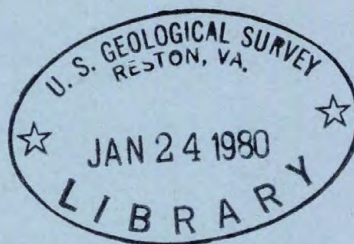


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# Water Resources Data for Idaho

Volume 1. Great Basin and Snake River  
Basin above King Hill



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

## WATER YEAR 1978

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

# CALENDAR FOR WATER YEAR 1978

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Basin above King Hill

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## WATER YEAR 1978

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

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

For information on the water program in Idaho write to  
District Chief, Water Resources Division  
U.S. Geological Survey  
Box 036, Federal Building  
550 West Fort Street  
Boise, Idaho 83724

1979

## Preface

This report was prepared by personnel of the Idaho district of the Water Resources Division of the U.S. Geological Survey under the supervision of E. F. Hubbard, District Chief, and W. H. Robinson, Regional Hydrologist, Western Region. It was done in cooperation with the State of Idaho and with other agencies.

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

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

VII

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(D) DISCHARGE, (C) CHEMICAL, (B) BIOLOGICAL, (M) MICROBIOLOGICAL,  
(T) WATER TEMPERATURE, (E) ELEVATION OR CONTENTS, (S) SEDIMENT

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## WATER RESOURCES DATA FOR IDAHO, 1978

### INTRODUCTION

Water resources data for the 1978 water year for Idaho consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This report in two volumes contains discharge records for 192 gaging stations; stage only records for 2 gaging stations; stage for 6 lakes; contents for 24 lakes and reservoirs; water-quality for 103 gaging stations, 48 partial-record stations, and 179 wells; and water levels for 429 observation wells. Also included are data for 57 crest-stage partial-record stations and 191 low-flow partial-record stations. Additional water data were collected at various sites, not involved in the systematic data collection program, and are published as miscellaneous measurements. 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 Idaho.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled, "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation,

the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report ID-78-1." Water-Data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

#### COOPERATION

The U.S. Geological Survey and organizations of the State of Idaho have had cooperative agreements for the systematic collection of stream-flow records since 1909, for ground-water levels since 1946, and for water-quality records since 1965. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Idaho Department of Water Resources, C. S. Allred, director.

Idaho Department of Transportation, Division of Highways,  
E. D. Tisdale, P.E., State highway administrator.

Bear River Commission, W. N. Jibson, chairman.

Assistance in the form of funds or services was given by the Bureau of Reclamation, U.S. Department of the Interior, in collecting records for 24 gaging stations; Corps of Engineers, U.S. Army, in collecting records for 22 gaging stations; U.S. Department of State in collecting records for 11 gaging stations and one water-quality station; Environmental Protection Agency in collecting records for 11 water-quality stations; Bonneville Power Administration, U.S. Department of Interior, in collecting records for four gaging stations; Bureau of Land Management, U.S. Department of the Interior, in collecting records for two gaging stations; U.S. Department of Agriculture, Soil Conservation Service, in collecting records for three gaging stations, and Forest Service, in collecting records for one gaging station; and by the Bureau of Indian Affairs, U.S. Department of the Interior, in collecting records for one gaging station published in this report.

The following organizations aided in collecting records:

Water Districts 01, 31, 33, 34, 37, 37N, and 65K; King Hill Irrigation District; Oakley Canal Co.; Idaho Power Co.; Washington Water Power Co.; Utah Power & Light Co.; Salmon River Canal Co.; and Blaine County Canal Co.

Organizations that supplied data are acknowledged in station descriptions.

## ACKNOWLEDGMENTS

Idaho district personnel who contributed significantly to the collection and preparation of the data in this report were: H. A. Ray, chief, hydrologic data section, assisted by R. W. Harper, C. M. Bennett, S. A. Gutenberger, J. R. Spofford, H. G. Sisco, W. H. Low, R. W. Luscombe, E. L. Young, S. C. Cordes, J. K. Crockett, and R. L. Murphy.

## HYDROLOGIC CONDITIONS

In contrast with the record low streamflow during the 1977 drought year, mean annual streamflow for 1978 was near average or more in most unregulated streams. Streamflow in some streams including Malad River near Woodruff, Snake River near Heise, and Salmon Falls Creek near San Jacinto was in the excessive range. Streams at the higher elevations receded to deficient flows October to March. Those streams draining lower elevations increased to excessive flows from winter rain and early snowmelt. The snow accumulation, which was near average at most snow courses and exceeded average in the snowfields of southeastern Idaho and in the upper Snake River basin in Wyoming, was sufficient to raise discharge in all streams to the median range and most streams discharged at excessive levels in one or more months during the spring and summer months.

On October 1, 1977, storage in nine of the larger reservoirs was depleted to 13 percent of the capacity of 4.8 million acre-feet. On September 30, 1978, the storage had increased to 65 percent of capacity, which was an excellent carryover for next season's irrigation use.

Monthly and annual mean discharge is compared with median at two representative gaging stations in figure 4.

Changes in ground-water levels from spring 1977 to spring 1978 for selected wells are shown in figure 1. These wells are representative of long-term water-level trends for different areas in the State.

The lower symbol is the well location; the upper number is the water-level change in feet above (+) or below (-) the spring 1977 water level.

Ground-water levels in the Big Wood River valley of south-central Idaho (fig. 7) rose 2.5 feet in the water-table aquifer in the upper part of the valley and dropped 2.4 feet in the lower part of the valley. The artesian aquifer declined 1.7 feet in the western part of the valley and rose 0.8 feet in the southern part of the valley.



Water levels in the northern tributary valleys adjacent to the Snake Plain aquifer (Big Lost and Little Lost River valleys) showed declines of 0.3-8.2 feet. The greatest declines were in areas where ground water is withdrawn for irrigation.

Increased withdrawals and below-normal recharge in Camas Prairie (Fairfield area) caused water levels to decline 0.5-5.9 feet in the artesian aquifer. Water levels rose about 3 feet in the water-table aquifer. In the Snake Plain aquifer near the Rupert-Minidoka area and west to Gooding, water levels dropped about 1-11 feet. Water levels in tributary valleys south of the Snake River declined about 1-7 feet.

In the area from American Falls to Idaho Falls in southeast Idaho (fig. 8), water levels declined about 1-4 feet. Levels in the central part of the Snake Plain aquifer declined 0.8-3.7 feet. Water levels in the Portneuf River valley, responded to climatic conditions and were about 15 feet higher in the upper valley. Levels in the Mud Lake area declined 1-3 feet. Levels in the Island Park and Henrys Fork areas showed declines of about 1-13 feet.

Water levels in Malad valley were about 3 feet higher in the artesian aquifer and about 3 feet lower in the water-table aquifer. Water levels in the Bear River valley generally were higher than spring 1977 levels.

#### DEFINITION OF TERMS

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

Acre-foot (ac-ft, AC-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.

Adenosine triphosphate (ATP) is the primary energy donor in cellular life process. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

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

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies 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 ml of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the 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  $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$  on M-enterococcus 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.

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

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of  $500^{\circ}\text{C}$  for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter ( $\text{g}/\text{m}^3$ ), and periphyton and benthic organisms in grams per square meter ( $\text{g}/\text{m}^2$ ).

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

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

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

Bottom material: See Bed material.

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

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

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

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.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ( $\text{CaCO}_3$ ).

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.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

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

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

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.

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

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters ( $\text{m}^2$ ), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

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

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by 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 distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

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

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.

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

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

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

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

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.

Primary production is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time  
[ $\text{mg C}/(\text{m}^2 \cdot \text{time})$  for periphyton and macrophytes and  $\text{mg C}/(\text{m}^3 \cdot \text{time})$ ] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time  
[ $\text{mg O}_2/(\text{m}^2 \cdot \text{time})$  for periphyton and macrophytes and  $\text{mg O}_2/(\text{m}^3 \cdot \text{time})$ ] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

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

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

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

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

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

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

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

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

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

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

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

#### DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 13317000, which appears just to the left of the station name, includes the 2-digit part number "13" plus the 6-digit downstream order number "317000."

## 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 2 below.

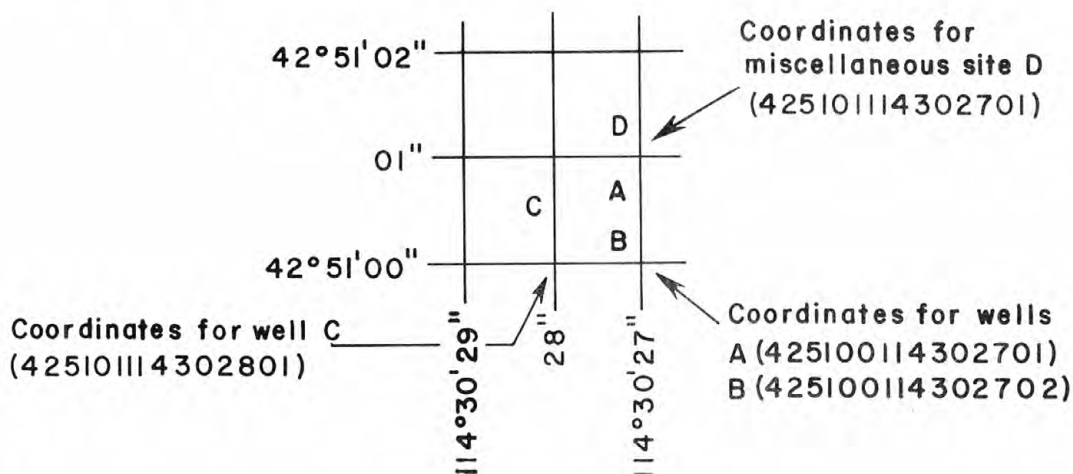


Figure 2.--System for numbering wells and miscellaneous sites (latitude and longitude).

#### Idaho Well-Numbering System

The well-numbering system used by the Geological Survey in Idaho indicates the location of wells within the official rectangular subdivisions of the public lands, with reference to the Boise base line and meridian. The first segment of a well number indicates the township, the second the range, and the third the section in which the well is situated. The letters following the section number indicate the well location within the section: The first letter denotes the 160-acre (65-hm<sup>2</sup>) tract, the second the 40-acre (16-hm<sup>2</sup>) tract, the third the 10-acre (4.0-hm<sup>2</sup>) tract in which the well occurs. The letters are assigned in a counterclockwise direction, beginning in the northeast quarter (fig. 3). The last numeral is a serial number assigned when the well is inventoried. Thus, well 07S-17E-06ACA1 is in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 7 S., R. 17 E., and is the first well inventoried in that tract.

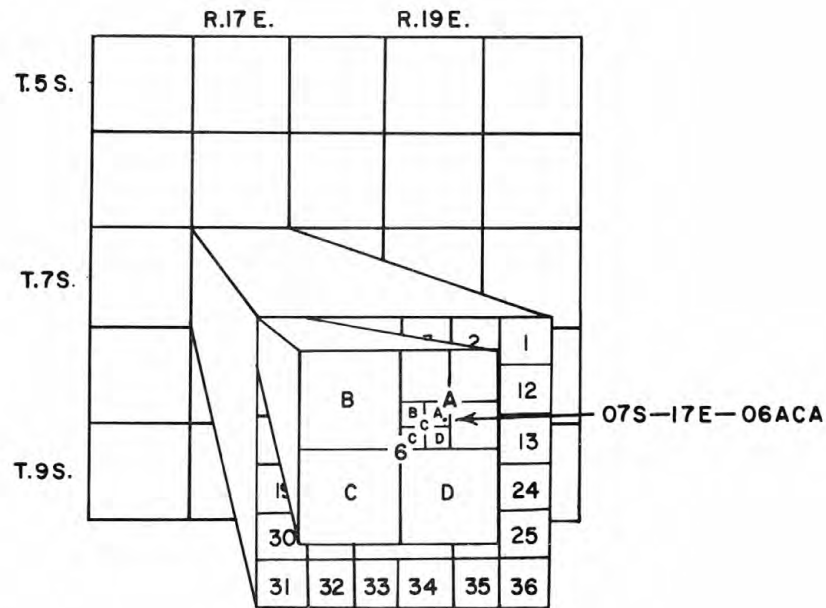


Figure 3.--Diagram showing Idaho well-numbering system.

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

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

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

Tritium network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

## EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

### Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes and reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected 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, or 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 the yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

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

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

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

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

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

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

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information 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 above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gages, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey, unless otherwise qualified.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations, information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations, peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following EXTREMES, for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN") or in acre-feet (line headed "AC-FT"). Figures of cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are appropriate daily discharges for the calendar and water years.

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

For most gaging stations on lakes and reservoirs, the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs, a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

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.

#### Accuracy of Field Data and Computed Results

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

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is 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<sup>3</sup>/s; to tenths between 1.0 and 10 ft<sup>3</sup>/s; to whole numbers between 10 and 1,000 ft<sup>3</sup>/s' and to 3 significant figures above 1,000 ft<sup>3</sup>/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

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

### Other Data Available

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

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

### Records of Discharge Collected by Agencies other than the Geological Survey

Records of discharge not published by the Geological Survey were collected in the current water year by other State and Federal agencies. The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintains an index of such sites. Information on records available at specific sites can be obtained upon request.

## 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 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.

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

#### Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

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

### Sediment

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

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

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

In addition to 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

Ground-water level data from the Statewide network of observation wells are published herein. This network is designed so that the fewest number of wells are used to obtain the most significant data in the most important aquifers.

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

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 with reference to either National Geodetic Vertical Datum of 1929 (NGVD) or land-surface datum (lsd). Mean sea level 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 above mean sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

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

#### Aquifer Names

The names of aquifers and their geologic ages adopted for use in Idaho are from the stratigraphic names listed in the Idaho section of the U.S. Geological Survey Bulletins 1056-B, 1200, and 1395-A. Names will be modified where necessary as official changes in stratigraphic nomenclature occur.

If a formal name has not been assigned to the aquifer, the lithology and its age are used to designate the water-bearing unit. Although some wells are supplied by more than one aquifer, only the major aquifer penetrated by the well is given in the well description.

Well Descriptions

For each well, the well description includes, if available, the following information: Latitude-longitude number, Idaho well number, owner, method of construction, use of well, type of well (artesian or water table), formal aquifer name or lithology and geologic age, diameter of casing, depth of well, depth of perforations or screen, altitude of land-surface datum, remarks of unusual conditions affecting the water level, acknowledgment of outside persons or agencies contributing data, and a description of the measuring point. The depth of the well at the time it was originally inventoried is given in the well description. If the well has been deepened or filled in, the new depth and date the change was discovered are noted following the notation of land-surface datum.

When a well is added to the State observation-well network, all its prior water-level measurements are included with the current year tabulation.

## PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office. Prices are effective October 1978 but are subject to change.

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. \$1.60.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W.Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages. \$0.85
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages. \$1.90.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages. \$1.75.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages. \$1.00.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages. \$0.35.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages. \$0.40.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages. \$1.00.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages. \$0.35.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6, 1968, 13 pages. \$1.00.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages. \$1.40.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages. \$1.25.
- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages. \$1.20.
- 3-A12. *Fluorometric procedures for dye tracing*, by J. F. Wilson Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. \$0.35. Not currently available.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages. \$0.70.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2 1976. 172 pages. \$2.50.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages. \$2.50.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2, 1970. 59 pages. \$2.50.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages. \$2.10.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4 Chapter A1. 1968. 39 pages. \$1.60.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages. \$1.20
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972, 18 pages. \$0.65.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages. \$0.75.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages. \$0.65.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages. \$1.10.

- 5-A1. *Methods for collection and analysis of water samples for dissolved minerals and gases*, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: USGS--TWRI Book 5, Chapter A1. 1970. 160 pages. \$2.40.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages. \$0.80.
- 5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages. \$0.90.
- 5-A4.\* *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P.E. Greeson, T.A. Ehlke, G.A. Irwin, B.W. Lium, and K.V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages. \$20.00.
- 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. \$16.00.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages. \$2.10.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages. \$2.30.
- 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. \$0.70.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages. \$1.10.

\*These publications are available ONLY from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. They are in looseleaf format and are subscription items. Additional supplements will be issued to subscribers at no extra cost. Checks should be made payable to Superintendent of Documents. Requester should emphasize to Superintendent of Documents that this is a subscription item.

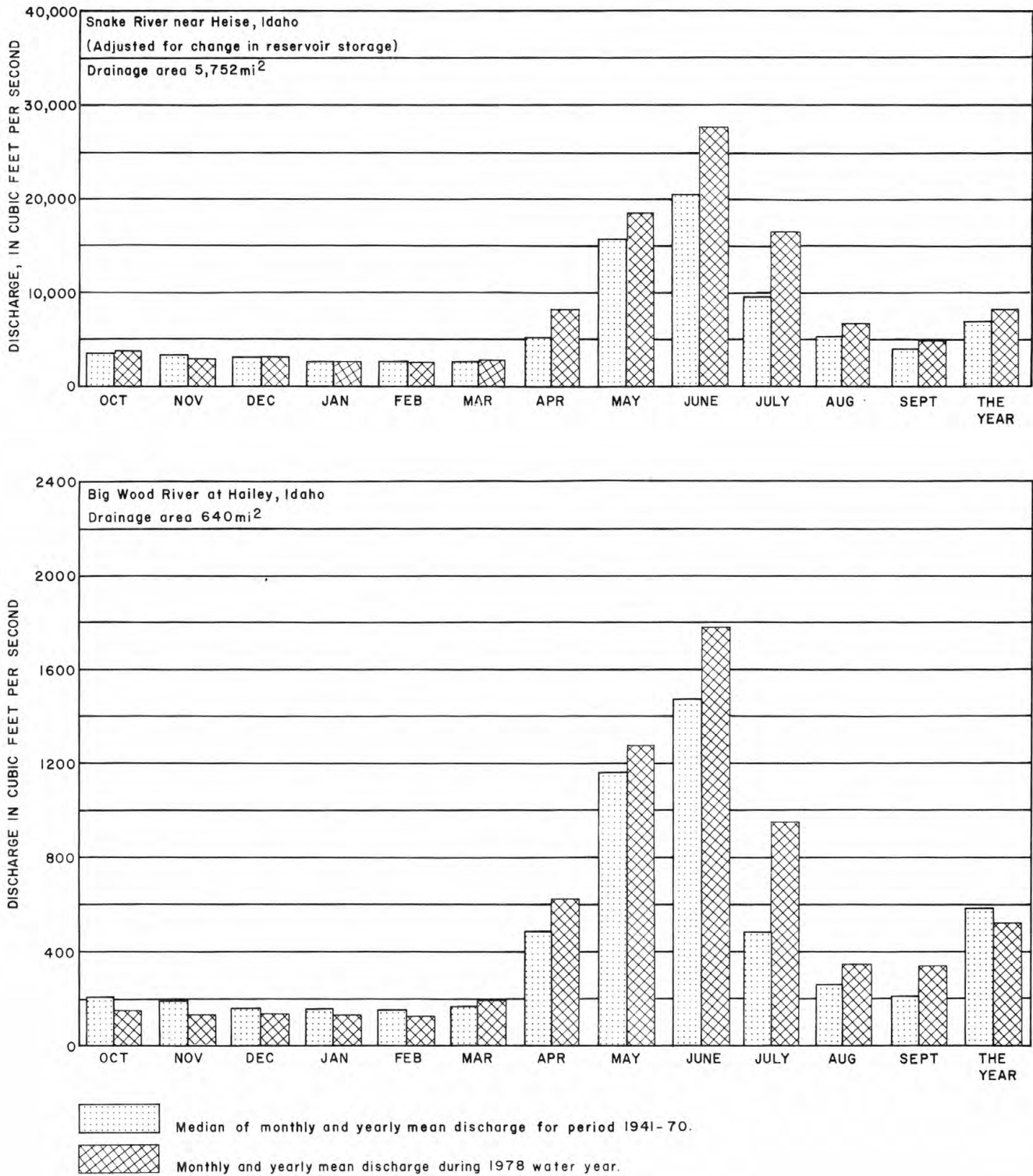


FIGURE 4.--Discharge during 1978 water year compared with median discharge for period 1941-70 for two representative gaging stations.

EXPLANATION

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PART 13

River basin boundary and number

▲  
321500

Gaging station and number  
Inverted symbol indicates water-quality station

▼  
Chemical-measurement site

▼  
Temperature-measurement site

▼  
Biological-measurement site

▼  
Sediment-measurement site

△  
Low-flow measurement site

▲  
Crest-stage measurement site

●  
51N-04W-18  
Observation well and number

This explanation is for all four maps in this volume. Shaded areas on figure 5 indicate areas of detailed study. Data for these areas are listed in this report, but individual collection sites are not shown.

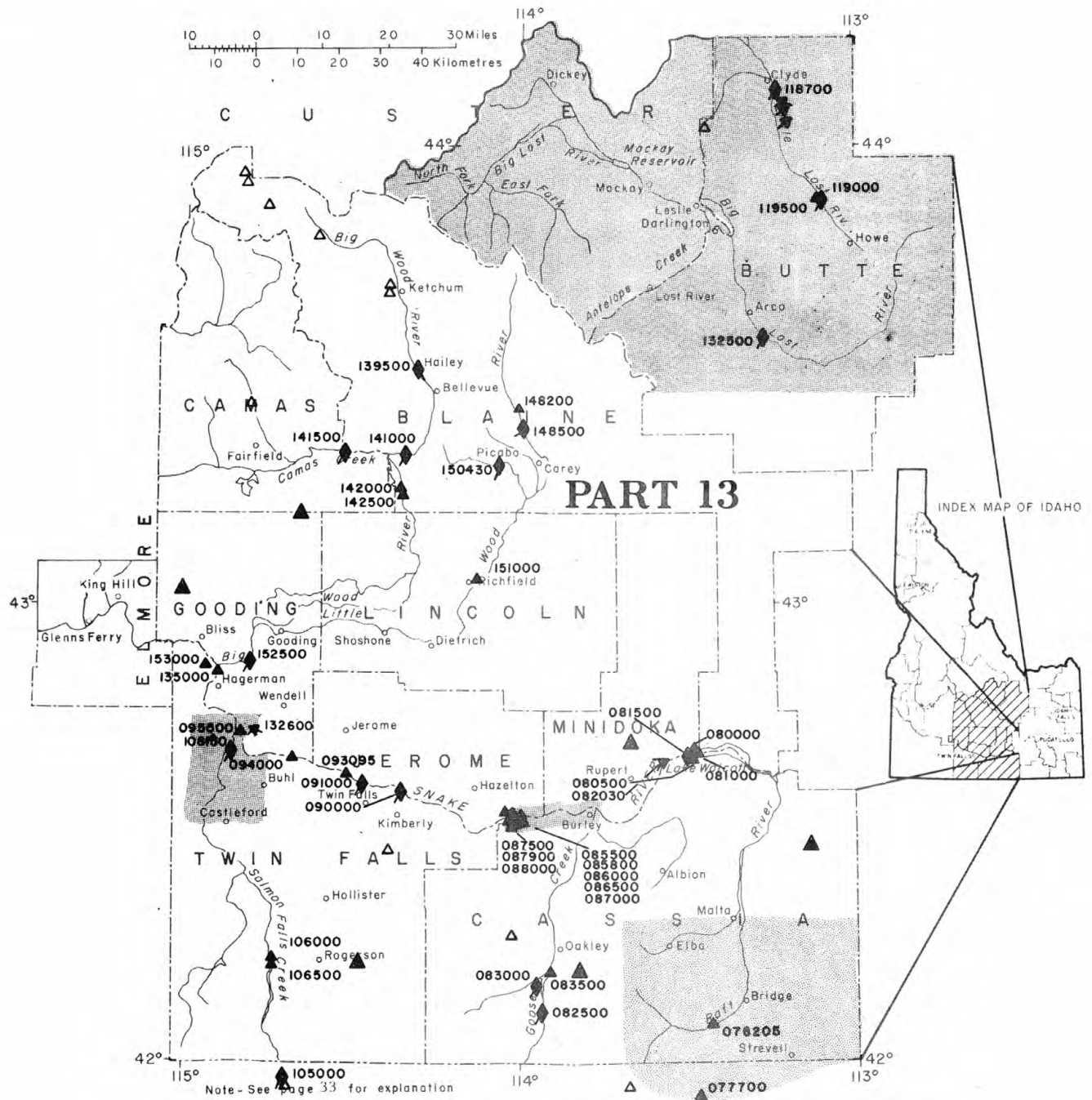


FIGURE 5.--Location of surface-water and water-quality stations in south-central Idaho.

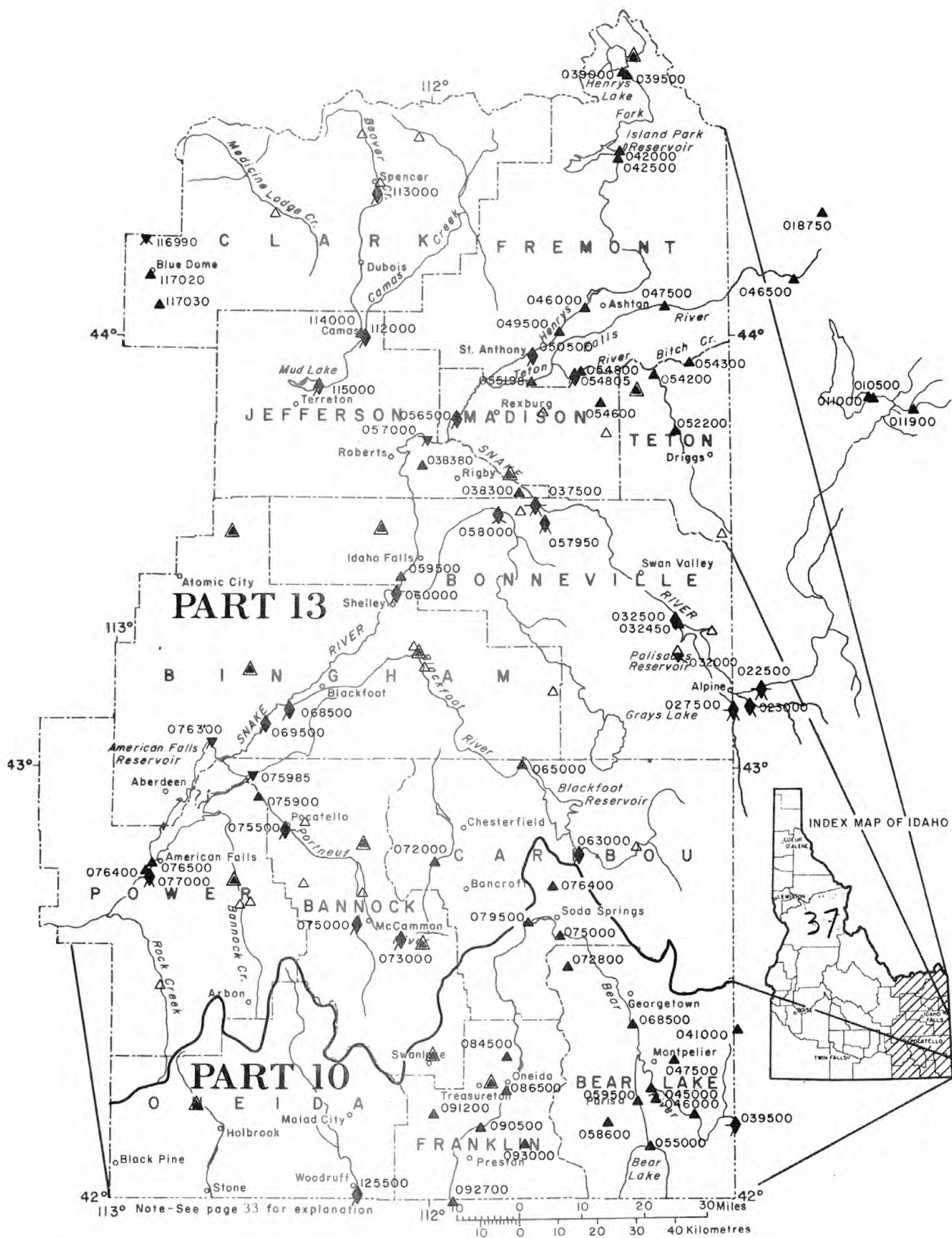


FIGURE 6.--Location of surface-water and water-quality stations in southeast Idaho.

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HYDROLOGIC-DATA STATION RECORDS

37

THE GREAT BASIN

BEAR RIVER BASIN

10039500 BEAR RIVER AT BORDER, WY

LOCATION.--Lat 42°12'40", long 111°03'11", in NE¼NE¼ sec.15, T.14 S., R.46 E., Bear Lake County, Idaho, Hydrologic Unit 16010102, on left bank 0.2 mi (0.3 km) west of Idaho-Wyoming State line, 0.5 mi (0.8 km) west of Border, and 2.1 mi (3.4 km) upstream from Thomas Fork.

DRAINAGE AREA.--2,486 mi<sup>2</sup> (6,439 km<sup>2</sup>).

PERIOD OF RECORD.--October 1937 to current year.

REVISED RECORDS.--WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,051.63 ft (1,844.537 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter months, which are fair. Natural flow of stream affected by regulation by upstream reservoirs, diversions for irrigation, and return flow from irrigated areas.

AVERAGE DISCHARGE.--41 years, 423 ft<sup>3</sup>/s (12.0 m<sup>3</sup>/s), 306,500 acre-ft/yr (378 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,680 ft<sup>3</sup>/s (104 m<sup>3</sup>/s) May 11, 1952, gage height, 8.89 ft (2.710 m); minimum, 24 ft<sup>3</sup>/s (0.68 m<sup>3</sup>/s) Apr. 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,880 ft<sup>3</sup>/s (53.2 m<sup>3</sup>/s) June 23, gage height, 6.12 ft (1.865 m); minimum, 30 ft<sup>3</sup>/s (0.50 m<sup>3</sup>/s) Oct. 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	66	99	110	120	125	567	603	904	1140	348	192
2	34	70	100	110	120	125	616	577	811	1000	339	187
3	35	75	100	110	120	125	574	626	793	984	327	185
4	34	74	100	110	120	125	484	686	814	1050	310	183
5	31	74	100	110	120	125	459	704	868	1020	298	181
6	33	77	100	110	120	126	402	659	952	952	288	169
7	36	77	100	110	120	117	373	603	1170	900	276	174
8	42	75	100	110	120	111	381	583	1540	833	276	185
9	40	73	100	110	120	110	381	545	1640	754	264	183
10	39	75	100	120	120	116	386	548	1750	743	252	183
11	39	75	100	120	120	120	405	659	1760	818	247	190
12	38	77	100	120	120	123	397	718	1740	814	245	199
13	39	75	110	118	120	125	383	700	1650	830	262	201
14	61	75	110	120	120	127	386	740	1640	849	305	199
15	84	75	110	120	120	122	386	833	1660	872	315	198
16	68	75	110	120	120	116	397	1030	1750	888	312	207
17	64	75	110	120	120	116	413	1140	1840	784	298	225
18	67	75	110	120	120	117	373	1030	1850	715	303	283
19	72	75	110	120	120	123	351	960	1860	673	293	293
20	72	74	110	120	125	131	351	849	1840	596	291	302
21	72	80	110	120	125	153	360	826	1840	551	281	288
22	73	90	110	120	125	187	360	880	1860	523	281	274
23	73	90	110	120	125	219	339	1000	1850	487	271	262
24	72	95	110	120	125	234	322	1050	1710	459	271	255
25	69	95	110	120	125	250	319	1080	1580	452	252	245
26	31	100	110	120	125	234	383	1060	1520	428	232	238
27	30	100	110	120	125	250	529	1030	1460	428	225	230
28	34	100	110	120	125	298	500	1010	1350	413	223	225
29	56	100	110	120	---	355	481	992	1270	378	223	223
30	61	100	110	120	---	419	539	1030	1200	353	213	213
31	64	---	110	120	---	497	---	1000	---	343	209	---
TOTAL	1593	2437	3289	3628	3405	5521	12597	25751	44472	22030	8530	6572
MEAN	51.4	81.2	106	117	122	178	420	831	1482	711	275	219
MAX	84	100	110	120	125	497	616	1140	1860	1140	348	302
MIN	30	66	99	110	120	110	319	545	793	343	209	169
AC-FT	3160	4830	6520	7200	6750	10950	24990	51080	88210	43700	16920	13040
CAL YR 1977 TOTAL	29690			81.3	MAX 163	MIN 25	AC-FT 58890					
WTR YR 1978 TOTAL	139825			383	MAX 1860	MIN 30	AC-FT 277300					

## BEAR RIVER BASIN

10039500 BEAR RIVER AT BORDER, WY--Continued  
(National stream-quality accounting network)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1965 to September 1976, January to September 1978.

WATER TEMPERATURES: October 1965 to September 1976, January to September 1978.

REMARKS.--Additional information is available in the Wyoming district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,580 micromhos Dec. 27, 1975; minimum daily, 312 micromhos Apr. 3, 1969.

WATER TEMPERATURES: Maximum, 23.0°C Aug. 7, 1970, Aug. 9, 1972, July 7, 1973, July 24, 25, 1974; minimum daily, 0.0°C on many days during winter periods.

EXTREMES FOR PERIOD JANUARY TO SEPTEMBER 1978.--

SPECIFIC CONDUCTANCE: Maximum daily, 640 micromhos Mar. 28; minimum daily, 388 micromhos May 24.

WATER TEMPERATURES: Maximum, 21.0°C Aug. 4; minimum daily, 0.0°C Feb. 21-24.

## WATER QUALITY DATA: WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, Dis- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT											
13...	1545	39	540	--	11.0	2	--	10.0	44	260	56
21...	1020	71	660	--	7.5	--	--	--	--	--	--
NOV											
30...	1530	135	500	--	.5	--	--	10.6	42	260	45
DEC											
01...	1540	99	630	--	.0	--	--	--	--	--	--
21...	1500	140	620	--	.0	3	--	11.2	3	320	82
JAN											
13...	1350	118	690	--	.0	--	--	--	--	--	--
21...	1500	147	570	8.1	.0	2	--	--	K3	270	80
FEB											
18...	1515	175	490	8.1	.0	2	--	11.0	K4	300	73
MAR											
05...	1710	126	540	--	2.0	--	--	--	--	--	--
17...	1500	56	580	8.1	4.0	5	--	11.4	K2	270	76
APR											
04...	1625	489	620	--	9.0	--	--	--	--	--	--
MAY											
01...	1000	758	470	8.1	4.0	120	--	10.4	90	220	41
09...	2115	534	520	--	12.5	--	--	--	--	--	--
26...	1430	1200	410	8.0	10.0	40	50	9.2	K110	220	36
JUN											
06...	1005	430	450	--	13.0	--	--	--	--	--	--
15...	1700	1680	500	--	17.0	--	--	--	--	--	--
19...	1500	1460	540	8.1	15.0	50	55	8.0	240	230	32
JUL											
14...	1220	838	530	--	18.5	--	--	--	--	--	--
AUG											
04...	1515	336	620	8.1	20.0	15	9.4	10.3	K80	270	36
17...	1625	298	550	--	15.5	--	--	--	--	--	--
SEPT											
01...	1440	194	500	8.1	20.0	6	3.8	8.9	44	240	60
22...	1005	276	550	--	7.0	--	--	--	--	--	--
30...	1330	217	550	8.0	12.0	7	4.1	9.5	K8	260	70

BEAR RIVER BASIN

10039500 BEAR RIVER AT BORDER, WY--Continued  
 WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	
OCT 13...	64	25	28	19	.8	1.9	230	9	200	74
21...	--	--	--	--	--	--	--	--	--	--
NOV 30...	66	24	25	17	.7	1.5	250	6	220	58
DEC 01...	--	--	--	--	--	--	--	--	--	--
21...	80	28	31	18	.8	1.8	290	0	240	84
JAN 13...	--	--	--	--	--	--	--	--	--	--
21...	68	24	20	14	.5	1.6	230	0	190	74
FEB 18...	75	28	24	15	.6	1.8	280	0	230	83
MAR 06...	--	--	--	--	--	--	--	--	--	--
17...	68	25	21	14	.6	1.8	240	0	200	73
APR 04...	--	--	--	--	--	--	--	--	--	--
MAY 01...	59	18	13	11	.4	1.6	220	0	180	49
09...	--	--	--	--	--	--	--	--	--	--
26...	62	15	9.2	8	.3	1.4	220	0	180	38
JUN 06...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
19...	53	24	25	19	.7	2.8	230	6	200	45
JUL 14...	--	--	--	--	--	--	--	--	--	--
AUG 04...	62	27	26	17	.7	2.5	280	0	230	58
17...	--	--	--	--	--	--	--	--	--	--
SEP 01...	63	20	19	15	.5	2.0	240	0	180	62
22...	--	--	--	--	--	--	--	--	--	--
30...	68	22	22	15	.6	1.9	250	0	190	74

DATE	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 CONSI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FI)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT 13...	29	.3	8.2	--	352	.48	37	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
NOV 30...	28	.2	14	--	343	.47	125	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--	--
21...	35	.3	11	--	414	.56	156	--	--	--
JAN 13...	--	--	--	--	--	--	--	--	--	--
21...	32	.2	6.8	345	342	.47	137	.13	.14	--
FEB 18...	28	.2	10	386	388	.53	182	.20	.09	.06
MAR 06...	--	--	--	--	--	--	--	--	--	--
17...	24	.2	6.2	335	340	.46	50	.14	.06	1.8
APR 04...	--	--	--	--	--	--	--	--	--	--
MAY 01...	14	.1	7.5	276	271	.38	565	.33	.09	1.3
09...	--	--	--	--	--	--	--	--	--	--
26...	8.1	.1	7.5	238	252	.32	771	.20	.04	--
JUN 06...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
19...	25	.1	9.8	299	306	.41	1500	.09	.10	.90
JUL 14...	--	--	--	--	--	--	--	--	--	--
AUG 04...	25	.2	9.1	352	348	.48	319	.06	.01	1.4
17...	--	--	--	--	--	--	--	--	--	--
SEP 01...	20	.2	7.3	313	312	.43	164	.04	.09	1.0
22...	--	--	--	--	--	--	--	--	--	--
30...	22	.2	7.1	345	341	.47	202	.08	.04	.88

## BEAR RIVER BASIN

10039500 BEAR RIVER AT BORDER, WY--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	617	538	561	476	398	461	570	490
2				---	594	528	585	487	521	441	563	496
3				---	559	556	578	410	521	446	553	502
4				---	573	556	606	466	531	497	538	490
5				---	599	548	619	430	521	482	538	495
6				601	578	573	591	477	521	500	509	494
7				600	592	563	620	474	511	502	518	528
8				563	603	554	596	477	526	500	521	513
9				583	565	557	569	475	536	497	536	519
10				602	581	543	558	438	503	515	547	508
11				584	535	545	556	443	503	522	515	526
12				558	540	541	552	426	509	532	511	532
13				565	549	560	550	414	509	532	517	532
14				570	565	555	554	427	514	543	512	532
15				530	578	552	563	407	474	537	517	526
16				488	575	543	552	432	474	516	506	530
17				606	607	564	540	422	490	554	517	508
18				563	615	563	550	415	470	544	518	530
19				564	589	560	554	422	504	525	512	530
20				591	586	559	553	415	488	535	495	503
21				568	542	548	538	408	499	540	500	534
22				573	551	554	553	414	499	604	520	536
23				553	570	514	534	393	494	582	495	541
24				597	558	509	513	388	499	622	498	530
25				578	574	525	513	395	495	623	506	519
26				580	554	530	508	399	485	609	506	519
27				581	543	540	508	393	480	588	496	524
28				582	548	640	470	393	480	573	501	536
29				611	---	581	455	389	470	572	501	529
30				614	---	577	465	389	475	570	506	538
31				616	---	559	---	398	---	561	469	---
MEAN				578	573	553	549	426	497	536	516	520
WTR YR 1978	MEAN	526	MAX	640	MIN	388						

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	1.0	1.0	8.0	9.0	11.5	17.5	19.5	19.0
2				---	1.0	2.0	8.5	8.0	12.0	17.5	20.0	19.0
3				---	1.5	2.5	8.5	9.0	12.0	16.0	20.0	19.5
4				---	1.0	2.5	9.0	8.5	12.0	16.5	21.5	19.5
5				---	1.5	3.5	9.0	8.5	12.5	16.0	20.5	19.5
6				2.0	1.5	3.5	9.0	6.5	14.5	16.5	20.0	19.5
7				1.0	2.0	3.0	9.0	6.5	14.5	17.0	20.5	19.0
8				.5	2.0	3.0	8.5	8.5	15.0	18.0	20.5	18.5
9				1.0	2.5	3.0	8.5	12.0	14.5	18.5	18.5	18.5
10				.5	2.0	3.0	8.5	12.0	14.0	15.5	20.5	18.5
11				1.0	1.5	2.5	8.5	12.0	14.0	16.0	20.0	12.0
12				1.0	1.5	2.5	8.5	12.0	14.0	17.5	20.0	11.5
13				1.5	1.5	3.0	8.5	12.5	14.0	17.0	18.5	11.5
14				1.0	1.0	3.0	8.5	13.5	14.5	17.0	15.5	11.0
15				1.5	.5	3.5	8.5	13.5	13.0	17.0	15.5	11.5
16				.5	.5	4.0	8.5	12.0	14.0	20.0	18.5	10.5
17				1.0	.5	4.0	8.0	12.0	14.5	19.5	18.5	10.0
18				1.0	.5	4.0	8.0	12.0	13.0	19.0	18.5	10.5
19				1.5	.5	4.0	8.0	8.0	15.5	19.5	18.5	10.5
20				1.0	.5	4.0	8.0	12.5	15.5	19.5	18.5	10.0
21				1.5	.0	4.0	8.0	13.5	15.5	19.0	19.5	10.5
22				1.5	.0	4.0	7.0	14.0	16.0	20.0	19.5	11.0
23				.5	.0	4.0	10.0	10.0	17.0	20.0	20.0	12.0
24				1.0	.0	4.0	9.5	9.5	17.5	20.5	19.0	12.0
25				1.0	.5	4.0	10.0	9.5	15.5	20.5	19.0	14.0
26				1.0	1.0	6.5	10.0	9.5	16.0	20.5	18.5	14.5
27				.5	1.0	7.5	10.0	9.0	16.5	21.0	18.5	14.0
28				1.5	1.0	8.0	9.5	9.0	18.0	20.5	19.0	14.0
29				1.5	---	8.5	9.5	8.5	17.5	20.0	19.5	12.5
30				.5	---	9.0	9.5	8.5	17.5	20.0	19.0	12.5
31				.5	---	9.0	---	11.5	---	19.5	19.0	---
MEAN				1.0	1.0	4.0	9.0	10.5	14.5	18.5	19.0	14.0
WTR YR 1978	MEAN	10.5	MAX	21.5	MIN	.0						

10041000 THOMAS FORK NEAR WYOMING-IDAHO STATE LINE

LOCATION.--Lat 42°24'10", long 111°01'30", in SE¼NW¼ sec.19, T.28 N., R.119 W., Lincoln County, Wyoming, Hydrologic Unit 16010102, on right bank 1.3 mi (2.1 km) upstream from State line, 1.5 mi (2.4 km) downstream from Giraffe Creek, and 3.5 mi (5.6 km) northeast of Geneva, Idaho.

DRAINAGE AREA.--113 mi<sup>2</sup> (293 km<sup>2</sup>).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,280 ft (1,914 m) from topographic map. Prior to Aug. 23, 1957, at site 0.2 mi (0.3 km) upstream at different datum.

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

AVERAGE DISCHARGE.--29 years, 54.9 ft<sup>3</sup>/s (1.55 m<sup>3</sup>/s), 39,780 acre-ft/yr (49.0 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft<sup>3</sup>/s (29.5 m<sup>3</sup>/s) May 14, 1971 (gage height, 3.84 ft or 1.170 m); minimum, 2.6 ft<sup>3</sup>/s (0.074 m<sup>3</sup>/s) Mar. 2, 1956, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft<sup>3</sup>/s (4.25 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Apr. 11	0300	177 5.01	1.81 0.552	Apr. 30	2200	501 14.2	2.81 0.856
Apr. 16	0200	212 6.00	1.95 .594	May 4	0200	575 16.3	2.98 .908
Apr. 21	0100	202 5.72	1.92 .585	May 15	2400	*808 22.9	3.44 1.049

Minimum discharge, 4.2 ft<sup>3</sup>/s (0.119 m<sup>3</sup>/s) Nov. 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	8.4	9.6	12	12	12	91	420	257	83	41	25
2	7.9	8.4	10	12	12	12	90	460	247	81	38	24
3	7.6	8.1	10	12	12	12	74	519	249	79	37	24
4	7.4	8.1	10	12	13	13	71	519	247	77	36	24
5	7.3	8.4	10	12	13	13	75	453	230	75	36	24
6	8.3	9.0	11	13	13	13	74	405	220	74	35	24
7	10	8.4	11	13	13	12	92	384	215	73	34	25
8	9.0	7.4	11	13	13	13	110	348	205	70	33	26
9	8.2	8.0	11	13	13	13	133	342	199	70	33	24
10	7.9	8.1	11	12	13	13	147	386	192	67	33	24
11	7.6	8.1	11	12	12	14	161	465	182	63	33	28
12	7.7	8.0	11	12	12	14	151	454	171	61	34	26
13	7.7	8.0	11	11	12	13	151	461	163	59	47	26
14	7.4	8.1	11	12	12	13	151	562	157	58	51	25
15	7.4	8.7	11	12	12	13	158	670	151	56	37	25
16	7.4	8.5	11	12	12	14	192	672	144	56	34	23
17	7.4	7.5	11	12	12	14	160	543	138	53	35	31
18	7.4	8.2	11	12	12	14	142	489	133	53	34	42
19	7.4	8.0	11	12	12	15	146	437	128	51	32	31
20	7.6	8.1	11	12	12	16	163	429	122	50	31	28
21	8.1	9.0	11	12	12	17	181	456	117	52	30	26
22	8.1	9.0	11	11	12	19	161	472	112	49	31	25
23	7.8	9.0	11	11	13	23	159	480	108	47	29	24
24	7.4	8.9	11	12	13	27	169	452	105	45	28	23
25	7.4	9.0	11	12	13	25	207	406	102	44	28	23
26	7.4	10	12	13	12	25	325	377	99	42	27	22
27	7.4	10	12	13	12	29	364	350	95	42	27	22
28	7.4	10	12	13	12	34	354	328	91	42	26	22
29	8.4	10	12	13	---	40	351	321	89	43	26	21
30	10	10	12	12	---	49	466	306	87	41	26	21
31	9.0	---	12	12	---	61	---	278	---	41	26	---
TOTAL	245.3	258.4	341.6	377	346	615	5269	13644	4755	1797	1028	758
MEAN	7.91	8.61	11.0	12.2	12.4	19.8	176	440	159	58.0	33.2	25.3
MAX	10	10	12	13	13	61	466	672	257	83	51	42
MIN	7.3	7.4	9.6	11	12	12	71	276	87	41	26	21
AC-FT	487	513	678	748	686	1220	10450	27060	9430	3560	2040	1500

CAL YR 1977 TOTAL 3909.0 MEAN 10.7 MAX 37 MIN 4.9 AC-FT 7750  
WTR YR 1978 TOTAL 29434.3 MEAN 80.6 MAX 672 MIN 7.3 AC-FT 58380

## BEAR RIVER BASIN

10044000 BEAR RIVER AT HARER, ID

LOCATION.--Lat 42°11'50", long 111°10'05", in NW¼ sec.23, T.14 S., R.45 E., Bear Lake County, Hydrologic Unit 16010102, on right bank 400 ft (122 m) downstream from Sheep Creek, 0.8 mi (1.3 km) north of Harer siding on Union Pacific (Oregon Short Line) Railroad, and 5 mi (8 km) southeast of Dingle.

DRAINAGE AREA.--2,839 mi<sup>2</sup> (7,353 km<sup>2</sup>).

PERIOD OF RECORD.--June 1913 to current year. Monthly discharge only October 1916 to December 1918 published in WSP 1314.

REVISED RECORDS.--WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,000 ft (1,830 m) from topographic map. Prior to Aug. 24, 1914, nonrecording gage at site 1,500 ft (457 m) downstream at different datum.

REMARKS.--Records good except those for winter months, which are fair. Natural flow of stream affected by upstream reservoirs, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

AVERAGE DISCHARGE.--65 years, 520 ft<sup>3</sup>/s (14.7 m<sup>3</sup>/s), 376,700 acre-ft/yr (464 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,440 ft<sup>3</sup>/s (126 m<sup>3</sup>/s) May 7, 1952, gage height, 11.04 ft (3.365 m); minimum daily, 26 ft<sup>3</sup>/s (0.74 m<sup>3</sup>/s) Aug. 21-27, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,920 ft<sup>3</sup>/s (54.4 m<sup>3</sup>/s) June 23, gage height, 7.51 ft (2.289 m); minimum, 56 ft<sup>3</sup>/s (1.59 m<sup>3</sup>/s) Oct. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	109	159	118	106	144	714	927	1320	1190	411	233
2	65	114	155	118	116	118	810	1010	1220	1110	406	214
3	73	119	133	119	105	124	820	1090	1150	1040	387	206
4	75	125	153	119	119	127	712	1180	1150	1090	367	205
5	74	130	148	122	123	118	682	1270	1180	1180	348	202
6	74	134	113	127	112	131	668	1290	1240	1090	332	195
7	77	140	143	130	118	140	596	1220	1380	1010	323	189
8	77	139	136	135	109	137	609	1150	1580	922	315	198
9	82	130	125	121	112	150	620	1090	1680	836	307	199
10	82	119	131	125	119	141	623	1040	1780	764	291	203
11	75	98	142	129	119	163	643	1080	1820	793	277	214
12	72	84	125	131	121	148	651	1200	1820	802	274	227
13	66	92	120	132	123	157	630	1240	1750	834	278	219
14	66	92	117	126	124	156	629	1270	1710	889	311	216
15	67	99	124	127	124	165	621	1320	1770	953	347	217
16	82	93	107	119	124	178	615	1440	1820	993	354	222
17	82	85	104	117	125	163	650	1640	1890	943	338	259
18	78	88	106	108	123	166	622	1730	1910	831	332	327
19	81	84	107	121	115	144	566	1660	1910	786	331	379
20	86	92	108	109	115	150	550	1520	1880	725	322	387
21	90	111	110	98	129	163	546	1450	1860	657	309	391
22	91	97	111	96	138	192	556	1450	1880	643	304	375
23	93	100	112	98	136	241	536	1480	1910	590	303	360
24	95	101	113	100	124	280	509	1550	1810	557	297	345
25	96	99	115	102	116	295	478	1610	1640	533	296	331
26	98	107	116	104	129	300	501	1610	1530	515	270	317
27	94	124	117	106	134	302	589	1560	1460	514	259	308
28	85	143	118	110	141	340	679	1470	1390	502	254	299
29	89	141	110	107	---	428	761	1420	1320	468	255	291
30	98	133	115	118	---	495	844	1400	1270	445	251	291
31	105	---	117	121	---	423	---	1400	---	420	241	---
TOTAL	2541	3322	3810	3613	3399	6579	19030	41767	48030	24625	9690	6019
MEAN	82.0	111	123	117	121	212	634	1347	1601	794	313	267
MAX	105	143	159	135	141	623	844	1730	1910	1190	411	391
MIN	65	84	104	96	105	118	478	927	1150	420	241	189
AC-FT	5040	6590	7560	7170	6740	13050	37750	82840	95270	48840	19220	15910
CAL YR 1977 TOTAL		41587		MEAN 114	MAX 222	MIN 56	AC-FT 82490					
WTR YR 1978 TOTAL		174425		MEAN 478	MAX 1910	MIN 65	AC-FT 346000					

10046000 RAINBOW INLET CANAL NEAR DINGLE, ID

LOCATION.--Lat 42°13'48", long 111°17'43", in SE½ sec.3, T.14 S., R.44 E., Bear Lake County, Hydrologic Unit 16010201, on left bank 1.5 mi (2.4 km) west of Dingle and 1.8 mi (2.9 km) downstream from headworks at Stewart Dam.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only prior to October 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 5,922.0 ft (1,805.03 m) National Geodetic Vertical Datum of 1929 (by topographic survey). Prior to Oct. 1, 1923, at site 300 ft (91 m) downstream at different datum; Oct. 1, 1923, to Oct. 27, 1944, at site 0.5 mi (0.8 km) downstream at different datum.

REMARKS.--Records good. Canal diverts from Bear River at Stewart Dam in NE½ sec.34, T.13 S., R.44 E., for storage in Bear Lake. At times flow in canal is augmented by surplus water from Black Otter Slough entering at the station and by seepage and surplus water from irrigation.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

AVERAGE DISCHARGE.--56 years, 339 ft³/s (9.60 m³/s), 245,600 acre-ft/yr (303 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,180 ft³/s (118 m³/s) May 7, 1952, gage height, 8.62 ft (2.627 m); no flow Apr. 28, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,630 ft³/s (46.2 m³/s) May 18, gage height, 5.24 ft (1.597 m); minimum, 5.0 ft³/s (0.142 m³/s) Oct. 29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	24	89	67	65	92	666	805	1050	846	336	224
2	20	34	80	53	69	78	745	844	945	842	337	224
3	20	32	87	50	78	73	786	902	809	798	331	212
4	27	36	91	47	77	65	681	938	776	788	319	202
5	26	40	87	50	79	83	648	1010	787	855	298	193
6	28	41	68	59	81	99	650	1090	870	821	277	187
7	31	42	59	63	86	101	605	1060	892	748	264	184
8	31	44	67	65	93	102	561	1000	1030	724	265	181
9	36	47	55	62	92	100	564	935	1210	666	289	187
10	35	44	77	65	82	106	570	869	1270	618	278	186
11	22	47	82	67	76	120	575	896	1340	619	267	187
12	19	89	90	72	94	110	581	952	1380	630	253	189
13	17	83	89	74	91	115	567	1030	1340	613	252	194
14	15	65	89	80	77	111	578	1050	1280	581	269	197
15	14	64	78	80	74	99	578	1100	1210	680	284	196
16	14	67	61	80	76	108	583	1150	1260	741	291	197
17	20	56	50	83	69	112	582	1330	1300	753	295	218
18	18	52	61	89	67	117	594	1510	1350	648	303	268
19	14	40	78	93	64	124	557	1530	1370	610	317	320
20	18	32	73	98	69	138	532	1430	1380	558	311	335
21	18	30	51	73	82	155	515	1310	1360	522	301	338
22	21	30	50	57	85	181	523	1260	1370	490	278	335
23	24	34	63	64	70	232	524	1290	1410	467	299	323
24	27	44	62	48	66	269	503	1310	1370	439	290	315
25	30	53	61	48	65	291	479	1350	1250	409	285	309
26	26	62	67	65	77	304	469	1340	1160	398	274	312
27	17	67	66	67	94	306	578	1300	1110	377	264	306
28	13	88	61	75	91	326	717	1230	1040	377	258	289
29	7.1	98	54	62	---	399	679	1150	1000	382	257	284
30	9.8	96	57	53	---	477	743	1130	940	373	252	277
31	15	---	53	58	---	581	---	1100	---	344	231	---
TOTAL	659.9	1581	2156	2067	2189	5574	17933	35201	34859	18717	8825	7369
MEAN	21.3	52.7	69.5	66.7	78.2	180	598	1136	1162	604	285	246
MAX	36	98	91	98	94	581	786	1530	1410	855	337	338
MIN	7.1	24	50	47	64	65	469	805	776	344	231	181
AC-FT	1310	3140	4280	4100	4340	11060	35570	69820	69140	37130	17500	14620

CAL YR 1977 TOTAL 18518.15 MEAN 50.7 MAX 154 MIN .04 AC-FT 36730  
WTR YR 1978 TOTAL 137130.90 MEAN 376 MAX 1530 MIN 7.1 AC-FT 272000

## BEAR RIVER BASIN

10046500 BEAR RIVER BELOW STEWART DAM, NEAR MONTPELIER, ID

LOCATION.--Lat 42°15'14", long 111°17'35", in NE¼ sec.34, T.13 S., R.44 E., Bear Lake County, Hydrologic Unit 16010201, on right bank 300 ft (91 m) downstream from Stewart Dam and 4.5 mi (7.2 km) south of Montpelier.

DRAINAGE AREA.--2,853 mi<sup>2</sup> (7,389 km<sup>2</sup>).

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only January 1922 to September 1945, published in WSP 1314.

REVISED RECORDS.--WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,950 ft (1,814 m) from topographic map.

REMARKS.--Records good. Water diverted at Stewart Dam through Rainbow inlet canal (see sta 10046000) for storage in Bear Lake.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

AVERAGE DISCHARGE.--56 years, 46.2 ft<sup>3</sup>/s (1.31 m<sup>3</sup>/s), 33,470 acre-ft/yr (41.3 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,050 ft<sup>3</sup>/s (86.4 m<sup>3</sup>/s) June 3, 1923; no flow July 15, 1956, July 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25 ft<sup>3</sup>/s (0.71 m<sup>3</sup>/s) June 9, gage height, 1.37 ft (0.418 m); minimum, 0.11 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/s) Sept. 11.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	7.4	12	7.1	6.6	7.5	5.4	12	11	11	.47	.38
2	6.8	7.3	11	6.9	6.7	7.6	5.4	12	11	11	.42	.36
3	6.6	7.3	12	6.8	6.7	7.7	5.5	11	11	11	.45	.36
4	6.5	7.2	14	6.7	6.7	7.8	5.4	12	11	11	.50	.45
5	6.6	7.0	12	6.6	6.8	7.9	5.3	12	12	11	.55	.42
6	6.7	6.8	11	6.6	6.7	8.0	5.1	12	15	11	.60	.37
7	6.8	6.6	10	6.7	6.4	8.1	5.0	10	18	11	.65	.32
8	6.9	6.7	9.6	6.8	6.4	7.8	4.9	8.9	20	11	.69	.32
9	7.0	6.7	7.6	6.8	6.3	7.6	4.8	8.2	20	10	.68	.32
10	7.0	6.7	8.7	6.9	6.3	7.4	4.7	8.3	15	10	.48	.32
11	5.2	11	9.1	7.0	6.3	7.4	4.5	9.5	13	10	.47	.37
12	3.9	13	9.2	7.0	6.4	7.2	4.7	11	14	10	.49	.39
13	3.4	12	9.3	7.1	6.5	6.2	5.8	11	14	11	.48	.34
14	3.0	9.5	9.2	7.1	6.6	5.4	7.6	8.8	13	10	.44	.37
15	2.6	9.1	9.9	7.2	6.7	5.2	7.5	8.9	12	10	.48	.37
16	2.3	8.9	9.0	7.4	6.7	5.1	7.4	9.8	13	10	.49	.37
17	2.0	8.7	7.9	7.4	6.8	5.6	7.4	12	14	5.9	.53	.37
18	2.9	8.3	8.3	7.4	6.9	5.4	7.4	11	14	1.9	.48	.37
19	6.6	7.4	8.4	7.3	7.0	5.4	7.4	9.5	15	1.5	.50	.37
20	8.5	6.6	8.0	7.2	7.1	5.4	7.4	9.1	15	1.4	.52	.37
21	8.8	6.7	7.2	6.9	7.2	5.4	7.4	8.8	14	1.3	.53	.41
22	9.2	6.8	7.1	6.6	7.3	5.4	7.4	8.7	14	1.2	.55	.30
23	9.7	7.0	7.2	6.2	7.3	5.5	7.4	8.8	14	.90	.57	.35
24	10	7.2	7.4	6.1	7.3	5.3	7.4	9.9	14	.77	.55	.37
25	11	7.5	7.4	6.0	7.4	5.1	7.4	10	13	.55	.54	.38
26	9.8	8.2	7.4	6.1	7.4	5.1	7.4	11	12	.31	.52	.33
27	8.2	8.4	7.5	6.2	7.4	5.1	8.2	11	12	.35	.51	.32
28	7.5	10	7.5	6.3	7.4	5.2	9.9	11	11	.38	.50	.32
29	6.9	10	7.4	6.4	---	5.4	11	10	11	.42	.48	.32
30	7.1	15	7.4	6.6	---	5.4	11	11	11	.45	.46	.32
31	7.3	---	7.2	6.6	---	5.4	---	10	---	.48	.42	---
TOTAL	203.7	251.0	276.9	210.0	191.3	194.0	203.1	317.2	407	186.81	16.00	10.73
MEAN	6.57	8.37	8.93	6.77	6.83	6.26	6.77	10.2	13.6	6.03	.52	.36
MAX	11	15	14	7.4	7.4	8.1	11	12	20	11	.69	.45
MIN	2.0	6.6	7.1	6.0	6.3	5.1	4.5	8.2	11	.31	.42	.30
AC-FT	404	498	549	417	379	385	403	629	807	371	32	21
CAL YR 1977	TOTAL	1734.49	MEAN	4.75	MAX	25	MIN	.00	AC-FT	3440		
WTR YR 1978	TOTAL	2467.74	MEAN	6.76	MAX	20	MIN	.30	AC-FT	4890		

## 10047500 MONTPELIER CREEK AT IRRIGATORS WEIR, NEAR MONTPELIER, ID

LOCATION.--Lat 42°19'47", long 111°14'47", in SW¼SE¼ sec.31, T.12 S., R.45 E., Bear Lake County, Hydrologic Unit 16010201, Caribou National Forest, on right bank 3 mi (5 km) east of Montpelier and 3.5 mi (5.6 km) downstream from South Fork.

DRAINAGE AREA.--49.5 mi<sup>2</sup> (128.2 km<sup>2</sup>).

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 6,210 ft (1,893 m) from topographic map.

REMARKS.--Records excellent. One small diversion above station for irrigation. Flow regulated by Montpelier Creek reservoir (capacity, 4,050 acre-ft or 5.00 hm<sup>3</sup>) since December 1970.

AVERAGE DISCHARGE.--28 years (1943-70), 21.2 ft<sup>3</sup>/s (0.600 m<sup>3</sup>/s), 15,360 acre-ft/yr (18.9 hm<sup>3</sup>/yr). 8 years (1971-78), 28.3 ft<sup>3</sup>/s (0.802 m<sup>3</sup>/s), 20,500 acre-ft/yr (25.3 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 224 ft<sup>3</sup>/s (6.34 m<sup>3</sup>/s) May 18, 1950; maximum gage height, 3.06 ft (0.933 m) Apr. 28, 1962; minimum discharge, 0.40 ft<sup>3</sup>/s (0.011 m<sup>3</sup>/s) Jan. 28, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 135 ft<sup>3</sup>/s (3.82 m<sup>3</sup>/s) May 21, gage height, 2.47 ft (0.753 m); minimum, 1.7 ft<sup>3</sup>/s (0.048 m<sup>3</sup>/s) Dec. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	5.3	5.0	3.9	5.0	5.2	24	109	75	67	49	27
2	5.0	5.2	5.5	4.1	5.0	5.2	23	106	69	67	48	27
3	5.0	5.2	6.4	5.4	5.0	5.1	22	105	60	66	48	27
4	4.9	5.1	6.1	6.0	4.9	5.2	22	119	60	62	48	27
5	4.9	5.2	5.5	5.4	5.0	5.5	23	120	60	38	47	27
6	5.2	5.3	5.3	5.4	5.1	5.7	23	117	60	37	47	27
7	5.3	5.2	5.3	5.2	5.0	5.6	25	117	60	37	47	27
8	5.1	5.1	4.7	5.1	5.2	5.6	26	115	60	37	47	27
9	5.1	4.9	4.8	5.1	5.1	7.4	27	115	60	50	47	27
10	5.1	5.1	5.2	5.1	5.2	16	30	115	64	58	47	27
11	5.0	5.1	5.1	5.1	5.3	16	33	120	64	59	42	27
12	5.0	5.1	5.2	5.1	5.1	17	39	117	63	59	37	27
13	5.1	5.1	5.1	5.0	5.0	17	39	117	63	58	38	27
14	5.0	5.1	5.3	5.0	5.1	17	41	126	63	58	31	27
15	5.0	5.1	6.0	4.9	5.1	17	40	130	63	57	30	27
16	5.1	5.1	5.6	4.7	4.8	17	43	130	61	57	30	26
17	5.0	5.0	5.2	4.7	4.3	17	42	126	60	57	29	28
18	5.0	5.1	5.6	4.7	5.1	17	42	131	60	57	29	28
19	5.1	4.9	5.2	4.7	5.8	17	43	130	63	56	29	27
20	5.2	4.3	4.1	4.7	5.3	18	48	130	67	56	28	27
21	5.1	4.2	3.9	4.7	5.1	18	65	131	68	56	28	27
22	5.1	5.5	5.3	4.7	5.1	19	65	132	68	56	28	27
23	5.1	5.5	6.1	4.5	5.0	19	65	132	67	55	28	26
24	5.1	5.2	5.8	4.2	5.2	20	71	131	67	55	28	26
25	5.1	5.3	5.5	5.5	5.2	19	80	123	73	55	28	26
26	5.1	6.2	5.3	5.2	5.2	19	85	102	70	54	27	26
27	5.1	5.6	5.3	5.1	5.4	20	88	100	69	49	27	25
28	5.1	5.4	5.3	4.9	5.2	20	88	99	68	42	27	25
29	5.5	5.3	5.2	5.1	---	20	90	100	68	49	27	25
30	5.5	5.2	5.4	5.0	---	21	98	91	67	49	27	25
31	5.3	---	5.2	5.1	---	21	---	76	---	49	27	---
TOTAL	158.3	154.9	164.5	153.3	142.8	452.5	1450	3612	1940	1662	1100	799
MEAN	5.11	5.16	5.31	4.95	5.10	14.6	48.3	117	64.7	53.6	35.5	26.6
MAX	5.5	6.2	6.4	6.0	5.8	21	98	132	75	67	49	28
MIN	4.9	4.2	3.9	3.9	4.3	5.1	22	76	60	37	27	25
AC-FT	314	307	326	304	283	898	2880	7160	3850	3300	2180	1580
CAL YR 1977	TOTAL	3132.8	MEAN	8.58	MAX	55	MIN	3.9	AC-FT	6210		
WTR YR 1978	TOTAL	11789.3	MEAN	32.3	MAX	132	MIN	3.9	AC-FT	23380		

## BEAR RIVER BASIN

10055500 BEAR LAKE AT LIFTON, NEAR ST. CHARLES, ID

LOCATION.--Lat 42°07'16", long 111°18'52", in NE¼ sec.16, T.15 S., R.44 E., Bear Lake County, Hydrologic Unit 16010201, in Lifton pumping plant of Utah Power & Light Company and 3.5 mi (5.6 km) east of St. Charles.

DRAINAGE AREA.--435 mi<sup>2</sup> (1,127 km<sup>2</sup>), approximately (does not include Mud Lake drainage).

PERIOD OF RECORD.--October 1903 to June 1906 (elevations only, published as "at Fish Haven"), January 1921 to current year. Monthly contents only January 1921 to September 1945 published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft (1,798.3 m) Utah Power & Light Co. datum.

REMARKS.--Outflow regulated by gates and pumps at north end of Bear Lake and by gates in dike at north end of Mud Lake, a shallow interconnected lake. Principal inflow to Bear Lake is from Bear River through Rainbow inlet (see sta 10046000) and Dingle inlet canals into Mud Lake, from which the inflow can enter into Bear Lake either through the pumping plant or through an opening in the dividing causeway. The inflow can be routed directly into the Outlet canal (see sta 10059500). Usable capacity of Bear Lake is 1,421,000 acre-ft (1.75 km<sup>3</sup>) between elevations 5,902.00 or 1,798.930 m (lower limit of pumps) and 5,923.65 ft or 1,805.529 m (upper limit of storage with existing facilities). Water is used for irrigation and power development. Figures given herein represent usable contents.

COOPERATION.--Gage heights furnished by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,423,000 acre-ft (1.75 km<sup>3</sup>) June 10, 1923, elevation, 5,923.68 ft (1,805.538 m); no usable contents Nov. 9-19, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,043,000 acre-ft (1.29 km<sup>3</sup>) July 11, elevation, 5,918.25 ft (1,803.883 m); minimum, 760,000 acre-ft (0.94 km<sup>3</sup>) Nov. 17.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

5,914	754,000	5,917	956,900	5,920	1,165,000
5,915	821,000	5,918	1,026,000	5,921	1,235,000
5,916	888,600	5,919	1,095,000	5,922	1,305,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	784800	764700	760000	765400	774800	786200	802200	853200	955500	1027000	1021000	965200
2	793500	764700	760000	765400	775400	786800	804200	855300	958300	1029000	1015000	964500
3	782100	764700	760000	765400	775400	786800	807600	857300	960400	1031000	1010000	963800
4	780800	764700	760000	766100	776100	787500	810300	859400	963100	1033000	1006000	963100
5	779500	764700	760000	766100	776100	787500	813000	861400	965800	1036000	1002000	962400
6	778100	764000	760000	766700	776100	788200	815000	863400	967800	1037000	997500	961700
7	776800	764000	760000	766700	776800	788200	816300	865500	969200	1038000	992700	961000
8	776100	763400	760000	767400	776800	788800	817600	868900	970600	1040000	988500	959700
9	775400	763400	760000	767400	776800	788800	819000	873600	972000	1041000	985100	959000
10	774100	762700	760000	768100	777400	789500	821000	879100	974000	1042000	981600	958300
11	772800	762700	760000	768100	778100	789500	823700	883800	975400	1043000	978900	957600
12	771400	762000	760000	768100	778800	790200	825700	888600	977500	1043000	976100	956900
13	770800	762000	760000	768700	779500	790200	827700	893400	979600	1043000	974000	956900
14	770800	761400	760000	768700	779500	790800	829700	896800	982300	1043000	972000	956200
15	770800	760700	760000	768700	780100	790800	831700	900200	985100	1043000	971300	955500
16	770100	760700	760700	769400	780800	791500	833100	903000	987800	1043000	970000	954900
17	770100	760000	761400	770100	781500	791500	834400	905000	991300	1042000	969200	954900
18	770100	760700	761400	770100	781500	792200	835700	908400	994100	1042000	968600	956900
19	769400	760700	762000	770800	782100	792900	836400	912500	997500	1041000	968600	958300
20	768700	760700	762000	770800	782800	793500	837800	917300	1000000	1040000	968600	958300
21	768100	761400	762700	771400	783500	794200	839100	921300	1003000	1039000	967800	958300
22	767400	761400	762700	771400	784200	794900	839800	924100	1006000	1038000	967800	959000
23	766700	760700	763400	772100	784200	795500	841100	927500	1010000	1036000	967200	959000
24	766700	760000	763400	772100	784800	796200	842400	931000	1013000	1035000	967200	959000
25	766100	760000	763400	772800	784800	796900	843800	934400	1016000	1033000	967200	959000
26	766100	760000	763400	772800	784800	797600	845100	937800	1019000	1032000	967800	959000
27	766100	760000	763400	773400	785500	798200	846500	941200	1022000	1031000	967800	959000
28	765400	760000	764000	773400	785500	798900	847800	944600	1023000	1029000	967800	959000
29	765400	760000	764000	774100	---	799600	849200	947300	1024000	1028000	967200	959000
30	765400	760000	764700	774100	---	800200	851200	95100	1026000	1026000	966500	959000
31	764700	---	764700	774800	---	800900	---	952800	---	1025000	965800	---
MAX	793500	764700	764700	774800	785500	800900	851200	952800	1026000	1043000	1021000	965200
MIN	764700	760000	760000	765400	774800	786200	802200	853200	955500	1025000	965800	954900
(+)	5914.16	5914.09	5914.16	5914.31	5914.47	5914.70	5915.45	5916.94	5918.00	5917.99	5917.13	5917.03
(-)	-21400	-4700	+4700	+10100	+10700	+15400	+50300	+101600	+73200	-1000	-59200	-6800
CAL YR 1977..... ‡			-295300									
WTR YR 1978..... ‡			+172900									

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.



## BEAR RIVER BASIN

## 10059500 BEAR LAKE OUTLET CANAL NEAR PARIS, ID

LOCATION.--Lat 42°13'00", long 111°20'35", in SW¼ sec.8, T.14 S., R.44 E., Bear Lake County, Hydrologic Unit 16010201, on right bank 2,000 ft (610 m) downstream from headgates (at dike), and 3 mi (5 km) southeast of Paris.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only January 1922 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 5,912.6 ft (1,802.16 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Bear Lake (see sta 10055500).

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

AVERAGE DISCHARGE.--56 years, 372 ft<sup>3</sup>/s (10.5 m<sup>3</sup>/s), 269,500 acre-ft/yr (332 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,870 ft<sup>3</sup>/s (53.0 m<sup>3</sup>/s) Aug. 8, 1924; minimum daily, 1 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s) for many days in 1937, 1954, 1959, 1961, 1964, 1977, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,240 ft<sup>3</sup>/s (35.1 m<sup>3</sup>/s) July 28, gage height, 18.11 ft (5.520 m); minimum daily, 1.0 ft<sup>3</sup>/s (0.03 m<sup>3</sup>/s) Oct. 17 to Apr. 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	98	1180	15
2	8.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	90	1190	15
3	8.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	233	1130	15
4	8.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	405	968	15
5	8.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	408	948	84
6	8.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	383	946	292
7	8.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	364	978	299
8	8.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	351	1050	307
9	8.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	331	1100	357
10	8.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	451	1040	349
11	8.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	667	1040	197
12	7.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	718	1030	10
13	6.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	734	1030	10
14	6.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	770	901	10
15	6.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	876	774	10
16	6.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	914	791	10
17	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	1010	797	10
18	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	1210	696	10
19	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	1230	466	10
20	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	6.0	1230	370	10
21	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	6.0	1210	365	10
22	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	6.0	1200	207	10
23	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	6.0	1200	21	10
24	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	6.0	1190	14	10
25	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	6.0	1190	15	10
26	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	6.0	1220	15	10
27	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	6.0	1210	15	10
28	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	133	1230	15	10
29	1.0	1.0	1.0	1.0	---	1.0	6.0	6.0	128	1220	15	10
30	1.0	1.0	1.0	1.0	---	1.0	6.0	6.0	112	1190	15	10
31	1.0	---	1.0	1.0	---	1.0	---	6.0	---	1160	15	---
TOTAL	134.0	30.0	31.0	31.0	28.0	31.0	85.0	186.0	535.0	25693	19137	2135
MEAN	4.32	1.00	1.00	1.00	1.00	1.00	2.83	6.00	17.8	829	617	71.2
MAX	8.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	133	1230	1190	357
MIN	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0	90	14	10
AC-FT	266	60	61	61	56	61	169	369	1060	50960	37960	4230

CAL YR 1977 TOTAL 143057.6 MEAN 392 MAX 1540 MIN 1.0 AC-FT 283800  
WTR YR 1978 TOTAL 48056.0 MEAN 132 MAX 1230 MIN 1.0 AC-FT 95320

BEAR RIVER BASIN

10068500 BEAR RIVER AT PESCADERO, ID

LOCATION.--Lat 42°24'06", long 111°21'22", in SW¼SW¼SE¼ sec.6, T.12 S., R.44 E., Bear Lake County, Hydrologic Unit 16010202, on left bank at Pescadero, 400 ft (122 m) downstream from road bridge, 2 mi (3.2 km) downstream from Bennington Creek, and 6.5 mi (10.5 km) northwest of Montpelier.

DRAINAGE AREA.--3,705 mi<sup>2</sup> (9,596 km<sup>2</sup>).

PERIOD OF RECORD.--October 1921 to September 1954, June 1969 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft (1,798 m) from topographic map.

REMARKS.--Records good except those for winter months, which are fair. Flow regulated by Bear Lake (see sta 10055000) and diversions above station for irrigation.

AVERAGE DISCHARGE.--42 years, 602 ft<sup>3</sup>/s (17.0 m<sup>3</sup>/s), 436,100 acre-ft/yr (538 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,840 ft<sup>3</sup>/s (109 m<sup>3</sup>/s) June 10, 1923; minimum daily, 23 ft<sup>3</sup>/s (0.65 m<sup>3</sup>/s) Mar. 14-17, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,400 ft<sup>3</sup>/s (39.6 m<sup>3</sup>/s) July 19, gage height, 4.89 ft (1.490 m); minimum, 31 ft<sup>3</sup>/s (0.88 m<sup>3</sup>/s) Oct. 18, 19, 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	44	87	91	100	108	694	351	297	376	1330	94
2	37	48	87	90	100	108	734	409	285	354	1320	84
3	36	60	87	88	100	110	752	401	292	374	1300	82
4	35	64	87	88	100	110	706	393	299	692	1150	83
5	34	63	87	91	100	110	672	401	363	775	1100	80
6	35	62	87	95	100	110	563	417	385	755	1100	276
7	35	54	87	97	100	108	484	417	363	666	1120	347
8	35	51	87	97	100	113	435	401	365	609	1170	355
9	35	46	87	95	100	113	417	393	367	599	1180	405
10	34	51	87	101	98	115	397	397	451	568	1180	430
11	38	51	87	102	97	120	377	417	510	853	1170	409
12	41	54	87	104	97	122	362	433	486	974	1170	174
13	37	55	87	104	97	127	351	433	472	994	1200	106
14	35	54	86	102	97	125	351	432	443	1010	1190	100
15	33	53	87	104	97	125	370	420	429	1050	989	100
16	32	55	87	106	97	130	377	416	412	1120	934	102
17	31	45	87	102	98	134	377	460	395	1140	936	107
18	31	50	87	96	101	141	370	605	382	1320	921	130
19	31	55	87	98	102	128	344	667	370	1390	748	130
20	31	60	87	100	102	128	319	688	309	1380	532	128
21	34	63	86	100	102	122	301	620	279	1350	473	130
22	34	69	86	100	104	132	305	540	274	1330	451	130
23	35	73	86	100	106	154	292	512	258	1320	210	127
24	36	86	86	100	107	200	279	460	247	1310	127	125
25	36	85	86	100	110	264	270	431	239	1300	122	123
26	38	84	86	100	110	344	264	409	258	1290	115	118
27	39	84	86	100	110	426	222	365	314	1300	113	112
28	37	86	86	100	110	495	215	338	446	1300	104	109
29	39	87	87	100	---	532	228	322	444	1300	101	107
30	43	87	88	100	---	566	273	321	396	1320	95	104
31	43	---	90	100	---	608	---	324	---	1320	95	---
TOTAL	1106	1879	2692	3051	2842	6228	12101	13593	10830	31439	23746	4907
MEAN	35.7	62.6	86.8	98.4	102	201	403	438	361	1014	766	164
MAX	43	87	90	106	110	608	752	688	510	1390	1330	430
MIN	31	44	86	88	97	108	215	321	239	354	95	80
AC-FT	2190	3730	5340	6050	5640	12350	24000	26960	21480	62360	47100	9730
CAL YR 1977	TOTAL	164069	MEAN 450	MAX 1630	MIN 31	AC-FT 325400						
WTR YR 1978	TOTAL	114414	MEAN 313	MAX 1390	MIN 31	AC-FT 226900						

## BEAR RIVER BASIN

10072800 EIGHTMILE CREEK NEAR SODA SPRINGS, ID

LOCATION.--Lat 42°32'15", long 111°34'20", in SE¼ sec.20, T.10 S., R.42 E., Bear Lake County, Hydrologic Unit 16010202, on right bank just below Wilson Creek, 15 ft (5 m) downstream from road bridge, 0.3 mi (0.5 km) north of Eightmile ranger station, and 8.4 mi (13.5 km) south of Soda Springs.

DRAINAGE AREA.--22.6 mi<sup>2</sup> (58.5 km<sup>2</sup>).

PERIOD OF RECORD.--October 1960 to current year.

REVISED RECORDS.--WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,170 ft (1,881 m) from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--18 years, 17.0 ft<sup>3</sup>/s (0.481 m<sup>3</sup>/s), 12,320 acre-ft/yr (15.2 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 209 ft<sup>3</sup>/s (5.92 m<sup>3</sup>/s) June 14, 1978, gage height, 2.39 ft (0.728 m); minimum, 0.73 ft<sup>3</sup>/s (0.021 m<sup>3</sup>/s) Nov. 17, 18, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 209 ft<sup>3</sup>/s (5.92 m<sup>3</sup>/s) June 14, gage height, 2.39 ft (0.728 m); minimum, 0.73 ft<sup>3</sup>/s (0.021 m<sup>3</sup>/s) Nov. 17-18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.3	1.1	1.2	1.3	2.1	21	46	58	56	21	9.0
2	1.5	1.3	1.2	1.3	1.3	2.2	22	45	54	54	21	8.7
3	1.5	1.3	1.3	1.4	1.3	2.2	20	45	54	54	20	8.6
4	1.4	1.3	1.3	1.4	1.3	2.4	20	44	56	51	19	8.4
5	1.4	1.3	1.3	1.4	1.4	3.2	20	43	62	50	18	8.3
6	1.5	1.3	1.4	1.4	1.4	2.8	19	43	63	48	17	8.1
7	1.5	1.2	1.4	1.4	1.5	2.7	21	43	73	47	17	8.0
8	1.4	1.1	1.3	1.3	1.6	2.8	22	42	80	46	16	8.0
9	1.4	1.0	1.2	1.4	1.5	2.9	23	40	94	43	15	7.9
10	1.6	1.2	1.3	1.4	1.5	3.0	25	41	122	41	14	8.2
11	1.6	1.2	1.3	1.3	1.6	3.1	26	49	141	40	14	8.5
12	1.6	1.2	1.3	1.3	1.6	3.2	28	48	157	39	14	8.0
13	1.6	1.2	1.3	1.3	1.5	3.0	29	48	151	39	15	8.0
14	1.5	1.2	1.3	1.3	1.6	3.0	29	53	155	38	14	7.6
15	1.5	1.2	2.4	1.3	1.5	2.8	31	62	140	39	13	7.1
16	1.4	1.2	2.7	1.3	1.4	3.0	32	65	122	37	13	6.8
17	1.4	1.2	2.0	1.3	1.5	3.2	32	68	113	36	13	7.1
18	1.3	1.0	2.1	1.3	1.5	3.7	33	69	99	36	13	7.5
19	1.3	1.1	1.8	1.4	1.5	4.5	33	61	88	35	12	7.3
20	1.3	1.0	1.3	1.4	1.5	5.7	35	59	84	34	12	7.1
21	1.2	1.0	1.3	1.5	1.4	7.0	36	64	84	33	11	6.9
22	1.2	1.0	1.4	1.5	1.5	8.5	35	71	84	32	11	6.7
23	1.2	1.0	1.4	1.3	1.5	10	36	79	84	30	11	6.6
24	1.2	1.1	1.4	1.2	1.6	12	36	84	82	29	11	6.6
25	1.2	1.1	1.4	1.4	1.7	11	37	85	81	28	9.9	6.5
26	1.2	1.2	1.3	1.4	2.0	11	41	80	74	27	9.8	6.2
27	1.1	1.2	1.3	1.4	2.0	13	41	68	69	26	9.8	6.1
28	1.1	1.2	1.3	1.3	2.0	15	44	69	65	26	9.8	5.8
29	1.5	1.2	1.4	1.3	---	17	44	65	60	25	9.5	5.9
30	1.5	1.2	1.4	1.2	---	18	49	65	58	23	9.5	5.9
31	1.3	---	1.4	1.3	---	19	---	61	---	22	9.2	---
TOTAL	43.0	35.0	45.3	41.6	43.0	203.0	920	1805	2707	1164	422.3	221.4
MEAN	1.39	1.17	1.46	1.34	1.54	6.55	30.7	58.2	90.2	37.5	13.6	7.38
MAX	1.6	1.3	2.7	1.5	2.0	19	49	85	157	56	21	9.0
MIN	1.1	1.0	1.1	1.2	1.3	2.1	19	40	54	22	9.2	5.8
AC-FT	85	69	90	83	85	403	1820	3580	5370	2310	838	439
CAL YR 1977 TOTAL	1289.8			MEAN 3.53	MAX 17	MIN 1.0	AC-FT 2560					
WTR YR 1978 TOTAL	7650.6			MEAN 21.0	MAX 157	MIN 1.0	AC-FT 15170					

10075000 BEAR RIVER AT SODA SPRINGS, ID

LOCATION.--Lat 42°36'50", long 111°34'58", in NW¼SW¼NW¼ sec.29, T.9 S., R.42 E., Caribou County, Hydrologic Unit 16010202, on left bank 800 ft (244 m) upstream from Bailey Creek road bridge and 2 mi (3 km) south of Soda Springs.

DRAINAGE AREA.--3,972 mi<sup>2</sup> (10,287 km<sup>2</sup>).

PERIOD OF RECORD.--May to September 1896, May, June 1898, and October 1953 to current year in reports of Geological Survey. Irrigation season only during 1944-49, 1951-53 in reports of Bear River Hydrometric Data (Geological Survey open-file report).

REVISED RECORDS.--WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,760 ft (1,756 m) from topographic map. May 25 to Oct. 2, 1896, May 22 to July 1, 1898, nonrecording gage at different datum. During irrigation season 1944-49, 1950-53, water-stage recorder at site 800 ft (244 m) downstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by upstream reservoirs, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

AVERAGE DISCHARGE.--25 years, 645 ft<sup>3</sup>/s (18.3 m<sup>3</sup>/s), 467,300 acre-ft/yr (576 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,380 ft<sup>3</sup>/s (181 m<sup>3</sup>/s) June 9, 15, 1896, gage height, 8.40 ft (2.560 m), datum then in use; minimum, 52 ft<sup>3</sup>/s (1.47 m<sup>3</sup>/s) Nov. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,180 ft<sup>3</sup>/s (61.7 m<sup>3</sup>/s) June 20, gage height, 5.54 ft (1.689 m); minimum, 52 ft<sup>3</sup>/s (1.47 m<sup>3</sup>/s) Nov. 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	102	137	137	146	201	1060	674	632	500	1170	151
2	92	101	146	139	147	203	1120	688	589	484	1170	146
3	92	107	161	141	147	205	1050	672	583	468	1150	136
4	89	118	159	142	147	206	976	666	609	596	1080	130
5	87	119	156	144	148	208	901	666	653	763	984	133
6	87	121	154	146	148	210	830	667	669	775	967	151
7	93	114	152	148	149	212	763	672	658	724	978	349
8	90	99	149	150	149	214	709	644	656	682	1020	373
9	89	85	147	152	150	216	661	624	663	643	1050	391
10	88	101	145	154	150	218	641	627	677	602	1050	432
11	86	113	153	155	150	220	640	665	754	698	1030	451
12	91	105	150	157	151	222	619	701	762	870	1030	381
13	96	104	147	159	153	224	597	704	721	901	1080	222
14	91	106	144	161	155	226	617	699	700	912	1120	182
15	89	108	139	162	157	219	654	713	779	932	1010	176
16	88	103	135	151	159	201	646	743	1030	978	913	172
17	84	98	132	144	161	213	640	806	1300	1010	877	176
18	82	91	131	140	163	241	618	907	1610	1110	882	218
19	78	90	132	141	165	247	580	975	1940	1200	819	229
20	79	89	132	141	167	261	549	957	1460	1200	652	221
21	83	89	132	142	169	287	523	920	505	1190	531	215
22	88	88	132	142	171	315	523	848	485	1180	516	218
23	88	88	131	142	173	365	512	823	466	1170	426	214
24	89	110	131	143	175	438	497	811	448	1160	245	208
25	91	142	131	143	166	512	483	781	438	1150	204	202
26	91	166	131	144	172	603	503	750	432	1140	191	197
27	91	191	130	144	169	700	504	718	447	1140	182	191
28	92	174	130	145	193	795	478	675	511	1150	173	185
29	95	164	132	145	---	843	485	659	572	1160	165	180
30	114	160	133	145	---	879	565	649	538	1160	159	177
31	106	---	135	146	---	961	---	654	---	1170	155	---
TOTAL	2786	3446	4349	4545	4450	11065	19944	22758	22287	28818	22979	6807
MEAN	89.9	115	140	147	159	357	665	734	743	930	741	227
MAX	114	191	161	162	193	961	1120	975	1940	1200	1170	451
MIN	78	85	130	137	146	201	476	624	432	468	155	130
AC-FT	5530	6840	8630	9020	8830	21950	39560	45140	44210	57160	45580	13500

CAL YR 1977 TOTAL 179293 MEAN 491 MAX 1570 MIN 78 AC-FT 355600  
WTR YR 1978 TOTAL 154234 MEAN 423 MAX 1940 MIN 78 AC-FT 305900

## 10076400 SODA CREEK AT FIVEMILE MEADOWS, NEAR SODA SPRINGS, ID

LOCATION.--Lat 42°43'45", long 111°36'55", in SE¼NW¼ sec.13, T.8 S., R.41 E., Caribou County, Hydrologic Unit 16010202, on right bank 100 ft (30 m) southeast of Lau ranchhouse, 150 ft (46 m) downstream from Schmidt ditch, and 5 mi (8.0 km) north of Soda Springs.

DRAINAGE AREA.--51.7 mi<sup>2</sup> (133.9 km<sup>2</sup>).

PERIOD OF RECORD.--October 1964 to current year. April 1923 to October 1926 at this site published as "at Lau Ranch;" records not equivalent owing to diversion in Schmidt ditch during irrigation season.

REVISED RECORDS.--WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,980 ft (1,822 m) from topographic map. April 1923 to October 1926 at different datum and Oct. 1, 1964, to Aug. 26, 1965, at site 400 ft (122 m) upstream at different datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--14 years, 17.3 ft<sup>3</sup>/s (0.49 m<sup>3</sup>/s), 12,530 acre-ft/yr (15.4 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 121 ft<sup>3</sup>/s (3.43 m<sup>3</sup>/s) Apr. 14, 1976; maximum gage height, 4.01 ft (1.222 m) Apr. 2, 1965, site and datum then in use; no flow Dec. 24, 1966, Feb. 17, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 106 ft<sup>3</sup>/s (3.00 m<sup>3</sup>/s) Mar. 31, gage height, 1.95 ft (0.594 m); minimum observed, no flow Feb. 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.0	2.0	1.2	1.0	1.0	96	17	14	9.8	7.8	6.4
2	4.8	5.0	2.0	1.0	1.0	1.0	68	16	13	9.8	7.6	6.4
3	4.6	5.0	2.0	1.0	1.0	1.0	35	15	13	9.8	7.4	6.4
4	4.6	4.8	2.0	1.0	1.0	1.0	22	15	13	9.8	7.4	6.4
5	4.6	4.8	2.0	1.0	1.0	1.0	20	15	13	9.8	7.2	6.4
6	4.8	5.0	2.0	1.0	1.0	1.0	18	15	13	9.8	7.0	6.4
7	4.8	4.8	2.0	1.0	1.0	1.0	18	14	13	9.8	6.8	6.8
8	4.8	5.0	2.0	1.0	1.0	1.0	19	13	13	9.8	6.6	7.0
9	4.6	5.0	2.0	1.0	1.0	1.0	18	13	13	9.8	6.6	7.0
10	4.6	5.0	2.0	1.0	1.0	1.0	16	13	13	9.8	6.6	7.4
11	4.2	4.8	2.0	1.0	1.0	1.0	16	14	13	9.8	6.4	7.6
12	4.4	4.6	2.0	1.0	1.0	1.0	15	14	12	10	6.4	7.6
13	4.2	4.4	2.0	1.0	1.0	1.0	15	13	12	10	7.2	7.8
14	4.2	4.2	2.0	1.0	1.0	1.0	16	13	12	9.8	7.0	7.8
15	4.2	4.0	2.0	1.0	1.0	1.0	15	13	12	10	6.8	7.8
16	4.2	4.0	2.0	1.0	.00	1.0	16	14	12	9.8	7.2	8.0
17	4.2	4.0	2.0	1.0	.00	2.0	16	14	12	9.8	6.8	8.6
18	4.6	3.5	2.0	1.0	.00	3.0	16	16	12	9.8	6.6	9.2
19	4.6	3.0	2.0	1.0	1.0	4.0	15	16	11	9.8	6.6	8.6
20	4.6	3.0	2.0	1.0	1.0	5.0	15	15	10	9.5	6.6	8.6
21	4.4	3.0	2.0	1.0	1.0	5.5	15	14	10	8.9	6.6	8.6
22	4.2	2.8	2.0	1.0	1.0	5.5	15	15	10	8.3	6.8	8.3
23	4.0	2.6	2.0	1.0	1.0	5.5	14	15	10	8.0	6.6	8.3
24	4.2	2.4	2.0	1.0	1.0	5.6	14	15	10	8.0	6.8	8.0
25	3.9	2.2	2.0	1.0	1.0	5.8	14	14	10	7.8	6.8	8.3
26	3.9	2.0	2.0	1.0	1.0	6.4	15	14	10	7.6	6.6	8.3
27	4.0	2.0	2.0	1.0	1.0	9.5	16	14	10	7.8	6.6	8.0
28	4.0	2.0	2.0	1.0	1.0	17	16	14	10	8.3	6.4	7.8
29	4.4	2.0	1.8	1.0	---	26	15	14	10	8.0	6.4	7.8
30	3.9	2.0	1.6	1.0	---	52	17	14	9.8	8.0	6.4	7.8
31	5.2	---	1.4	1.0	---	88	---	14	---	7.8	6.4	---
TOTAL	136.7	111.9	60.8	31.2	5.00	256.8	636	445	348.8	284.8	211.0	229.4
MEAN	4.41	3.73	1.96	1.01	.89	8.28	21.2	14.4	11.6	9.19	6.81	7.65
MAX	5.2	5.0	2.0	1.2	1.0	88	96	17	14	10	7.8	9.2
MIN	3.9	2.0	1.4	1.0	.00	1.0	14	13	9.8	7.6	6.4	6.4
AC-F T	271	222	121	62	50	509	1260	883	692	565	419	455
CAL YR 1977	TOTAL	2815.30	MEAN	7.71	MAX	17	MIN	1.4	AC-F T	5580		
WTR YR 1978	TOTAL	2777.40	MEAN	7.61	MAX	96	MIN	.00	AC-F T	5510		

BEAR RIVER BASIN

53

10079500 BEAR RIVER AT ALEXANDER, ID

LOCATION.--Lat 42°38'42", long 111°41'51", in NE¼SW¼NW¼ sec.17, T.9 S., R.41 E., Caribou County, Hydrologic Unit Unit 16010202, on right bank 600 ft (183 m) downstream from Soda hydroelectric plant of Utah Power & Light Co., 0.5 mi (0.8 km) southeast of Alexander, and 5 mi (8 km) downstream from Soda Creek.

DRAINAGE AREA.--4,099 mi<sup>2</sup> (10,616 km<sup>2</sup>).

PERIOD OF RECORD.--March 1911 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,650 ft (1,722 m), from topographic map.

REMARKS.--Records good. Natural flow of stream affected by upstream reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

AVERAGE DISCHARGE.--67 years, 774 ft<sup>3</sup>/s (21.9 m<sup>3</sup>/s), 560,900 acre-ft/yr (692 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,740 ft<sup>3</sup>/s (139 m<sup>3</sup>/s) Mar. 31, 1911; maximum gage height, 15.95 ft (4.862 m) Dec. 11, 1919 (backwater from ice); minimum discharge, 28 ft<sup>3</sup>/s (0.79 m<sup>3</sup>/s) at times when reservoir gates were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,990 ft<sup>3</sup>/s (56.4 m<sup>3</sup>/s) July 13, gage height, 2.97 ft (0.905 m); minimum, 42 ft<sup>3</sup>/s (1.19 m<sup>3</sup>/s) Oct. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	117	302	305	332	309	964	600	946	424	1160	407
2	95	153	309	284	335	342	965	814	952	424	920	418
3	100	214	320	347	355	496	959	830	694	779	1260	437
4	106	168	346	295	371	508	961	826	695	683	1260	661
5	104	172	421	369	364	632	960	796	857	699	1290	527
6	108	199	315	313	368	685	967	654	904	621	1070	408
7	108	174	283	313	384	676	960	655	700	617	981	509
8	78	196	338	312	361	705	956	654	613	652	987	523
9	103	132	218	332	361	672	960	685	406	624	985	220
10	119	171	297	304	325	681	899	711	433	634	983	223
11	83	191	373	386	375	433	701	918	458	778	983	504
12	90	203	295	317	333	468	794	915	467	637	983	473
13	115	182	336	308	342	482	754	924	497	648	1020	461
14	77	199	303	325	308	460	745	908	759	938	1250	355
15	109	199	442	331	322	463	686	910	638	689	1230	297
16	79	180	326	344	378	492	704	918	663	762	1140	299
17	113	229	351	320	346	336	741	925	534	910	902	237
18	85	212	274	337	321	343	724	927	541	1220	743	240
19	83	136	335	325	325	342	619	926	518	1230	684	240
20	84	158	355	396	325	486	701	916	607	1230	949	241
21	99	248	293	333	335	334	702	914	496	1240	690	244
22	92	209	259	349	322	565	712	913	479	1260	593	249
23	92	208	353	343	333	716	435	912	573	1110	622	251
24	102	231	368	343	329	822	698	916	460	1280	433	252
25	94	245	342	327	331	832	630	915	465	1280	595	252
26	115	272	323	329	365	731	493	919	461	1290	436	253
27	98	276	344	325	468	783	474	912	421	1200	576	252
28	98	286	275	334	469	866	423	918	418	1250	612	381
29	116	288	294	333	---	985	464	925	413	1260	617	368
30	102	224	392	337	---	979	495	933	410	1250	474	168
31	106	---	350	337	---	983	---	940	---	1320	427	---
TOTAL	3067	6072	10132	10253	9883	18607	22246	26529	17478	28939	26855	10350
MEAN	98.9	202	327	331	353	600	742	856	583	934	866	345
MAX	119	288	442	396	469	985	967	940	952	1320	1290	661
MIN	77	117	218	284	308	309	423	600	406	424	427	168
AC-FT	6080	12040	20100	20340	19600	36910	44120	52620	34670	57400	53270	20530
CAL YR 1977	TOTAL	213273	MEAN	584	MAX	1610	MIN	77	AC-FT	423000		
WTR YR 1978	TOTAL	190411	MEAN	522	MAX	1320	MIN	77	AC-FT	377700		

## BEAR RIVER BASIN

10084500 COTTONWOOD CREEK NEAR CLEVELAND, ID

LOCATION.--Lat 42°19'57", long 111°46'27", in SW¼ sec.34, T.12 S., R.40 E., Franklin County, Hydrologic Unit 16010202, on right bank 500 ft (152 m) upstream from Cleveland irrigation canal, 2.5 mi (4.0 km) west of Cleveland, and 4 mi (6 km) downstream from proposed Cottonwood Dam.

DRAINAGE AREA.--61.7 mi<sup>2</sup> (159.8 km<sup>2</sup>).

PERIOD OF RECORD.--November 1938 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,150 ft (1,570 m) from topographic map. Prior to Dec. 29, 1944, nonrecording gage at same site and datum.

REMARKS.--Records good except those for periods of ice effect, which are fair. A few small diversions for irrigation of meadowland in Cottonwood Valley above station. Treasureton Canal diverts from Cottonwood Creek 10.1 mi (16.3 km) above station in SE¼ sec.8, T.12 S., R.39 E., for irrigation in Battle Creek basin in vicinity of Treasureton.

AVERAGE DISCHARGE.--39 years, 31.4 ft<sup>3</sup>/s (0.889 m<sup>3</sup>/s), 22,750 acre-ft/yr (28.0 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 788 ft<sup>3</sup>/s (22.3 m<sup>3</sup>/s) May 16, 1975, gage height, 4.01 ft (1.222 m); no flow Feb. 19, 20, 21, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 200 ft<sup>3</sup>/s (5.66 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)		Gage height (ft) (m)		Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)		Gage height (ft) (m)	
Mar. 31	2200	*452	12.80	3.41	1.039	Apr. 26	2400	241	9.56	2.85	0.867
Apr. 7	2400	420	11.89	3.34	1.018	May 16	0100	228	6.46	2.84	.866

Minimum discharge, 2.1 ft<sup>3</sup>/s (0.059 m<sup>3</sup>/s) Oct. 1, 2, 3, 4, 5.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	3.6	6.7	8.9	12	17	377	180	73	8.9	6.8	6.3
2	2.1	3.8	6.6	8.0	13	16	307	189	67	8.5	6.8	6.2
3	2.1	3.8	11	7.8	13	16	216	192	70	8.3	6.8	6.2
4	2.1	3.8	19	8.5	12	16	197	193	71	8.3	6.8	6.2
5	2.1	3.9	13	9.6	14	21	197	167	66	8.5	6.8	6.2
6	2.2	4.1	12	10	16	24	197	150	58	8.3	6.6	6.2
7	2.2	4.1	12	10	16	23	330	139	56	8.8	6.6	6.2
8	2.2	4.1	8.4	9.8	15	24	310	128	55	8.0	6.5	6.2
9	2.3	4.1	7.6	11	14	25	293	130	57	8.1	6.5	6.2
10	2.3	4.2	7.5	11	17	26	248	153	56	8.2	6.5	6.4
11	2.3	4.3	8.1	11	16	28	245	180	50	7.8	6.5	6.3
12	2.4	4.3	9.0	11	15	29	219	161	45	7.7	6.4	6.3
13	2.4	4.3	8.8	10	14	26	203	158	40	7.6	6.8	6.3
14	2.5	4.3	9.5	11	15	25	221	176	34	7.5	8.4	6.2
15	2.6	4.3	17	12	15	22	202	197	32	7.3	7.7	6.3
16	2.7	4.3	16	11	11	23	236	196	30	7.4	7.4	6.3
17	2.7	4.3	12	12	8.6	25	196	163	24	7.4	7.1	6.7
18	2.9	4.3	13	12	8.9	30	170	155	22	9.1	7.1	9.2
19	2.9	4.3	11	11	11	41	162	138	22	9.7	6.9	12
20	3.0	4.4	8.7	12	14	52	173	130	20	9.3	6.9	12
21	3.0	4.6	7.8	12	14	73	184	133	18	9.3	6.8	11
22	3.2	4.6	7.5	12	15	106	160	143	17	11	6.7	10
23	3.2	4.5	7.7	10	15	134	150	140	16	7.5	6.8	9.5
24	3.3	4.4	8.1	8.3	17	152	146	135	16	7.2	6.8	9.2
25	3.3	4.6	11	8.6	16	132	161	123	16	6.8	6.7	8.8
26	3.3	11	12	9.7	17	137	217	114	14	6.7	6.6	8.8
27	3.4	17	11	10	17	162	222	105	13	6.5	6.5	8.6
28	3.4	11	11	9.8	17	192	206	93	11	6.5	6.5	8.4
29	3.6	7.6	11	11	---	231	185	90	9.5	6.5	6.5	8.4
30	3.6	7.1	12	10	---	281	184	87	9.1	6.6	6.5	8.4
31	3.6	---	11	11	---	314	---	81	---	6.8	6.4	---
TOTAL	85.0	159.0	327.0	320.0	398.5	2423	6476	4521	1087.6	246.1	210.7	231.0
MEAN	2.74	5.30	10.5	10.3	14.2	78.2	216	146	36.3	7.94	6.80	7.70
MAX	3.6	17	19	12	17	314	377	197	73	11	8.4	12
MIN	2.1	3.6	6.6	7.8	8.6	16	146	81	9.1	6.5	6.4	6.2
AC-FT	169	315	649	635	790	4810	12850	8970	2160	488	418	458
CAL YR 1977 TOTAL		2476.18		MEAN 6.78	MAX 50	MIN .00	AC-FT 4910					
WTR YR 1978 TOTAL		16484.90		MEAN 45.2	MAX 377	MIN 2.1	AC-FT 32700					

BEAR RIVER BASIN

55

10086500 BEAR RIVER BELOW UTAH POWER & LIGHT CO.'S TAILRACE, AT ONEIDA, ID

LOCATION.--Lat 42°16'00", long 111°45'04", in NE¼SE¼NW¼ sec.26, T.13 S., R.40 E., Franklin County, Hydrologic Unit 16010202, on right bank 200 ft (61 m) downstream from tailrace of Oneida plant and 6 mi (10 km) south of Cleveland.

DRAINAGE AREA.--4,456 mi<sup>2</sup> (11,541 km<sup>2</sup>).

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only October 1921 to September 1945, published in WSP 1314.

REVISED RECORDS.--WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,800 ft (1,460 m) from topographic map.

REMARKS.--Records good. Natural flow of stream affected by upstream reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

AVERAGE DISCHARGE.--57 years, 830 ft<sup>3</sup>/s (23.5 m<sup>3</sup>/s), 601,300 acre-ft/yr (741 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,480 ft<sup>3</sup>/s (155 m<sup>3</sup>/s) May 8, 1922; minimum, 3.0 ft<sup>3</sup>/s (0.085 m<sup>3</sup>/s) June 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,760 ft<sup>3</sup>/s (78.2 m<sup>3</sup>/s) Mar. 6, gage height, 6.31 ft (1.923 m); minimum, 3.0 ft<sup>3</sup>/s (0.085 m<sup>3</sup>/s) June 13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	333	29	467	311	148	1580	1200	1360	127	934	346
2	14	445	29	290	421	170	1750	670	1040	134	972	215
3	14	458	29	397	329	262	1760	1060	1030	521	998	313
4	16	442	29	210	586	447	1500	1050	815	718	817	786
5	16	461	186	497	317	940	1580	1340	848	154	959	565
6	170	449	519	360	307	706	1180	1400	1130	495	732	635
7	267	450	444	483	567	981	1310	1070	1040	511	1110	285
8	281	666	529	370	531	849	1770	1250	890	633	963	321
9	274	736	193	497	607	925	1750	1130	514	545	902	190
10	255	314	498	500	413	852	1370	733	314	608	823	359
11	261	306	290	353	535	897	1440	1090	285	408	824	346
12	249	308	560	403	375	426	927	1280	467	607	204	369
13	256	315	413	353	748	763	1410	1310	577	601	300	179
14	261	322	175	372	75	826	1320	1560	443	784	1010	180
15	248	318	529	146	408	574	768	1500	590	607	1370	176
16	250	323	678	468	183	453	1430	1100	377	807	892	180
17	259	326	481	539	605	686	1050	1590	676	649	386	228
18	237	320	138	286	446	422	1430	1770	338	789	718	563
19	243	353	594	313	421	556	1010	929	477	1050	814	189
20	244	330	658	529	319	652	1320	1270	642	900	531	309
21	244	112	120	194	400	676	1150	1230	877	954	677	178
22	234	15	72	572	414	687	1020	1280	206	858	355	419
23	231	16	289	447	641	1040	913	1300	481	1050	456	219
24	231	16	690	205	732	1350	1090	1840	555	823	468	550
25	231	16	193	156	932	1190	869	1870	578	993	465	345
26	224	16	711	380	447	1240	982	566	162	1040	324	356
27	217	17	401	421	1020	1160	1200	1660	498	965	339	470
28	218	17	321	581	173	1530	478	956	203	983	598	514
29	224	25	189	277	---	1270	970	1780	281	787	352	556
30	232	29	756	296	---	1350	893	946	106	781	566	362
31	241	---	247	475	---	1360	---	1360	---	742	446	---
TOTAL	6449	8254	10992	11837	13263	25388	37220	39090	17800	21624	21305	10703
MEAN	208	275	355	382	474	819	1241	1261	593	698	687	357
MAX	281	736	756	581	1020	1530	1770	1870	1360	1050	1370	786
MIN	14	15	29	146	75	148	478	566	106	127	204	176
AC-FT	12790	16370	21800	23480	26310	50360	73830	77530	35310	42890	42260	21230
CAL YR 1977 TOTAL	216836.8		MEAN 594	MAX 1720	MIN 7.7	AC-FT 430100						
WTR YR 1978 TOTAL	223925.0		MEAN 613	MAX 1870	MIN 14	AC-FT 444200						

## BEAR RIVER BASIN

## 10090500 BEAR RIVER NEAR PRESTON, ID

LOCATION.--Lat 42°10'05", long 111°50'59", in NW¼ sec.36, T.14 S., R.39 E., Franklin County, Hydrologic Unit 16010202, on left bank 600 ft (183 m) downstream from headgates of West Cache Canal, 5 mi (8 km) downstream from Mink Creek, 5 mi (8 km) north of Preston, and 5.5 mi (8 km) upstream from Battle Creek.

DRAINAGE AREA.--4,545 mi<sup>2</sup> (11,772 km<sup>2</sup>).

PERIOD OF RECORD.--October 1889 to December 1916, January to September 1917 (gage heights only), October 1943 to current year. Prior to 1903, published as "at Battlecreek." Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 205: 1905-7. WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,524.8 ft (1,379.16 m) National Geodetic Vertical Datum of 1929. October 1889 to September 1917 nonrecording gages at several sites within 5 mi (8 km) downstream at different datums.

REMARKS.--Records good. Station is below all irrigation diversions from Bear River in Idaho except Cub River pumps in SE¼ sec.20, T.16 S., R.39 E. Natural flow of stream affected by storage reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

AVERAGE DISCHARGE.--35 years (1944-78), 869 ft<sup>3</sup>/s (24.6 m<sup>3</sup>/s), 629,600 acre-ft/yr (776 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--(since 1943): Maximum discharge, 4,420 ft<sup>3</sup>/s (125 m<sup>3</sup>/s) Apr. 17, 1950, gage height, 5.61 ft (1.710 m); minimum, 0.6 ft<sup>3</sup>/s (0.02 m<sup>3</sup>/s) June 14, 1949.

1889-1917: Maximum flood occurred June 9, 10, 1907, about 8,500 ft<sup>3</sup>/s (241 m<sup>3</sup>/s), estimated on basis of records for downstream station near Collinston (station 10118000), site and datum then in use. Maximum gage height observed, 9.04 ft (2.755 m) Jan. 17, 18, 1917 (backwater from ice), site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,870 ft<sup>3</sup>/s (81.3 m<sup>3</sup>/s) May 24, gage height, 4.42 ft (1.347 m); minimum, 15 ft<sup>3</sup>/s (0.43 m<sup>3</sup>/s) July 9, 10, 11, 12, 13, 15, 16, 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	308	39	312	421	80	1890	1350	1290	113	957	126
2	33	462	50	557	447	305	2100	1040	1190	90	729	154
3	25	470	60	349	456	208	2040	1410	1070	477	925	187
4	17	466	51	328	482	552	1600	1180	977	567	779	630
5	17	483	109	482	441	979	1780	1650	971	211	969	418
6	77	468	478	505	339	618	1410	1880	1150	446	612	453
7	254	462	372	363	682	1130	1490	1150	1290	238	899	194
8	258	650	580	584	504	983	2060	1530	1060	621	821	202
9	271	797	291	515	629	954	2010	1390	827	494	719	45
10	249	367	436	567	251	924	1750	869	548	426	729	168
11	255	305	368	400	752	920	1610	1380	605	343	804	315
12	248	318	370	374	444	778	1170	1500	461	460	36	255
13	250	319	292	498	646	721	1570	1580	671	533	163	55
14	257	319	412	358	359	832	1660	1820	580	605	739	50
15	253	316	509	253	395	654	1030	1800	683	425	1320	90
16	246	323	589	456	315	528	1830	1540	441	655	639	109
17	255	321	555	808	513	707	1290	1870	961	634	1130	164
18	234	316	176	267	444	554	1800	2140	381	653	655	471
19	231	343	564	455	530	596	1170	1270	389	886	63	345
20	235	333	587	563	371	746	1790	1510	500	834	679	342
21	235	188	163	110	437	575	1340	1440	1030	870	822	234
22	229	25	163	753	399	711	1270	1440	329	707	137	386
23	225	19	305	526	711	1310	1160	1540	298	984	255	320
24	224	17	686	196	563	1600	1300	2060	282	833	468	610
25	224	21	136	287	1180	1520	1160	2060	324	842	197	349
26	221	25	795	334	363	1320	1220	903	314	982	86	395
27	209	21	495	666	986	1220	1410	1810	549	905	285	497
28	208	32	382	386	326	1680	966	856	313	966	337	601
29	216	34	179	454	---	1420	1300	1890	283	697	251	527
30	228	41	489	432	---	1530	1150	1050	126	640	489	520
31	234	---	642	463	---	1620	---	1620	---	517	235	---
TOTAL	6290	8569	11323	13601	14386	28275	45246	46528	19893	18654	17949	9212
MEAN	203	286	365	439	514	912	1508	1501	663	602	579	307
MAX	271	797	795	808	1180	1680	2100	2140	1290	984	1320	630
MIN	17	17	39	110	251	80	966	856	126	90	36	45
AC-FT	12480	17000	22460	26980	28530	56080	89750	92290	39460	37000	35600	18270
CAL YR 1977	TOTAL	203675	MEAN	558	MAX	1610	MIN	11	AC-FT	404000		
WTR YR 1978	TOTAL	239926	MEAN	657	MAX	2140	MIN	17	AC-FT	475900		

BEAR RIVER BASIN

57

10091200 DEEP CREEK NEAR CLIFTON, ID

LOCATION.--Lat 42°11'55", long 111°59'09", in SE¼SW¼ sec.14, T.14 S., R.38 E., Franklin County, Hydrologic Unit 16010202, on right bank 40 ft (12 m) above county road culvert and 1.3 mi (2.1 km) northeast of Clifton.

DRAINAGE AREA.--107 mi<sup>2</sup> (277 km<sup>2</sup>).

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

REVISED RECORDS.--WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder and culvert control. Altitude of gage is 4,705 ft (1,434 m) from topographic map.

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

AVERAGE DISCHARGE.--12 years, 11.8 ft<sup>3</sup>/s (0.33 m<sup>3</sup>/s) 8,550 acre-ft/yr (10.5 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 152 ft<sup>3</sup>/s (4.30 m<sup>3</sup>/s) Mar. 31, 1969, gage height, 6.80 ft (2.073 m), from high-water mark on outside of well; minimum observed, 0.30 ft<sup>3</sup>/s (0.009 m<sup>3</sup>/s) July 27, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46 ft<sup>3</sup>/s (1.30 m<sup>3</sup>/s) Apr. 16, gage height, 3.67 ft (1.119 m); minimum observed, 0.34 ft<sup>3</sup>/s (0.010 m<sup>3</sup>/s) Oct. 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	.72	1.5	1.5	5.0	15	21	28	10	2.7	1.2	.90
2	.44	.76	1.5	1.2	5.0	16	23	27	9.8	2.6	1.4	.90
3	.44	.76	1.5	1.2	5.8	17	23	25	9.6	2.4	2.3	.90
4	.41	.86	1.5	1.3	6.0	16	22	24	9.6	2.1	1.2	.90
5	.44	.86	1.5	1.8	6.4	21	22	23	9.6	2.0	.99	.90
6	.47	.86	1.5	2.0	7.1	27	21	23	9.4	2.1	.94	.90
7	.50	.81	1.5	2.0	7.8	26	24	22	9.1	2.2	.86	.90
8	.53	.80	1.5	1.8	8.8	23	33	22	9.0	2.1	.81	.94
9	.53	.90	1.5	1.5	9.6	21	32	21	8.8	2.7	1.4	.94
10	.50	.90	1.5	1.5	10	22	28	20	8.3	2.8	1.7	.94
11	.50	.90	1.5	1.5	12	21	26	20	8.3	2.8	1.7	.94
12	.50	.90	1.5	1.5	13	21	26	20	8.2	2.4	2.0	.94
13	.50	.90	1.5	2.0	13	22	24	19	7.8	2.8	2.1	.94
14	.53	.90	1.5	2.0	13	21	33	17	7.4	2.5	1.5	.99
15	.53	.90	1.5	2.0	13	21	38	16	7.0	3.0	1.3	1.4
16	.53	.90	1.5	2.0	13	20	40	15	6.6	3.2	1.3	1.5
17	.53	1.0	1.5	3.0	13	18	45	15	6.4	2.8	1.3	1.3
18	.53	1.0	1.5	3.0	13	17	42	16	6.2	2.4	.99	1.3
19	.57	1.0	1.5	3.0	13	16	40	16	6.5	2.7	.99	1.3
20	.60	1.0	1.5	3.0	13	15	38	17	6.6	2.3	.94	1.3
21	.63	1.0	1.3	3.0	14	14	40	16	6.1	2.0	.99	1.3
22	.60	1.1	1.5	3.0	14	15	36	16	5.3	2.0	1.6	1.3
23	.60	1.1	1.5	4.0	14	19	37	16	5.0	2.0	1.1	1.2
24	.63	1.2	1.5	4.0	14	29	35	14	4.8	1.3	1.3	1.1
25	.63	1.2	1.5	4.0	14	30	33	14	4.7	1.2	1.2	1.2
26	.63	1.3	1.5	4.0	14	23	32	13	4.9	1.2	.90	1.3
27	.63	1.3	1.5	5.0	14	21	32	12	4.4	1.2	.90	1.4
28	.68	1.3	1.3	5.0	15	20	32	12	4.1	1.3	.90	1.5
29	.72	1.4	1.5	5.0	---	19	31	12	4.1	1.3	.90	1.8
30	.76	1.4	1.5	5.0	---	18	30	11	3.4	1.3	.94	2.4
31	.76	---	1.5	5.0	---	19	---	10	---	1.3	.94	---
TOTAL	17.29	29.93	46.1	85.8	113.5	623	941	552	211.0	66.7	38.59	35.53
MEAN	.56	1.00	1.49	2.77	11.2	20.1	31.4	17.8	7.03	2.15	1.24	1.18
MAX	.76	1.4	1.5	5.0	15	30	45	28	10	3.2	2.3	2.4
MIN	.41	.72	1.3	1.2	5.0	14	21	10	3.4	1.2	.81	.90
AC-FT	34	59	91	170	622	1240	1870	1090	419	132	77	70
CAL YH 1977	TOTAL	912.86	MEAN	2.50	MAX	13	MIN	.31	AC-FT	1810		
WTR YH 1978	TOTAL	2960.44	MEAN	8.11	MAX	45	MIN	.41	AC-FT	5870		

## BEAR RIVER BASIN

## 10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE

LOCATION.--Lat 42°00'47", long 111°55'14", in NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.29, T.16 S., R.39 E., Franklin County, Idaho, Hydrologic Unit 16010202, on left bank 1,050 ft (320 m) downstream from inlet canal to Cub River pumps, 1.1 mi (1.8 km) downstream from Weston Creek, 1.8 mi (2.9 km) upstream from State line, and 3.5 mi (5.6 km) southeast of Weston.

DRAINAGE AREA.--4,881 mi<sup>2</sup> (12,642 km<sup>2</sup>).

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR ID 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,420 ft (1,347 m) from topographic map.

REMARKS.--Records fair. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

AVERAGE DISCHARGE.--8 years, 1,280 ft<sup>3</sup>/s (36.2 m<sup>3</sup>/s) 927,400 acre-ft/yr (1.14 km<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,190 ft<sup>3</sup>/s (119 m<sup>3</sup>/s) June 12, 1971, gage height, 8.25 ft (2.515 m); minimum observed, 73 ft<sup>3</sup>/s (2.07 m<sup>3</sup>/s) June 29, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,060 ft<sup>3</sup>/s (86.7 m<sup>3</sup>/s) May 26, gage height, 5.84 ft (1.780 m); minimum observed, 73 ft<sup>3</sup>/s (2.07 m<sup>3</sup>/s) June 29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	300	140	392	576	336	2180	1500	1620	200	776	393
2	200	475	150	700	500	431	2220	1470	1430	150	914	250
3	150	496	160	503	694	364	2340	1480	1250	300	807	300
4	100	528	170	578	506	562	2070	1360	1150	545	1040	394
5	100	514	180	492	639	799	1950	1670	1120	760	762	785
6	200	524	289	728	528	1230	1710	2270	1340	355	885	507
7	296	510	614	546	619	1130	1450	1350	1660	583	691	633
8	300	564	689	685	638	1040	2300	1530	880	640	887	300
9	300	868	678	640	651	1110	2280	1630	1240	555	892	250
10	300	618	370	578	699	1310	2060	1130	869	608	829	150
11	300	354	704	678	643	829	1770	1470	639	540	755	544
12	300	373	461	542	710	1350	1540	1930	613	650	682	411
13	300	370	662	659	576	681	1630	1630	632	439	200	512
14	300	367	575	444	898	918	1940	1810	859	692	645	300
15	300	370	492	592	349	981	1560	1940	775	737	1320	150
16	300	364	670	370	613	667	1790	1930	681	558	1150	200
17	300	373	797	888	442	857	1610	1850	615	753	974	250
18	300	373	662	674	698	771	2000	2330	1010	801	880	450
19	300	376	500	463	613	678	1670	1740	455	787	785	772
20	300	408	760	527	523	907	1900	1560	493	868	781	366
21	290	373	647	563	516	720	1430	1720	868	915	653	528
22	280	250	408	516	496	1020	1450	1700	799	826	739	341
23	270	150	324	834	680	1060	1430	1800	481	1020	386	588
24	260	100	565	449	716	2090	1510	2080	446	958	540	490
25	250	90	744	442	1110	1760	1430	2360	423	825	424	543
26	240	100	578	377	791	1390	1420	1650	444	1030	350	477
27	250	100	760	633	848	1450	1620	1640	527	967	300	537
28	250	110	632	524	915	1840	1500	1520	568	1080	300	644
29	250	120	503	708	---	1690	1280	1900	379	943	450	716
30	250	130	370	549	---	1690	1350	1500	300	605	363	606
31	270	---	800	434	---	1720	---	1700	---	897	584	---
TOTAL	8006	10648	16074	17708	18187	33381	52390	53150	24566	21587	21744	13387
MEAN	258	355	519	571	650	1077	1746	1715	819	696	701	446
MAX	300	868	800	888	1110	2090	2340	2360	1660	1080	1320	785
MIN	100	90	140	370	349	336	1280	1130	300	150	200	150
AC-FT	15880	21120	31880	35120	36070	66210	103900	105400	48730	42820	43130	26550
CAL YR 1977	TOTAL	220929	MEAN	605	MAX	1660	MIN	90	AC-FT	438200		
WTR YR 1978	TOTAL	290828	MEAN	797	MAX	2360	MIN	90	AC-FT	576900		

BEAR RIVER BASIN

10093000 CUB RIVER NEAR PRESTON, ID

LOCATION.--Lat 42°08'28", long 111°41'19", in SW¼ sec.5, T.15 S., R.41 E., Franklin County, Hydrologic Unit 16010202, Cache National Forest, on right bank 0.2 mi (0.3 km) upstream from headgates of Cub River-Worm Creek Canal, 0.7 mi (1.1 km) upstream from forest boundary, and 10 mi (16 km) east of Preston.

DRAINAGE AREA.--31.6 mi<sup>2</sup> (81.8 km<sup>2</sup>).

PERIOD OF RECORD.--March 1940 to September 1952, October 1955 to current year.

REVISED RECORDS.--WRD ID 1974: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,285.1 ft (1,610.90 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--35 years, 83.9 ft<sup>3</sup>/s (2.38 m<sup>3</sup>/s), 60,780 acre-ft/yr (74.9 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 803 ft<sup>3</sup>/s (22.7 m<sup>3</sup>/s) June 11, 1971; maximum gage height, 3.83 ft (1.167 m) June 2, 1943; no flow for part of Jan. 29, 1965, result of snowslide.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 621 ft<sup>3</sup>/s (17.6 m<sup>3</sup>/s) June 10, gage height, 2.61 ft (0.796 m); minimum, 13 ft<sup>3</sup>/s (0.37 m<sup>3</sup>/s) Nov. 18, 19, 20, 21, 23, 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	15	14	16	16	18	140	115	330	326	78	41
2	16	15	16	16	16	18	136	126	352	306	75	40
3	16	14	17	16	16	18	112	143	370	295	73	40
4	16	14	17	16	16	18	96	164	374	279	71	40
5	16	14	16	16	16	23	89	162	394	256	69	40
6	17	15	15	16	18	26	80	146	451	239	67	39
7	17	14	15	16	18	24	87	131	494	227	65	39
8	17	14	14	16	19	24	102	117	530	214	65	38
9	18	14	14	16	18	25	97	108	588	207	63	38
10	18	14	14	16	18	28	98	109	606	196	62	38
11	17	14	14	16	18	30	103	126	561	189	60	38
12	17	14	14	16	17	29	102	138	533	181	59	37
13	17	14	14	16	17	26	100	151	542	171	61	36
14	17	14	15	16	17	24	107	199	582	160	60	35
15	17	14	15	16	17	23	103	279	602	154	57	35
16	17	14	15	16	17	22	110	370	599	149	55	34
17	17	14	15	16	16	22	104	334	552	143	54	38
18	17	13	15	16	16	27	96	282	511	136	53	38
19	17	13	15	16	16	37	90	240	472	129	51	37
20	16	13	15	16	16	45	91	223	443	121	50	34
21	16	14	15	16	16	51	95	234	438	116	49	33
22	16	14	16	16	16	63	91	296	442	111	48	33
23	16	13	16	16	16	73	86	343	446	106	48	33
24	16	14	15	16	17	76	80	379	442	102	47	32
25	16	15	15	16	17	62	81	372	434	98	46	32
26	15	16	15	16	18	59	98	350	404	93	45	32
27	15	14	15	16	19	63	116	341	365	91	45	32
28	15	14	15	16	19	70	117	350	352	89	44	31
29	16	14	15	16	---	79	114	393	348	86	43	31
30	16	14	16	16	---	89	113	423	343	83	43	31
31	15	---	16	16	---	105	---	380	---	82	42	---
TOTAL	509	422	468	496	476	1297	3034	7524	13900	5137	1748	1075
MEAN	16.4	14.1	15.1	16.0	17.0	41.8	101	243	463	166	56.4	35.8
MAX	18	16	17	16	19	105	140	423	606	326	78	41
MIN	15	13	14	16	16	18	80	108	330	82	42	31
AC-FT	1010	837	928	984	944	2570	6020	14920	27570	10190	3470	2130

CAL YR 1977 TOTAL 10846 MEAN 29.7 MAX 130 MIN 13 AC-FT 21510  
WTR YR 1978 TOTAL 36086 MEAN 98.9 MAX 606 MIN 13 AC-FT 71580



BEAR RIVER BASIN

10125500 MALAD RIVER AT WOODRUFF, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-71, 1975 to current year.

REMARKS.--Miscellaneous chemical data published for water years 1966-69, 1973-74.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
NOV 10...	0930	54	4090	7.1	11.5	7.5	550	260	110
JUL 13...	1000	26	5222	7.7	17.5	22.0	650	240	170

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM RATIO PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
NOV 10...	67	560	67	10	33	350	0	290	180
JUL 13...	54	1100	76	19	98	500	0	410	110

DATE	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
NOV 10...	910	.2	27	2060	2.60	300	.49	.03
JUL 13...	1900	.6	27	3710	5.05	260	.07	.06

## SNAKE RIVER BASIN

## SNAKE RIVER MAIN STEM

13010500 JACKSON LAKE NEAR MORAN, WY

LOCATION.--Lat 43°51'33", long 110°35'23", in SE¼SW¼ sec.18, T.45 N., R.114 W., Teton County, Hydrologic Unit 17040101, Grand Teton National Park, near left end of spillway over Jackson Lake Dam on Snake River, 4.3 mi (6.9 km) west of Moran, and at mile 988.9 (1,591.1 km).

DRAINAGE AREA.--807 mi<sup>2</sup> (2,090 km<sup>2</sup>).

PERIOD OF RECORD.--July 1908 to current year (1908-10 fragmentary). Prior to October 1968, published as "at Moran".

REVISED RECORDS.--WRD Idaho 1974: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,700.00 ft (2,042.160 m), Bureau of Reclamation datum. Datum of Geological Survey, National Geodetic Vertical Datum of 1929, is 2.08 ft (0.634 m) lower. July 1908 to June 1, 1941, nonrecording gage at site 300 ft (91 m) upstream at same datum. June 1, 1941, to Feb. 17, 1978, nonrecording gage at same site and datum.

REMARKS.--Reservoir was formed by log crib dam built in the outlet of the natural lake in 1906. Usable capacity was 300,000 acre-ft (370 hm<sup>3</sup>). This dam washed out in July 1910 and was replaced by an earth dam, forming a reservoir with a usable capacity of 380,000 acre-ft (469 hm<sup>3</sup>). The earth dam was raised in 1916, increasing the usable capacity to 790,000 acre-ft (974 hm<sup>3</sup>). In 1917, by dredging the outlet, the capacity was further increased to 847,000 acre-ft (1,040 hm<sup>3</sup>) between elevations 6,730 ft or 2,051 m (top of baffles to sluices) and 6,769 ft or 2,063 m (top of spillway gates). Reservoir is used to store water for irrigation in Snake River valley, Idaho. Figures given herein represent usable contents.

COOPERATION.--Reservoir elevations and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 859,530 acre-ft (1,060 hm<sup>3</sup>) July 11, 1965, elevation, 6,769.49 ft (2,063.341 m); no usable contents for several days during period August to October 1919.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 626,800 acre-ft (773 hm<sup>3</sup>) July 14, elevation, 6,760.10 ft (2,060.478 m); minimum, 228,600 acre-ft (282 hm<sup>3</sup>) Oct. 1, elevation, 6,742.30 ft (2,055.053 m).

Capacity table (elevation, in feet, and contents, in acre-feet)

6,740	182,500
6,750	392,900
6,760	624,400
6,770	872,600

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228600	241800	254000	286800	307800	334100	326000	331900	437600	569400	623200	556700
2	229200	242600	254200	287000	309300	335200	326500	333600	439400	575800	622900	554100
3	229800	242800	255900	287400	310000	336000	325800	336200	443000	582400	621000	551300
4	230000	242800	256100	288300	311900	336400	326000	340800	447400	588400	619600	548300
5	230200	243200	256300	288700	313600	333400	326500	343000	450600	593400	618100	545700
6	230400	243700	256500	289300	314000	333400	326500	344300	455600	597400	616500	543100
7	230600	244100	255400	290200	314500	333400	326300	345100	461900	601400	615000	540800
8	232200	244300	257300	292100	314900	333400	326900	345800	468600	605700	612900	538200
9	232800	244700	259200	292900	316400	333400	326700	346900	476600	611000	610700	535900
10	233600	244900	261000	293800	317700	333200	326700	347700	485800	616500	608800	533500
11	234100	245100	263100	294600	319200	333000	326900	350600	494600	621000	606200	532400
12	234300	245300	265000	295300	320500	332800	327100	353400	497800	624100	603800	531400
13	234500	245500	266900	296500	321300	332500	327300	354700	498900	626000	603600	531000
14	234700	245900	268500	297200	321500	332300	327600	356900	502600	626800	602100	530500
15	234900	246300	270600	297800	321800	331900	327800	362000	508900	626000	599300	530500
16	234900	246800	271900	298900	322000	331500	328000	370300	514700	625100	598300	530500
17	234900	247200	272300	299300	322200	331000	328600	378700	517700	625100	596700	531400
18	235100	247600	274400	299700	322600	330400	328900	382900	518400	624400	594300	531900
19	235100	248000	274600	301200	322800	329900	328600	386300	519800	623200	591700	532100
20	235500	248400	275000	302000	323000	329500	329100	388500	521200	623600	589600	532100
21	236300	248800	275400	302500	323500	329100	329100	390500	521900	623600	587200	532400
22	236900	249200	276500	302700	324100	328600	328900	392000	526100	622900	584800	532600
23	237700	249600	277500	303100	325000	328200	328400	398000	531200	622900	582200	532800
24	238300	249900	280500	303800	325800	328200	328000	403200	536100	622900	579600	533000
25	238600	250100	280700	304000	327100	328000	327600	408800	541500	622700	577000	533300
26	238800	250700	281100	304600	332300	327800	327300	412600	544800	622900	574400	533800
27	239000	251300	281700	305200	332800	327600	327800	415700	546900	622900	571600	534000
28	239200	251700	282200	305700	333200	327100	328400	419300	550800	623400	568300	534500
29	239600	252300	282400	305900	---	326700	329300	423800	556500	623900	565400	534700
30	240200	253400	283800	306300	---	326300	330200	430400	563300	624100	562600	534700
31	240800	---	284200	307400	---	325800	---	435100	---	623600	559600	---
MAX	240800	253400	284200	307400	333200	336400	330200	435100	563300	626800	623200	556700
MIN	228600	241800	254000	286800	307800	325800	325800	331900	437600	569400	559600	530500
(†)	6742.90	6743.51	6744.99	6746.08	6747.28	6746.94	6747.14	6751.88	6757.43	6759.97	6757.27	6756.21
(‡)	+13500	+12600	+30800	+23200	+25800	-7400	+4400	+104900	+128200	+60300	-64000	-24900

CAL YR 1977..... ‡ -291600

WTR YR 1978..... ‡ +307400

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

## 13011000 SNAKE RIVER NEAR MORAN, WY

LOCATION.--Lat 43°51'31", long 110°35'09", in SW¼SE¼ sec.18, T.45 N., R.114 W., Teton County, Hydrologic Unit 17040101, Grand Teton National Park, on left bank 1,000 ft (305 m) downstream from Jackson Lake Dam, 4.1 mi (6.6 km) west of Moran, and at mile 988.7 (1,590.8 km).

DRAINAGE AREA.--807 mi<sup>2</sup> (2,090 km<sup>2</sup>). Mean altitude, 8,040 ft (2,450 m).

PERIOD OF RECORD.--September 1903 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "South Fork Snake River at Moran" prior to October 1910 and as "Snake River at Moran" October 1910 to September 1968.

REVISED RECORDS.--WSP 1217: 1944(m). WSP 1347: 1906-10. WRD Idaho 1974: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,727.84 ft (2,050.646 m) National Geodetic Vertical Datum of 1929 (levels by USBR). Prior to June 13, 1917, nonrecording gage, and June 14, 1917, to May 20, 1940, water-stage recorder, at site 1.5 mi (2.4 km) downstream at different datums.

REMARKS.--Records excellent. Flow regulated by Jackson Lake (see sta 13010500).

COOPERATION.--Once-daily gage readings for current reporting purposes furnished by Bureau of Reclamation.

AVERAGE DISCHARGE.--75 years, 1,440 ft<sup>3</sup>/s (40.78 m<sup>3</sup>/s), 1,043,000 acre-ft/yr (1,290 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft<sup>3</sup>/s (428 m<sup>3</sup>/s) June 12, 1918, gage height, 10.41 ft (3.173 m) site and datum then in use; minimum, 0.30 ft<sup>3</sup>/s (0.01 m<sup>3</sup>/s) Oct. 26, 27, 28, 1969, gage height, 0.89 ft (0.271 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood during early June 1894 was considerably higher than that of June 12, 1918.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,780 ft<sup>3</sup>/s (164 m<sup>3</sup>/s) June 19-21, gage height, 7.70 ft (2.347 m); minimum, 137 ft<sup>3</sup>/s (3.88 m<sup>3</sup>/s) Nov. 15-16, 22, gage height, 1.89 ft (0.576 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

2.2	231	6.0	3,250
3.0	582	7.0	4,660
4.0	1,210	8.0	6,290
5.0	2,110		

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

DAY	UCT	NOV	DEC	JAN	FFB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	155	144	157	165	171	633	881	2680	2660	1530	2070
2	179	154	145	159	165	237	631	888	2680	2110	1680	2070
3	172	154	145	159	165	401	629	966	2700	1930	1840	2060
4	159	156	145	159	165	397	628	1000	3190	1940	1840	2050
5	159	156	145	157	165	393	627	1060	3500	1950	1840	2050
6	158	157	146	157	165	389	628	1110	3950	1950	1820	2040
7	154	157	144	157	165	388	630	1100	4830	1870	1830	2040
8	154	157	145	157	168	387	632	1100	5090	1190	1830	2040
9	153	158	146	157	168	383	634	1310	5110	995	1830	2030
10	154	151	145	157	168	378	633	1580	5390	1090	1880	2020
11	154	143	145	157	169	375	632	1590	5640	1890	1930	1680
12	153	142	146	159	168	372	634	1570	5650	2250	1990	1200
13	154	141	147	159	168	425	634	1580	5660	2650	2060	928
14	153	140	149	159	171	510	634	1580	5680	3340	2060	678
15	153	139	152	159	171	508	633	1590	5720	3540	2050	535
16	152	138	151	159	171	506	634	1610	5750	3310	2050	426
17	152	140	153	159	171	505	633	1620	5760	3160	2050	385
18	151	140	151	159	171	505	749	1900	5770	2900	2040	403
19	151	140	151	159	171	505	864	2340	5770	2270	2030	403
20	152	140	153	159	171	505	864	2550	5780	1990	2030	403
21	152	140	154	159	171	505	863	2550	5470	1980	2040	403
22	152	140	154	162	171	505	863	2550	5100	1940	2120	400
23	153	140	152	162	171	505	863	2560	5000	1860	2120	398
24	153	141	153	162	171	505	862	2580	4740	1780	2120	398
25	153	141	153	162	171	505	865	2600	4530	1630	2110	397
26	154	144	154	162	171	504	873	2610	4130	1540	2110	411
27	153	144	154	162	171	522	874	2620	3620	1540	2100	356
28	154	143	153	162	171	619	875	2630	3310	1540	2100	297
29	155	143	157	162	---	629	876	2640	3010	1550	2090	296
30	155	143	157	162	---	629	879	2660	3030	1540	2080	281
31	155	---	157	165	---	629	---	2670	---	1530	2080	---
TOTAL	4836	4377	4646	4946	4729	14297	21909	57595	138240	63455	61280	31148
MEAN	156	146	150	160	169	461	730	1858	4608	2047	1977	1038
MAX	180	158	157	165	171	629	879	2670	5780	3540	2120	2070
MIN	151	138	144	157	165	171	627	881	2680	995	1530	281
AC-FT	9590	8680	9220	9810	9380	28360	43460	114200	274200	125900	121500	61780
CAL YR 1977	TOTAL	395376	MEAN	1083	MAX	4980	MIN	86	AC-FT	784200		
WTR YR 1978	TOTAL	411458	MEAN	1127	MAX	5780	MIN	138	AC-FT	816100		

## PACIFIC CREEK BASIN

13011500 PACIFIC CREEK AT MORAN, WY

LOCATION.--Lat 43°51'04", long 110°30'59", in SW¼NW¼ sec.23, T.45 N., R.114 W., Teton County, Hydrologic Unit 17040101, Grand Teton National Park, on left bank 40 ft (12 m) upstream from bridge on U.S. Highway 287, at Moran, and at mile 0.5 (0.8 km).

DRAINAGE AREA.--169 sq mi (438 sq km). Mean altitude, 8,160 ft (2,490 m).

PERIOD OF RECORD.--July to November 1906 (gage heights only), July 1917 to September 1918 (no winter records), September 1944 to September 1975, July to September 1978. Published as "near Moran" prior to October 1968.

GAGE.--Water-stage recorder. Altitude of gage is 6,720 ft (2,050 m), from topographic map. July 31 to Nov. 11, 1906, nonrecording gage at site 0.4 mi (0.6 km) downstream at different datum. July 20, 1917, to Sept. 30, 1918, nonrecording gage at site 0.1 mi (0.2 km) downstream at different datum. Sept. 23, 1944, to Nov. 13, 1959, at site 100 ft (30 m) upstream at same datum. Nov. 14, 1959, to Sept. 24, 1975, at site 35 ft (11 m) downstream at same datum.

REMARKS.--Records good. No diversion or regulation.

AVERAGE DISCHARGE.--31 years (1944-75), 269 ft<sup>3</sup>/s (7.618 m<sup>3</sup>/s), 21.62 in/yr (580 mm/yr), 194,900 acre-ft/yr (240 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,790 ft<sup>3</sup>/s (107 m<sup>3</sup>/s) June 15, 1974; maximum gage height, 6.35 ft (1.935 m) June 23, 1971; minimum daily discharge, 22 ft<sup>3</sup>/s (0.62 m<sup>3</sup>/s) Nov. 18, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 643 ft<sup>3</sup>/s (18.2 m<sup>3</sup>/s) July 13, gage height, 4.05 ft (1.234 m); minimum, 59 ft<sup>3</sup>/s (1.67 m<sup>3</sup>/s) Sept. 5, gage height, 2.76 ft (0.841 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										---	170	65
2										---	163	65
3										---	149	65
4										---	139	61
5										---	133	59
6										---	127	61
7										---	121	63
8										---	121	82
9										---	121	70
10										---	116	69
11										---	113	92
12										571	107	116
13										571	146	110
14										525	173	102
15										512	137	97
16										479	146	97
17										459	196	92
18										404	159	102
19										364	133	105
20										337	116	99
21										316	105	89
22										300	99	92
23										266	105	97
24										247	97	105
25										225	85	102
26										208	78	94
27										204	78	89
28										204	76	85
29										212	76	82
30										208	71	80
31										185	69	---
TOTAL										---	3725	2593
MEAN										---	120	86.4
MAX										---	196	110
MIN										---	69	59
CFSM										---	.71	.51
IN.										---	.82	.57
AC-FT										---	7390	5140

BUFFALO FORK BASIN

13011900 BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WY

LOCATION.--Lat 43°50'14", long 110°26'21", in SE¼NE¼ sec.29, T.45 N., R.113 W., Teton County, Hydrologic Unit 17040101, Grand Teton National Park, on right bank underneath bridge on U.S. Highway 26, 287, about 2 mi (3 km) upstream from Lava Creek, 3.5 mi (5.6 km) east of Moran, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--323 mi<sup>2</sup> (837 km<sup>2</sup>).

PERIOD OF RECORD.--September 1965 to current year. July to November 1906, July 1917 to September 1918, and September 1944 to September 1960 at sites about 4 mi (6 km) downstream.

REVISED RECORDS.--WRD Idaho 1974: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,772.78 ft (2,064.343 m) National Geodetic Vertical Datum of 1929 (U.S. Bureau of Public Roads bench mark).

REMARKS.--Records good except those for winter period, which are fair. No regulation or significant diversions above station.

AVERAGE DISCHARGE.--13 years (1966-78), 578 ft<sup>3</sup>/s (16.37 m<sup>3</sup>/s), 418,800 acre-ft/yr (516 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,020 ft<sup>3</sup>/s (170 m<sup>3</sup>/s) June 19, 1974, gage height, 7.91 ft (2.411 m); minimum daily, 82 ft<sup>3</sup>/s (2.32 m<sup>3</sup>/s) Jan. 28-31, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3100 ft<sup>3</sup>/s (87.8 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)
June 10	0500	3870	110	6.47	1.972	June 24	0430	3890	110	6.49	1.978
June 15	0430	3450	97.7	6.10	1.859	June 30	0500	*3900	110	6.49	1.978

Minimum daily discharge, 85 ft<sup>3</sup>/s (2.41 m<sup>3</sup>/s) Jan. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	114	110	105	105	100	202	369	915	3600	1170	383
2	140	136	120	85	105	100	211	430	872	3350	1100	374
3	136	131	130	100	110	100	183	506	964	3300	1040	364
4	136	128	135	105	110	105	177	476	959	3330	952	364
5	133	135	135	115	110	105	172	434	1140	2720	910	354
6	132	133	130	115	110	105	164	403	1550	2770	876	354
7	142	130	130	115	115	105	168	386	1910	2470	858	355
8	146	130	125	115	115	105	182	373	2250	2680	801	381
9	141	125	125	115	100	110	208	366	2790	2700	758	351
10	142	125	125	110	110	110	213	430	3440	2760	722	337
11	122	125	125	110	110	110	220	479	2560	2830	695	366
12	134	125	130	110	105	110	212	462	2060	2670	685	385
13	146	125	140	110	100	110	214	450	2100	2620	733	364
14	151	127	170	110	98	110	214	617	2780	2590	736	347
15	148	129	170	110	97	100	208	901	3160	2810	616	361
16	146	125	165	110	97	98	220	1180	3060	2520	607	359
17	144	120	160	110	97	100	215	951	2440	2690	664	335
18	140	120	155	110	98	105	199	851	2380	2420	585	348
19	137	115	150	110	100	110	212	761	2550	2260	536	331
20	135	105	145	110	105	115	218	763	2170	2120	507	324
21	135	110	135	110	100	120	222	842	2500	2110	488	316
22	134	120	125	110	98	130	217	984	3140	1690	488	346
23	129	120	120	105	100	140	215	1080	3440	1600	495	348
24	130	125	120	95	100	155	209	1230	3610	1650	461	353
25	130	130	120	105	105	135	233	1160	3520	1580	447	341
26	129	140	115	110	105	124	274	1080	2680	1620	433	326
27	130	140	115	105	105	121	341	1050	2470	1460	423	317
28	129	135	115	105	100	128	337	1090	2760	1520	415	307
29	129	130	115	105	---	141	333	1320	3490	1530	403	300
30	138	125	115	105	---	158	352	1230	3640	1310	397	293
31	130	---	115	100	---	176	---	1040	---	1220	386	---
TOTAL	4252	3778	4085	3335	2910	3641	6745	23706	73300	72500	20387	10384
MEAN	137	126	132	108	104	117	225	765	2443	2339	658	346
MAX	152	140	170	115	115	176	352	1320	3640	3600	1170	385
MIN	128	105	110	85	97	98	164	366	872	1220	386	293
CFSM	.42	.39	.41	.33	.32	.36	.70	2.37	7.56	7.24	2.04	1.07
IN.	.49	.44	.47	.38	.34	.42	.78	2.73	8.44	8.35	2.35	1.20
AC-FT	8430	7490	8100	6610	5770	7220	13380	47020	145400	143800	40440	20600
CAL YR 1977 TOTAL	100323			MEAN 275	MAX 2680	MIN 100	CFSM .85	IN 11.55	AC-FT 199000			
WTR YR 1978 TOTAL	229023			MEAN 627	MAX 3640	MIN 85	CFSM 1.94	IN 26.38	AC-FT 454300			

## SNAKE RIVER MAIN STEM

13018750 SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY

LOCATION.--Lat 43°22'20", long 110°44'17", in NE¼SE¼ sec.3, T.39 N., R.116 W., Teton County, Hydrologic Unit 17040103, on left bank 20 ft (6.1 m) upstream from county road bridge, about 1 mi (1.6 km) downstream from Flat Creek, 4.8 mi (7.7 km) upstream from Hoback River, and 7.0 mi (11.3 km) south of Jackson.

DRAINAGE AREA.--2,627 m<sup>2</sup> (6,804 km<sup>2</sup>).

PERIOD OF RECORD.--November 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,950 ft (1,814 m), from topographic map.

REMARKS.--Records fair. Flow partly regulated by Jackson Lake (see sta 13010500). Some diversions from tributaries above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft<sup>3</sup>/s (538 m<sup>3</sup>/s) June 10, 1978, gage height, 8.64 ft (2.634 m); minimum daily, 880 ft<sup>3</sup>/s (24.9 m<sup>3</sup>/s) Mar. 4, 6, 14, 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,000 ft<sup>3</sup>/s (538 m<sup>3</sup>/s) June 10, gage height, 8.64 ft (2.634 m); minimum daily, 1,070 ft<sup>3</sup>/s (30.3 m<sup>3</sup>/s) Nov. 22, Jan. 3.

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Stage-discharge relation affected by ice Nov. 20-24, Dec. 18 to Jan. 4, Jan. 25-26)

1.7	862	5.0	6,750
2.0	1,170	6.0	9,620
3.0	2,540	7.5	14,500
4.0	4,400	9.0	20,500

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	1190	1220	1090	1170	1150	2390	3100	8550	13700	5820	3810
2	1330	1160	1250	1080	1170	1140	2440	3230	8080	12800	5640	3740
3	1320	1170	1260	1070	1170	1160	2310	3520	8500	12000	5760	3690
4	1310	1170	1290	1080	1170	1220	2190	3830	8990	11900	5550	3680
5	1270	1170	1270	1100	1170	1280	2140	3640	10100	11300	5330	3660
6	1270	1200	1250	1100	1200	1280	2090	3470	11400	10500	5210	3700
7	1290	1220	1250	1100	1190	1270	2190	3290	13400	10200	5110	3710
8	1290	1210	1240	1100	1200	1270	2250	3210	14900	9720	5000	3810
9	1290	1180	1200	1120	1190	1280	2330	3120	16100	9180	4840	3790
10	1290	1180	1200	1120	1190	1280	2360	3080	17800	9210	4680	3720
11	1280	1150	1200	1120	1200	1280	2370	4260	17600	9590	4740	3740
12	1270	1180	1220	1120	1200	1290	2440	4320	15200	10200	4720	3410
13	1250	1170	1220	1120	1180	1290	2360	4230	14000	10400	5220	3110
14	1250	1150	1250	1140	1110	1380	2320	4500	15300	10500	5400	2810
15	1250	1140	1530	1140	1170	1380	2260	5580	16800	11100	5060	2540
16	1250	1140	1530	1160	1160	1370	2320	7220	17200	11000	4930	2360
17	1250	1150	1380	1160	1160	1380	2310	7380	16400	10700	5110	2240
18	1250	1150	1300	1160	1150	1410	2230	6710	15200	10400	4900	2260
19	1250	1150	1290	1150	1150	1470	2280	6650	15100	9530	4670	2310
20	1220	1100	1240	1160	1140	1520	2360	6800	14800	8460	4500	2280
21	1180	1040	1200	1160	1120	1550	2360	7100	14700	8280	4350	2230
22	1190	1070	1170	1160	1120	1530	2360	7970	15300	8050	4450	2210
23	1190	1080	1160	1160	1120	1560	2340	8700	16000	7470	4460	2210
24	1180	1110	1150	1140	1140	1630	2310	9330	16500	7010	4330	2210
25	1180	1140	1140	1130	1140	1630	2310	9350	16300	6830	4240	2190
26	1180	1340	1140	1140	1140	1590	2470	8980	15300	6590	4160	2140
27	1180	1360	1130	1160	1140	1640	2690	8810	13300	6420	4100	2120
28	1180	1280	1130	1160	1140	1730	2820	8890	12400	6460	4020	2050
29	1170	1250	1120	1160	---	1830	2840	9600	12800	6720	4000	1980
30	1190	1250	1110	1160	---	1930	2940	10200	13600	6380	3950	1940
31	1190	---	1100	1160	---	2060	---	9540	---	6090	3880	---
TOTAL	38500	35250	38130	35090	32500	44760	71380	190210	421620	288690	148130	85650
MEAN	1242	1175	1230	1132	1161	1444	2379	6136	14050	9313	4778	2855
MAX	1330	1360	1530	1160	1200	2060	2940	10200	17800	13700	5820	3810
MIN	1170	1070	1100	1070	1110	1140	2090	3100	8080	6090	3880	1940
AC-FT	76360	69920	75630	69600	64460	88780	141600	377300	836300	572600	293800	169900

CAL YR 1977 TOTAL 873930 MEAN 2394 MAX 10400 MIN 880 AC-FT 1733000  
WTP YR 1978 TOTAL 1429910 MEAN 3918 MAX 17800 MIN 1070 AC-FT 2836000

SNAKE RIVER MAIN STEM

13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY

LOCATION.--Lat 43°11'47", long 110°53'18", Lincoln County, Hydrologic Unit 17040103, on right bank 0.3 mi (0.5 km) downstream from Wolf Creek, 6.4 mi (10.3 km) upstream from Greys River, 7.4 mi (11.9 km) east of Alpine, and at mile 917.5 (1,476.3 km).

DRAINAGE AREA.--3,465 mi<sup>2</sup> (8,974 km<sup>2</sup>).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1937 to March 1939 (published as "above Greys River, near Alpine"), July 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,683.90 ft (1,732.453 m) National Geodetic Vertical Datum of 1929. Mar. 16, 1937, to Mar. 31, 1939, at site 6.0 mi (9.7 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Flow partly regulated by Jackson Lake (see sta 13010500). Some diversions from tributaries above station.

AVERAGE DISCHARGE.--26 years (1938, 1954-78), 4,596 ft<sup>3</sup>/s (130 m<sup>3</sup>/s), 3,330,000 acre-ft/yr (4.11 km<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,600 ft<sup>3</sup>/s (810 m<sup>3</sup>/s) June 19, 1974, gage height, 11.96 ft (3.645 m); minimum, 740 ft<sup>3</sup>/s (21.0 m<sup>3</sup>/s) Nov. 16, 1955, gage height, 2.19 ft (0.668 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,000 ft<sup>3</sup>/s (680 m<sup>3</sup>/s) June 10, 11, gage height, 10.75 ft (3.277 m); minimum, 1,000 ft<sup>3</sup>/s (28.3 m<sup>3</sup>/s) Jan. 24, gage height, 2.46 ft (0.750 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Stage-discharge relation affected by ice Nov. 21-24, Dec. 2-13, Dec. 17 to Jan. 20)

2.4	940	7.0	10,200
2.8	1,340	9.0	17,200
3.0	1,540	10.0	21,000
4.0	2,920	11.0	25,100
5.0	4,870		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1380	1290	1240	1090	1180	1140	3240	5840	10900	17100	6730	4390
2	1400	1270	1230	1070	1180	1130	3390	6160	10500	16000	6520	4260
3	1390	1270	1240	1060	1210	1130	3070	6820	11200	15100	6500	4200
4	1360	1270	1250	1070	1190	1290	2820	6680	12000	14400	6320	4100
5	1340	1260	1260	1090	1140	1350	2690	6100	12700	13600	6070	4120
6	1370	1270	1250	1120	1210	1360	2600	5600	14400	12700	5950	4140
7	1420	1270	1240	1130	1190	1350	2750	5200	16900	12300	5830	4120
8	1400	1250	1220	1130	1230	1340	3030	5120	19100	12000	5710	4310
9	1380	1170	1210	1130	1180	1360	3310	5180	20600	11300	5540	4350
10	1380	1170	1180	1130	1220	1400	3410	6290	22800	11100	5360	4280
11	1370	1170	1190	1140	1240	1400	3540	7450	22300	11300	5360	4220
12	1340	1180	1200	1140	1200	1400	3700	7230	19000	12000	5360	4020
13	1320	1180	1250	1150	1130	1400	3530	6850	17700	11900	5880	3710
14	1330	1190	1360	1160	1150	1440	3370	7760	19300	12100	6250	3380
15	1330	1220	1640	1170	1120	1450	3240	9650	20900	12700	5760	3050
16	1320	1230	1650	1180	1190	1440	3390	11700	21700	12800	5540	2830
17	1310	1180	1400	1180	1120	1460	3330	11000	20200	12400	5710	2680
18	1300	1150	1310	1180	1100	1480	3090	9760	18600	11900	5520	2730
19	1300	1140	1240	1180	1120	1560	3060	9380	18200	10800	5240	2760
20	1290	1120	1220	1180	1160	1630	3260	9440	17800	9660	5090	2720
21	1290	1080	1200	1160	1120	1690	3410	10100	17700	9200	4960	2680
22	1290	1090	1180	1170	1110	1700	3330	11300	18600	8830	5000	2630
23	1280	1090	1160	1190	1120	1720	3230	12300	19600	8490	5070	2630
24	1270	1120	1150	1140	1150	1790	3190	12900	20200	8100	4920	2610
25	1260	1190	1150	1210	1190	1820	3370	12600	20000	7840	4810	2600
26	1250	1490	1150	1230	1190	1800	4150	11600	18600	7600	4750	2550
27	1240	1480	1150	1190	1180	1910	5140	11500	16200	7410	4680	2520
28	1250	1360	1140	1140	1150	2000	5050	11600	15300	7410	4620	2460
29	1260	1320	1170	1190	---	2160	5170	12600	16100	7730	4580	2370
30	1330	1290	1110	1190	---	2360	5310	13300	17100	7460	4510	2320
31	1320	---	1100	1160	---	2590	---	12100	---	7020	4430	---
TOTAL	41070	36760	38440	35570	32670	49050	105210	281310	526200	340250	168570	99750
MEAN	1325	1225	1240	1151	1167	1582	3507	9075	17540	10980	5438	3325
MAX	1420	1490	1650	1230	1240	2590	5310	13300	22800	17100	6730	4390
MIN	1240	1080	1100	1060	1100	1130	2600	5120	10500	7020	4430	2320
AC-FT	21460	72910	76250	70750	64600	97290	208700	558000	1044000	674900	334400	197900
CAL YR 1977 TOTAL		946490		MEAN 2599	MAX 11100	MIN 1070	AC-FT 1881000					
WTR YR 1978 TOTAL		1754950		MEAN 4808	MAX 22600	MIN 1060	AC-FT 3481000					

## SNAKE RIVER MAIN STEM

13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY--Continued

## WATER-QUALITY RECORDS

LOCATION.--Samples collected at bridge at Astoria Springs, 3.0 mi (4.8 km) downstream from Hoback River, 13 mi (21 km) upstream from discharge station, and 15 mi (24 km) northeast of Alpine.

PERIOD OF RECORD.--Water years 1965 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)
OCT											
14...	0930	1320	340	7.7	--	7.0	--	9.9	56	180	49
NOV											
02...	1330	1260	420	--	4.0	4.0	--	--	--	--	--
DEC											
01...	0900	1210	320	7.7	--	.0	0	10.8	22	170	47
22...	0900	1180	360	--	--	.0	1	11.4	26	180	73
JAN											
22...	0930	1210	400	--	--	.5	1	--	42	180	41
FEB											
14...	1615	1030	392	--	-4.0	.5	--	--	--	--	--
19...	1000	1150	310	--	--	.5	1	12.2	78	190	51
MAR											
18...	0930	1510	360	--	--	4.0	1	10.8	K11	160	37
27...	1145	1950	358	--	11.0	6.5	--	--	--	--	--
APR											
30...	1600	2340	330	--	--	5.5	15	10.8	K12	290	170
MAY											
09...	1310	5140	357	--	20.5	7.0	--	--	--	--	--
27...	1000	8310	270	7.7	--	6.0	15	10.2	42	120	13
JUN											
13...	1500	17500	232	--	23.5	12.0	--	--	--	--	--
20...	1000	17900	220	7.6	--	13.0	30	8.8	44	94	12
JUL											
26...	1115	7530	505	--	22.0	13.0	--	--	--	--	--
AUG											
05...	0900	6100	280	7.9	--	12.0	2	8.7	32	110	20
SEP											
02...	0930	4240	310	7.7	--	13.0	1	8.3	22	130	32
13...	0820	3780	268	--	8.0	8.0	--	--	--	--	--





13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ARSENIC	ARSENIC	ARSENIC	CADMIUM	CADMIUM	CADMIUM	CHRO-	CHRO-	CHRO-	COBALT,	COBALT,
	TOTAL (UG/L AS AS)	SUS- PENDE TOTAL (UG/L AS AS)	DIS- SOLVED (UG/L AS AS)	TOTAL RECOV- ERABLE (UG/L AS CD)	SUS- PENDE RECOV- ERABLE (UG/L AS CD)	DIS- SOLVED (UG/L AS CD)	MIMUM, TOTAL RECOV- ERABLE (UG/L AS CR)	MIMUM, SUS- PENDE RECOV. (UG/L AS CR)	MIMUM, DIS- SOLVED (UG/L AS CR)	TOTAL RECOV- ERABLE (UG/L AS CO)	SUS- PENDE RECOV- ERABLE (UG/L AS CO)
OCT 14...	4	0	4	10	5	5	10	0	20	<50	<50

DATE	COBALT,	COPPER,	COPPER,	COPPER,	IRON,	IRON,	LEAD,	LEAD,	LEAD,	MANGA-	MANGA-
	DIS- SOLVED (UG/L AS CO)	TOTAL RECOV- ERABLE (UG/L AS CU)	SUS- PENDE RECOV- ERABLE (UG/L AS CU)	DIS- SOLVED (UG/L AS CU)	TOTAL RECOV- ERABLE (UG/L AS FE)	DIS- SOLVED (UG/L AS FE)	TOTAL RECOV- ERABLE (UG/L AS PB)	SUS- PENDE RECOV- ERABLE (UG/L AS PB)	DIS- SOLVED (UG/L AS PB)	TOTAL RECOV- ERABLE (UG/L AS MN)	SUS- PENDE RECOV. (UG/L AS MN)
OCT 14...	0	<10	<10	0	80	40	<100	<87	13	20	20

DATE	MANGA-	MERCURY	MERCURY	MERCURY	SELE-	SELE-	SELE-	ZINC,	ZINC,	ZINC,
	NESE, DIS- SOLVED (UG/L AS MN)	TOTAL RECOV- ERABLE (UG/L AS HG)	SUS- PENDE RECOV- ERABLE (UG/L AS HG)	DIS- SOLVED (UG/L AS HG)	TOTAL RECOV- ERABLE (UG/L AS SE)	SUS- PENDE TOTAL (UG/L AS SE)	NIUM, DIS- SOLVED (UG/L AS SE)	TOTAL RECOV- ERABLE (UG/L AS ZN)	SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	DIS- SOLVED (UG/L AS ZN)
OCT 14...	0	.0	.0	.0	0	0	0	10	10	0

## SNAKE RIVER MAIN STEM

13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	ALDRIN, TOTAL (UG/L)	ATRA- ZINE, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)
DEC 01...	0900	1210	ND	ND	ND	ND	ND	ND	ND

DATE	DI- ELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)
DEC 01...	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	SIMA- ZINE TOTAL COUL- SON COND. (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
DEC 01...	ND	ND	ND	ND	ND	ND	ND	ND

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 14...	0930	9	32	73
DEC 01...	0900	2	6.5	61

13023000 GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WY

LOCATION.--Lat 43°08'35", long 110°58'34", in SW¼SE¼ sec.34, T.37 N., R.118 W. (unsurveyed), Lincoln County, Hydrologic Unit 17040103, on right bank at Bridge Campground, 3.6 mi (5.8 km) southeast of Alpine, and at mile 3.0 (4.8 km).

DRAINAGE AREA.--448 mi<sup>2</sup> (1,160 km<sup>2</sup>). Mean altitude, 8,080 ft (2,460 m).

PERIOD OF RECORD.--July to September 1917, June to September 1918, March 1937 to March 1939, October 1953 to current year. Published as Greys River near Alpine, Idaho, 1917-18 and as Greys River near Alpine, Wyo., 1937-39.

REVISED RECORDS.--WRD Idaho 1967: 1966.

GAGE.--Water-stage recorder. Altitude of gage is 5,720 ft (1,740 m), from topographic map. July 6 to Sept. 30, 1917, and June 4 to Sept. 30, 1918, nonrecording gage and Mar. 17, 1937, to Mar. 31, 1939, water-stage recorder, at site 1.8 mi (2.9 km) downstream, and October 1953 to Sept. 22, 1965, water-stage recorder at site 1 mi (1.6 km) downstream at different datums.

REMARKS.--Records fair. Less than 500 acres (202 hm<sup>2</sup>) irrigated by diversions from Greys River and tributaries above station.

AVERAGE DISCHARGE.--26 years (1938, 1954-78), 657 ft<sup>3</sup>/s (18.61 m<sup>3</sup>/s), 19.91 in/yr (506 mm/yr), 476,000 acre-ft/yr (587 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 7,230 ft<sup>3</sup>/s (205 m<sup>3</sup>/s) June 19, 1971, gage height, 6.33 ft (1.929 m); maximum gage height observed, 19.1 ft (5.82 m) former site and datum about Dec. 18, 1965 (ice jam); minimum daily discharge, 92 ft<sup>3</sup>/s (2.61 m<sup>3</sup>/s) Jan. 2, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft<sup>3</sup>/s (56.6 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)
May 16	0100	2860	81.0	4.90	1.494	June 10	1000	*3950	112	5.63	1.716
May 23	2330	2710	76.7	4.78	1.457						

Minimum daily discharge, 92 ft<sup>3</sup>/s (2.61 m<sup>3</sup>/s) Jan. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	187	141	98	120	156	770	1320	1880	2390	870	418
2	203	190	209	92	150	157	772	1430	1930	2300	837	406
3	197	189	213	120	170	150	623	1680	2100	2260	802	399
4	193	186	206	150	175	169	552	1530	2170	2190	770	397
5	193	189	187	190	172	169	510	1300	2270	2060	737	389
6	202	196	184	190	179	116	482	1130	2550	1930	717	388
7	215	197	192	180	177	132	506	1050	2790	1850	697	380
8	215	179	170	160	186	155	638	1020	2990	1830	682	384
9	213	129	160	160	169	163	805	1110	3480	1860	660	377
10	208	181	200	165	179	174	821	1400	3530	1840	647	372
11	202	194	193	170	178	171	868	1650	2720	1820	631	393
12	190	190	191	175	184	176	840	1510	2390	1780	622	410
13	190	163	186	175	155	176	794	1510	2520	1700	679	413
14	190	175	208	175	145	176	730	1900	2680	1660	697	397
15	190	173	304	185	140	156	691	2310	2640	1640	626	391
16	190	176	285	180	135	153	753	2420	2650	1610	604	385
17	190	151	242	170	120	163	697	1960	2410	1590	611	380
18	190	148	238	170	110	181	626	1710	2380	1480	583	419
19	186	110	219	170	120	211	599	1630	2370	1380	553	408
20	186	107	170	169	130	245	628	1670	2330	1290	538	404
21	186	104	142	167	135	262	677	1850	2410	1260	523	396
22	185	129	194	170	130	279	634	2090	2580	1190	519	396
23	183	145	217	140	130	275	582	2450	2620	1120	507	396
24	183	173	212	110	160	296	548	2550	2600	1070	494	395
25	183	189	199	125	171	277	620	2300	2540	1040	484	392
26	179	281	200	155	169	275	952	2180	2410	1030	468	391
27	183	256	170	165	132	326	1220	2160	2310	995	451	391
28	183	212	155	165	145	372	1150	2160	2320	987	442	389
29	187	191	175	175	---	442	1090	2350	2420	1000	438	391
30	204	172	185	180	---	499	1200	2270	2470	961	433	391
31	201	---	160	140	---	564	---	2010	---	900	424	---
TOTAL	6004	5262	6107	4936	4266	7216	22378	55610	75460	48013	18746	11838
MEAN	194	175	197	159	152	233	746	1794	2515	1549	605	395
MAX	215	281	304	190	186	564	1220	2550	3530	2390	870	419
MIN	179	104	141	92	110	116	482	1020	1880	900	424	372
CFSM	.43	.39	.44	.36	.34	.52	1.67	4.00	5.61	3.46	1.35	.88
IN.	.50	.44	.51	.41	.35	.60	1.86	4.62	6.27	3.99	1.56	.98
AC-FT	11910	10440	12110	9790	8460	14310	44390	110300	149700	95230	37180	23480
CAL YR 1977 TOTAL	84407			231	600	104	CFSM .52	IN 7.01	AC-FT 167400			
WTR YR 1978 TOTAL	265836			728	3530	92	CFSM 1.63	IN 22.07	AC-FT 527300			



SALT RIVER BASIN

75

13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY

LOCATION.--Lat 43°04'47", long 111°02'12", in SW¼NE¼ sec.28, T.36 N., R.119 W., Lincoln County, Hydrologic Unit 17040105, on right bank 3.4 mi (5.5 km) northwest of Etna and at mile 8.0 (12.9 km).

DRAINAGE AREA.--829 mi<sup>2</sup> (2,147 km<sup>2</sup>).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,675.78 ft (1,729.977 m) National Geodetic Vertical Datum of 1929 (levels by USBR).

REMARKS.--Records good. Diversions above station for power developments, industry, municipal supply, and irrigation of about 60,500 acres (245 km<sup>2</sup>) of which about 1,000 acres (405 hm<sup>2</sup>) are below station (1966 determination). For details on adjudication of diversions, see Remarks for this station in WSP 1347.

AVERAGE DISCHARGE.--25 years, 776 ft<sup>3</sup>/s (21.98 m<sup>3</sup>/s), 562,200 acre-ft/yr (693 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,870 ft<sup>3</sup>/s (110 m<sup>3</sup>/s) June 1, 1971, gage height, 5.30 ft (1.615 m); minimum, 160 ft<sup>3</sup>/s (4.53 m<sup>3</sup>/s) Jan. 7, 8, 1971, gage height, 1.53 ft (0.466 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,030 ft<sup>3</sup>/s (85.8 m<sup>3</sup>/s) May 16, gage height, 4.81 ft (1.466 m); minimum, 201 ft<sup>3</sup>/s (5.69 m<sup>3</sup>/s) Jan. 2, 3, gage height, 1.69 ft (0.515 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	356	331	342	327	327	344	1140	2250	2490	1860	846	724
2	352	331	400	262	329	337	1230	2240	2360	1850	829	716
3	346	331	489	287	333	337	1100	2340	2330	1830	812	708
4	343	330	479	293	331	344	1040	2280	2330	1800	796	701
5	337	332	431	319	336	357	1020	2140	2340	1780	780	678
6	345	332	410	326	347	364	1060	2020	2370	1730	764	678
7	348	333	402	321	341	370	1220	1920	2450	1680	756	678
8	344	340	384	314	344	364	1490	1880	2530	1610	724	693
9	339	331	359	321	341	357	1740	1690	2590	1620	708	693
10	337	328	376	326	346	370	1760	2070	2670	1610	693	678
11	334	329	365	319	354	370	1800	2360	2640	1560	686	701
12	350	340	363	321	349	370	1760	2340	2590	1510	686	679
13	347	339	360	321	335	370	1640	2220	2460	1450	756	714
14	344	338	384	324	341	370	1550	2420	2300	1410	829	700
15	342	347	454	331	344	370	1540	2550	2310	1370	796	613
16	340	347	465	334	337	364	1630	2980	2320	1370	764	642
17	328	340	423	337	324	364	1520	2690	2290	1370	780	639
18	328	340	413	337	324	370	1400	2630	2220	1360	788	738
19	330	343	397	332	337	370	1380	2690	2130	1330	780	645
20	331	323	358	337	337	390	1450	2520	2030	1260	780	702
21	331	314	334	337	331	403	1510	2510	1930	1200	772	678
22	320	349	343	337	324	422	1420	2610	1910	1140	764	708
23	326	349	366	337	324	442	1370	2730	1950	1110	772	669
24	324	348	360	300	331	493	1350	2620	1980	1050	780	707
25	324	363	348	331	337	528	1460	2780	2010	1030	780	688
26	324	420	342	343	344	542	1860	2730	2030	989	748	700
27	320	423	331	339	350	563	2070	2660	1950	939	740	672
28	318	397	306	331	344	605	2020	2630	1640	922	740	679
29	323	380	337	331	---	648	1890	2670	1830	947	732	655
30	337	367	352	328	---	768	2180	2710	1860	922	740	684
31	336	---	346	326	---	888	---	2620	---	897	724	---
TOTAL	10417	10415	11819	10033	9444	13574	45600	76300	67040	42506	23645	20560
MEAN	336	347	381	324	337	438	1520	2461	2235	1371	763	685
MAX	356	423	489	343	354	608	2180	2980	2670	1860	846	738
MIN	310	314	306	262	324	337	1020	1880	1830	897	686	613
AC-FT	20650	20660	23440	19900	18730	26920	90450	151300	133000	84310	46900	40780
Cal Yr 1977	TOTAL	131768	MEAN	361	MAX	816	MIN	216	AC-FT	261400		
Wth Yr 1978	TOTAL	341349	MEAN	335	MAX	2980	MIN	202	AC-FT	677100		

## SALT RIVER BASIN

13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: May 1977 to current year.

INSTRUMENTATION.--Temperature recorder since May 17, 1977.

REMARKS.--No temperature record Feb. 15 to Mar. 31, Apr. 15 to Sept. 12 due to equipment malfunction.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURES: Maximum, 18.5°C July 18, 1977.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Minimum, 1.5°C Dec. 20-22, 28, 29, Jan. 1, 2, 3.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD- NESS (MG/L AS CAC03)
OCT										
14...	0730	344	--	--	--	7.0	1	9.2	K400	230
NOV										
01...	1510	331	447	--	4.0	6.0	--	--	--	--
DEC										
01...	0730	324	--	--	--	.5	0	10.8	K34	240
22...	0730	340	--	--	--	1.0	2	11.8	22	250
JAN										
22...	0815	538	--	--	--	2.5	1	--	33	240
FEB										
14...	1115	341	458	--	1.0	4.5	--	--	--	--
19...	0830	337	--	--	--	1.0	1	10.6	K11	250
MAR										
18...	0815	370	--	--	--	3.0	3	11.1	K6	240
30...	1535	788	519	--	19.5	10.0	--	--	--	--
APR										
30...	1730	2180	--	--	--	5.0	60	10.4	K250	350
MAY										
12...	0920	2310	441	--	5.0	4.5	--	--	--	--
27...	0830	2660	400	7.9	--	6.0	30	9.8	100	200
JUN										
12...	1415	2590	391	--	14.0	10.0	--	--	--	--
20...	0815	2030	390	8.0	--	12.5	15	9.3	160	200
JUL										
24...	1040	1050	278	--	27.5	12.5	--	--	--	--
AUG										
05...	0730	780	490	7.6	--	10.5	4	7.6	96	220
SEP										
02...	0800	716	460	7.7	--	11.0	2	7.8	140	240
12...	1330	755	466	--	8.0	8.0	--	--	--	--



## SALT RIVER BASIN

13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY.--Continued

## PESTICIDE ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
OCT 14...	0730	344	.00	--	.0	--	.00	--	.00	--
MAY 27...	0830	2660	.00	.0	.0	0	.00	.0	.00	.1

DATE	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)
OCT 14...	.00	--	.00	.00	--	.00	--	.00	.00
MAY 27...	.00	.0	.00	.00	.1	.00	.0	.00	.00

DATE	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATT. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)
OCT 14...	--	.00	--	.00	--	.00	.00	.00	.00
MAY 27...	.0	.00	.1	.00	.0	.00	.00	.00	.00

DATE	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4-D, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	2,4,5-T TOTAL (UG/L)	2,4,5-T TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	SILVEX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
OCT 14...	0	--	.00	.00	--	.00	--	.00	--
MAY 27...	0	0	.00	.00	0	.00	0	.00	.0





SLAKE RIVER MAIN STEM

13032450 PALISADES RESERVOIR NEAR IRWIN, ID

LOCATION.--Lat 43°19'49", long 111°12'20", in NW¼SE¼ sec.17, T.1 S., R.45 E., Bonneville County, Hydrologic Unit 17040104, Caribou National Forest, on left bank on spillway structure near Palisades Dam on Snake River, 3.5 mi (5.6 km) upstream from Palisades Creek, 7 mi (11.3 km) southeast of Irwin, and at mile 901.6 (1,450.7 km).

DRAINAGE AREA.--5,208 mi<sup>2</sup> (13,489 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Outside staff gages attached to concrete headwalls upstream from power and outlet tunnels. Datum of gage is at mean sea level (Bureau of Reclamation datum). Datum of Geological Survey is 0.10 ft (0.030 m) lower National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earth-fill, rock-faced dam; partial storage began in October 1955; full storage began in November 1956. Capacity, 1,400,000 acre-ft (1,730 hm<sup>3</sup>) between elevations 5,372 or 1,637 m (river level at original outlet tunnels) and 5,620 ft (1,713 m). Dead storage 44,100 acre-ft (54.4 hm<sup>3</sup>) at elevation 5,452.43 ft (1,661.901 m), elevation of completed outlet tunnels. Inactive storage for minimum power head, 199,600 acre-ft (246 hm<sup>3</sup>) at elevation 5,497.5 ft (1,675.64 m). Water is used for irrigation in Snake River valley. Figures given herein represent total storage.

COOPERATION.--Reservoir elevations and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,421,000 acre-ft (1,750 hm<sup>3</sup>) June 17, 18, 1963 (elevation, 5,621.17 ft or 1,713.333 m); minimum observed, 565 acre-ft (0.697 hm<sup>3</sup>) Jan. 31, 1956 (prior to filling of reservoir); minimum after first filling of reservoir in June 1958, 224,000 acre-ft (276 hm<sup>3</sup>) Sept. 24, 25, 1960 (elevation, 5,502.3 ft or 1,677.106 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,405,000 acre-ft (1,730 hm<sup>3</sup>) July 18, elevation, 5,620.24 ft (1,713.049 m); minimum, 232,700 acre-ft (287 hm<sup>3</sup>) Oct. 1, elevation, 5,504.00 ft (1,677.619 m).

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232700	287700	343600	412300	467500	495200	488400	522700	819700	1282000	1373000	1323000
2	232800	289800	346500	412900	469200	496600	492200	530000	821400	1296000	1371000	1322000
3	233000	291700	349100	413900	471300	494100	494400	539800	823900	1308000	1368000	1320000
4	234000	293500	351700	415500	473000	493800	495800	548800	827500	1319000	1365000	1318000
5	235100	295600	354200	417600	474600	494100	496300	555300	831300	1327000	1362000	1316000
6	236300	297400	356500	420000	476500	494200	496300	559700	839700	1335000	1358000	1315000
7	237600	299400	358500	421900	478300	494300	497100	562900	854300	1342000	1354000	1314000
8	239200	301700	360500	423600	480300	494100	500100	565700	873500	1351000	1349000	1313000
9	240600	302600	362200	425400	482200	494200	504500	567100	897100	1359000	1344000	1313000
10	242100	304300	364000	427300	484100	494400	509600	572500	925200	1367000	1339000	1313000
11	243800	306000	365900	429300	486100	494500	496600	582100	951300	1376000	1333000	1314000
12	245600	306600	368100	431200	487600	494700	516900	590000	969300	1384000	1329000	1315000
13	247500	309100	370500	433100	489400	494200	519700	595100	983400	1389000	1326000	1317000
14	249500	310900	373300	435000	489600	493600	521800	603900	1003000	1395000	1324000	1317000
15	251700	312600	377000	437200	490300	493100	523200	618900	1028000	1401000	1322000	1318000
16	253900	314300	380300	439400	490800	492400	523800	639400	1054000	1403000	1321000	1322000
17	256000	316100	383100	441400	491000	491900	523400	656600	1075000	1404000	1321000	1322000
18	258200	317500	385700	443500	491200	491400	521800	668200	1092000	1405000	1321000	1325000
19	260300	318900	388000	445200	491500	491200	518200	677900	1109000	1403000	1322000	1326000
20	262400	320400	389500	447000	492200	491300	514700	685000	1123000	1398000	1323000	1327000
21	264600	321800	391100	448700	492700	491500	512800	693900	1138000	1395000	1325000	1328000
22	266700	323400	392800	450500	493100	492000	509800	706400	1155000	1393000	1326000	1329000
23	268700	325200	395300	452300	493500	492900	506200	719400	1174000	1393000	1327000	1330000
24	270800	327200	397400	453600	494000	494000	502200	733800	1194000	1391000	1327000	1331000
25	272900	329000	399300	455200	494700	495000	499300	747500	1213000	1390000	1328000	1331000
26	274800	331900	401400	457200	495500	496300	500300	758500	1228000	1388000	1327000	1332000
27	276800	334700	403200	459000	496300	496000	504900	768700	1238000	1385000	1327000	1333000
28	278800	337100	404400	460700	495900	494800	508800	778800	1246000	1383000	1327000	1333000
29	281100	339300	406100	462500	---	491000	512100	791900	1256000	1381000	1326000	1333000
30	283400	341400	408400	464200	---	488000	516600	809800	1269000	1379000	1326000	1333000
31	285600	---	410600	465900	---	486600	---	814300	---	1376000	1325000	---
MAX	285600	341400	410600	465900	496300	496300	523800	814300	1269000	1405000	1373000	1333000
MIN	232700	287700	343600	412300	467500	486800	488400	522700	819700	1282000	1321000	1313000
(†)	5513.15	5521.98	5531.85	5539.05	5542.76	5541.65	5545.26	5576.34	5611.59	5618.45	5615.21	5615.77
(‡)	+52.6	+55.8	+69.2	+55.3	+30.0	-9.1	+29.8	+297.7	+454.7	+107	-51	+8
CAL YR 1977..... †	-863.4											
WTR YR 1978..... †	+1110											

† Elevation, in feet, at end of month.  
‡ Change in contents, in thousands of acre-feet.

## SNAKE RIVER MAIN STEM

13032500 SNAKE RIVER NEAR IRWIN, ID

LOCATION.--Lat 43°21'03", long 111°13'06", in NE¼NE¼ sec.7, T.1 S., R.45 E., Bonneville County, Hydrologic Unit 17040104, on right bank at Bureau of Reclamation headquarters, 1.5 mi (2.4 km) downstream from Palisades Dam, 2 mi (3.2 km) upstream from Palisades Creek, 5 mi (8 km) southeast of Irwin, and at mile 900.2 (1,448.4 km).

DRAINAGE AREA.--5,225 mi<sup>2</sup> (13,533 km<sup>2</sup>).

PERIOD OF RECORD.--March to October 1935, April to October 1936, May 1949 to current year. Records for station "at Calamity Point, near Irwin" April to August 1934, April to October 1935, April to October 1936, March 1939 to September 1941 are equivalent to those for this station.

REVISED RECORDS.--WSP 1217: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,353.00 ft (1,631.594 m) National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Mar. 30, 1935, to Oct. 31, 1936, water-stage recorder at site 3.5 mi (5.6 km) downstream at different datum. May 1, 1949, to Mar. 22, 1950, nonrecording gage at site 1,100 ft (335 m) downstream at datum 1.9 ft (0.58 m) higher.

REMARKS.--Records excellent. Flow regulated by Jackson Lake (see sta 13010500) and Palisades Reservoir (see sta 13032450). Diversions from tributaries above station for irrigation in Wyoming and Idaho of about 95,300 acres (38,570 hm<sup>2</sup>) 1966 determination.

AVERAGE DISCHARGE.--29 years (1950-78), 5,755 ft<sup>3</sup>/s (163.0 m<sup>3</sup>/s), 4,782,000 acre-ft/yr (5,896 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,800 ft<sup>3</sup>/s (901 m<sup>3</sup>/s) June 4-6, 1956; maximum gage height, 13.31 ft (4.057 m) June 4, 1956; minimum discharge, 19 ft<sup>3</sup>/s (0.54 m<sup>3</sup>/s) Nov. 8, 1956, gage height, 2.43 ft (0.741 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in early June 1894 probably was higher than that of June 4-6, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,200 ft<sup>3</sup>/s (487 m<sup>3</sup>/s) June 11-12, gage height, 10.36 ft (3.158 m); minimum, 778 ft<sup>3</sup>/s (22.0 m<sup>3</sup>/s) Dec. 13, 24, 28, gage height, 4.36 ft (1.329 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

4.3	725	7.0	5,760
4.6	1,020	8.0	8,730
5.0	1,520	10.0	15,800
6.0	3,280	12.0	24,100

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2190	920	1010	1040	1030	2060	5630	8110	14100	16300	10500	6640
2	2090	940	1010	1040	1040	2060	4890	8110	15500	15100	10200	6640
3	1910	1020	1010	1040	1060	2040	4850	8120	16100	14600	10100	6640
4	1540	1020	1010	1130	1060	2050	4850	8120	16300	14600	10100	6780
5	1530	1020	993	1060	1060	2040	4860	8140	17100	14500	10100	6780
6	1540	1030	1020	1050	1060	2050	5070	8130	17100	14200	10100	6640
7	1460	1020	1020	1060	1040	2040	5080	8120	17100	13300	10100	6550
8	1360	1020	1030	1050	1060	2040	5100	8110	17100	12500	10100	6440
9	1350	1020	1020	1050	1050	2030	5100	9110	17100	11900	10100	6330
10	1360	984	1030	1050	1050	2030	5080	9140	17200	11900	10100	6050
11	1220	1010	1020	1040	1050	2030	6060	9130	17100	11900	9990	5760
12	1100	1040	1020	1050	1050	2030	6130	9100	17100	12400	9950	5250
13	1100	1050	1020	1050	1050	2420	6120	10100	17100	13400	9950	4930
14	1020	1040	1020	1030	1540	2410	6110	10100	17000	13400	9660	4100
15	1020	1040	1030	1030	1540	2410	6110	10100	16600	13900	8640	3860
16	920	1030	1000	1040	1570	2400	7050	10100	16600	15400	7920	3870
17	920	1030	1010	1040	1540	2410	7130	10100	16600	15800	7920	3840
18	920	1020	1010	1030	1550	2410	7130	11100	16600	15800	7170	3820
19	920	1030	1010	1010	1550	2410	8030	11100	16600	15800	6900	3840
20	920	1010	1020	1020	1550	2410	8130	12100	16600	15500	6190	3780
21	920	1020	1010	1010	1550	2390	8150	12100	16600	14500	5930	3780
22	920	1040	1080	1010	1550	2390	8130	12100	16800	13400	6080	3750
23	920	1020	1010	1030	1550	2400	8120	13100	17100	12100	6500	3760
24	920	1020	1010	1020	1550	2400	8120	13200	17100	11900	6470	3750
25	920	1030	1000	1030	1550	2400	8110	13200	17100	11700	6500	3770
26	920	1030	997	1020	1560	2400	8120	13200	17100	11300	6470	3760
27	920	1020	998	1030	1560	3330	8120	13200	17100	11400	6500	3760
28	920	1020	992	1020	2030	4100	8120	13200	17100	11800	6470	3750
29	920	1020	1040	1040	---	5760	8130	13200	17100	11700	6500	3770
30	920	1010	1050	1040	---	5790	8130	13200	17100	11200	6550	3770
31	920	---	1050	1030	---	5700	---	14200	---	11000	6640	---
TOTAL	36510	30524	31550	32190	37400	82840	199760	330140	502800	414200	256400	146160
MEAN	1178	1017	1018	1038	1336	2672	6659	10650	16760	13360	8271	4872
MAX	2190	1050	1080	1130	2030	5790	8150	14200	17200	16300	10500	6780
MIN	920	920	992	1010	1030	2030	4850	8110	14100	11000	5930	3750
AC-FT	72420	60540	62580	63850	74180	164300	396200	654800	997300	821600	508600	289900
CAL YR 1977	TOTAL	1707856	MEAN	4679	MAX	12300	MIN	556	AC-FT	3388000		
WTR YR 1978	TOTAL	2100474	MEAN	5755	MAX	17200	MIN	920	AC-FT	4166000		

13032500 SNAKE RIVER NEAR IRWIN, ID--Continued

## WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: May 1977 to current year.

INSTRUMENTATION.--Temperature recorder since May 17, 1977.

REMARKS.--Miscellaneous chemical data published for water year 1976. No temperature record Oct. 1 to Dec. 4 due to equipment malfunction.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURES: Maximum, 18.5°C Aug. 22, 1977.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 13.0°C Aug. 3, 6-8, 10-19, 21, 28; minimum, 0.0°C on many days during winter months.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLUW. INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)
NOV 01...	1100	922	374	5.5	7.0
DEC 17...	1030	1810	187	-8.0	.0
JAN 31...	1020	5590	438	5.5	3.5
MAY 11...	1350	9080	369	19.0	8.0
JUN 12...	0920	17300	312	12.0	9.5
JUL 25...	1215	11900	487	32.5	12.5
SEP 12...	1040	5550	267	9.5	12.0
22...	1140	3750	273	18.0	--



Snake River Main Stem

13037500 SNAKE RIVER NEAR HEISE, ID

LOCATION.--Lat 43°36'45", long 111°39'33", in SE¼SW¼ sec.5, T.3 N., R.41 E., Bonneville County, Hydrologic Unit 17040104, on left bank 850 ft (259 m) upstream from Anderson canal headgate, 2.4 mi (3.9 km) upstream from Heise, 6 mi (9.7 km) east of Ririe, 24 mi (38.6 km) upstream from Henrys Fork, and at mile 853.6 (1,373.4 km).

DRAINAGE AREA.--5,752 mi<sup>2</sup> (14,898 km<sup>2</sup>). Mean altitude, 7,770 ft (2,368 m).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1910 to current year. Monthly discharge only for some periods, published in WSP 1317. Prior to 1911, published as South Fork of Snake River near Heise.

REVISED RECORDS.--WSP 1217: Drainage area. WSP 1347: 1912.

GAGE.--Water-stage recorder. Datum of gage is 5,015.3 ft (1,528.66 m) National Geodetic Vertical Datum of 1929. Prior to July 9, 1913, nonrecording gage and July 9, 1913, to Sept. 29, 1922, water-stage recorder, at datum 2.65 ft higher (0.808 m).

REMARKS.-- Records good. Flow partly regulated by Jackson Lake (see sta 13010500) and Palisades Reservoir (see sta 13032450). Some diurnal fluctuations during winter from powerplant operations at Palisades. Riley ditch, 1.5 mi (2.4 km) upstream, diverted 6,328 acre-ft (7.80 hm<sup>3</sup>) during the year. Diversions from tributaries above station for irrigation in Wyoming and Idaho of about 104,000 acres (42,100 hm<sup>2</sup>), 1966 determination.

AVERAGE DISCHARGE.--68 years, 6,938 ft<sup>3</sup>/s (196.5 m<sup>3</sup>/s), 5,027,000 acre-ft/yr (6,198 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 60,000 ft<sup>3</sup>/s (1,700 m<sup>3</sup>/s) May 19, 1927, result of washing out of landslide on Gros Ventre River, gage height, about 16.0 ft (4.88 m), present datum; minimum, 460 ft<sup>3</sup>/s (13.0 m<sup>3</sup>/s) Nov. 10, 12, 1956, gage height, -0.18 ft (-0.055 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in early June 1894 was estimated as 65,000 ft<sup>3</sup>/s (1,840 m<sup>3</sup>/s) by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,600 ft<sup>3</sup>/s (527 m<sup>3</sup>/s) June 8, gage height, 6.81 ft (2.076 m); minimum, 1,180 ft<sup>3</sup>/s (33.4 m<sup>3</sup>/s) Dec. 20, gage height, 0.99 ft (0.302 m); minimum gage height, 0.99 ft (0.302 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	2630	1430	1490	1470	1500	2510	7010	9630	15400	17300	11100	7030	
2	2480	1440	1510	1450	1500	2500	6240	9760	16200	16100	10700	7020	
3	2440	1480	1550	1420	1570	2490	5700	9930	17400	15400	10500	7000	
4	2090	1530	1490	1440	1510	2500	5620	9800	17500	15400	10500	7110	
5	1980	1550	1450	1450	1510	2520	5580	9690	18300	15200	10500	7160	
6	1980	1580	1420	1460	1530	2530	5670	9540	18400	15100	10500	7110	
7	1960	1570	1420	1460	1510	2490	5870	9440	18500	14200	10500	6820	
8	1860	1560	1400	1440	1540	2490	5980	9420	18500	13500	10600	6790	
9	1810	1550	1420	1430	1520	2500	6030	9990	18300	12600	10600	6580	
10	1810	1570	1410	1420	1540	2510	6030	10500	18300	12500	10600	6410	
11	1760	1560	1420	1420	1530	2510	6770	10800	18300	12400	10500	6160	
12	1640	1550	1430	1420	1530	2500	7200	10700	18100	12600	10400	5820	
13	1580	1600	1450	1420	1510	2650	7140	11400	18100	13700	10600	5390	
14	1540	1610	1460	1420	1720	2820	7060	11900	18200	13800	10400	4800	
15	1490	1620	1660	1420	2030	2800	7040	12400	17700	14000	9480	4260	
16	1450	1600	1510	1420	2030	2790	7790	12700	17600	15400	8670	4240	
17	1400	1600	1450	1420	2040	2770	8200	12100	17500	16100	8480	4220	
18	1390	1620	1470	1420	2050	2770	8150	12600	17400	16000	8060	4240	
19	1400	1610	1420	1420	2060	2800	8810	12700	17300	16000	7440	4240	
20	1400	1590	1440	1450	2060	2810	9250	13500	17300	15900	6990	4210	
21	1410	1600	1420	1460	2050	2830	9320	13900	17300	15100	6380	4190	
22	1400	1640	1440	1460	2060	2860	9290	14000	17300	14100	6370	4170	
23	1390	1620	1480	1470	2050	2870	9240	14900	17600	12700	6880	4160	
24	1420	1600	1440	1480	2060	2910	9210	15200	17600	12300	6890	4160	
25	1410	1590	1470	1500	2060	2870	9240	15000	17600	12200	6880	4160	
26	1410	1620	1410	1520	2070	2870	9450	14900	17500	11700	6880	4150	
27	1410	1590	1470	1490	2060	3460	9650	14800	17500	11700	6880	4140	
28	1410	1560	1520	1480	2300	4380	9610	14800	17600	12100	6850	4140	
29	1430	1530	1470	1500	---	5880	9560	14900	17600	12300	6860	4140	
30	1440	1510	1480	1510	---	6650	9650	14900	17600	11800	6890	4140	
31	1430	---	1490	1500	---	6840	---	15300	---	11500	7010	---	
TOTAL	51650	47080	45360	45040	50500	96680	231350	381100	529500	430700	271890	158160	
MEAN	1666	1569	1463	1453	1804	3119	7712	12290	17650	13890	8771	5272	
MAX	2630	1640	1660	1520	2300	6840	9650	15300	18500	17300	11100	7160	
MIN	1390	1430	1400	1420	1500	2490	5580	9420	15400	11500	6370	4140	
AC-FT	102400	93380	89970	89340	100200	191800	458900	755900	1050000	854300	539300	313700	
MEAN†	2740	2719	3090	2730	2809	2851	8287	18840	27440	16610	6900	4988	
AC-FT†	168500	161780	189970	167840	156000	175300	493100	1158500	1632900	1021600	424300	296800	
CAL YR 1977 TOTAL	1833446			5023		12700		902		3637000		MEAN† 3428	AC-FT† 2482000
WTR YR 1978 TOTAL	2339010			6406		18500		1390		4639000		MEAN† 8365	AC-FT† 6056400

† Adjusted for storage in Jackson Lake and Palisades Reservoir; no account taken for time of travel between reservoirs and Heise gaging station.

## SNAKE RIVER MAIN STEM

13037500 SNAKE RIVER NEAR HEISE, ID--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: January 1953 to September 1976, March to September 1978.

INSTRUMENTATION.--Temperature recorder since Nov. 10, 1972.

REMARKS.--Interruptions in daily water temperatures due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum daily, 20°C Aug. 6, 7, 1970; minimum daily, 0.0°C on many days during winter periods.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	
OCT												
04...	1335	2010	430	--	15.0	11.5	--	--	--	--	--	
31...	1010	1200	562	8.1	7.0	7.0	--	--	--	--	--	
NOV												
21...	1300	1540	546	--	4.0	1.0	--	--	--	--	--	
DEC												
04...	1050	1240	495	8.0	-2.0	2.0	2	--	12.4	120	<1	
JAN												
09...	1030	1330	--	--	.0	2.0	--	--	--	--	--	
24...	1300	1410	603	7.7	-5.0	.5	1	--	12.4	119	K10	
FEB												
24...	1245	1700	511	7.2	4.0	3.0	3	--	11.5	115	K3	
MAR												
24...	0800	2580	446	7.6	3.0	2.5	2	--	10.8	106	K5	
APR												
26...	1045	9480	--	--	8.0	6.0	--	--	--	--	--	
MAY												
25...	1500	15000	369	8.0	15.0	8.0	6	--	10.8	123	K12	
JUN												
26...	1600	17000	326	8.3	23.0	13.0	--	4.2	9.3	117	26	
27...	1140	17600	--	--	15.0	11.5	--	--	--	--	--	
JUL												
24...	1100	11900	272	7.9	20.0	11.5	--	2.4	8.6	104	K7	
26...	1020	11700	--	--	--	12.0	--	--	--	--	--	
AUG												
25...	0945	6920	--	--	19.0	12.5	--	--	--	--	--	
30...	1120	6860	341	--	25.5	13.5	--	--	--	--	--	
SEP												
06...	1115	6640	298	8.2	23.0	14.6	--	2.6	8.7	113	K8	
DATE	TIME	STREP- TOCOCCT FECAL, KF AGAP (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AU- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)
OCT												
04...	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	240	79	66	19	22	16	.6	3.3	200	0
NOV												
21...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
04...	54	250	76	68	19	21	15	.6	3.5	210	0	
JAN												
09...	--	--	--	--	--	--	--	--	--	--	--	--
24...	K13	260	110	72	19	21	15	.6	3.3	185	0	
FEB												
24...	K5	240	77	67	18	18	14	.5	2.4	200	0	
MAR												
24...	26	250	70	70	18	15	11	.4	2.6	220	0	
APR												
26...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
25...	31	170	55	48	12	8.8	10	.3	1.6	140	0	
JUN												
26...	130	140	25	41	9.5	7.1	10	.3	1.4	140	0	
27...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	K15	130	13	37	8.6	6.1	9	.2	1.4	140	0	
26...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
25...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
06...	17	150	35	44	10	7.1	9	.3	1.5	140	0	

K Results based on count outside ideal colony count range.

SNAKE RIVER MAIN STEM

13037500 SNAKE RIVER NEAR HEISE, ID--Continued  
 WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ALKALINITY (MG/L AS CAC03)	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, WFSIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT 04...	--	--	--	--	--	--	--	--	--	--	--
31...	160	81	25	.6	8.1	--	324	.44	1050	--	--
NOV 21...	--	--	--	--	--	--	--	--	--	--	--
DEC 08...	170	80	28	.5	8.2	333	332	.45	1110	.13	.02
JAN 09...	--	--	--	--	--	--	--	--	--	--	--
24...	152	80	20	.5	8.7	340	316	.46	1660	.16	.02
FEB 24...	160	76	22	.4	9.7	316	313	.43	1450	.19	.02
MAR 24...	180	68	19	.4	8.8	296	311	.40	2060	.20	.00
APR 26...	--	--	--	--	--	--	--	--	--	--	--
MAY 25...	115	33	7.8	.2	8.3	202	189	.27	8180	.10	.01
JUN 26...	115	24	5.3	.3	8.7	169	166	.23	7760	.03	.00
27...	--	--	--	--	--	--	--	--	--	--	--
JUL 24...	115	23	5.4	.2	8.6	157	159	.21	5040	.08	.02
26...	--	--	--	--	--	--	--	--	--	--	--
AUG 25...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
SEP 06...	115	35	1.8	.2	9.0	180	178	.24	3230	.06	.00

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEO TOTAL (MG/L AS C)
OCT 04...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	.00	--	--	--	--
NOV 21...	--	--	--	--	--	--	--	--	--	--	--
DEC 08...	--	--	--	.33	--	--	.01	.02	.8	--	--
JAN 09...	--	--	--	--	--	--	--	--	--	--	--
24...	.59	.61	.43	.18	.77	3.4	.01	.02	--	1.0	.4
FEB 24...	.08	.10	.00	.22	.29	1.3	.05	.01	1.2	--	--
MAR 24...	.69	.69	.33	.36	.89	3.9	.02	.01	--	1.7	.8
APR 26...	--	--	--	--	--	--	--	--	--	--	--
MAY 25...	.67	.68	.42	.26	.78	3.5	.04	.00	3.2	--	--
JUN 26...	.50	.50	.19	.31	.53	2.3	.03	.01	--	3.0	.8
27...	--	--	--	--	--	--	--	--	--	--	--
JUL 24...	.20	.22	.00	.36	.30	1.3	.04	.01	5.0	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
AUG 25...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
SEP 06...	3.5	3.5	3.2	.28	3.6	16	.00	.00	--	3.0	.6



## SNAKE RIVER MAIN STEM

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13037500 SNAKE RIVER NEAR HEISE, ID--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SELF- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDED TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVEU (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDED RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVEU (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVEU (UG/L AS ZN)
DEC 08...	0	0	0	0	0	0	20	0	20
JAN 24...	0	0	0	1	1	0	50	20	30
FEB 24...	1	1	0	1	1	0	20	10	10
MAR 24...	14	1	13	1	1	0	10	0	10
MAY 25...	0	0	0	0	0	0	30	0	30
JUN 26...	0	0	0	0	0	0	30	10	20
JUL 24...	0	0	0	0	0	0	20	0	20
SEP 06...	0	0	0	0	0	0	10	0	10

## SNAKE RIVER MAIN STEM

13037500 SNAKE RIVER NEAR HEISE, ID--Continued  
 PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	JAN 24,78 1810	MAR 24,78 0800	MAY 25,78 1500	JUN 26,78 1600	JUL 24,78 1100	SEP 6,78 1115				
TOTAL CELLS/ML	740	230	960	1600	330	140				
DIVERSITY: DIVISION	0.6	0.0	0.4	1.0	0.6	0.0				
..CLASS	0.6	0.0	0.4	1.1	0.6	0.0				
...ORDER	1.4	0.5	1.2	2.0	1.0	0.0				
...FAMILY	2.8	2.6	1.5	2.9	2.1	1.4				
....GENUS	3.2	2.6	2.2	3.0	2.2	1.4				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...SCENEDESMACEAE										
....SCENEDESMUS	21	3	--	--	--	--	--	--	--	--
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	--	--	89	9	--	--	--	--	--
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
...COSCINODISCEACEAE										
....CYCLOTELLA	5	1	--	470#	49	23	1	--	--	--
....MELOSIRA	240#	33	27	200#	21	--	--	35	11	--
....STEPHANODISCUS	--	--	--	--	--	300#	19	*	0	--
...PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	43	6	--	22	2	--	--	12	4	--
....COCCONEIS	37	5	--	--	--	46	3	12	4	58#
...CYMBELLACEAE										
....AMPHORA	69	9	--	--	--	--	--	--	--	14
....CYMBELLA	74	10	14	45	5	93	6	4	1	--
...DIATOMACEAE										
....DIATOMA	43	6	41#	45	5	93	6	3	1	--
...FRAGILARIACEAE										
....ASTERIONELLA	--	--	--	--	--	--	--	170#	52	--
....SYNEDRA	80	11	41#	--	--	--	--	--	--	--
...GOMPHONEMACEAE										
....GOMPHONEMA	21	3	14	--	--	46	3	--	--	--
...NAVICULACEAE										
....NAVICULA	32	4	68#	89	9	160	10	35	11	72#
...PINNULARIA	--	--	--	--	--	23	1	--	--	--
...NITZSCHIACEAE										
....NITZSCHIA	21	3	27	--	--	--	--	9	3	--
...TABELLARIACEAE										
....TABELLARIA	--	--	--	--	--	93	6	--	--	--
..CHRYSOPHYCEAE										
...CHRYSONOMADALES										
...MALLOMONADACEAE										
....MALLOMONAS	--	--	--	--	--	23	1	--	--	--
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROCOCCALES										
...CHROCOCCACEAE										
....ANACYSTIS	--	--	--	--	--	350#	21	--	--	--
...HORMOGONALES										
...OSCILLATORIA										
....OSCILLATORIA	43	6	--	--	--	370#	23	43	13	--
PYRRHOPHYTA (FIRE ALGAE)										
..DINOPHYCEAE										
...PFRIDINIALES										
...PERIDINIACEAE										
....PERIDINIUM	5	1	--	--	--	--	--	--	--	--

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%  
 \* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

## SNAKE RIVER MAIN STEM

91

13037500 SNAKE RIVER NEAR HEISE, ID--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LENGTH OF EXPO- SURE (DAYS)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)
JAN 24...	47	3.39	2.28	1.72	.000
MAR 24...	28	18.5	16.4	10.4	1.58
JUN 26...	32	.787	.315	.140	.010

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SEDI- MENT, SUS- PENDEI) (MG/L)	SFDI- MENT DIS- CHARGE, SUS- PENDEI) (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
DEC 08...	1050	3	10	88	100	--	--
JAN 24...	1300	13	64	--	--	--	--
FEB 24...	1245	18	83	91	100	--	--
MAR 24...	0800	5	42	97	100	--	--
MAY 25...	1500	33	1340	78	90	99	100
JUN 26...	1600	14	643	92	98	100	--
JUL 24...	1100	4	129	85	100	--	--
SEP 06...	1115	2	36	80	100	--	--



SNAKE RIVER MAIN STEM

93

13038000 DRY BED NEAR RIRIE, ID

LOCATION.--Lat 43°38'21", long 111°42'55", in NE¼NW¼ sec.35, T.4 N., R.40 E., Jefferson County, Hydrologic Unit 17040201, on right bank 30 ft (9.1 m) downstream from county road bridge, 1.3 mi (2.1 km) downstream from head, and 2.7 mi (4.3 km) east of Ririe.

PERIOD OF RECORD.--1923-27 and miscellaneous measurements during 1970-72 (formerly published as Great Feeder Canal), October 1976 to current year (irrigation seasons only prior to 1977).

GAGE.--Water-stage recorder. Altitude of gage is 4,985 ft (1,520 m), from topographic map.

REMARKS.--Records good. Flow from Snake River regulated by headgates 1.3 mi (2.1 km) upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,740 ft<sup>3</sup>/s (134.2 m<sup>3</sup>/s) June 21, 1925; no flow at times during periods of no record 1923-27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1600	736	282	38	233	324	336	478	4270	4080	3970	3300
2	1500	635	244	60	229	320	340	514	4190	4090	3940	3300
3	1400	550	191	87	230	324	287	508	4170	4140	3900	3300
4	1300	447	187	87	233	324	8.1	514	4170	4140	3890	3300
5	1250	340	236	98	232	320	3.5	526	4110	4120	3870	3300
6	1250	455	193	85	233	320	4.0	538	4090	4110	3890	3300
7	1220	544	209	92	230	315	2.0	550	4220	4030	3890	3200
8	1180	544	150	100	235	315	2.0	661	4240	3980	3890	3050
9	1140	538	149	97	235	315	2.0	852	4250	3950	3830	2880
10	1170	544	108	97	233	311	2.0	1070	4250	3900	3740	2870
11	1130	440	79	94	230	307	2.0	1180	4270	3970	3740	2660
12	1070	332	78	92	232	307	2.0	1260	4320	4180	3740	2150
13	1030	332	75	95	233	307	2.0	1380	4360	4190	3600	1770
14	1010	328	73	96	276	315	2.0	1400	4360	4290	3400	1590
15	987	328	70	100	315	311	2.0	1640	4350	4270	3250	1660
16	956	348	64	97	321	307	178	2010	4330	4240	3200	1720
17	891	316	61	96	322	307	264	2180	4320	4320	3200	1740
18	853	312	58	95	321	303	264	2190	4370	4320	3300	1710
19	816	300	57	96	321	299	272	2120	4340	4360	3100	1710
20	826	296	54	96	323	307	280	2030	4350	4360	3100	1720
21	828	300	52	96	320	303	280	2300	4290	4300	2900	1750
22	825	307	52	96	311	299	280	2510	4370	4220	2800	1750
23	825	303	52	97	315	303	276	2750	4270	4090	2800	1750
24	824	300	53	102	315	307	280	2880	4140	4010	2900	1740
25	818	295	53	120	311	307	328	2890	4170	3940	3000	1760
26	817	297	52	135	311	303	336	2950	4110	3770	3000	1740
27	812	293	51	135	311	311	332	3380	4090	3940	3000	1950
28	815	292	82	134	320	332	385	3800	4140	4120	3000	2100
29	802	284	89	132	---	362	420	3940	4120	4140	3100	2130
30	803	282	50	133	---	287	440	4220	4090	4120	3200	2170
31	760	---	50	190	---	332	---	4460	---	4060	3250	---
TOTAL	31508	11618	3254	3168	7731	9704	5611.6	59681	126970	127750	105390	69070
MEAN	1016	387	105	102	276	313	187	1925	4232	4121	3400	2302
MAX	1600	736	282	190	323	362	440	4460	4370	4360	3970	3300
MIN	760	282	50	35	229	287	2.0	478	4090	3770	2800	1590
AC-FT	62500	23040	6450	6280	15330	19250	11130	118400	251800	253400	209000	137000
CAL YR 1977 TOTAL	524743.0		MEAN	1438	MAX	3710	MIN	14	AC-FT	1041000		
WTR YR 1978 TOTAL	561455.6		MEAN	1538	MAX	4460	MIN	2.0	AC-FT	1114000		

## SNAKE RIVER MAIN STEM

13038380 DRY BED NEAR LEWISVILLE, ID

LOCATION.--Lat 43°42'41", long 112°02'19", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec.6, T.4 N., R.38 E., Jefferson County, Hydrologic Unit 17040201, on right bank 1.1 mi (1.8 km) northwest of Lewisville and at mile 7.3 (11.7 km).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,775 ft (1,458 m), from topographic map.

REMARKS.--Records good. Flow regulated at the head (see sta 13038000). Considerable diversions for irrigation above station during irrigation season.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft<sup>3</sup>/s (31.4 m<sup>3</sup>/s) July 30, 1978, gage height, 7.75 ft (2.362 m); minimum, 5.4 ft<sup>3</sup>/s (0.15 m) Apr. 11, 12, 1977, gage height, 4.88 ft (1.487 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,110 ft<sup>3</sup>/s (31.4 m<sup>3</sup>/s) July 30, gage height, 7.75 ft (2.362 m); minimum daily, 8.1 ft<sup>3</sup>/s (0.23 m) Jan. 30 to Feb. 1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	109	140	14	8.1	54	52	168	318	412	768	474
2	134	105	138	14	19	53	56	174	218	526	701	421
3	132	109	77	14	25	53	56	140	188	532	677	474
4	129	112	70	13	24	54	56	144	260	526	613	398
5	128	112	74	14	14	54	20	130	257	537	617	394
6	126	114	103	13	18	54	10	110	175	510	735	394
7	130	109	85	12	21	53	9.8	110	149	425	690	407
8	132	119	69	12	22	54	9.8	91	172	385	647	430
9	129	124	44	12	23	55	9.8	159	175	425	690	500
10	128	109	47	11	24	55	9.6	165	235	346	587	628
11	124	102	36	11	24	54	10	272	271	279	581	697
12	123	211	29	11	25	53	11	291	253	318	553	659
13	122	214	27	11	25	53	10	314	242	355	553	394
14	121	143	26	11	26	54	10	280	253	380	454	286
15	120	117	25	11	27	54	10	251	286	412	363	260
16	119	78	23	11	28	53	11	206	322	469	355	286
17	119	74	22	10	32	52	192	236	346	521	484	271
18	118	70	22	10	40	52	228	293	416	500	553	271
19	117	74	20	9.7	48	52	231	266	412	495	435	282
20	116	102	19	9.6	54	52	241	193	416	542	459	306
21	117	114	19	9.6	56	53	227	215	389	622	376	302
22	120	107	19	9.4	56	53	241	274	402	735	306	314
23	119	112	19	9.0	56	52	248	310	605	783	310	290
24	117	116	18	8.9	57	52	245	363	581	647	372	279
25	118	121	17	8.7	54	52	179	286	570	537	376	242
26	117	127	17	8.7	54	52	272	225	653	425	363	221
27	114	133	16	8.4	54	53	249	169	735	407	412	214
28	114	140	16	8.2	54	54	192	253	703	581	407	282
29	119	141	15	8.2	---	56	190	257	634	804	416	306
30	117	140	15	8.1	---	59	188	221	500	1080	425	330
31	117	---	14	8.1	---	53	---	350	---	963	454	---
TOTAL	3804	3558	1281	329.6	968.1	1657	3474.0	6916	11136	16479	15732	11012
MEAN	123	119	41.3	10.6	34.6	53.5	116	223	371	532	507	367
MAX	148	214	140	14	57	59	272	363	735	1080	768	697
MIN	114	70	14	8.1	8.1	52	9.6	91	149	279	306	214
AC-FT	7550	7060	2540	654	1920	3290	6890	13720	22090	32690	31200	21840
CAL YR 1977 TOTAL	82723.0		MEAN 227	MAX 879	MIN 5.7	AC-FT 164100						
WTR YR 1978 TOTAL	76346.7		MEAN 209	MAX 1080	MIN 8.1	AC-FT 151400						

13038500 SNAKE RIVER AT LORENZO, ID

LOCATION.--Lat 43°44'06", long 111°52'33", in NE¼SW¼ sec.28, T.5 N., R.39 E., Jefferson County, Hydrologic Unit 17040201, on left bank 0.5 mi (0.80 km) downstream from bridge on U.S. Highway 191, 0.5 mi (0.80 km) north of Lorenzo, 5.5 mi (0.85 km) upstream from Henrys Fork, and at mile 837.9 (1348.2 km).

- DRAINAGE AREA.--5,810 m<sup>2</sup> (15,048 km<sup>2</sup>).

PERIOD OF RECORD.--January to September 1978. Prior to January 1978 monthly mean discharges for the period April to September for the years 1924 to 1927 published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 4,850 ft (1478 m), from topographic map. Prior to January 1978 at site 0.5 mi (0.80 km) upstream at different datum.

REMARKS.--Records fair. Flow partly regulated by Jackson Lake (see sta 13010500) and Palisades Reservoir (see sta 13032450). Some diurnal fluctuations during winter from powerplant operations at Palisades. Diversions above station for irrigation in Wyoming and Idaho of about 255,000 acres (103,000 hm<sup>2</sup>) 1966 determination.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43,000 ft<sup>3</sup>/s (1,218 m<sup>3</sup>/s) May 19, 1927, result of washing out of landslide on Gros Ventre River, gage height, 9.85 ft (3.00 m) site and datum then in use; minimum, 258 ft<sup>3</sup>/s (7.3 m<sup>3</sup>/s) Sept. 29, 1926.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,200 ft<sup>3</sup>/s (289 m<sup>3</sup>/s) June 6, gage height, 10.30 ft (3.139 m); minimum, 558 ft<sup>3</sup>/s (15.8 m<sup>3</sup>/s) Feb. 13, gage height, 4.37 ft (1.332 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	743	1830	6210	7980	8530	9410	5100	2650
2				---	731	1860	5900	8050	8770	8800	4910	2510
3				---	776	1860	5340	7910	9300	8300	4820	2450
4				---	760	1860	5540	8180	9450	8220	4580	2320
5				---	739	1920	5540	8190	9860	8040	4440	2350
6				---	766	1920	5560	8230	10100	7930	4550	2380
7				---	746	1910	5750	8210	10100	7820	4570	2410
8				---	762	1900	5870	8160	10100	7910	4490	2350
9				---	744	1900	5920	8160	10000	8310	4580	2430
10				---	747	1950	5920	8370	9990	8140	4700	2300
11				---	756	1950	6240	8450	9940	8220	4780	2250
12				---	735	1960	6700	8500	9860	8680	4830	2410
13				---	718	1970	6630	8640	9760	8540	4840	2410
14				---	789	2370	6620	9040	9600	8750	5230	2920
15				---	1160	2360	8700	9150	9500	8750	5050	2180
16				---	1170	2360	8810	9130	9360	7870	4340	1980
17				---	1210	2370	8920	8950	9310	8120	4110	1940
18				---	1210	2370	8840	8970	9260	8180	4750	1640
19				---	1230	2410	8860	9200	9310	8200	3820	1900
20				---	1220	2420	7380	9450	9330	8250	3820	1910
21				---	1230	2450	7600	9600	9310	7980	2850	1940
22				---	1220	2500	7650	9470	9220	7410	2810	1930
23				---	1220	2530	7670	9470	9450	8060	3030	1850
24				---	1240	2560	7640	9620	9540	8130	2940	1850
25				---	1250	2540	7600	9550	9510	8090	2850	1750
26				799	1250	2530	7670	9460	9510	8760	2880	1850
27				865	1250	3010	7820	9290	9520	8520	2850	1400
28				843	1450	3240	7890	9550	9510	8430	2760	1120
29				841	---	4940	7890	9500	9500	8020	2620	1000
30				862	---	5940	7810	9350	9470	8450	2820	1010
31				821	---	6110	---	9390	---	8290	2830	---
TOTAL				---	27822	80460	703040	271250	286070	217030	121200	53200
MEAN				---	494	2594	8768	7761	4538	7123	3912	2110
MAX				---	1450	6110	7910	9020	10100	9410	5230	3410
MIN				---	718	1830	5340	7810	8540	8220	4580	2310
ΔC-FT				---	55180	159500	402700	538700	567400	430500	248500	128300

HENRYS FORK BASIN

13039000 HENRYS LAKE NEAR LAKE, ID

LOCATION.--Lat 44°35'51", long 111°21'10", in SW¼NW¼ sec.26, T.15 N., R.43 E., Fremont County, Hydrologic Unit 17040202, at dam on Henrys Fork, 5.2 mi (8.4 km) south of former Lake, Idaho, Post Office.

DRAINAGE AREA.--99.0 mi<sup>2</sup> (256.4 km<sup>2</sup>), including 6.2 mi<sup>2</sup> (16.1 km<sup>2</sup>) of Dry Creek basin.

PERIOD OF RECORD.--June 1923 to current year (fragmentary).

GAGE.--Water-stage record. Datum of gage is mean sea level (levels by Bureau of Reclamation). Prior to June 28, 1978, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed on natural lake by concrete dam supported by downstream earth-fill dam; storage began Sept. 21, 1922; dam completed July 1923. Capacity, 90,420 acre-ft (111 hm<sup>3</sup>) between gage heights 0.0 (low-water level of Henrys Lake prior to construction of dam) and 16.7 ft (5.09 m) top of 4.7-ft (1.43-m) flashboards on spillway. Floodwaters of Dry Creek are diverted into Henrys Lake at times (some diverted during water year 1978). Water used for irrigation near St. Anthony. Records given herein represent usable contents.

COOPERATION.--Capacity table and occasional reservoir elevations furnished by North Fork Reservoir Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 92,100 acre-ft (114 hm<sup>3</sup>) June 26, 1969, gage height, 16.95 ft (5.166 m); minimum observed, 140 acre-ft (0.173 hm<sup>3</sup>) Nov. 8, 1934, gage height, 0.03 ft (0.009 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 91,100 acre-ft (112 hm<sup>3</sup>) July 1, gage height, 16.80 ft (5.121 m); minimum observed, 61,000 acre-ft (75.2 hm<sup>3</sup>) Oct. 19, gage height, 12.04 ft (3.670 m).

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 2400

DAILY DATA

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	91100	89800	87100
2	---	---	---	---	---	---	---	---	---	91000	89600	87000
3	---	---	---	---	---	---	---	---	---	90500	89300	87100
4	---	---	---	---	---	---	---	---	---	90700	89300	87000
5	---	61500	63700	---	---	---	---	---	85100	90800	89200	87000
6	---	---	---	---	---	72800	---	---	---	90800	89100	87100
7	---	---	---	---	---	---	---	---	---	90700	89100	87500
8	---	---	---	---	---	---	---	---	---	90900	88900	87500
9	---	---	---	---	---	---	---	---	---	90700	88900	87500
10	---	---	---	---	---	---	---	---	---	90500	88900	87600
11	---	---	---	---	---	---	---	---	---	90400	88700	87500
12	---	---	---	---	---	---	76500	---	88100	90500	88700	87700
13	---	---	---	---	---	---	---	---	---	90300	88300	87500
14	---	---	---	---	---	---	---	---	88100	90200	88300	87800
15	---	---	---	---	---	---	---	---	---	90200	88100	87700
16	---	---	---	---	---	---	---	84300	---	90100	88100	87700
17	---	---	---	---	---	---	---	---	---	90100	88100	87700
18	---	---	---	---	---	---	---	---	---	89900	88000	87900
19	61000	---	---	---	---	---	---	---	---	90000	88100	87800
20	---	---	---	---	---	---	---	---	---	90200	87900	87800
21	---	---	---	---	---	---	---	---	---	90100	87900	87900
22	---	---	---	---	---	---	---	83900	---	89900	87700	87700
23	---	---	---	---	---	---	---	84300	---	90000	87700	85800
24	---	---	---	---	---	---	---	---	---	90100	87500	83800
25	---	---	---	---	---	---	---	---	---	89900	87600	83200
26	---	---	---	---	---	---	---	---	---	89900	87700	81900
27	---	---	---	69500	---	---	---	---	90400	89700	87500	82500
28	---	---	---	---	---	---	---	---	90500	89600	87300	84500
29	---	---	---	---	---	---	79900	---	90700	89600	87300	83800
30	---	63300	---	---	---	---	80200	84600	90700	89700	87200	87600
31	61400	---	66500	69600	---	75300	---	84700	---	89900	87000	---
MAX	---	---	---	---	---	---	---	---	---	91100	89800	87900
MIN	---	---	---	---	---	---	---	---	---	89600	87000	81900
(†)	---	---	---	13.44	---	---	---	15.82	16.74	16.62	16.19	---
(‡)	+1200	+1900	+3200	+3100	+2600	+3100	+4900	+4500	+6000	-800	-2900	+600

CAL YR 1977..... † ---  
WTR YR 1978..... † +27400

† Gage height, in feet, at end of month.  
‡ Change in contents, in acre-feet.

## HENRYS FORK BASIN

97

13039500 HENRYS FORK NEAR LAKE, ID

LOCATION.--Lat 44°35'42", long 111°20'57", in NE¼SW¼ sec.26, T.15 N., R.43 E., Fremont County, Hydrologic Unit 17040202, on left bank 0.2 mi (0.3 km) downstream from Henrys Lake Dam, 5.4 mi (8.7 km) south of former Lake Post Office, and at mile 117.1 (188.4 km).

DRAINAGE AREA.--99.3 mi<sup>2</sup> (257.2 km<sup>2</sup>) including 6.2 mi<sup>2</sup> (16.1 km<sup>2</sup>) of Dry Creek basin.

PERIOD OF RECORD.--May 1920 to current year (prior to October 1929, irrigation seasons only). Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1217: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,449.87 ft (1,965.9203 m) National Geodetic Vertical Datum of 1929, Corps of Engineers bench mark (levels by Bureau of Reclamation. May 1920 to September 1922, nonrecording gage at site 3 mi (4.8 km) downstream and below mouth of Dry Creek at different datum. September 1922 to July 30, 1978, recording gage at site 125 ft (38.1 m) upstream at different datum.

REMARKS.--Records fair. Flow regulated by Henrys Lake (see sta 13039000). Since 1923, floodwaters of Dry (Tygee) Creek have been diverted at times into Henrys Lake (some diverted during 1976).

AVERAGE DISCHARGE.--49 years (1930-78), 52.6 ft<sup>3</sup>/s (1.490 m<sup>3</sup>/s), 38,110 acre-ft/yr (47.0 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 907 ft<sup>3</sup>/s (25.7 m<sup>3</sup>/s) June 13, 1926, gage height, 5.40 ft (1.646 m); no flow for part of each day Sept. 17, 18, 1952, Sept. 5, 7-30, Oct. 1, 2, 1966, Sept. 18 to Oct. 6, 1977. Outflow from Henrys Lake was reported to have ceased entirely late in summer of 1889.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 127 ft<sup>3</sup>/s (3.60 m<sup>3</sup>/s) July 28, gage height, 1.49 ft (0.454 m); no flow Oct. 1-6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.40	1.4	1.2	.90	1.4	11	16	13	118	62	38
2	.00	.40	1.4	1.2	.95	1.5	12	15	14	118	39	36
3	.00	.40	1.4	1.2	.95	1.5	13	14	14	114	69	35
4	.00	.40	1.4	1.1	.95	1.5	13	11	13	109	97	34
5	.00	.40	1.4	1.1	1.0	1.5	12	9.0	9.2	113	87	34
6	.00	.40	1.4	1.1	1.0	1.5	11	9.0	9.2	113	81	39
7	.10	.40	1.4	1.1	1.0	1.5	13	9.0	9.2	109	60	44
8	.10	.40	1.4	1.1	1.0	1.5	16	10	9.2	109	42	48
9	.10	.60	1.4	1.1	1.0	1.5	14	11	12	113	39	48
10	.10	.60	1.4	1.1	1.1	1.5	13	13	21	109	43	47
11	.10	.50	1.4	1.1	1.1	1.5	15	12	17	99	55	54
12	.20	.50	1.4	1.1	1.1	1.5	13	9.0	15	79	69	57
13	.20	.50	1.3	1.1	1.1	1.5	9.8	9.0	16	77	65	46
14	.20	.50	1.3	1.0	1.1	1.5	9.0	9.2	14	103	64	46
15	.20	.50	1.3	1.0	1.2	1.5	9.0	9.2	15	91	62	43
16	.20	.60	1.3	1.0	1.2	1.5	9.8	9.0	18	88	62	41
17	.20	.60	1.3	1.0	1.2	1.5	9.0	9.0	12	86	70	44
18	.20	.80	1.3	1.0	1.2	1.6	9.0	9.0	14	87	62	50
19	.20	.90	1.3	1.0	1.2	3.0	9.2	9.0	15	88	59	54
20	.30	1.0	1.3	1.0	1.3	3.1	11	9.0	13	90	59	44
21	.30	1.1	1.3	1.0	1.3	3.1	10	9.0	15	90	57	38
22	.30	1.2	1.2	1.0	1.3	3.2	9.0	9.1	38	84	53	36
23	.30	1.2	1.2	.95	1.3	4.0	9.0	9.1	28	93	51	39
24	.30	1.2	1.2	.95	1.3	24	9.0	9.1	62	90	51	38
25	.30	1.2	1.2	.95	1.3	36	10	9.1	96	84	48	39
26	.30	1.2	1.2	.95	1.4	30	14	9.1	100	80	49	40
27	.30	1.2	1.2	.90	1.4	11	13	9.1	100	61	41	43
28	.30	1.3	1.2	.90	1.4	14	12	12	94	61	38	44
29	.30	1.4	1.2	.90	---	15	13	13	93	75	44	43
30	.40	1.4	1.2	.90	---	12	15	13	99	80	42	40
31	.40	---	1.2	.90	---	10	---	14	---	76	38	---
TOTAL	5.90	23.20	40.5	31.90	32.25	195.4	345.8	326.0	997.8	2887	1758	1284
MEAN	.19	.77	1.31	1.03	1.15	6.30	11.5	10.5	33.3	93.1	56.7	42.8
MAX	.40	1.4	1.4	1.2	1.4	36	16	16	100	118	97	57
MIN	.00	.40	1.2	.90	.90	1.4	9.0	9.0	9.2	61	38	34
AC-FT	12	46	80	63	64	368	686	647	1980	5730	3490	2550
CAI YR 1977	TOTAL	19623.50	MEAN	53.8	MAX	311	MIN	.00	AC-FT	38920		
WTR YR 1978	TOTAL	7927.75	MEAN	21.7	MAX	118	MIN	.00	AC-FT	15720		

## HENRYS FORK BASIN

## 13042000 ISLAND PARK RESERVOIR NEAR ISLAND PARK, ID

LOCATION.--Lat 44°25'11", long 111°23'50", in NE¼SE¼ sec.29, T.13 N., R.43 E., Fremont County, Hydrologic Unit 17040202, Targhee National Forest, in gatehouse shaft at Island Park Dam on Henrys Fork, 0.5 mi (0.8 km) upstream from Buffalo River, 1.3 mi (2.1 km) west of Island Park Post Office, and at mile 91.7 (147.5 km).

DRAINAGE AREA.--481 mi<sup>2</sup> (1,246 km<sup>2</sup>).

PERIOD OF RECORD.--November 1938 to current year.

REVISED RECORDS.--WSP 1217: Drainage area.

GAGE.--Water-stage recorder. Prior to Aug. 9, 1976, electric tape gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earth-fill rock-faced dam. Storage began Nov. 15, 1938. Capacity, 127,300 acre-ft (157 hm<sup>3</sup>) between elevations 6,239 ft (1,901.6 m), normal low-water level with outlet gates open, and 6,302 ft (1,920.8 m), crest of spillway. Natural flow passing through reservoir when outlet gates are open limits withdrawal of storage to elevation 6,230 ft (1,898.9 m), sill of lower outlet. Dead storage negligible. Water is used for irrigation of lands in Fremont-Madison irrigation district between Ashton and Rexburg. Figures given herein represent usable contents.

COOPERATION.--Reservoir elevations and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 143,500 acre-ft (177 hm<sup>3</sup>) May 16, 1971, elevation, 6,304.01 ft (1,921.462 m); minimum after first filling of reservoir in May 1939, 5,280 acre-ft (6.51 hm<sup>3</sup>) Sept. 29, 1966, elevation, 6,260.77 ft (1,908.283 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 134,300 acre-ft (166 hm<sup>3</sup>) June 13, elevation, 6,302.89 ft (1,921.121 m); minimum observed, 11,500 acre-ft (14.2 hm<sup>3</sup>) Oct. 1, elevation, 6,269.38 ft (1,910.907 m).

## Capacity table (elevation, in feet, and contents, in acre-feet)

6,265	7,800	6,290	54,800
6,270	12,100	6,295	79,600
6,275	17,900	6,300	112,200
6,280	25,800	6,304	143,400
6,285	37,600		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11500	28800	51500	72400	87700	99200	105600	109500	124200	133400	117200	86200
2	11900	29500	52300	72900	88300	99500	106100	110800	125000	133400	115300	85900
3	12300	30300	53000	73500	88800	99700	106500	112200	126000	133200	113700	85600
4	12700	31100	53700	74200	89200	99900	107300	113000	126900	133100	112200	85200
5	13100	32100	54400	75000	89500	100200	107500	113000	127700	133300	110800	84800
6	13500	32900	55000	75600	90000	100500	107600	111400	128700	133400	109400	84700
7	14200	33400	55800	76200	90500	100700	107700	114000	130000	133600	108200	84700
8	14800	34500	56500	76900	91100	101000	108000	114500	130300	134200	109600	84200
9	15300	35200	57000	77200	91700	101200	108400	114900	131400	134200	105600	84000
10	15800	35900	57800	77700	92300	101400	108200	115300	132400	133400	104200	84400
11	16300	36600	58500	78100	93000	101400	108100	116200	133100	134100	102800	84500
12	16800	37400	59200	78600	93400	101600	107800	116200	134200	134000	101300	84700
13	17400	38200	60000	79200	93900	102000	107900	116300	134300	133800	100300	85000
14	18000	38900	60800	79700	94100	102200	107900	116200	133900	133800	99100	85800
15	18600	39700	62100	80300	94400	102400	108000	116100	134100	133900	98100	86300
16	19100	40500	62900	80800	94800	102500	108300	116300	134100	133800	96000	87000
17	19700	41200	63800	81200	95100	102700	108400	116600	134200	133000	96000	87600
18	20300	41900	64800	81700	95500	102700	108700	116300	134000	132800	94900	88400
19	20800	42600	65200	82200	96000	102700	108500	116000	133900	132300	93100	89000
20	21400	43200	66000	82600	96400	102900	108300	115700	133900	131600	92600	89700
21	21900	44000	66200	83000	96600	103000	108400	115500	133200	130900	90900	90200
22	22500	45100	66900	83400	97000	103000	108400	115500	133300	130200	90600	90600
23	23000	45900	67500	83800	97400	103100	108400	116300	133300	129300	89800	91100
24	23500	46200	67800	84100	97700	103400	108200	116800	133300	128300	88700	91900
25	24100	47100	68200	84700	98300	103500	108400	118000	133400	126900	88800	92600
26	24900	47800	68600	85100	98600	103800	108200	118900	133400	125300	88400	93000
27	25300	48200	68900	85600	99000	104100	108200	119800	133400	123800	88000	93500
28	25900	49100	69500	86100	99100	104300	108200	120700	133400	122600	87800	94000
29	26600	50000	70100	86500	---	104700	108200	121600	133200	121600	87300	94400
30	27200	50700	70900	87000	---	105000	108800	122400	133200	120600	87000	94800
31	27900	---	71600	87400	---	105300	---	123400	---	119000	86500	---
MAX	27900	50700	71600	87400	99100	105300	108800	123400	134300	134200	117200	94800
MIN	11500	28800	51500	72400	87700	99200	105600	109500	124200	119000	86500	84000
(+)	6281.03	6288.98	6293.57	6296.30	6298.11	6299.02	6299.52	6301.50	6302.75	6300.92	6296.16	6297.46
(#)	+16800	+22800	+20900	+15800	+11700	+6200	+3500	+14600	+9800	-14200	-32500	+8300

CAL YR 1977..... ‡ -29100

WTR YR 1978..... ‡ +83700

† Elevation, in feet, at end of month.

# Change in contents, in acre-feet.

## HENRYS FORK BASIN

99

13042500 HENRYS FORK NEAR ISLAND PARK, ID

LOCATION.--Lat 44°24'59", long 111°23'41", in SW¼SW¼ sec.28, T.13 N., R.43 E., Fremont County, Hydrologic Unit 17040202, Targhee National Forest, on left bank 0.2 mi (0.3 km) downstream from Island Park Dam, 0.2 mi (0.3 km) upstream from Buffalo River, 1 mi (1.6 km) southwest of Island Park Post Office, and at mile 91.5 (147.2 km).

DRAINAGE AREA.--481 mi<sup>2</sup> (1,246 km<sup>2</sup>). Mean altitude, 7,080 ft (2,160 m).

PERIOD OF RECORD.--January 1933 to current year.

REVISED RECORDS.--WSP 1217: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,225 ft (1,897 m) from river-profile map. Prior to May 15, 1935, nonrecording gage at site about 0.8 mi (1.3 km) upstream at different datum. May 15 to Nov. 30, 1935, water-stage recorder at site 1,000 ft (305 m) downstream at different datum.

REMARKS.--Records good. Flow regulated by Henrys Lake (see sta 13039000) and Island Park Reservoir (see sta 1304200). Diversions above station for irrigation of about 15,500 acres (6,270 hm<sup>2</sup>), 1966 determination; a considerable portion of which consists of partly subirrigated meadows.

AVERAGE DISCHARGE.--45 years, 595 ft<sup>3</sup>/s (16.85 m<sup>3</sup>/s), 431,100 acre-ft/yr (532 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,770 ft<sup>3</sup>/s (78.4 m<sup>3</sup>/s) Apr. 26, 1946, gage height, 6.15 ft (1.875 m); minimum daily, 1 ft<sup>3</sup>/s (0.028 m<sup>3</sup>/s) Nov. 16 to Dec. 7, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,350 ft<sup>3</sup>/s (38.2 m<sup>3</sup>/s) Aug. 5-7, gage height, 4.36 ft (1.329 m); minimum daily, 7.5 ft<sup>3</sup>/s (0.212 m<sup>3</sup>/s) Dec. 8, 9, 12, 16, 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	403	18	7.9	70	152	252	265	868	379	662	1320	696
2	298	7.9	7.9	70	149	252	267	878	388	658	1320	693
3	297	7.9	7.9	70	149	247	263	907	393	654	1330	700
4	300	7.9	7.9	70	149	242	263	969	393	662	1330	706
5	297	7.9	8.3	73	149	251	364	967	398	639	1340	705
6	233	7.9	8.3	73	146	252	442	1030	432	657	1350	708
7	156	7.9	8.3	70	146	252	442	1100	437	636	1330	714
8	156	7.9	7.5	73	146	252	443	1150	412	635	1240	713
9	159	7.9	7.5	112	146	252	451	1180	432	621	1240	611
10	159	7.9	8.3	139	146	248	497	1190	511	622	1230	534
11	159	7.9	8.3	139	146	248	539	1200	625	611	1220	490
12	166	7.9	7.5	136	146	248	547	1200	662	575	1230	452
13	162	7.9	8.3	139	146	244	547	1210	701	553	1210	298
14	139	7.9	9.4	143	150	244	556	1200	729	541	1160	228
15	124	7.9	8.3	143	152	244	568	1190	768	540	1150	190
16	124	7.9	7.5	139	152	245	578	1200	756	554	1150	189
17	130	7.9	7.5	139	149	248	589	1200	779	654	1150	194
18	136	7.9	8.3	143	149	251	612	1200	785	833	1150	193
19	130	7.9	49	143	149	253	636	1200	740	832	1140	193
20	133	7.9	67	143	149	255	636	1160	695	811	1140	191
21	139	7.9	103	139	149	256	636	1090	723	770	1110	262
22	136	7.9	115	139	149	255	636	973	712	804	996	304
23	130	7.9	139	143	149	255	641	773	668	1050	956	311
24	130	7.9	166	146	152	259	646	609	657	1160	808	302
25	124	7.9	162	143	156	255	646	531	673	1180	751	219
26	89	7.9	169	143	159	255	780	447	646	1140	752	283
27	78	7.9	127	143	224	257	866	412	652	1140	724	280
28	75	7.9	97	143	255	259	872	374	673	1140	698	279
29	75	7.9	92	143	---	259	872	374	674	1270	699	274
30	75	7.9	75	146	---	259	868	370	668	1350	695	275
31	63	---	67	150	---	263	---	374	---	1350	696	---
TOTAL	4975	247.1	1572.9	3805	4359	7812	16968	28526	18161	25304	33615	12187
MEAN	160	8.24	50.7	123	156	252	566	920	605	816	1084	406
MAX	403	18	169	150	255	263	872	1210	785	1350	1350	714
MIN	63	7.9	7.5	70	146	242	263	370	379	540	695	189
AC-FT	9870	490	3120	7550	8650	15500	33660	56580	36020	50190	66680	24170
CAL YR 1977 TOTAL	207075.0		MEAN 567	MAX 2170	MIN 7.5	AC-FT 410700						
WTR YR 1978 TOTAL	157532.0		MEAN 432	MAX 1350	MIN 7.5	AC-FT 312500						

## HENRYS FORK BASIN

13046000 HENRYS FORK NEAR ASHTON, ID

LOCATION.--Lat 44°04'30", long 111°29'58", in SE¼SE¼ sec.28, T.9 N., R.42 E., Fremont County, Hydrologic Unit 17040203, on right bank 0.3 mi (0.5 km) downstream from powerplant, 2.6 mi (4.2 km) west of Ashton, and at mile 44.7 (71.9 km).

DRAINAGE AREA.--1,040 mi<sup>2</sup> (2,694 km<sup>2</sup>). Mean altitude, 6,710 ft (2,050 m).

PERIOD OF RECORD.--April 1890 to June 1891, August 1902 to June 1909, April 1920 to current year (seasonal records only 1920-26). Monthly discharge only for some periods, published in WSP 1317. Published as Henrys Fork in canyon, above Fall River 1890-91, and as North Fork of Snake River near Ora 1902-9.

REVISED RECORDS.--WSP 1217: Drainage area. WSP 1347: 1890-91.

GAGE.--Water-stage recorder. Altitude of gage is 5,095 ft (1,553 m), from river-profile map. April 1890 to June 1891, nonrecording gage at site 6 mi (9.7 km) downstream at different datum. August 1902 to Apr. 15, 1921, nonrecording gage and Apr. 16, 1921, to May 3, 1930, water-stage recorder at site 1.5 mi (2.4 km) downstream at different datum.

REMARKS.--Records fair. Diurnal fluctuation caused by powerplant above station. Flow regulated by Henrys Lake (see sta 13039000) and Island Park Reservoir (see sta 13042000). Diversions above station for irrigation of about 24,500 acres or 9,920 hm<sup>2</sup> (1966 determination).

AVERAGE DISCHARGE.--58 years (1903-8, 1927-78), 1,450 ft<sup>3</sup>/s (41.06 m<sup>3</sup>/s), 1,051,000 acre-ft/yr (1,300 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,220 ft<sup>3</sup>/s (176 m<sup>3</sup>/s) May 7, 1925, gage height, 3.11 ft (0.948 m, site and datum then in use); minimum, 53 ft<sup>3</sup>/s (1.50 m<sup>3</sup>/s) Sept. 20, 1960, gage height, 5.45 ft (1.661 m); minimum daily, 171 ft<sup>3</sup>/s (4.84 m<sup>3</sup>/s) Oct. 18, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,280 ft<sup>3</sup>/s (121 m<sup>3</sup>/s) May 3, gage height, 7.27 ft (2.216 m); minimum, 295 ft<sup>3</sup>/s (8.35 m<sup>3</sup>/s) Sept. 15, gage height, 5.63 ft (1.716 m).

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

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	1020	671	628	843	952	1450	3110	1750	1590	2190	1560
2	1110	530	694	607	841	927	1430	3590	1700	1590	2180	1530
3	1010	628	827	752	878	953	1350	4030	1700	1550	2170	1560
4	1010	617	717	802	847	1020	1310	3490	1670	1580	2180	1560
5	1020	660	617	802	838	1010	1340	3170	1640	1590	2140	1560
6	1040	728	781	764	875	1010	1420	3010	1620	1540	2180	1630
7	478	671	667	777	865	976	1570	3090	1680	1540	2150	1640
8	894	660	607	777	907	973	1720	3180	1610	1530	2130	1650
9	907	628	634	777	876	1000	1770	3310	1580	1570	2070	1550
10	907	705	683	840	870	986	1790	3000	1660	1510	2080	1380
11	894	694	699	853	891	992	1950	3780	1810	1510	2090	1460
12	907	682	694	867	806	1000	1980	3610	1840	1450	2090	1350
13	907	671	710	853	860	980	1950	3470	1780	1440	2130	1320
14	907	671	752	853	824	975	1850	3590	1880	1420	2150	1240
15	867	682	779	867	895	976	1900	3920	1940	1410	2090	1120
16	852	671	742	907	796	985	2000	3990	1910	1400	2070	1200
17	867	660	764	880	823	993	1990	3460	1850	1430	2140	1490
18	867	764	646	894	844	1010	1870	3280	1790	1610	2100	1320
19	880	596	665	853	850	1020	1890	3160	1830	1750	2050	1120
20	880	534	661	867	896	1040	1980	3110	1820	1690	2050	1090
21	867	671	625	851	873	1070	2120	2990	1760	1710	2060	1030
22	880	752	779	842	826	1070	2080	3060	1760	1600	1970	1050
23	867	752	868	840	849	1100	1930	2770	1710	1770	1860	1100
24	880	728	867	781	851	1130	1920	2500	1700	1980	1770	1100
25	867	760	867	853	863	1100	2050	2200	1660	1970	1620	1130
26	880	752	853	877	853	1090	2230	2140	1710	2030	1600	1070
27	827	728	867	870	877	1120	2690	2010	1660	1980	1620	1040
28	802	717	764	847	938	1150	3130	1880	1600	2060	1550	1080
29	814	717	814	884	---	1200	3020	1870	1620	2060	1530	1060
30	814	628	728	735	---	1240	3030	1830	1620	2240	1540	1070
31	894	---	740	851	---	1290	---	1810	---	2190	1560	---
TOTAL	26457	20662	22786	25533	24058	32338	58910	94010	51860	52290	61110	39060
MEAN	418	649	735	824	859	1043	1964	3033	1729	1687	1971	1302
MAX	1360	1020	854	907	938	1290	3130	4030	1940	2240	2190	1650
MIN	478	530	607	607	796	927	1310	1810	1580	1400	1530	1030
AC-FT	55440	40980	45200	50540	47710	64140	116800	186500	102900	103700	121200	77480
CAI Yr 1977	TOTAL	510077	MEAN	1397	MAX	3630	MIN	530	AC-FT	1012000		
WTR Yr 1978	TOTAL	511071	MEAN	1400	MAX	4030	MIN	530	AC-FT	1014000		

## HENRYS FORK BASIN

101

13046500 GRASSY LAKE NEAR MORAN, WY

LOCATION.--Lat 44°07'45", long 110°49'05", in NE¼ sec.18, T.48 N., R.116 W., Teton County, Hydrologic Unit 17040202, in gatehouse at dam 0.4 mi (0.6 km) upstream from mouth on Grassy Creek, which is tributary to headwaters of Falls River, and 25.4 mi (40.9 km) northwest of Moran, Wyo.

DRAINAGE AREA.--10.4 mi<sup>2</sup> (26.9 km<sup>2</sup>), including basin of Cascade Creek, from which water is diverted into Grassy Lake.

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

GAGE.--Mercury pressure gage. Datum of gage is mean sea level (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earth-fill, rock-faced dam; storage began Oct. 18, 1939. Capacity, 15,200 acre-ft (18.7 hm<sup>3</sup>) between elevations 7,135.0 ft (2,174.75 m), sill of trashrack, and 7,210.0 ft (2,197.61 m), crest of spillway. Water is used for irrigation of lands in Fremont-Madison irrigation district, Idaho. Gage read about twice monthly. Records given herein represent usable contents. Gage-height record and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 15,400 acre-ft (19.0 hm<sup>3</sup>) July 2, 1943, elevation, 7,210.85 ft (2,197.867 m); no contents Oct. 2-5, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 15,200 acre-ft (18.7 hm<sup>3</sup>), elevation, 7,210.20 ft (2,197.669 m), June 23; minimum observed, 6,990 acre-ft ( 8.62 hm<sup>3</sup>) Oct. 20, 25, elevation, 7,179.90 ft (2,188.434 m).

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	7080	---	---	---	---	---	---	---	---	14500	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	14300	---
8	---	---	---	---	---	---	---	---	14200	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	8250	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	8700	---	9540	---	---	14900	---	12000
15	---	---	---	---	---	9070	---	---	15000	14900	13800	---
16	---	---	---	---	---	---	---	11000	15200	---	---	---
17	---	---	---	---	---	---	---	---	---	---	13700	---
18	---	7200	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	6990	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	14700	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	15200	14700	13300	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	6990	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	8870	---	9880	---	---	---	---	---
28	7020	---	8010	---	8880	---	---	---	---	14700	---	---
29	---	---	---	---	---	---	---	---	---	---	12800	12100
30	---	7440	---	---	---	9260	10100	12800	15100	14700	---	12100
31	7050	---	8060	8530	---	9280	---	13000	---	14700	12700	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
(†)	-	-	-	7186.30	-	-	-	-	-	-	-	-
(‡)	+200	+390	+620	470	+350	+400	+820	+2900	+2100	-400	-2000	-600
CAL YR 1977.....	‡ -2340											
WTR YR 1978.....	‡ +5250											

† Elevation, in feet, at end of month.  
‡ Change in contents, in acre-feet.

## 13047500 FALLS RIVER NEAR SQUIRREL, ID

LOCATION.--Lat 44°04'07", long 111°14'25", in NW¼NE¼ sec.34, T.9 N., R.44 E., Fremont County, Hydrologic Unit 17040203, on right bank 0.2 mi (0.3 km) upstream from road bridge, 0.5 mi (0.8 km) downstream from headgates of Marysville Canal, 4 mi (6.4 km) northeast of Squirrel, 10.8 mi (17.4 km) upstream from Conant Creek, and at mile 19.8 (31.9 km).

DRAINAGE AREA.--326 mi<sup>2</sup> (844 km<sup>2</sup>). Mean altitude, 7,520 ft (2,290 m).

PERIOD OF RECORD.--August 1902 to June 1909 (gage heights only prior to October 1904), May 1918 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as Fall River at Wilson's Mill, near Marysville 1902, as Fall River near Marysville 1903, as Fall River at Fremont 1904-9, and as Fall River near Squirrel 1918-59.

REVISED RECORDS.--WSP 1217: Drainage area. WSP 1317: 1908. WSP 1347: 1905.

GAGE.--Water-stage recorder. Altitude of gage is 5,590 ft (1,704 m) from topographic map. Prior to Jan. 1, 1904, nonrecording gages at site 3 mi (4.8 km) upstream at different datum, Jan. 1, 1904 to Nov. 6, 1937, nonrecording gage at site 200 ft (61 m) upstream at different datum, and Nov. 7, 1937, to Oct. 7, 1948, nonrecording gage at site 100 ft (30 m) downstream at datum 0.29 ft (0.088 m) lower.

REMARKS.--Records good. Flow since October 1939 partly regulated by Grassy Lake (see sta 13046500). Diversions above station for irrigation of about 17,000 acres (6,880 hm<sup>2</sup>) below station and in adjacent basins, and diversions from tributary upstream from station for irrigation of about 500 acres or 200 hm<sup>2</sup> (1966 determination).

AVERAGE DISCHARGE.--64 years (1905-8, 1919-78), 776 ft<sup>3</sup>/s (21.98 m<sup>3</sup>/s), 562,200 acre-ft/yr (693 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 6,440 ft<sup>3</sup>/s (182 m<sup>3</sup>/s) June 27, 1927; minimum observed, 72 ft<sup>3</sup>/s (2.04 m<sup>3</sup>/s) Feb. 9, 1930.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,110 ft<sup>3</sup>/s (116 m<sup>3</sup>/s) May 16, gage height, 4.20 ft (1.280 m); minimum, 232 ft<sup>3</sup>/s (6.57 m<sup>3</sup>/s) Nov. 20, gage height, 0.71 ft or 0.216 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Stage-discharge relation affected by ice Nov. 22, Dec. 8, 14, 22, 31, Jan. 1-12, 15, 24, Feb. 18-19)

		0.7	215	3.0	2,220							
		1.0	306	4.0	3,700							
		1.5	611	5.0	5,500							
		2.0	1,050									
DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978 MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	482	365	351	271	309	311	620	1350	1710	2030	648	611
2	425	340	341	260	301	306	690	1060	1800	1920	636	604
3	465	391	374	290	333	311	650	1910	1930	1760	615	604
4	396	344	372	350	307	320	600	1630	1920	1720	610	604
5	327	325	361	350	299	330	560	1450	2110	1480	609	611
6	342	399	365	345	305	319	560	1380	2400	1340	607	633
7	419	396	359	330	297	303	620	1380	2490	1290	597	640
8	429	371	340	325	330	305	700	1440	2570	1290	592	604
9	413	355	345	325	309	313	770	1630	2800	1390	586	568
10	405	373	355	325	306	316	800	2100	3140	1260	589	611
11	344	362	345	325	315	311	840	2330	2970	1200	582	733
12	344	365	361	325	302	313	840	2140	2460	1240	574	759
13	354	361	359	320	298	309	810	2140	2380	1160	663	678
14	347	365	376	327	302	303	760	2610	2610	1080	784	648
15	345	367	435	325	299	302	720	3360	2840	1080	655	626
16	344	366	419	337	290	300	720	3540	2720	1000	655	561
17	342	355	344	332	293	300	690	2520	2380	1020	893	582
18	374	364	349	314	285	305	656	2190	2200	874	837	596
19	375	337	358	312	280	310	646	2020	2200	842	759	618
20	375	305	337	314	315	320	679	2150	2110	808	663	604
21	371	378	324	321	306	330	750	2310	2170	707	640	604
22	364	360	360	322	306	340	700	2530	2410	677	663	625
23	364	366	365	314	306	365	660	2510	2480	642	648	626
24	365	364	355	305	315	390	647	2420	2480	633	633	607
25	363	369	356	321	325	380	720	2070	2440	611	640	582
26	361	404	359	324	315	390	941	1630	2110	610	633	564
27	360	380	359	324	315	400	1150	1750	1770	596	633	551
28	360	372	365	324	311	420	1260	1830	1730	789	626	543
29	366	369	372	324	---	450	1200	2080	1910	766	626	537
30	399	354	376	304	---	480	1230	2100	2030	702	618	533
31	390	---	315	307	---	540	---	1890	---	661	618	---
TOTAL	12035	11070	11286	9919	8574	10692	23189	64250	69270	33178	20132	18267
MEAN	388	369	364	320	306	345	773	2073	2309	1070	649	609
MAX	482	404	435	350	333	540	1260	3540	3140	2030	893	759
MIN	360	305	315	260	280	300	560	1350	1710	596	574	533
AC-FT	23870	21960	22390	19670	17010	21210	46000	127400	137400	65810	39930	36230
CAL YR 1977	TOTAL	186768	MEAN	512	MAX	2130	MIN	244	AC-FT	370500		
WTR YR 1978	TOTAL	291862	MEAN	800	MAX	3540	MIN	260	AC-FT	578900		

## 13049500 FALLS RIVER NEAR CHESTER, ID

LOCATION.--Lat 44°01'06", long 111°33'57", in NW¼SE¼ sec.13, T.8 N., R.41 E., Fremont County, Hydrologic Unit 17040203, on right bank, 0.2 mi (0.3 km) upstream from highway bridge, at mile 0.8 (1.3 km), and 1.5 mi (2.4 km) north of Chester.

DRAINAGE AREA.--520 mi<sup>2</sup> (1,350 km<sup>2</sup>), approximately. Mean altitude, 6,970 ft (2,124 m).

PERIOD OF RECORD.--April 1920 to current year (irrigation seasons only prior to 1962). Prior to October 1959, published as Fall River near Chester.

REVISED RECORDS.--WSP 1217: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,051.9 ft (1,539.82 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 9, 1920, nonrecording gage at site 200 ft (61 m) downstream at same datum. Aug. 9, 1920, to Apr. 28, 1921, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter period, which are fair. Flow since October 1939 partly regulated by Grassy Lake (see sta 13046500). Diversions above station for irrigation of about 4,600 acres (1,860 hm<sup>2</sup>) above station and about 36,000 acres (14,600 hm<sup>2</sup>) in adjacent basins (1966 determination). Station is below all diversions from Falls River.

AVERAGE DISCHARGE.--17 years (1961-78), 766 ft<sup>3</sup>/s (21.69 m<sup>3</sup>/s), 555,000 acre-ft/yr (684 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 6,380 ft<sup>3</sup>/s (181 m<sup>3</sup>/s) June 27, 1927, gage height, 6.60 ft (2.012 m); maximum gage height recorded, 7.93 ft (2.417 m) Jan. 18, 1966 (backwater from ice); minimum discharge recorded, 7 ft<sup>3</sup>/s (0.198 m<sup>3</sup>/s) June 27, 1961, gage height, 0.74 ft (0.226 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,920 ft<sup>3</sup>/s (139 m<sup>3</sup>/s) May 16, gage height, 5.72 ft (1.743 m); minimum, 193 ft<sup>3</sup>/s (5.47 m<sup>3</sup>/s) July 28, gage height, 1.77 ft (0.539 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Stage-discharge relation affected by ice Nov. 18-28, Dec. 1-13, Dec. 20 to Feb. 4, Feb. 17-21)

0.7	7.0	2.5	520
1.0	25	3.0	881
1.3	63	4.0	1,930
1.9	221	5.0	3,410
2.2	350		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	472	336	380	350	360	345	843	1580	1760	1610	270	336
2	417	295	410	310	370	345	884	1960	1760	1540	265	343
3	398	340	410	345	390	348	781	2390	1900	1370	240	349
4	381	345	400	330	380	361	712	2100	1900	1330	227	351
5	371	340	390	390	369	373	692	1800	2000	1180	225	350
6	340	350	390	380	367	369	647	1670	2300	974	234	361
7	360	355	390	375	349	355	686	1650	2440	924	224	391
8	402	340	390	360	378	354	812	1700	2520	911	218	421
9	381	331	395	355	360	359	917	1680	2710	1030	216	382
10	392	371	395	350	360	369	932	2440	3040	929	218	372
11	376	360	395	355	370	366	474	2800	3010	838	220	474
12	350	365	407	360	362	370	495	2730	2460	816	218	591
13	350	365	420	365	352	373	468	2670	2220	768	301	578
14	350	371	437	370	348	369	409	3010	2420	682	467	526
15	350	371	483	380	355	361	884	3940	2670	650	347	505
16	350	376	466	390	334	358	916	4490	2610	602	363	485
17	345	360	425	365	340	361	898	3230	2240	608	632	464
18	345	350	434	375	340	365	815	2700	1980	507	528	503
19	331	336	421	370	340	374	800	2430	1960	473	455	505
20	326	330	375	370	340	393	833	2490	1870	432	416	486
21	322	380	390	375	350	405	933	2610	1840	348	398	481
22	322	410	410	380	363	423	875	2890	2050	310	393	502
23	317	400	390	380	346	442	815	2890	2140	277	413	508
24	317	390	380	385	349	463	789	2820	2150	271	388	492
25	313	410	380	380	365	453	872	2450	2120	249	373	463
26	313	440	390	375	352	448	1110	2120	1860	228	357	443
27	313	425	400	375	353	469	1420	1970	1440	208	354	427
28	322	410	420	380	351	501	1620	1970	1340	260	438	408
29	331	397	410	380	---	544	1530	2160	1450	405	432	406
30	360	365	410	370	---	604	1540	2210	1590	335	419	401
31	371	---	380	360	---	605	---	2000	---	291	348	---
TOTAL	10990	11024	12573	11455	9993	12705	28462	75750	63750	21356	10597	13306
MEAN	355	367	406	371	357	410	947	2444	2125	689	342	444
MAX	472	440	483	391	390	625	1620	4490	3040	1610	632	591
MIN	313	295	375	310	334	345	647	1580	1340	208	216	336
AC-FT	21800	21870	24940	22720	19820	25200	56340	150300	126400	42360	21020	26390
CAL YR 1977 TOTAL	167578	MEAN	459	MAX	1930	MIN	14	AC-FT	332400			
WTR YR 1978 TOTAL	281901	MEAN	772	MAX	4490	MIN	208	AC-FT	559200			

HENRYS FORK BASIN

13050500 HENRYS FORK AT ST. ANTHONY, ID

LOCATION.--Lat 43°58'00", long 111°40'20", in NW¼ sec.6, T.7 N., R.41 E., Fremont County, Hydrologic Unit 17040203, on right bank 0.5 mi (0.8 km) upstream from bridge on main street of St. Anthony, 6.4 mi (10.3 km) downstream from Falls River, and at mile 32.4 (52.1 km).

DRAINAGE AREA.--1,770 mi<sup>2</sup> (4,580 km<sup>2</sup>), approximately. Mean altitude, 6,670 ft (2,033 m).

PERIOD OF RECORD.--March 1919 to current year (irrigation seasons only prior to 1962).

REVISED RECORDS.--WSP 1217: Drainage area. WSP 1317: 1923(M).

GAGE.--Water-stage recorder. Datum of gage is 4,950.7 ft (1,508.97 m) National Geodetic Vertical Datum of 1929. March 1919 to May 7, 1922, nonrecording gages and May 8, 1922, to Aug. 14, 1931, water-stage recorder, at site 150 ft (46 m) downstream at datum 0.08 ft (0.024 m) lower.

REMARKS.--Records good. Diversions above station for irrigation of about 21,000 acres (8,500 hm<sup>2</sup>) below and about 58,000 acres (23,500 hm<sup>2</sup>) above station of which about 1,100 acres (450 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Flow regulated by powerplant 17 mi (27.4 km) above station and by Henrys Lake (see sta 13039000), Island Park Reservoir (see sta 13042000), and Grassy Lake (see sta 13046500).

AVERAGE DISCHARGE.--17 years (1962-78), 1,936 ft<sup>3</sup>/s (54.83 m<sup>3</sup>/s) 1,403,000 acre-ft/yr (1,730 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 11,500 ft<sup>3</sup>/s (326 m<sup>3</sup>/s) June 4, 1975, gage height, 7.77 ft (2.368 m), present datum ; minimum discharge recorded, 21 ft<sup>3</sup>/s (0.60 m<sup>3</sup>/s) July 9, 1973, gage height, 1.91 ft (0.582 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,780 ft<sup>3</sup>/s (249 m<sup>3</sup>/s) May 16, gage height, 6.85 ft (2.088 m); minimum, 89 ft<sup>3</sup>/s (2.52 m<sup>3</sup>/s) Nov. 2, gage height, 2.18 ft (0.664 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Shifting-control method used Dec. 2 to Jan. 10, May 14-25; stage-discharge relation affected by ice  
Nov. 21-24, Dec. 8-10, 19-23, Jan. 1-7)

2.9	520	5.0	3,710
2.0	56	4.0	1,800
2.5	259	5.0	3,710
3.0	602	6.0	6,040
3.5	1,120	7.0	8,900

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1450	1100	742	770	1100	1190	1940	4200	2410	1990	1240	948
2	1270	807	787	760	1080	1160	1980	4940	2290	1950	1220	934
3	1160	822	978	900	1120	1150	1850	5020	2370	1760	1160	962
4	1160	823	934	1080	1120	1220	1730	5210	2340	1720	1140	961
5	1150	831	792	1060	1110	1250	1770	4690	2350	1720	1100	917
6	1150	931	840	1080	1120	1250	1790	4430	2600	1470	1090	1070
7	1150	917	921	1060	1100	1190	1930	4450	2790	1410	1090	1170
8	1130	865	830	1070	1170	1180	2230	4560	2830	1350	1040	1270
9	1100	837	880	1070	1120	1210	2390	4790	2910	1460	984	1220
10	1100	901	950	1110	1120	1210	2420	5490	3330	1390	950	1190
11	1090	953	994	1120	1170	1190	2560	6100	3490	1290	961	1330
12	1060	936	1010	1110	1070	1200	2600	6040	3080	1190	973	1420
13	1050	902	1000	1090	1090	1180	2560	5620	2820	1170	1070	1420
14	1060	913	1030	1100	1070	1180	2400	6000	2980	982	1310	1290
15	1060	920	1110	1120	1140	1150	2380	7260	3260	943	1270	1210
16	1030	926	1090	1120	1040	1160	2510	7980	3230	889	1350	1260
17	1040	883	1030	1110	1050	1160	2500	6160	2860	966	1760	1530
18	1030	829	922	1110	1050	1150	2270	5350	2500	924	1690	1490
19	1020	730	850	1050	1090	1140	2220	4990	2490	1030	1500	1310
20	1020	592	810	1070	1150	1180	2260	4920	2430	973	1450	1270
21	1010	800	810	1080	1120	1220	2470	4910	2300	939	1430	1220
22	1010	870	1100	1050	1090	1290	2410	5130	2470	884	1380	1220
23	1010	850	1120	1080	1100	1320	2200	4860	2540	950	1310	1270
24	1010	830	1150	939	1100	1370	2120	4520	2540	1100	1240	1270
25	1010	825	1140	1040	1130	1350	2280	3900	2510	1080	1110	1250
26	1010	846	1140	1050	1100	1310	2650	3440	2370	1030	1050	1200
27	997	864	1120	1090	1120	1330	3630	3120	1940	984	1070	1150
28	959	927	1050	1110	1170	1380	4140	2850	1780	1050	1080	1140
29	470	857	1040	1120	---	1430	4070	2930	1830	1250	1030	1190
30	1020	797	1100	1090	---	1520	4110	2910	1980	1260	1020	1250
31	1070	---	995	1090	---	1650	---	2690	---	1270	963	---
TOTAL	33365	25844	30265	32719	31010	38870	74370	150260	77620	38374	37031	36332
MEAN	1076	863	976	1055	1108	1254	2479	4847	2587	1238	1195	1211
MAX	1450	1100	1150	1120	1170	1650	4140	7980	3490	1990	1760	1530
MIN	959	592	742	760	1040	1140	1730	2690	1780	884	950	917
AC-FT	66180	51340	60930	64900	61510	77100	147500	298000	154000	76110	73450	72060
CAL YR 1977 TOTAL	474503		MEAN	1300	MAX	2440	MIN	592	AC-FT	941200		
WTR YR 1978 TOTAL	606100		MEAN	1661	MAX	7980	MIN	592	AC-FT	1202000		

## HENRYS FORK BASIN

105

13050500 HENRYS FORK AT ST. ANTHONY, ID

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971-74, 1977 to current year.

REMARKS.--Miscellaneous chemical data published for water years 1975-76.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STRFAM- FLOW- INSTAN- TANFOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT 25...	1231	1000	150	--	22.0	8.5	48	0	13
APR 13...	1043	2560	133	--	8.0	7.0	--	--	--
AUG 10...	1115	901	130	* 7.9	31.0	18.5	49	0	13

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 25...	3.7	16	41	1.0	2.3	80	0	66
APR 13...	--	--	--	--	--	--	--	--
AUG 10...	3.9	11	36	.7	2.0	75	0	62

DATE	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)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT 25...	5.6	2.1	32	118	.16	319	.09	.00
APR 13...	--	--	--	--	--	--	--	--
AUG 10...	3.1	1.7	29	105	.14	255	.05	.02

\* Not a field determination.

## HENRYS FORK BASIN

13052200 TETON RIVER ABOVE SOUTH LEIGH CREEK, NEAR DRIGGS, ID

LOCATION.--Lat 43°46'54", long 111°12'30", in NW¼NE¼ sec.12, T.5 N., R.44 E., Teton County, Hydrologic Unit 17040204, on right bank 75 ft (23 m) upstream from county road bridge, 3.5 mi (5.6 km) southwest of Tetonia, 6.5 mi (10.5 km) northwest of Driggs, and at mile 56.3 (90.6 km).

DRAINAGE AREA.--335 mi<sup>2</sup> (868 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,952.9 ft (1,814.44 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Diversions above station for irrigation of about 42,000 acres (17,000 hm<sup>2</sup>) of which about 1,000 acres (400 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination).

AVERAGE DISCHARGE.--17 years, 405 ft<sup>3</sup>/s (11.47 m<sup>3</sup>/s), 293,400 acre-ft/yr (362 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,270 ft<sup>3</sup>/s (64.3 m<sup>3</sup>/s) June 18, 19, 1974, gage height, 4.28 ft (1.305 m); maximum gage height, 6.37 ft (1.942 m) Feb. 1, 1963; minimum, 54 ft<sup>3</sup>/s (1.53 m<sup>3</sup>/s) Nov. 23, 1977, gage height, 0.60 ft (0.183 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,280 ft<sup>3</sup>/s (36.2 m<sup>3</sup>/s) June 30, gage height, 3.24 ft (0.988 m); minimum, 54 ft<sup>3</sup>/s (1.53 m<sup>3</sup>/s) Jan. 24, gage height, 0.60 ft (0.183 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	162	189	110	195	176	787	374	426	1240	539	424
2	164	167	203	100	194	176	582	335	400	1200	516	414
3	159	166	229	140	202	173	410	365	403	1190	497	411
4	156	164	237	180	183	175	353	432	436	1160	484	414
5	155	154	217	194	175	181	343	465	451	1060	479	405
6	155	164	201	195	184	195	302	385	477	956	473	414
7	160	162	168	190	180	194	335	325	515	1030	471	439
8	166	156	130	190	186	192	351	300	642	1040	459	444
9	160	112	167	190	183	198	307	284	813	1050	450	419
10	161	141	177	200	189	206	280	297	995	1060	447	419
11	158	134	173	210	188	206	275	332	1110	1080	445	498
12	157	137	163	214	180	205	265	337	815	1100	438	560
13	157	135	155	217	170	200	259	320	619	1090	540	583
14	155	132	204	215	165	192	256	328	678	1070	676	506
15	152	138	436	214	160	189	253	362	789	1070	547	462
16	152	131	283	211	150	189	256	431	974	1110	530	437
17	148	126	179	206	150	183	267	475	872	1110	630	421
18	148	120	167	196	150	189	270	521	681	1040	579	466
19	150	118	164	187	165	218	262	609	681	917	529	480
20	153	115	161	182	170	256	247	450	684	862	500	473
21	153	112	124	179	184	266	246	421	732	830	471	437
22	154	105	136	184	180	287	248	422	913	763	475	418
23	153	91	140	170	177	314	247	442	1050	703	515	400
24	153	150	110	139	173	377	236	456	1090	681	481	392
25	152	200	105	210	175	357	232	462	1100	631	458	387
26	150	350	112	203	178	384	245	447	1010	626	449	383
27	151	353	120	206	177	437	272	424	785	593	446	380
28	146	210	135	196	176	463	287	409	824	606	441	376
29	151	207	150	196	---	503	284	415	978	647	436	369
30	171	245	145	199	---	564	300	444	1160	608	431	372
31	171	---	125	198	---	686	---	457	---	566	429	---
TOTAL	4847	4857	5405	5821	4939	8531	9257	12526	23103	28689	15261	12983
MEAN	156	162	174	188	176	275	309	404	770	925	492	433
MAX	176	353	436	217	202	686	787	609	1160	1240	676	583
MIN	146	91	105	100	150	173	232	284	400	566	429	369
AC-FT	9610	9630	10720	11550	9800	16920	18360	24850	45820	56900	30270	25750
CAL YR 1977	TOTAL	72970	MEAN	200	MAX	759	MIN	91	AC-FT	144700		
WTR YR 1978	TOTAL	136219	MEAN	373	MAX	1240	MIN	91	AC-FT	270200		

## 13055000 TETON RIVER NEAR ST. ANTHONY, ID

LOCATION.--Lat 43°55'38", long 111°36'55", in SW¼SW¼ sec.15, T.7 N., R.41 E., Fremont County, Hydrologic Unit 17040204, on right bank 0.5 mi (0.8 km) upstream from railroad bridge, 4 mi (6.4 km) southeast of St. Anthony, and at mile 22 (35.4 km).

DRAINAGE AREA.--890 mi<sup>2</sup> (2,305 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--January 1890 to September 1893, April 1903 to June 1909, April 1920 (irrigation seasons only 1920-21, 1923-33) to May 1976 (destroyed by flood of June 5, 1976), October 1977 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "near Wilford" or "at Chases Ranch" 1890-93.

REVISED RECORDS.--WSP 1217: Drainage area. WSP 1347: 1903-6, 1908-9.

GAGE.--Water-stage recorder. Altitude of gage is 4,970 ft (1,515 m) from topographic map.

Apr. 5, 1890, to Sept. 30, 1893, nonrecording gage at site 1 mi (1.6 km) downstream at different datum. Apr. 23, 1903, to June 30, 1909, nonrecording gage at site 0.8 mi (1.3 km) upstream at different datum. Apr. 19, 1920, to May 1, 1921, nonrecording gage and May 2, 1921, to Nov. 5, 1933, water-stage recorder, at site 400 ft (12.0 m) downstream at different datum. Nov. 6, 1933, to June 5, 1976, water-stage recorder, at approximately same site at different datum.

REMARKS.--Records excellent. Diversions above station for irrigation of about 58,000 acres (23,000 hm<sup>2</sup>) of which about 4,400 acres (1,800 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Water is diverted at times (since 1939) during irrigation season from Henrys Fork through Cross Cut Canal to Teton River 0.8 mi (1.3 km) upstream from station, 32,100 acre-ft (39.6 hm<sup>3</sup>). No significant amount diverted into river during 1978 irrigation season.

AVERAGE DISCHARGE.--43 years (1933-75, 1978), 810 ft<sup>3</sup>/s (22.94 m<sup>3</sup>/s), 586,800 acre-ft/yr (724 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft<sup>3</sup>/s (312 m<sup>3</sup>/s) Feb. 12, 1962, gage height, 9.36 ft (2.853 m), on basis of contracted-opening measurement of peak flow; minimum, 183 ft<sup>3</sup>/s (5.18 m<sup>3</sup>/s) Oct. 4, 1975, gage height, 2.38 ft (0.725 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 5, 1976 (failure of Teton Dam) reached a stage of about 42.2 ft (12.86 m) present datum, discharge, about 1.7 million ft<sup>3</sup>/s (48,100 m<sup>3</sup>/s) estimated from the average of slope-area measurements of peak flow at Teton (5.3 mi or 8.5 km downstream) and near Newdale, 3.4 mi (5.5 km) upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,650 ft<sup>3</sup>/s (103 m<sup>3</sup>/s) June 10, gage height, 6.09 ft (1.856 m); minimum, 234 ft<sup>3</sup>/s (6.63 m<sup>3</sup>/s) Jan. 25, gage height, 2.68 ft (0.817 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	488	439	378	250	340	333	1790	950	1670	2690	1210	884
2	475	485	336	240	335	338	1620	1040	1510	2690	1100	884
3	454	396	405	300	345	330	1070	1150	1560	2610	1050	870
4	443	382	462	357	360	335	789	1300	1770	2510	1010	869
5	435	376	479	354	345	357	815	1300	1980	2320	1010	891
6	433	381	408	351	355	362	687	1160	2380	2080	1040	906
7	424	385	396	330	370	373	711	987	2650	2020	1050	951
8	434	386	376	327	370	370	919	883	2780	2070	1010	936
9	435	357	281	330	360	366	884	841	3050	2070	972	876
10	427	331	335	340	350	379	802	906	3460	2070	983	854
11	424	369	376	345	365	385	768	1230	3460	2060	914	891
12	418	364	373	335	355	379	802	1030	2840	2090	917	982
13	416	371	378	335	370	384	768	1510	2260	2080	944	1040
14	417	363	389	335	300	372	729	1520	2290	2010	1220	1010
15	420	365	535	350	290	359	690	2170	2720	1970	1160	921
16	421	370	794	360	280	344	673	2060	2890	2000	1020	790
17	423	355	532	360	270	342	674	2060	2640	2020	1130	769
18	421	331	399	365	260	351	654	2000	2220	1940	1210	762
19	416	302	370	350	300	363	633	1950	2020	1750	1110	783
20	418	289	300	340	350	400	616	1790	2030	1590	1060	797
21	432	271	290	345	355	451	627	1690	1990	1500	1030	783
22	418	260	310	345	345	474	625	1920	2340	1400	998	749
23	416	260	380	340	330	502	611	2200	2620	1290	998	729
24	415	302	356	300	330	541	591	2360	2690	1230	990	709
25	415	351	270	253	347	608	578	2270	2680	1180	929	703
26	422	387	275	345	340	594	640	1920	2550	1220	884	696
27	411	482	280	335	340	640	788	1690	2130	1190	876	696
28	412	523	300	350	338	718	979	1010	1950	1200	884	690
29	411	444	321	350	---	789	939	1730	2170	1330	862	684
30	414	411	353	345	---	984	908	1960	2510	1400	862	665
31	441	---	355	340	---	1270	---	1930	---	1330	876	---
TOTAL	13249	11108	11792	10302	9345	14793	24380	51023	71810	56910	31309	24776
MEAN	427	370	380	332	334	477	813	1646	2394	1836	1010	826
MAX	488	523	794	365	370	1270	1790	2860	3460	2690	1220	1040
MIN	411	260	270	240	260	330	578	841	1510	1180	862	665
AC-FT	26280	22030	23390	20430	18540	29340	48360	101200	142400	112900	62100	49140
WTR YR 1978	TOTAL	330797	MEAN	906	MAX	3460	MIN	240	AC-FT	656100		





## 13055198 NORTH FORK TETON RIVER AT TETON, ID

LOCATION.--Lat 43°53'53", long 111°40'37", in NW¼NW¼NW¼ sec.31, T.7 N., R.41 E., Fremont County, Hydrologic Unit 17040204, on left bank 60 ft (18 m) upstream from county road bridge, 0.4 mi (0.7 km) downstream from point of diversion, 0.5 mi (0.80 km) north of Teton, and at mile 16.2 (26.1 km).

DRAINAGE AREA.--

PERIOD OF RECORD.--October 1977 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 4,390 ft (1,338 m) from topographic map.

REMARKS.--Records good. Diversions from tributaries above station for irrigation in Wyoming and Idaho.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,470 ft<sup>3</sup>/s (41.6 m<sup>3</sup>/s) June 10, gage height, 12.17 ft (3.709 m); minimum daily, 44 ft<sup>3</sup>/s (1.25 m<sup>3</sup>/s) Nov. 20, 21.

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Stage-discharge relation affected by ice Nov. 19-24, Dec. 8-10, 19-28, Jan. 1-8, 24, Feb. 17-18, Mar. 3)

6.6	40	8.6	400
7.0	80	9.2	580
7.4	133	10.0	820
8.0	249	12.0	1,420

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	268	98	77	92	91	742	345	718	1010	373	272
2	215	299	86	82	92	91	706	391	619	1010	319	283
3	199	226	102	95	94	91	433	436	604	982	294	290
4	189	155	124	95	99	90	292	502	700	949	274	302
5	183	143	133	100	97	98	294	508	754	877	268	321
6	181	147	110	100	96	99	249	448	895	775	279	345
7	179	147	104	100	100	102	251	367	1040	739	281	364
8	183	148	100	100	102	103	342	314	1150	766	264	379
9	185	140	87	92	102	103	329	294	1270	769	247	350
10	179	127	86	92	97	104	292	311	1400	754	249	342
11	166	138	98	94	102	105	279	454	1420	742	249	362
12	150	138	99	93	99	107	294	667	1240	751	253	403
13	148	140	102	91	96	108	281	634	976	751	266	424
14	148	138	104	92	85	105	268	613	952	721	373	430
15	150	125	141	94	90	103	251	910	1110	703	364	382
16	152	80	264	98	96	97	245	1220	1150	721	306	319
17	154	78	174	99	81	96	245	1170	1060	721	345	306
18	154	70	114	100	70	98	236	907	874	685	379	294
19	170	57	110	97	81	102	224	856	760	607	348	299
20	247	44	110	94	91	108	230	760	760	535	324	297
21	257	44	91	93	96	125	224	703	742	493	311	290
22	249	48	105	94	94	138	224	793	904	454	294	270
23	247	57	125	94	90	150	217	955	1040	409	294	262
24	247	66	110	87	88	164	205	1070	1090	373	302	253
25	247	85	85	65	93	195	197	1020	1090	348	279	241
26	251	97	71	93	93	189	217	841	1020	376	266	234
27	247	125	80	93	93	205	266	721	823	350	260	220
28	247	150	92	93	94	251	362	676	721	362	260	226
29	247	122	87	96	---	279	348	727	808	421	255	220
30	249	108	96	96	---	359	332	838	949	454	257	218
31	264	---	99	93	---	487	---	832	---	424	260	---
TOTAL	6295	3710	3387	2882	2603	4543	9075	21283	28639	20032	9093	9198
MEAN	203	124	109	93.0	93.0	147	303	687	955	646	293	307
MAX	264	299	264	100	102	487	742	1220	1420	1010	379	430
MIN	148	44	71	65	70	90	197	294	604	348	247	218
AC-FT	12490	7360	6720	5720	5160	9010	18000	42210	56810	39730	18040	18240

WTP YR 1978 TOTAL 120740 MEAN 331 MAX 1420 MIN 44 AC-FT 239500

## HENRYS FORK BASIN

111

13056500 HENRYS FORK NEAR REXBURG, ID

LOCATION.--Lat 43°49'34", long 111°54'15", in NW¼NE¼ sec.30, T.6 N., R.39 E., Madison County, Hydrologic Unit 17040203, on right bank 200 ft (61 m) downstream from highway bridge, 6 mi (9.7 km) west of Rexburg, and at mile 9.2 (14.8 km).

DRAINAGE AREA.--2,920 mi<sup>2</sup> (7,560 km<sup>2</sup>), approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1909 to current year. Monthly discharge only for some periods, published in WSP 1317. Prior to 1911, published as North Fork of Snake River near Rexburg.

REVISED RECORDS.--WSP 1217: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,806.35 ft (1,464.98 m) National Geodetic Vertical Datum of 1929. Apr. 13, 1909, to Sept. 28, 1912, nonrecording gage at datum 0.67 ft (0.204 m) higher. Sept. 29, 1912, to Apr. 4, 1913, nonrecording gage at present datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by operation of powerplant near Ashton, and by Henrys Lake (see sta 13039000), Island Park Reservoir (see sta 13042000), Grassy Lake (see sta 13046500), and Teton Reservoir (see sta 13054800). Diversions above station for irrigation of about 5,000 acres (2,000 hm<sup>2</sup>) below and about 204,000 acres (82,600 hm<sup>2</sup>) above station of which about 21,000 acres (8,500 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Considerable water leaks above gage into the Snake Plain aquifer. Station is downstream from all tributaries except inflow from ground water and irrigation waste. Part of ground-water flow escapes westward beneath the Snake River plains above gaging station.

AVERAGE DISCHARGE.--69 years, 2,034 ft<sup>3</sup>/s (57.60 m<sup>3</sup>/s), 1,474,000 acre-ft/yr (1,820 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 79,000 ft<sup>3</sup>/s (2,240 m<sup>3</sup>/s) June 5, 1976; maximum gage height, 22.36 ft (6.815 m) June 5, 1976, result of Teton Dam failure; maximum discharge excluding 1976, 11,200 ft<sup>3</sup>/s (317 cu m/s) May 29, 1970, June 5, 1975; maximum gage height, 10.30 ft (3.139 m) May 29, 1970; minimum, 183 ft<sup>3</sup>/s (5.18 m<sup>3</sup>/s) Mar. 24-28, 1934, gage height, 1.45 ft (0.442 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,520 ft<sup>3</sup>/s (270 m<sup>3</sup>/s) May 17, gage height, 9.77 ft (2.978 m); minimum daily, 820 ft<sup>3</sup>/s (23.2 m<sup>3</sup>/s) Nov. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1680	1360	962	1170	1340	1360	2680	4260	2900	2710	1630	1300
2	1630	1420	1010	846	1330	1340	3120	4470	2530	2860	1480	1240
3	1450	1070	1050	1010	1340	1320	2950	5080	2420	2830	1350	1220
4	1400	1140	1200	1520	1380	1360	2520	6020	2570	2720	1270	1240
5	1380	1080	1140	1770	1350	1410	2330	5740	2660	2750	1190	1190
6	1370	1120	1020	1690	1370	1460	2320	5190	2780	2470	1190	1340
7	1360	1150	1100	1640	1380	1440	2300	4830	3120	2200	1190	1630
8	1360	1140	1110	1540	1400	1420	2630	4680	3310	2080	1100	1750
9	1330	1140	1050	1460	1410	1420	2840	4680	3340	2170	1010	1770
10	1310	1110	1170	1450	1370	1460	2910	4870	3610	2210	992	1790
11	1330	1190	1250	1540	1410	1460	2910	5470	4080	2010	1020	1820
12	1320	1210	1250	1470	1370	1430	3000	6440	4350	1850	1030	2110
13	1310	1210	1230	1400	1310	1440	3000	6680	3860	1800	1180	2240
14	1310	1190	1270	1380	1300	1420	2920	6150	3270	1700	1480	2200
15	1300	1200	1370	1410	1300	1390	2740	6610	3370	1540	1730	2100
16	1290	1200	1560	1440	1310	1370	2780	7940	3700	1500	1700	1950
17	1260	1190	1530	1450	1280	1360	2850	9320	3720	1520	2050	2030
18	1260	1060	1410	1440	1310	1320	2740	8010	3270	1460	2310	2140
19	1230	1020	1280	1410	1270	1330	2540	6590	2940	1410	2170	2080
20	1230	820	1230	1360	1290	1370	2460	5660	2800	1370	2040	1980
21	1220	950	968	1360	1330	1420	2600	5500	2570	1400	1950	1930
22	1210	1200	1020	1350	1300	1500	2690	5420	2550	1330	1880	1880
23	1210	1190	1390	1340	1270	1570	2560	5620	2860	1190	1770	1870
24	1210	1180	1580	1320	1280	1650	2390	5520	3080	1260	1720	1860
25	1210	1170	1570	1330	1300	1700	2350	5260	3250	1290	1540	1840
26	1250	1180	1500	1340	1310	1690	2540	4660	3360	1130	1410	1820
27	1250	1200	1520	1400	1290	1670	3040	3980	3070	1080	1380	1730
28	1210	1300	1550	1360	1320	1770	3690	3440	2530	1100	1400	1710
29	1230	1270	1400	1390	---	1870	4180	3160	2300	1510	1360	1700
30	1250	1090	1450	1380	---	2010	4210	3160	2480	1700	1310	1690
31	1290	---	1450	1310	---	2280	---	3160	---	1780	1320	---
TOTAL	40650	34750	39590	43276	37220	47010	84790	167770	92650	55930	46152	53170
MEAN	1311	1158	1277	1396	1329	1516	2826	5412	3088	1804	1489	1772
MAX	1680	1420	1580	1770	1410	2280	4210	9320	4350	2860	2310	2240
MIN	1210	820	962	846	1270	1320	2300	3160	2300	1080	992	1190
AC-FT	80630	68930	78530	85840	73830	93240	168200	332800	183800	110900	91540	105500
CAL YR 1977 TOTAL	469777			1287	MAX 2070	MIN 448	AC-FT 931800					
WTR YR 1978 TOTAL	742958			MEAN 2036	MAX 9320	MIN 820	AC-FT 1474000					

## HENRYS FORK BASIN

13056500 HENRYS FORK NEAR REXBURG, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW INSTAN- TANFOUS (CFS)	SPE- CIFIC CON- DUCTI- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS AS CACO3	HARD- NESS- NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT 25...	1500	1200	196	--	24.5	10.0	60	0	18
JUL 05...	1420	2790	184	8.2	23.0	16.0	77	1	21

DATE	MAGNE- SIUM DIS- SOLVED (MG/L AS MG)	SODIUM DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AU- SORP- TION RATIO	POTAS- SIUM DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 25...	5.5	15	37	.8	2.3	100	--	82	3.7
JUL 05...	6.0	6.6	15	.3	1.7	93	0	76	4.0

DATE	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)	SOLIDS, DIS- SOLVED (TONS PER AC-F1)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT 25...	5.8	1.9	29	131	.18	424	.14	.01
JUL 05...	2.7	.9	16	105	.14	791	.15	.02

SNAKE RIVER MAIN STEM

113

13057000 SNAKE RIVER NEAR MENAN, ID

LOCATION.--Lat 43°45'10", long 111°58'50", in SW¼NW¼ sec.22, T.5 N., R.38 E., Jefferson-Madison County line, Hydrologic Unit 17040201, at county bridge 2.0 mi (3.2 km) north of Menan.

DRAINAGE AREA.--Not determined.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPF-CIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)
OCT 31...	1220	1700	248	7.7	13.0	5.0	2	11.6	108	16
DEC 02...	1215	1860	349	7.3	4.5	3.0	2	11.6	103	15
JAN 23...	1200	2140	*357	8.1	9.0	1.0	4	11.3	95	37
FEB 21...	1320	2700	343	8.1	6.5	2.0	2	11.8	102	1
MAR 23...	0845	1430	418	7.4	5.5	6.0	3	9.8	93	10
APR 20...	1115	9400	348	8.2	9.0	6.0	6	9.9	95	16
MAY 30...	0945	8800	284	7.7	9.0	10.0	6	9.1	96	9
JUN 23...	1015	10100	281	8.2	18.0	13.0	5	8.4	95	76
AUG 02...	1200	5800	283	8.2	26.5	16.0	2	7.8	93	10
SEP 07...	1200	3890	286	8.1	26.0	16.0	2	7.4	89	20

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	BICARBONATE (MG/L AS HC03)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CAC03)	SILICA, DISSOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C. SUSPENDED (MG/L)
OCT 31...	K9	130	0	107	28	144	.20	661	11
DEC 02...	52	170	0	139	22	220	.30	1110	8
JAN 23...	K5	140	0	115	23	212	.29	1230	20
FEB 21...	K16	150	0	123	21	223	.30	1630	15
MAR 23...	25	170	0	139	16	235	.32	907	10
APR 20...	23	120	0	98	12	222	.30	5630	22
MAY 30...	130	140	0	115	11	174	.24	4130	20
JUN 23...	46	130	0	107	11	165	.22	4500	48
AUG 02...	51	110	0	90	13	163	.22	2550	3
SEP 07...	--	130	0	107	15	172	.23	1810	15

\* Not a field determination.

K Results based on count outside ideal colony count range.

## SNAKE RIVER MAIN STEM

13057000 SNAKE RIVER NEAR MENAN, ID--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 31...	.16	.01	.10	.11	.27	1.2	.02	4	<10
DEC 02...	.34	.04	.15	.19	.53	2.3	.02	4	0
JAN 23...	.21	.03	.02	.05	.26	1.2	.03	4	0
FEB 21...	.29	.02	.26	.28	.57	2.5	.02	4	0
MAR 23...	.18	.03	.11	.14	.32	1.4	.03	2	2
APR 20...	.17	.04	.15	.19	.36	1.6	.04	3	2
MAY 30...	.17	.01	.34	.35	.52	2.3	.04	4	4
JUN 23...	.07	.01	.24	.25	.32	1.4	.05	2	2
AUG 02...	.10	.00	.47	.47	.57	2.5	.00	3	1
SEP 07...	.09	.01	.32	.33	.42	1.9	.00	3	2

DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PR)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	OIL AND GREASE (MG/L)
OCT 31...	10	10	190	<100	.0	0	20	1.2	0
DEC 02...	0	6	120	5	.1	0	20	26	0
JAN 23...	0	23	260	9	.1	0	50	.7	0
FEB 21...	10	8	130	7	.0	0	10	1.1	0
MAR 23...	0	5	240	15	.0	2	10	1.7	--
APR 20...	10	5	530	13	.1	0	30	2.4	0
MAY 30...	0	6	540	23	.0	0	20	2.3	0
JUN 23...	0	7	680	10	.3	1	10	3.5	0
AUG 02...	10	4	210	3	.0	0	10	2.9	0
SEP 07...	0	19	340	11	.1	0	0	2.3	0

## SNAKE RIVER MAIN STEM

115

13057150 SNAKE RIVER NEAR LEWISVILLE, ID

LOCATION.--Lat 43°37'35", long 112°03'56", in SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.35, T.4 N., R.37 E., Jefferson County, Hydrologic Unit 17040201, on left bank 15 ft (4.6 m) upstream from county line highway bridge, 5.0 mi (8.0 km) southwest of Lewisville, and at mile 815.3 (1311.8 km).

DRAINAGE AREA.--9,100 mi<sup>2</sup> (23,570 km<sup>2</sup>), approximately, excluding nontributary area on Snake River Plain.

PERIOD OF RECORD.--June to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 4,750 ft (1,448 m), from topographic map.

REMARKS.--Records good. Some regulation by Jackson Lake (see sta 13010500), Palisades Reservoir (see sta 13032450), Island Park Reservoir (see sta 13042000), Henrys Lake (see sta 13039000), and Grassy Lake (see sta 13046500). Diversions above station for irrigation of about 700,000 acres (283,000 hm<sup>2</sup>). Considerable water leaks above station into the Snake Plain aquifer.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period June to September, 14,600 ft<sup>3</sup>/s (413 m<sup>3</sup>/s) June 12, gage height, 6.00 ft (1.829 m); minimum, 3,450 ft<sup>3</sup>/s (97.7 m<sup>3</sup>/s) Aug. 30, 31, gage height, 2.83 ft (0.863 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

2.8	3,480	4.5	8,850
3.0	4,030	5.0	10,700
3.5	5,500	5.5	12,600
4.0	7,100	6.0	14,600

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	12200	6630	3830
2									---	12100	6330	3770
3									---	11300	6240	3690
4									---	10700	5770	3770
5									---	10600	5620	3690
6									---	10300	5860	3750
7									---	9640	5930	3990
8									---	8870	5680	4220
9									---	8270	5560	4390
10									---	7920	5530	4450
11									---	7380	5590	4600
12									14600	6930	5620	4960
13									14300	6990	5860	5170
14									13400	7560	6270	5200
15									12800	7630	6390	5110
16									12600	8100	6050	4870
17									12800	9210	5770	4660
18									12900	9400	6110	4630
19									12600	9240	5960	4780
20									12100	9330	5590	4780
21									11900	9440	5080	4630
22									11900	8870	4630	4600
23									11800	7700	4600	4510
24									12200	7200	4600	4420
25									12800	6770	4570	4420
26									13200	6520	4250	4220
27									13200	6150	4130	4070
28									12900	6010	4130	3800
29									12400	6620	4070	3720
30									12200	7380	3690	3640
31									---	7310	3640	---
TOTAL	---	---	---	---	---	---	---	---	---	263640	165750	130340
MEAN	---	---	---	---	---	---	---	---	---	8505	5347	4345
MAX	---	---	---	---	---	---	---	---	---	12200	6630	5200
MIN	---	---	---	---	---	---	---	---	---	6010	3640	3640
AC-FT	---	---	---	---	---	---	---	---	---	522900	328800	258500

## WILLOW CREEK BASIN

13057940 WILLOW CREEK BELOW TEX CREEK, NEAR RIRIE, ID

LOCATION.--Lat 43°26'33", long 111°43'37", in NE¼SE¼ sec.3, T.1 N., R.40 E., Bonneville County, Hydrologic Unit 17040205, on right bank 0.3 mi (0.48 km) below Tex Creek, and 13.2 mi (21.2 km) southeast of Ririe.

DRAINAGE AREA.--

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

GAGE.--Water-stage recorder. Altitude of gage is 5,200 ft (1,580 m) from topographic map.

REMARKS.--Records good except for winter period, which are fair. Diversions above station for irrigation of about 7,300 acres (3,000 hm<sup>2</sup>) of which 100 acres (40 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Since May 1924 water has been diverted from Grays Lake into Meadow Creek basin and thence into Blackfoot Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 868 ft<sup>3</sup>/s (24.6 m<sup>3</sup>/s) May 1, 1978, gage height, 5.12 ft (1.561 m); minimum, 10 ft<sup>3</sup>/s (0.283 m<sup>3</sup>/s) Aug. 25, 1977, gage height, 1.99 ft (0.607 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 868 ft<sup>3</sup>/s (24.6 m<sup>3</sup>/s) May 1, gage height, 5.12 ft (1.561 m); minimum daily, 21 ft<sup>3</sup>/s (0.595 m<sup>3</sup>/s) Oct. 5-19, 21-23, 28.

Maximum discharge during period Aug. 24 to September 1977, 27 ft<sup>3</sup>/s (0.765 m<sup>3</sup>/s) Sept. 24, gage height, 2.29 ft (0.698 m); minimum discharge, 10 ft<sup>3</sup>/s (0.283 m<sup>3</sup>/s) Aug. 25, gage height, 1.99 ft (0.607 m).

Discharge, in cubic feet per second, August to September 1977

DAY	AUG	DAY	AUG	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP
24	11	28	20	1	15	5	14	9	13	13	13	17	19	21	19	26	21
25	12	29	18	2	15	6	14	10	13	14	14	18	18	22	20	27	19
26	15	30	17	3	15	7	14	11	13	15	16	19	19	23	22	28	19
27	20	31	16	4	14	8	13	12	13	16	17	20	18	24	25	29	19
														25	23	30	21
TOTAL	-----																508
MEAN	-----																16.9
MAX	-----																25
MIN	-----																13
AC-FT	-----																1010

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	27	36	26	38	39	425	820	337	109	45	33
2	27	24	50	25	39	38	501	690	319	105	44	31
3	24	25	126	27	40	37	420	671	313	101	42	29
4	24	25	175	31	39	45	372	660	320	99	41	28
5	21	25	93	35	39	45	334	589	305	102	39	27
6	21	25	74	42	45	49	289	537	284	96	36	28
7	21	26	64	41	40	45	320	498	268	99	35	30
8	21	26	60	41	44	44	530	475	254	93	34	30
9	21	25	56	41	43	49	545	454	244	89	34	31
10	21	24	50	40	45	53	559	471	232	85	34	31
11	21	33	47	40	41	51	614	546	233	85	33	39
12	21	26	43	40	39	53	676	578	223	82	32	55
13	21	24	38	38	37	53	651	514	212	79	34	55
14	21	23	40	40	36	45	608	486	200	74	52	53
15	21	25	134	40	35	39	548	491	175	70	54	46
16	21	25	141	41	35	38	642	499	164	69	50	41
17	21	24	84	41	36	46	625	520	161	67	56	38
18	21	24	76	43	36	53	484	592	153	64	52	38
19	21	24	54	42	37	63	447	614	150	62	48	43
20	22	24	45	43	40	77	497	522	147	59	47	46
21	21	24	41	39	42	85	581	482	143	59	42	44
22	21	24	42	38	42	98	527	461	140	58	39	41
23	21	26	42	37	42	106	428	454	134	55	39	39
24	22	28	44	36	43	132	402	440	131	53	40	38
25	22	27	45	36	40	121	470	438	127	51	37	36
26	22	37	46	36	41	131	620	412	130	50	36	36
27	22	107	44	37	39	155	748	392	130	48	35	35
28	21	81	41	37	33	164	666	374	125	48	35	35
29	22	63	39	37	---	194	568	355	116	50	35	33
30	23	35	39	38	---	239	620	354	113	49	33	33
31	27	---	39	38	---	283	---	365	---	46	33	---
TOTAL	682	956	1948	1166	1106	2670	15717	15754	5983	2256	1246	1122
MEAN	22.0	31.9	62.8	37.6	39.5	86.1	524	508	199	72.8	40.2	37.4
MAX	27	107	175	43	45	283	748	820	337	109	56	55
MIN	21	23	36	25	33	37	289	354	113	46	32	27
AC-FT	1350	1900	3860	2310	2190	5300	31170	31250	11870	4470	2470	2230
WTP YR 1978	TOTAL	50606	MEAN	139	MAX	820	MIN	21	AC-FT	100400		



## WILLOW CREEK BASIN

13058000 WILLOW CREEK NEAR RIRIE, ID

LOCATION.--Lat 43°35'35", long 111°46'30", in SE¼NW¼ sec.17, T.3 N., R.40 E., Bonneville County, Hydrologic Unit 17040205, on left bank about 1 mi (2 km) upstream from mouth of canyon, 1.5 mi (2.4 km) upstream from Eagle Rock Canal, 2.6 mi (4.2 km) south of Ririe, and at mile 18.5 (29.8 km).

DRAINAGE AREA.--627 mi<sup>2</sup> (1,620 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1903 to September 1904, October 1916 to September 1925, May to August 1928, October 1962 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,506 m) from topographic map. Prior to September 1904, nonrecording gage at site about 1.5 mi (2.4 km) downstream at different datum. October 1916 to June 1921, nonrecording gage, and after June 1921 water-stage recorder at sites about 2 (3 m) and 2.2 mi (3.5 km) upstream at different datums.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 7,300 acres (3,000 hm<sup>2</sup>) of which about 100 acres (40 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Since May 1924, water has been diverted from Grays Lake about 40 mi (64 km) upstream into Meadow Creek basin and thence into Blackfoot Reservoir. Flow regulated by Ririe Reservoir (sta 13057950) beginning December 1975.

AVERAGE DISCHARGE.--26 years (1904, 1917-25, 1963-78), 177 ft<sup>3</sup>/s (5.013 m<sup>3</sup>/s), 128,200 acre-ft/yr (158 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,200 ft<sup>3</sup>/s (119 m<sup>3</sup>/s) May 15, 1917, gage height, 16.3 ft (4.97 m); minimum daily, 0.27 ft<sup>3</sup>/s (0.008 m<sup>3</sup>/s) Jan. 6-15, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since 1899, 5,080 ft<sup>3</sup>/s (144 m<sup>3</sup>/s) Feb. 11, 1962, from estimate based on field survey, gage height, 15.0 ft (4.57 m) from floodmarks; stream reported practically dry during summers of 1899 and 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 208 ft<sup>3</sup>/s (5.89 m<sup>3</sup>/s) Aug. 3, 5, gage height, 3.90 ft (1.189 m); maximum gage height, 3.92 ft (1.195 m) Sept. 24; minimum discharge, 3.8 ft<sup>3</sup>/s (0.11 m<sup>3</sup>/s) Nov. 30, gage height, 0.88 ft (0.268 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	23	5.8	14	26	101	89	54	29	29	90	192
2	17	22	14	14	26	101	90	54	32	29	181	192
3	17	22	15	14	27	101	90	55	36	27	206	191
4	17	22	14	14	26	99	91	55	36	27	206	192
5	17	23	12	15	26	99	80	56	33	26	205	192
6	17	23	13	22	29	99	59	57	30	26	206	192
7	16	22	14	27	27	98	52	44	32	26	206	192
8	17	22	15	27	27	97	43	42	32	26	206	191
9	17	22	14	27	27	86	43	59	30	26	206	191
10	17	22	13	27	32	50	43	62	32	24	205	191
11	17	22	13	27	37	37	43	42	32	25	204	190
12	17	22	13	27	38	37	43	22	32	30	204	189
13	18	21	13	27	43	34	46	32	30	30	204	187
14	18	21	14	27	57	35	46	32	26	30	202	188
15	18	21	14	27	78	35	46	31	27	30	200	187
16	18	22	14	27	118	35	47	31	28	30	199	186
17	18	22	13	27	130	34	48	31	32	30	199	185
18	19	22	14	27	102	34	48	31	33	30	199	185
19	18	21	13	27	101	34	50	31	32	29	198	185
20	18	18	14	27	102	35	50	32	31	29	198	187
21	18	18	14	27	102	34	50	33	30	29	196	189
22	18	18	14	26	102	34	50	33	29	29	196	186
23	19	18	14	27	102	30	50	33	29	29	195	186
24	20	16	15	27	102	27	51	33	29	29	194	189
25	20	15	15	27	101	29	53	33	29	29	194	190
26	20	15	15	27	100	28	53	33	29	29	193	190
27	21	20	15	27	101	62	53	33	29	28	193	189
28	22	19	14	27	100	75	53	32	29	29	192	188
29	21	12	15	26	---	64	53	30	29	29	191	187
30	22	4.5	15	26	---	78	54	29	29	29	191	187
31	22	---	15	26	---	88	---	29	---	38	191	---
TOTAL	571	590.5	425.8	764	1889	1830	1667	1204	916	886	6050	5666
MEAN	18.4	19.7	13.7	24.6	67.5	59.0	55.6	38.6	30.5	28.6	195	189
MAX	22	23	15	27	130	101	91	62	36	38	206	192
MIN	16	4.5	5.8	14	26	27	43	22	26	24	90	185
AC-FT	1130	1170	845	1520	3750	3630	3310	2390	1820	1760	12000	11240
CAL YR 1977	TOTAL	8866.2	MEAN 24.3	MAX 61	MIN 4.5	AC-FT 17590						
WTR YR 1978	TOTAL	22459.3	MEAN 61.5	MAX 206	MIN 4.5	AC-FT 44550						

## 13058000 WILLOW CREEK NEAR RIRIE, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1971 to current year.

INSTRUMENTATION.--Temperature recorder since October 1971.

REMARKS.--Partial temperature record Nov. 19-21, May 25-28, June 1-7 due to equipment malfunction. Miscellaneous chemical data published for water years 1968-69.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 25.0°C July 19-22, 1974; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 17.5°C July 9, 11, 14, 16, 25; minimum, 0.0°C on many days during winter months.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANFOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)
OCT 05...	1455	17	477	8.4	18.5	12.0	190	14

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 05...	48	18	24	21	.8	3.8	220	180	23

DATE	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 CONSTIT- UENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT 05...	31	.2	16	273	.37	12.5	.11	.06



## 13058510 SAND CREEK ABOVE WILLOW CREEK DIVERSION, NEAR UCON, ID

LOCATION.--Lat 43°34'16", long 111°53'44", in NE¼SW¼ sec.20, T.3 N., R.39 E., Bonneville County, Hydrologic Unit 17040201, on right bank about 300 ft (91 m) downstream from Sand Creek control gates, about 0.6 mi (1.0 km) east of U.S. Highway 26 crossing with Willow Creek, and 3.3 mi (5.28 km) southeast of Ucon.

PERIOD OF RECORD.--March to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 4,850 ft (1,478 m), from topographic map.

REMARKS.--Records good. Flow controlled by headgates. Water is diverted during the irrigation season from the Snake River through the Eagle Rock Canal to Willow Creek 5.5 mi (8.8 km) upstream from the station; about 163,000 acre-ft (201 hm<sup>3</sup>) diverted into creek during 1978 irrigation season. Diversions below Ririe Lake Reservoir (13057950) and above station for irrigation of about 1,500 acres (610 hm<sup>2</sup>).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 713 ft<sup>3</sup>/s (20.2 m<sup>3</sup>/s) July 17, 1978; no flow during winter months.

DAILY DATA	DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978											
	MEAN VALUES											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	15	29	280	618	515	352
2						---	15	36	340	618	530	335
3						---	16	41	430	529	510	338
4						---	17	31	470	441	515	335
5						---	16	31	480	554	515	352
6						---	12	31	485	520	590	366
7						---	8.5	30	490	501	595	342
8						---	7.5	12	520	487	585	352
9						---	13	47	590	462	590	356
10						---	15	100	618	502	606	356
11						---	18	59	600	597	595	331
12						---	16	22	648	652	595	280
13						---	16	88	690	684	606	253
14						---	16	93	624	640	555	241
15						---	16	118	672	621	456	223
16						---	16	116	684	679	432	220
17						---	19	85	612	713	380	220
18						---	19	100	580	595	380	226
19						---	18	140	580	687	356	244
20						---	18	150	570	681	342	250
21						---	18	159	600	675	321	229
22						---	18	88	660	658	295	229
23						---	19	120	666	624	301	229
24						9.6	23	150	565	565	301	229
25						9.5	11	190	555	510	345	229
26						9.6	21	190	595	550	338	226
27						13	25	190	630	585	324	253
28						17	26	190	624	595	307	268
29						8.0	28	200	605	606	301	253
30						12	29	225	611	580	352	250
31						14	---	250	---	540	363	---
TOTAL						---	525.0	3311	17074	18269	13796	8367
MEAN						---	17.5	107	569	589	445	279
MAX						---	29	250	690	713	606	366
MIN						---	7.5	12	280	441	295	220
AC-FT						---	1040	6570	33870	36240	27360	16600

## WILLOW CREEK BASIN

13058520 WILLOW CREEK FLOODWAY CHANNEL NEAR UCON, ID

LOCATION.--Lat 43°34'35", long 111°54'40", in SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.19, T.3 N., R.39 E., Bonneville County, Hydrologic Unit 17040201, on left bank 300 ft (91.4 m) below Willow Creek floodway channel diversion structure 2 mi (3.2 km) southeast of Ucon.

- PERIOD OF RECORD.--March to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 4,840 ft (1,475 m), from topographic map.

REMARKS.--Records fair. Flow controlled by headgates. Floodway channel built to carry excess flow from Willow Creek and Sand Creek during periods of flooding.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 28 ft<sup>3</sup>/s (0.793 m<sup>3</sup>/s) May 23, 1978; no flow during winter months.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	.00	27	.46	.00	.00
2							---	.00	12	.35	.61	.00
3							---	.00	.34	.25	.00	.00
4							---	.29	.10	.20	.00	.00
5							---	.00	.10	.35	.00	.00
6							---	.00	.09	.07	.00	.00
7							---	.00	.51	.06	.00	.00
8							---	.00	1.1	.04	.00	.00
9							---	.00	9.5	.04	.00	.00
10							---	.00	1.6	.05	.00	.00
11							---	.00	1.1	.06	.00	.00
12							---	.00	.83	.06	.00	.00
13							---	.00	.62	.06	.20	.00
14							.03	.00	.61	.05	.02	.00
15							.00	.00	.54	.06	.00	.00
16							.00	4.0	.47	.07	.00	.00
17							.00	.00	.54	.07	.00	.00
18							.05	.00	.68	.07	.00	.01
19							.16	.00	.66	.08	.00	.80
20							.00	.00	.67	.08	.00	.89
21							.00	.00	1.4	.19	.00	.01
22							.00	.00	.62	.07	.00	.02
23							.00	28	.54	.07	.00	.01
24							.00	.00	.49	.07	.00	.01
25							.00	.00	.64	.07	.00	.49
26							.01	.00	.99	.07	.00	.00
27							.00	.00	.40	.07	.00	.00
28							.45	.00	.32	.04	.00	.00
29							.00	.00	.33	.00	.00	.00
30							.00	6.7	.42	.00	.00	.00
31							---	1.5	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	40.49	65.21	3.18	.83	2.24
MEAN	---	---	---	---	---	---	---	1.31	2.17	.10	.027	.075
MAX	---	---	---	---	---	---	---	28	27	.46	.61	.89
MIN	---	---	---	---	---	---	---	.00	.09	.00	.00	.00
AC-FT	---	---	---	---	---	---	---	80	129	6.3	1.6	4.4

## WILLOW CREEK BASIN

123

13058530 WILLOW CREEK BELOW FLOODWAY CHANNEL, NEAR UCON, ID

LOCATION.--Lat 43°34'30", long 111°54'30", in SE¼ sec.19, T.3 N., R.39 E., Bonneville County, Hydrologic Unit 17040201, at left bank 100 ft (30 m) below outlet diversion structure and 2.0 mi (3.2 km) southeast of Ucon.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,840 ft (1,475 m), from topographic map.

REMARKS.--Records good. Flow controlled by headgates. Water is diverted during the irrigation season from the Snake River through the Eagle Rock Canal to Willow Creek about 6.5 mi (10.5 km) upstream from the station; about 163,000 acre-ft (201 hm<sup>3</sup>) diverted into creek during 1978 irrigation season. Diversions below Ririe Lake Reservoir (13057950) and above station for irrigation of about 1,500 acres (610 hm<sup>2</sup>).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 169 ft<sup>3</sup>/s (4.79 m<sup>3</sup>/s) June 25, 1978; minimum daily, 1.3 ft<sup>3</sup>/s (0.037 m<sup>3</sup>/s) Feb. 10-19, 1978.

MONTHLY DATA	DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	8.0	11	6.6	65	34	133	141	118	90
2			---	8.0	11	5.6	65	25	144	136	124	88
3			---	8.0	11	6.3	65	11	145	116	151	85
4			---	8.0	11	7.0	65	8.8	139	106	152	88
5			---	8.0	11	7.0	61	9.3	141	130	155	89
6			23	8.0	11	7.0	41	8.9	137	127	154	83
7			12	8.0	9.0	7.0	41	8.8	138	120	153	83
8			19	11	6.0	7.0	34	4.2	135	113	139	78
9			20	11	2.0	7.0	26	9.3	144	112	137	81
10			19	11	1.3	7.0	24	35	149	120	136	77
11			16	11	1.3	10	23	55	140	130	137	76
12			15	11	1.3	11	24	10	142	129	135	72
13			15	11	1.3	12	25	9.9	141	126	134	64
14			15	11	1.3	13	26	9.9	142	114	131	59
15			16	11	1.3	13	27	12	140	116	118	57
16			14	11	1.3	13	30	11	139	117	110	53
17			12	11	1.3	13	26	10	146	117	93	52
18			15	11	1.3	13	24	9.0	165	121	86	52
19			12	11	1.3	13	24	8.5	151	121	84	52
20			9.0	11	4.5	13	26	22	147	118	81	51
21			7.0	11	9.0	13	28	34	168	122	80	26
22			6.0	11	11	12	27	36	166	118	63	31
23			6.0	11	7.4	11	29	35	166	111	55	30
24			6.0	11	7.2	10	42	37	168	107	56	30
25			6.0	11	7.3	10	53	44	169	102	56	27
26			6.0	11	7.2	10	44	43	163	106	61	29
27			6.0	11	7.2	25	35	52	147	116	61	58
28			6.0	11	7.8	54	33	73	144	121	69	75
29			6.0	11	---	54	33	81	142	122	71	84
30			6.0	11	---	54	34	105	139	119	88	92
31			6.0	11	---	54	---	118	---	123	94	---
TOTAL	---	---	---	320.0	164.6	498.5	1100	969.6	4430	3697	3282	1912
MEAN	---	---	---	10.3	5.88	16.1	36.7	31.3	148	119	106	63.7
MAX	---	---	---	11	11	54	65	118	169	141	155	92
MIN	---	---	---	8.0	1.3	5.6	23	4.2	133	102	55	26
AC-FT	---	---	---	635	326	989	2180	1920	8790	7330	6510	3790

## SNAKE RIVER MAIN STEM

13060000 SNAKE RIVER NEAR SHELLEY, ID

LOCATION.--Lat 43°24'47", long 112°08'02", in SE¼SW¼ sec.17, T.1 N., R.37 E., Bingham County, Hydrologic Unit 17040201, on right bank 0.3 mi (0.5 km) southeast of Woodville, 2.5 mi (4.0 km) north of Shelley, and at mile 787.8 (1,267.6 km).

DRAINAGE AREA.--9,790 mi<sup>2</sup> (25,400 km<sup>2</sup>), approximately, excluding indeterminate nontributary area on Snake River Plain.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1915 to current year (prior to October 1931, irrigation seasons only).

REVISED RECORDS.--WSP 1317: 1916.

GAGE.--Water-stage recorder. Datum of gage is 4,599.0 ft (1,401.78 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter periods, which are fair. Some regulation by Jackson Lake (see sta 13010500), Palisades Reservoir (see sta 13032450), Island Park Reservoir (see sta 13042000), Henrys Lake (see sta 13039000), and Grassy Lake (see sta 13046500). Diversions above station for irrigation of about 39,000 acres (16,000 hm<sup>2</sup>) below and about 637,000 acres (258,000 hm<sup>2</sup>) above station of which about 100,000 acres (40,500 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Considerable water leaks above station into Snake Plain aquifer.

AVERAGE DISCHARGE.--47 years (1932-78), 5,280 ft<sup>3</sup>/s (149.5 m<sup>3</sup>/s), 4,097,000 acre-ft/yr (5,051 hm<sup>3</sup>).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 67,300 ft<sup>3</sup>/s (1,910 m<sup>3</sup>/s) June 6, 1976, gage height, 19.12 ft (5.172 m); minimum, 288 ft<sup>3</sup>/s (8.16 m<sup>3</sup>/s) Nov. 5, 1934, gage height, 2.22 ft (0.677 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 6, 1894, reached an estimated discharge of 75,000 ft<sup>3</sup>/s (2,100 m<sup>3</sup>/s) at former station at Eagle Rock (now Idaho Falls), 7 mi (11 km) upstream from present site.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,900 ft<sup>3</sup>/s (507 m<sup>3</sup>/s) May 18, gage height, 10.22 ft (3.115 m); minimum, 770 ft<sup>3</sup>/s (21.8 m<sup>3</sup>/s) Oct. 29, gage height, 3.70 ft (1.128 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Stage-discharge relation affected by ice Nov. 21, Dec. 8-11, 20-28, Jan. 1-9, 12-13, 25-29, Feb. 19-20)

3.5	670	8.0	9,650
4.0	931	10.0	17,200
5.0	1,820	12.0	26,200
6.0	3,540		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1710	1500	2270	1800	2230	2830	7860	12000	9260	11500	5470	2810
2	1920	1670	2100	1250	2190	3070	8390	11900	8810	11500	5070	2730
3	1840	1910	2180	1300	2210	3080	8010	12100	9390	10700	4750	2660
4	1740	1560	2290	1800	2280	3070	7580	12800	10500	9770	4310	2700
5	1540	1730	2410	2200	2260	3150	7240	13500	10900	9540	4210	2530
6	1470	1890	2260	2600	2250	3200	7120	13200	11500	9240	4160	2560
7	1420	1900	2160	2600	2280	3240	7230	12600	11700	8560	4290	2920
8	1420	1910	2100	2600	2270	3190	7460	12100	11900	7550	4030	3300
9	1360	1940	2050	2600	2310	3180	7760	11700	12100	6900	3910	3600
10	1310	2060	2150	2580	2330	3190	7910	12300	12500	6440	3860	3730
11	1230	2080	2350	2600	2330	3250	7960	12800	13500	5780	4090	4150
12	1230	2130	2540	2600	2300	3270	8630	13600	13500	5290	4210	4580
13	1210	2240	2500	2550	2240	3210	8940	14000	13100	5190	4640	4900
14	1200	2260	2460	2540	2150	3400	8900	14800	12300	5900	5360	4980
15	1200	2290	2510	2470	2240	3460	8820	14800	11600	6090	5610	4630
16	1160	2310	2800	2470	2530	3440	8700	15200	11500	6720	5330	4090
17	1090	2270	2870	2470	2580	3400	9150	16400	11900	7790	5140	3880
18	1160	2270	2720	2460	2530	3390	9360	16700	12100	8130	5620	3920
19	1190	2220	2560	2440	2500	3370	9240	16400	11600	8130	5500	4050
20	1130	2060	2250	2390	2550	3380	9650	15300	11100	8260	5130	3850
21	1130	1600	2000	2330	2660	3430	9860	15200	10900	8360	4630	3810
22	1070	1750	1900	2320	2640	3490	10000	15000	10600	7960	3920	3810
23	1100	2000	2200	2340	2610	3590	10100	14600	10900	7190	3730	3730
24	1060	2390	2500	2150	2580	3650	9910	15200	12000	6120	3770	3660
25	1090	2530	2500	2050	2570	3740	9730	15200	12600	5350	3560	3500
26	1060	2500	2400	2150	2610	3720	9720	14600	13000	4930	3340	3220
27	1090	2540	2500	2300	2590	3700	10300	13200	12700	4370	3270	3000
28	1100	2470	2500	2450	2580	4210	10900	11800	12200	4390	3240	2730
29	1060	2510	2510	2400	---	5080	11400	10600	11600	4870	3060	2490
30	1090	2460	2540	2400	---	6590	11800	9770	11300	5620	2860	2460
31	1260	---	2740	2400	---	7340	---	9190	---	5900	2720	---
TOTAL	39640	62950	73820	71610	67400	113310	269630	418560	348560	224040	132790	104980
MEAN	1279	2098	2381	2310	2407	3655	8988	13500	11620	7227	4284	3499
MAX	1920	2540	2870	2600	2660	7340	11800	16700	13500	11500	5620	4980
MIN	1060	1500	1900	1250	2150	2830	7120	9190	8810	4370	2720	2460
AC-FT	78630	124900	146400	142000	133700	224800	534800	830200	691400	444400	263400	208200
CAL YR 1977	TOTAL	1301880	MEAN	3567	MAX	8680	MIN	1060	AC-FT	2582000		
WTR YR 1978	TOTAL	1927290	MEAN	5280	MAX	16700	MIN	1060	AC-FT	3823000		

SNAKE RIVER MAIN STEM

13060000 SNAKE RIVER NEAR SHELLEY, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972-74, 1976 to current year.

REMARKS.--Miscellaneous chemical data published for water year 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS AS CaCO3 (MG/L)	HARDNESS, NONCARBONATE (MG/L CaCO3)
OCT 06...	1050	1490	314	8.4	15.5	11.5	130	5
JAN 13...	1435	2600	--	--	-2.0	.0	--	--
APR 03...	1615	7850	--	--	12.0	--	--	--
APR 13...	1555	8960	--	--	15.5	10.0	--	--
JUN 08...	1620	12300	--	--	30.0	10.5	--	--
JUN 26...	1205	13100	--	--	--	13.5	--	--
AUG 11...	1630	3990	243	7.9	21.5	20.0	140	23

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	ALKALINITY (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 06...	35	9.9	15	20	.6	2.5	150	120	24
JAN 13...	--	--	--	--	--	--	--	--	--
APR 03...	--	--	--	--	--	--	--	--	--
APR 13...	--	--	--	--	--	--	--	--	--
JUN 08...	--	--	--	--	--	--	--	--	--
JUN 26...	--	--	--	--	--	--	--	--	--
AUG 11...	39	9.7	8.6	12	.3	1.8	140	110	24

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-F T)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 06...	3.1	1.3	22	187	.25	752	.08	.04
JAN 13...	--	--	--	--	--	--	--	--
APR 03...	--	--	--	--	--	--	--	--
APR 13...	--	--	--	--	--	--	--	--
JUN 08...	--	--	--	--	--	--	--	--
JUN 26...	--	--	--	--	--	--	--	--
AUG 11...	6.5	.5	11	171	.23	1840	.13	.02

## SNAKE RIVER MAIN STEM

13062500 SNAKE RIVER AT BLACKFOOT, ID

LOCATION.--Lat 43°11'50", long 112°22'05", in SE½SW¼ sec.33, T.2 S., R.35 E., Bingham County, Hydrologic Unit 17040206, on left bank immediately upstream from old Riverside Highway bridge, 0.25 mi (0.40 km) downstream from new U.S. Highway 26 bridges, 1.2 mi (1.92 km) west of Blackfoot, and at mile 764.3 (1,222.9 km).

DRAINAGE AREA.--

PERIOD OF RECORD.--August to September 1978. Monthly and yearly mean discharge only for some years published in WSP 1317. Published as Snake River below Blackfoot Bridge, near Blackfoot.

GAGE.--Water-stage recorder. Altitude of gage is 4,490 ft (1,369 m), from topographic map. May 1924 to September 1932, water-stage recorder at site downstream at different datum.

REMARKS.--Records good. Flow regulated by Jackson Lake (see sta 13010500), Palisades Reservoir (see sta 13032450), Henrys Lake (see sta 13039000), Island Park Reservoir (see sta 13042000), and Grassy Lake (see sta 13046500), having a combined capacity of 2,570,000 acre-ft (3,169 hm<sup>3</sup>). Diversions above station for irrigation of about 750,000 acres (304,000 hm<sup>2</sup>). Considerable water leaks above the station into the Snake Plain aquifer.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,650 ft<sup>3</sup>/s (103 m<sup>3</sup>/s) Aug. 19, 1978, gage height, 4.89 ft (1.490 m); minimum, 171 ft<sup>3</sup>/s (4.84 m<sup>3</sup>/s) Sept. 5, 6, 1978, gage height, 2.46 ft (0.750 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,650 ft<sup>3</sup>/s (103 m<sup>3</sup>/s) Aug. 19, gage height, 4.89 ft (1.490 m); minimum, 171 ft<sup>3</sup>/s (4.84 m<sup>3</sup>/s) Sept. 5, 6, gage height, 2.46 ft (0.750 m).

DAILY DATA	DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978											
	MEAN VALUES											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											2500	531
2											2100	494
3											1800	333
4											1460	399
5											1450	292
6											1390	234
7											1570	468
8											1450	974
9											1300	1370
10											1210	1580
11											1330	1970
12											1600	2600
13											1890	3090
14											2670	3280
15											3150	3260
16											3130	2720
17											2980	2420
18											3340	2340
19											3600	2520
20											3240	2530
21											2920	2380
22											2210	2410
23											1730	2290
24											1720	2200
25											1580	2130
26											1290	1860
27											1150	1590
28											1120	1170
29											940	898
30											735	811
31											543	---
TOTAL	---	---	---	---	---	---	---	---	---	---	59098	51144
MEAN	---	---	---	---	---	---	---	---	---	---	1906	1705
MAX	---	---	---	---	---	---	---	---	---	---	3600	3280
MIN	---	---	---	---	---	---	---	---	---	---	543	234
AC-FT	---	---	---	---	---	---	---	---	---	---	117200	101400

BLACKFOOT RIVER BASIN

13063000 BLACKFOOT RIVER ABOVE RESERVOIR, NEAR HENRY, ID

LOCATION.--Lat 42°49'00", long 111°30'35", in SE¼NE¼ sec.14, T.7 S., R.42 E., Caribou County, Hydrologic Unit 17040207, on right bank 70 ft (21 m) upstream from railroad bridge immediately upstream from the Monsanto Chemical Company "Haul Road", 5 mi (8 km) upstream from Blackfoot Reservoir flow line, 6 mi (10 km) south of Henry, and 11 mi (18 km) north of Soda Springs.

DRAINAGE AREA.--350 mi<sup>2</sup> (910 km<sup>2</sup>), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1914 to September 1925 (no winter records except water year 1915), August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,260 ft (1,908 m), from topographic map. Mar. 25, 1914, to Sept. 30, 1914, nonrecording gage at site 3.3 mi (5.3 km) downstream at different datum. Oct. 1, 1915, to Sept. 30, 1925, nonrecording gage at site 4 mi (6 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Diversions above station for irrigation of about 4,500 acres or 1,820 hm<sup>2</sup> (1966 determination).

AVERAGE DISCHARGE.--12 years (1915, 1968-78), 173 ft<sup>3</sup>/s (4.899 m<sup>3</sup>/s), 6.71 in/yr (170 mm/yr), 125,300 acre-ft/yr (154 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,150 ft<sup>3</sup>/s (60.9 m<sup>3</sup>/s) Apr. 26, 1974, gage height, 8.60 ft (2.621 m); minimum, 22 ft<sup>3</sup>/s (0.62 m<sup>3</sup>/s) Aug. 17, 1977, gage height, 1.36 ft (0.415 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 600 ft<sup>3</sup>/s (17.0 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)
Apr. 27	1800	*1140	32.3	6.57	2.003	May 19	1630	881	24.9	5.84	1.780

Minimum daily discharge, 32 ft<sup>3</sup>/s (0.62 m<sup>3</sup>/s) Jan. 2.

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Shifting-control method used Oct. 1-13; stage-discharge relation affected by ice Nov. 30 to Dec. 2, Dec. 7-11, Dec. 17 to Mar. 28)

1.3	20	5.0	606
1.8	45	6.0	947
2.0	60	7.0	1,360
3.0	173	8.2	1,910
4.0	360		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	46	37	51	35	40	47	191	992	529	214	116	95		
2	43	37	58	32	38	45	224	834	493	213	113	95		
3	39	38	61	38	42	45	197	857	470	205	110	91		
4	37	38	63	45	43	50	196	863	489	193	110	89		
5	37	37	61	49	44	55	212	793	536	192	104	88		
6	37	38	63	52	45	55	220	854	511	188	102	89		
7	39	39	60	48	45	53	275	858	477	186	101	90		
8	39	37	52	45	44	50	379	834	464	181	100	91		
9	37	33	46	48	43	51	434	818	452	181	99	92		
10	37	44	47	48	42	52	503	817	442	178	98	91		
11	36	54	48	48	39	52	557	888	448	165	99	100		
12	36	44	53	49	39	51	568	879	449	160	99	105		
13	36	39	54	50	39	49	555	864	429	155	109	117		
14	36	39	59	50	40	48	541	857	409	151	144	112		
15	36	39	73	51	40	48	503	850	395	141	138	104		
16	36	39	78	52	38	48	505	878	386	143	124	99		
17	36	40	67	55	37	48	568	838	384	141	124	97		
18	36	39	54	51	36	48	460	729	373	136	130	108		
19	36	42	44	50	37	50	392	835	363	136	120	118		
20	35	43	38	47	39	51	397	784	354	133	116	116		
21	35	39	34	46	42	52	460	831	331	131	111	112		
22	35	43	40	43	44	54	510	887	318	128	109	106		
23	35	40	47	37	45	56	408	883	307	129	116	101		
24	35	40	49	38	46	60	377	887	293	127	111	96		
25	35	43	47	39	48	66	422	879	285	123	106	96		
26	35	52	44	40	48	72	560	870	282	119	103	95		
27	34	61	41	41	48	82	962	848	271	112	101	94		
28	34	59	39	42	48	90	1010	829	261	118	100	93		
29	34	54	45	42	---	101	873	812	248	132	100	91		
30	38	48	48	43	---	121	837	810	233	134	99	90		
31	40	---	41	42	---	145	---	823	---	125	97	---		
TOTAL	1140	1275	1605	1396	1179	1895	14296	14879	11652	4770	3411	2974		
MEAN	36.8	42.5	51.8	45.0	42.1	61.1	477	841	389	154	110	99.1		
MAX	46	61	78	55	48	145	1010	992	536	214	144	118		
MIN	34	33	34	32	36	45	191	810	233	112	97	88		
CFSM	.11	.12	.15	.13	.12	.18	1.36	1.83	1.11	.44	.31	.28		
IN.	.12	.14	.17	.15	.13	.20	1.52	2.11	1.24	.51	.36	.32		
AC-FT	2260	2530	3180	2770	2340	3760	28360	39430	23170	9460	6770	5900		
CAL YR 1977	TOTAL	21709	MEAN	59.5	MAX	449	MIN	23	CFSM	.17	IN	2.31	AC-FT	43060

13063000 BLACKFOOT RIVER ABOVE RESERVOIR, NEAR HENRY, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

REMARKS.--Miscellaneous chemical data published for water year 1968.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW INSTAN- TANFOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 09...	1515	32	243	7.6	4.0	1.0	220	99	64
JUL 12...	1230	159	369	* 8.1	21.0	17.0	190	10	57
SEP 26...	1015	94	332	--	12.0	10.5	--	--	--

DATE	MAGNE- SIUM DIS- SOLVED (MG/L AS MG)	SODIUM DIS- SOLVED (MG/L AS NA)	SODIUM AL- SOPP- TION RATIO	POTAS- SIUM DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	
NOV 09...	15	4.6	4	.1	.9	150	0	120	11
JUL 12...	12	3.8	4	.1	.7	220	0	180	9.3
SEP 26...	--	--	--	--	--	--	--	--	--

DATE	CHLO- RIDE DIS- SOLVED (MG/L AS CL)	FLOU- RIDE DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-F1)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
NOV 09...	3.6	.1	.3	173	.24	15.0	.00	.01
JUL 12...	2.7	.1	9.3	204	.28	87.6	.15	.05
SEP 26...	--	--	--	--	--	--	--	--

\* Not a field determination.

## 13065000 BLACKFOOT RESERVOIR NEAR HENRY, ID

LOCATION.--Lat 43°00'20", long 111°43'00", in sec.12, T.5 S., R.40 E., Caribou County, Hydrologic Unit 17040207, Bureau of Land Management lands, near spillway at right end of Blackfoot Dam on Blackfoot River, 12 mi (19 km) northwest of Henry, and at mile 69.0 (111.0 km).

DRAINAGE AREA.--581 mi<sup>2</sup> (1,500 km<sup>2</sup>).

PERIOD OF RECORD.--January 1912 to September 1925, January 1929 to current year (no winter records 1949-59). Monthend contents only for January 1929 to September 1960, published in WSP 1317, 1737. Prior to October 1950 and October 1960 to September 1961, published as Blackfoot-Marsh Reservoir near Henry.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Indian Field Service).

REMARKS.--Water diverted from reservoir for irrigation of about 50,000 acres (20,000 hm<sup>2</sup>) near Pocatello and on Fort Hall Indian Reservation. Capacity is 313,000 acre-ft (386 hm<sup>3</sup>) between elevations 6,086 ft (1,855 m) bottom of outlet tunnel and 6,118.5 ft (1,864.92 m), crest of spillway, with provision for additional storage of 100,000 acre-ft (123 hm<sup>3</sup>) to elevation 6,124 ft (1,866.6 m) by means of flashboards. Storage supplemented by water from Grays Lake beginning May 1924. Storage began in spring of 1910.

COOPERATION.--Capacity table, gage readings and daily contents furnished by Bureau of Indian Affairs.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 350,500 acre-ft (432 hm<sup>3</sup>) May 2, 9, 1974 (elevation, 6,120.60 ft (1,865.559 m); minimum observed, 610 acre-ft (0.252 hm<sup>3</sup>) Sept. 12-15, 19, 21, 22, 1934; minimum elevation observed, 6,088.59 ft (1,855.802 m) Sept. 22, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 287,900 acre-ft (355 hm<sup>3</sup>) June 13, elevation, 6,117.02 ft (1,864.468 m); minimum observed, 100,000 acre-ft (123 hm<sup>3</sup>) Oct. 6, elevation, 6,104.42 ft (1,860.627 m).

Capacity table (elevation, in feet, and contents, in acre-feet)

6,104	94,900	6,116	270,600
6,112	205,400	6,118	304,700
6,114	237,500	6,120.6	350,500

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
AM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102800	---	---	---	138300	---	---	---	---	273500	234900	---
2	102800	107300	---	---	---	---	---	220600	279600	---	---	---
3	102000	---	---	---	---	---	---	---	280600	---	---	---
4	101400	---	---	---	---	---	---	---	---	---	231800	---
5	101400	---	---	---	---	---	163200	227200	---	270100	---	206800
6	100000	---	---	---	---	---	---	---	283000	---	---	---
7	---	---	---	---	---	---	---	---	---	268100	---	---
8	---	---	---	---	---	150000	---	---	284400	---	226800	---
9	---	108700	---	---	---	---	---	233400	---	---	---	---
10	---	---	---	---	---	---	---	---	---	267300	---	---
11	---	---	---	---	---	---	---	---	---	264600	---	---
12	103000	---	---	---	---	---	---	239600	---	263100	---	202700
13	103000	---	---	---	---	---	---	---	287900	---	---	---
14	---	---	---	---	---	---	---	---	---	260500	---	---
15	---	---	---	---	---	---	---	---	---	---	221100	200700
16	---	108200	---	---	---	---	---	248300	287100	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	186700	---	---	---	218900	---
19	---	---	---	133700	---	---	---	255400	---	---	---	201200
20	---	---	---	134100	---	---	---	---	283200	---	---	---
21	---	---	125500	134300	---	153800	---	---	---	---	---	---
22	---	---	---	134800	145800	---	193600	264300	---	---	217100	---
23	---	---	---	135000	---	---	---	---	280300	---	---	---
24	---	---	---	135400	---	---	---	---	---	---	214900	---
25	---	---	---	135800	---	---	196700	---	---	243700	---	---
26	105000	---	---	136100	---	---	---	268800	---	---	---	198400
27	---	---	---	136500	---	---	---	---	276700	---	---	---
28	---	---	---	136800	147600	---	203200	---	---	---	---	199200
29	---	---	---	137200	---	---	---	---	---	---	210800	---
30	---	115100	---	137600	---	---	211900	274500	274400	---	---	198600
31	106600	---	128300	137900	---	160100	---	278300	---	236200	209700	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
(+)	-	-	-	7.33	-	-	-	16.45	16.22	-	-	-
(‡)	+3200	+8500	+13200	+9600	+9700	+12500	+51800	+66400	-3900	-38200	-26500	-11100

CAL YR 1977..... ‡ -108500

WTR YR 1978..... ‡ +95200

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

## BLACKFOOT RIVER BASIN

13066000 BLACKFOOT RIVER NEAR SHELLEY, ID

LOCATION.--Lat 43°15'46", long 112°02'48", in NW¼SW¼NE¼ sec.7, T.2 S., R.38 E., Bingham County, Hydrologic Unit 17040207, on right bank 1.2 mi (1.9 km) downstream from Wolverine Creek, 8.5 mi (13.7 km) southeast of Shelley, and at mile 30.5 (49.1 km).

DRAINAGE AREA.--909 mi<sup>2</sup> (2,354 km<sup>2</sup>).

PERIOD OF RECORD.--July 1909 to November 1926, May 1926 to September 1950 (irrigation seasons only), August 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,650 ft (1,417 m), from topographic map. Prior to Aug. 19, 1975, at nearby site at different datum.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Blackfoot Reservoir (station 13065000) 38.5 mi (61.9 km) upstream. Water diverted from reservoir and several other diversions upstream for irrigation.

AVERAGE DISCHARGE.--20 years (1910-26, 1976-78), 355 ft<sup>3</sup>/s (10.05 m<sup>3</sup>/s), 257,200 acre-ft/yr (317 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,030 ft<sup>3</sup>/s (57.5 m<sup>3</sup>/s) May 17, 18, 1976, gage height, 8.14 ft (2.481 m); maximum gage height, 19.97 ft (6.087 m) Nov. 29, 1975 (backwater from ice); minimum observed discharge, 15 ft<sup>3</sup>/s (0.42 m<sup>3</sup>/s) Jan. 23, 1919, gage height, 2.83 ft (0.862 m), site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,090 ft<sup>3</sup>/s (30.9 m<sup>3</sup>/s) June 17, 18, 20, gage height, 7.37 ft (2.246 m); minimum, 25 ft<sup>3</sup>/s (0.708 m<sup>3</sup>/s) Dec. 6, gage height, 5.28 ft (1.609 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	694	63	39	56	60	66	338	286	436	716	885	420
2	672	66	75	52	62	69	395	246	499	598	760	415
3	679	66	130	46	63	66	310	228	494	585	753	415
4	672	63	95	49	69	75	232	216	505	560	745	410
5	463	63	55	54	66	77	228	211	500	548	745	410
6	342	66	66	59	80	77	215	211	505	541	738	415
7	235	66	77	66	69	75	235	201	500	529	716	415
8	225	58	69	63	75	72	390	195	494	517	687	420
9	221	66	115	63	61	77	326	185	500	505	672	415
10	188	66	80	66	69	77	283	198	494	489	658	415
11	138	66	55	66	75	77	283	208	500	672	630	420
12	138	66	55	66	66	80	268	218	494	658	617	420
13	130	63	52	63	61	77	246	205	505	644	630	334
14	98	61	55	63	57	75	228	191	623	630	623	326
15	89	61	153	66	54	72	221	191	623	617	611	326
16	92	58	118	66	52	75	257	179	672	598	457	260
17	92	44	100	66	52	77	271	182	1060	585	451	257
18	92	43	76	66	50	80	232	211	1070	585	441	257
19	89	43	64	58	44	83	218	211	1070	598	441	257
20	75	43	57	63	45	92	215	188	1060	617	441	253
21	63	43	53	66	47	98	221	188	1050	665	436	249
22	63	44	51	61	48	106	218	185	1060	716	436	253
23	63	47	53	60	55	124	211	188	1070	806	436	249
24	63	50	56	57	69	147	201	182	821	845	430	249
25	63	52	59	56	72	138	195	182	821	806	425	249
26	63	75	59	55	72	155	211	182	821	814	425	249
27	63	75	58	56	69	176	242	176	806	829	425	253
28	63	66	58	57	66	185	225	170	783	853	420	249
29	63	61	58	58	---	198	215	170	760	877	420	242
30	72	52	59	58	---	225	232	167	738	901	420	239
31	72	---	61	59	---	246	---	170	---	901	420	---
TOTAL	6135	1756	2211	1860	1728	3317	7562	6123	21274	20805	17394	9741
MEAN	198	58.5	71.3	60.0	61.7	107	252	198	709	671	561	325
MAX	694	75	153	66	80	246	395	286	1070	901	885	420
MIN	63	43	39	46	44	66	195	167	436	489	420	239
AC-FT	12170	3480	4390	3690	3430	6580	15000	12140	42200	41270	34500	19320
CAL YR 1977	TOTAL	127575	MEAN 350	MAX 1050	MTN 39	AC-FT 253000						
WTR YR 1978	TOTAL	99906	MEAN 274	MAX 1070	MTN 39	AC-FT 198200						

BLACKFOOT RIVER BASIN

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13068495 BLACKFOOT RIVER BYPASS NEAR BLACKFOOT, ID

LOCATION.--Lat 43°10'16", long 112°23'13", in SE¼SW¼ sec.8, T.3 S., R.35 E., Bingham County, Hydrologic Unit 17040207, on right bank at flood diversion structure about 400 ft (122 m) downstream from U.S. Highway 15 bridge, and 2.5 mi ( 4.0 km) southwest of Blackfoot.

DRAINAGE AREA.--

PERIOD OF RECORD.--April 1964 to current year. (Prior to 1975, only combined monthly flows of main river and of bypass channel were published.)

GAGE.--Water-stage recorder. Datum of gage is 4,469.0 ft (1,362.2 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair except those for winter periods, which are poor. Flow regulated by Blackfoot Reservoir (see sta 13065000). Diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,560 ft<sup>3</sup>/s (44.2 m<sup>3</sup>/s) May 5, 1974, gage height, 8.69 ft (2.65 m); no flow for many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,015 ft<sup>3</sup>/s (28.7 m<sup>3</sup>/s) Aug. 15, gage height, 5.63 ft (1.716 m); no flow for many days.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	38	.00	.00	.00	.00	56	.00	.38	50	144	104
2	55	13	.00	.00	.00	.00	69	.00	4.7	59	123	112
3	55	5.2	.00	.00	.00	.00	78	.00	24	80	92	111
4	61	.55	.00	.00	.00	.00	78	.00	73	66	71	122
5	76	.00	.00	.00	.00	.00	72	1.0	98	47	66	117
6	72	.00	.00	.00	.00	.00	65	.75	73	41	74	107
7	51	.00	.00	.00	.00	.00	57	.00	31	21	115	131
8	28	.00	.00	.00	.00	.00	52	.00	5.1	18	125	154
9	20	.00	.00	.00	.00	.00	55	1.5	.99	7.8	109	182
10	158	.00	.00	.00	.00	.00	55	.00	1.3	6.3	110	207
11	142	.00	.00	.00	.00	.00	53	.00	7.3	.00	148	262
12	136	.00	.00	.00	.00	.00	48	12	15	3.0	174	301
13	115	.00	.00	.00	.00	.00	44	1.5	10	27	236	286
14	103	.00	.00	.00	.00	.00	40	.00	6.1	53	330	261
15	86	.00	.00	.00	.00	.00	36	.00	.00	73	393	237
16	72	.00	.00	.00	.00	.00	32	.00	.00	76	344	208
17	62	.00	.00	.00	.00	.00	29	.00	33	94	293	190
18	37	.00	.00	.00	.00	.00	23	3.0	104	97	266	189
19	.00	.00	.00	.00	.00	.00	15	19	157	89	263	202
20	10	.00	.00	.00	.00	.00	9.4	50	165	64	255	189
21	23	.00	.00	.00	.00	.00	5.5	58	146	56	219	181
22	20	.00	.00	.00	.00	.00	3.6	64	153	85	151	158
23	17	.00	.00	.00	.00	.03	.43	41	.00	123	108	129
24	24	.00	.00	.00	.00	3.2	.00	22	.00	155	114	95
25	19	.00	.03	.00	.00	7.9	.00	8.4	156	134	122	57
26	23	.00	.00	.00	.00	7.6	.00	.00	155	93	126	39
27	14	.00	.00	.00	.00	15	.00	.00	137	56	129	37
28	11	.00	.00	.00	.00	22	.00	.00	134	43	136	33
29	20	.00	.00	.00	---	28	.00	.00	103	73	127	26
30	25	.00	.00	.00	---	39	.00	.00	74	119	120	19
31	39	---	.00	.00	---	50	---	.00	---	150	109	---
TOTAL	1605.00	56.75	.03	.00	.00	172.73	976.23	242.15	1866.87	2059.10	5192	4446
MEAN	51.8	1.89	.001	.000	.000	5.57	32.5	9.10	62.2	66.4	167	148
MAX	158	38	.03	.00	.00	50	78	64	165	155	393	301
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	66	19
AC-FT	3180	113	.06	.00	.00	343	1940	560	3700	4080	10300	8820
CAL YR 1977	TOTAL	6443.58	MEAN	17.7	MAX	158	MIN	.00	AC-FT	12780		
WTP YR 1978	TOTAL	16656.86	MEAN	45.6	MAX	393	MIN	.00	AC-FT	33040		

## BLACKFOOT RIVER BASIN

## 13068500 BLACKFOOT RIVER NEAR BLACKFOOT, ID

LOCATION.--Lat 43°07'50", long 112°28'35", near E¼ cor. sec.28, T.3 S., R.34 E., Bingham County, Hydrologic Unit 17040207, Fort Hall Indian Reservation, on left bank 11 ft (3 m) upstream from highway bridge, 8 mi (13 km) southwest of Blackfoot, and at mile 3.4 (5.5 km).

DRAINAGE AREA.--1,295 mi<sup>2</sup> (3,354 km<sup>2</sup>), including that of Sand Creek whose flow is diverted to Blackfoot River through the Idaho Canal.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1913 to current year (prior to October 1931, summer months only). Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1217: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,420 ft (1,350 m), from river-profile survey. Prior to May 8, 1926, nonrecording gage and May 8, 1926, to June 25, 1937, water-stage recorder at site 0.5 mi (0.8 km) upstream at different datum. June 26, 1937, to Aug. 16, 1963, water-stage recorder at site 175 ft (53 m) downstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated by Blackfoot Reservoir (see sta 13065000). Diversions above station for irrigation of about 28,000 acres (11,000 hm<sup>2</sup>) below and about 32,000 acres (13,000 hm<sup>2</sup>) above station of which about 900 acres (360 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Part of flow is supplied by waste from Snake River canals.

Diversions to bypass channel, which diverts 5.5 mi (8.8 km) upstream from station, started in April 1964.

Figures of combined daily discharges for the river and the bypass channel appear on the following page.

AVERAGE DISCHARGE.--47 years, river only (1932-63), combined river and bypass channel (1964-78), 193 ft<sup>3</sup>/s (5.466 m<sup>3</sup>), 139,800 acre-ft/yr (172 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 1,710 ft<sup>3</sup>/s (48.4 m<sup>3</sup>/s) Feb. 11, 1962, gage height, 7.68 ft (2.341 m); no flow on many days.

Combined river and bypass: Maximum discharge, 2,130 ft<sup>3</sup>/s (60.3 m<sup>3</sup>/s) May 5, 1974; no flow June 2-6, July 17, Sept. 10, 1977.

EXTREMES FOR CURRENT YEAR.--River only: Maximum discharge, 343 ft<sup>3</sup>/s (9.71 m<sup>3</sup>/s) Sept. 12, gage height, 3.87 ft (1.180 m); minimum, 4.2 ft<sup>3</sup>/s (0.119 m<sup>3</sup>/s) May 31, gage height, 1.24 ft (0.378 m).

Combined river and bypass: Maximum daily discharge, 704 ft<sup>3</sup>/s (34.6 m<sup>3</sup>/s) Nov. 2; minimum discharge, 4.2 ft<sup>3</sup>/s (0.119 m<sup>3</sup>/s) May 31.

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

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	133	64	52	50	52	157	47	32	109	198	164
2	168	118	61	40	51	52	206	46	55	121	183	184
3	173	97	87	43	53	51	208	47	76	143	155	183
4	178	87	106	44	55	51	172	50	124	125	118	198
5	150	79	86	46	56	55	154	90	148	113	109	186
6	187	74	65	48	65	58	146	79	121	104	118	176
7	175	72	90	51	69	58	143	69	77	83	157	201
8	151	78	90	52	65	55	178	54	46	73	173	230
9	143	74	54	54	65	53	223	82	42	66	152	246
10	203	71	57	55	59	55	183	53	36	55	146	257
11	236	79	57	61	65	55	169	65	41	27	146	279
12	227	79	58	63	66	57	170	109	52	34	218	305
13	216	76	60	64	60	60	161	86	58	64	246	311
14	180	72	64	61	56	57	152	64	64	93	279	304
15	168	67	74	65	48	54	149	49	46	107	311	292
16	157	66	125	67	45	51	148	29	43	131	296	283
17	160	67	87	68	44	51	160	37	82	146	296	273
18	146	59	75	67	43	53	104	89	151	146	290	275
19	140	54	68	64	43	53	106	107	205	139	275	284
20	133	54	60	60	43	53	104	142	224	116	279	273
21	125	54	55	61	43	57	104	143	218	110	262	270
22	112	54	56	61	44	54	104	140	217	133	223	255
23	104	56	57	60	47	69	104	122	215	167	184	215
24	109	58	54	52	51	62	103	107	215	206	163	184
25	103	65	60	48	56	94	100	94	212	202	172	158
26	103	76	68	47	56	90	100	63	206	154	181	139
27	93	86	65	48	55	100	110	36	190	136	183	136
28	92	81	58	49	55	109	83	46	184	124	217	127
29	107	76	61	50	---	115	79	36	146	136	198	119
30	113	73	69	50	---	125	81	15	133	158	180	100
31	128	---	66	50	---	136	---	14	---	202	167	---
TOTAL	4662	2235	2165	1701	1508	2115	4161	2212	3659	3723	6325	6607
MFAN	150	74.5	69.8	54.9	53.9	68.2	139	71.4	122	120	204	220
MAX	236	133	125	68	69	136	223	143	224	206	311	311
MIN	92	54	55	40	43	51	79	14	32	27	109	100
AC-FT	9250	4430	4290	3370	2990	4200	8250	4390	7260	7380	12550	13100

CAL YR 1977 TOTAL 30295.51 MFAN 83.0 MAX 236 MIN 9.00 AC-FT 60040  
WTR YR 1978 TOTAL 41073.00 MEAN 113 MAX 311 MIN 14 AC-FT 61470

## BLACKFOOT RIVER BASIN

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13068500 BLACKFOOT RIVER NEAR BLACKFOOT, ID--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, RIVER AND BYPASS CHANNEL NEAR BLACKFOOT,  
WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	171	64	52	50	52	213	47	32	159	342	268
2	223	131	61	40	51	52	275	48	60	180	306	296
3	228	102	87	43	53	51	286	47	100	223	247	294
4	239	88	106	44	55	51	250	50	197	191	189	320
5	266	79	86	46	56	55	226	91	246	160	175	303
6	259	74	65	48	65	58	211	80	194	145	192	283
7	226	72	90	51	69	58	200	69	108	104	272	332
8	179	78	90	52	65	55	230	54	51	91	298	384
9	163	74	58	54	65	53	278	84	43	74	261	428
10	361	71	57	55	59	55	238	53	37	61	256	464
11	378	79	57	61	65	55	222	65	48	27	344	541
12	363	79	58	63	66	57	218	121	67	37	392	606
13	331	76	60	64	60	60	205	88	68	91	482	597
14	283	72	64	61	56	57	192	64	70	146	609	565
15	254	67	74	65	48	54	185	49	46	180	704	529
16	229	66	125	67	45	51	180	29	43	207	640	491
17	222	67	87	68	44	51	189	37	115	240	589	463
18	183	59	75	67	43	53	127	92	255	243	556	464
19	140	54	68	64	43	53	121	126	362	228	538	486
20	143	54	60	60	43	53	113	192	389	180	534	462
21	148	54	55	61	43	57	110	201	364	166	481	451
22	132	54	56	61	44	54	108	204	370	218	374	413
23	121	56	57	60	47	69	104	163	215	290	292	344
24	133	58	58	52	51	85	103	129	215	361	277	279
25	122	65	60	48	56	102	100	102	368	336	294	215
26	126	76	68	47	56	98	100	63	361	247	307	178
27	107	86	65	48	55	115	110	36	327	192	312	173
28	103	81	58	49	55	131	83	46	318	167	353	160
29	127	76	61	50	---	143	79	36	249	209	325	145
30	138	73	69	50	---	164	81	15	207	277	300	119
31	167	---	66	50	---	186	---	14	---	352	276	---
TOTAL	6267	2292	2165	1701	1508	2288	5137	2495	5525	5782	11517	11053
MEAN	202	76.4	69.8	54.9	53.9	73.8	171	80.5	184	187	372	368
MAX	378	171	125	68	69	186	286	204	389	361	704	606
MIN	103	54	55	40	43	51	79	14	32	27	175	119
AC-FT	12430	4550	4290	3370	2990	4540	10190	4950	10960	11470	22840	21920
CAL YR 1977	TOTAL	36742.93	MEAN	101	MAX	378	MIN	.00	AC-FT	72880		
WTR YR 1978	TOTAL	57730.00	MEAN	158	MAX	704	MIN	14	AC-FT	114500		

## BLACKFOOT RIVER BASIN

13068500 BLACKFOOT RIVER NEAR BLACKFOOT, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970, 1972 to current year.

REMARKS.--Miscellaneous chemical data published for water years 1966, 1968-69.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 18...	1415	142	414	*8.4	22.0	10.5	180	17	46	16
NOV 29...	1605	77	--	--	6.5	4.5	--	--	--	--
JAN 12...	1515	69	--	--	.5	3.5	--	--	--	--
FEB 24...	1550	44	--	--	6.5	6.0	--	--	--	--
APR 04...	1155	160	--	--	12.0	7.5	--	--	--	--
MAY 04...	1455	50	358	--	7.0	10.5	--	--	--	--
JUN 09...	1415	37	*352	*8.4	29.0	20.0	170	21	46	13
29...	1240	156	345	--	23.0	20.0	--	--	--	--
AUG 02...	1345	178	333	8.6	27.0	21.5	170	25	43	14
SEP 20...	1415	265	364	*8.3	14.5	10.5	150	19	43	11

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	HTCAH- RONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINEITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 18...	16	16	.5	3.4	200	--	160	36	7.7
NOV 29...	--	--	--	--	--	--	--	--	--
JAN 12...	--	--	--	--	--	--	--	--	--
FEB 24...	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--
MAY 04...	--	--	--	--	--	--	--	--	--
JUN 09...	9.9	11	.3	2.2	180	--	150	38	8.5
29...	--	--	--	--	--	--	--	--	--
AUG 02...	8.7	10	.3	2.1	160	5	140	23	6.6
SEP 20...	12	14	.4	2.3	160	0	131	24	9.0

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTIT- UENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT CHARGE, SUS- PENDED (T/DAY)
OCT 18...	1.0	21	246	.33	94.3	.17	.15	--	--
NOV 29...	--	--	--	--	--	--	--	--	--
JAN 12...	--	--	--	--	--	--	--	--	--
FEB 24...	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--
MAY 04...	--	--	--	--	--	--	--	--	--
JUN 09...	.4	10	217	.30	21.7	.03	.02	28	2.8
29...	--	--	--	--	--	--	--	--	--
AUG 02...	.4	10	192	.26	92.3	.02	.05	92	44
SEP 20...	.8	15	196	.27	140	.11	.01	--	--

\* Not a field determination.

## 13069500 SNAKE RIVER NEAR BLACKFOOT, ID

LOCATION.--Lat 43°07'31", long 112°31'06", in SE¼SE¼ sec.30, T.3 S., R.34 E., Bingham County, Hydrologic Unit 17040206, on right bank 0.3 mi (0.5 km) downstream from highway bridge, 0.7 mi (1.1 km) downstream from Blackfoot River, 10 mi (16 km) southwest of Blackfoot, and at mile 750.1 (1,206.9 km).

DRAINAGE AREA.--11,310 mi<sup>2</sup> (29,290 km<sup>2</sup>), approximately, excluding indeterminate nontributary area on Snake River Plain.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1910 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "at Clough ranch, near Blackfoot" 1924-45.

GAGE.--Water-stage recorder. Datum of gage is 4,399.83 ft (1,341.068 m) National Geodetic Vertical Datum of 1929. Prior to July 6, 1913, nonrecording gages about 0.1 mi (0.2 km) upstream at datum about 1.00 ft (0.3 m) higher. July 6, 1913, to Aug. 19, 1962, water-stage recorder at site 0.1 mi (0.2 km) upstream at datum 1.00 ft (0.3 m) higher.

REMARKS.--Records good. Flow regulated by Jackson Lake (see sta 13010500), Palisades Reservoir (see sta 13032450), Henrys Lake (see sta 13039000), Grassy Lake (see sta 13046500), Island Park Reservoir (see sta 13042000), and Blackfoot Reservoir (see sta 13065000), having a combined capacity of 2,883,000 acre-ft (3,550 hm<sup>3</sup>). Diversions above station for irrigation of about 121,000 acres (49,000 hm<sup>2</sup>) below and about 832,000 acres (337,000 hm<sup>2</sup>) above station of which about 155,000 acres (62,700 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Considerable water leaks above the station into the Snake Plain aquifer.

AVERAGE DISCHARGE.--68 years, 4,800 ft<sup>3</sup>/s (135.9 m<sup>3</sup>/s), 3,478,000 acre-ft/yr (4,288 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53,500 ft<sup>3</sup>/s (1,520 m<sup>3</sup>/s) June 7, 1976, gage height, 15.44 ft (4.706 m) result of Teton Dam failure, maximum discharge, excluding 1976, 46,200 ft<sup>3</sup>/s (1,310 m<sup>3</sup>/s) June 18, 1918, gage height, 14.80 ft (4.511 m) site and datum then in use; minimum, 111 ft<sup>3</sup>/s (3.14 m<sup>3</sup>/s) Nov. 10, 1934, gage height, 0.80 ft (0.244 m), site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Late in summer of 1905 there was no flow in Snake River for a distance of 10 mi (16 km) in vicinity of Blackfoot. Aug. 9, 1905, discharge of Snake River just below mouth of Blackfoot River was 39 ft<sup>3</sup>/s (1.10 m<sup>3</sup>/s), supplied by ground-water inflow a short distance upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,800 ft<sup>3</sup>/s (419 m<sup>3</sup>/s) May 18, gage height, 8.59 ft (2.618 m); minimum, 414 ft<sup>3</sup>/s (11.7 m<sup>3</sup>/s) Oct. 22, gage height, 1.64 ft (0.500 m); minimum gage height, 1.58 ft (0.482 m) Sept. 6.

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Shifting-control method used May 6 to July 16)

1.5	391	5.0	4,600
2.2	860	7.0	9,220
3.0	1,630	9.0	15,700
4.0	2,920		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	703	1090	2010	1880	2080	2350	7200	10900	5990	8240	2560	653
2	1020	1260	1850	1240	2000	2650	7870	10800	5570	8360	2190	653
3	1180	1410	1860	1150	2030	2740	8080	10600	5520	7930	1850	552
4	987	1500	1900	1180	2030	2760	7450	11000	6790	6850	1470	577
5	935	1270	2030	1540	2060	2800	7060	11600	7550	6540	1320	577
6	769	1480	2010	2220	2050	2880	6820	12100	7970	6110	1250	485
7	689	1570	1910	2420	2060	2920	6830	11500	8180	5610	1540	584
8	618	1570	1850	2380	2080	2910	7130	10900	8240	4610	1510	1020
9	598	1610	1620	2410	2060	2890	7460	10300	8390	3930	1290	1450
10	682	1660	1860	2350	2080	2890	7570	10200	8500	3450	1220	1790
11	813	1770	1760	2270	2100	2920	7580	10700	9520	2770	1370	2240
12	710	1770	2170	2280	2090	3000	7920	11300	10000	2220	1680	2980
13	710	1820	2200	2320	2050	3010	8500	11800	9650	1890	2040	3530
14	618	1860	2160	2260	1970	2970	8580	12200	9070	2350	2920	3740
15	564	1940	2170	2280	1940	3180	8530	12400	8240	2610	3550	3740
16	564	1950	2300	2250	2130	3220	8430	12200	7960	2730	3580	3240
17	539	1960	2460	2260	2270	3190	8560	13400	8260	3840	3420	2840
18	497	1910	2440	2250	2250	3180	8900	14400	8990	4800	3600	2690
19	480	1900	2140	2250	2200	3150	8780	14400	9050	4670	3900	2920
20	485	1600	1970	2210	2270	3160	8730	13700	8490	4510	3680	2870
21	456	1760	1760	2130	2390	3200	9040	13300	8270	4750	3360	2730
22	456	1480	1550	2100	2360	3260	9240	13200	8050	4530	2560	2720
23	639	1510	1720	2090	2330	3360	9360	12700	7910	4150	1910	2520
24	718	1860	2120	2010	2290	3440	9190	12800	8860	3470	1810	2330
25	669	2150	2390	1850	2290	3550	8910	13200	9570	2410	1640	2220
26	696	2170	2320	1930	2290	3590	8800	12600	10400	1980	1430	1900
27	667	2150	2230	2040	2330	3590	9130	11500	10200	1440	1250	1600
28	675	2150	2150	2040	2310	3720	9620	9970	9840	1050	1270	1230
29	703	2020	2320	2220	---	4450	10200	8600	8930	1240	1110	972
30	783	2100	2270	2160	---	5430	10700	7310	8360	2230	910	811
31	893	---	2240	2130	---	6560	---	6290	---	2860	725	---
TOTAL	21536	51750	63740	64100	60390	102920	252170	358070	252320	124130	63915	58164
MEAN	695	1725	2056	2068	2157	3320	8406	11550	8411	4004	2062	1939
MAX	1180	2170	2460	2420	2390	6560	10700	14400	10400	8360	3900	3740
MIN	456	1090	1550	1150	1940	2350	6820	6290	5520	1050	725	485
AC-FT	42720	102600	126400	127100	119800	204100	500200	710200	500500	246200	126800	115400
CAL YR 1977 TOTAL		798863	MEAN	2189	MAX	5970	MIN	167	AC-FT	1585000		
WTR YR 1978 TOTAL		1473205	MEAN	4036	MAX	14400	MIN	456	AC-FT	2922000		

## SNAKE RIVER MAIN STEM

13069500 SNAKE RIVER NEAR BLACKFOOT, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-73, 1975 to current year.

REMARKS.--Miscellaneous chemical data published for water year 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHQS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACU3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT									
18...	1225	459	476	*7.9	20.0	14.0	210	11	52
NOV									
29...	1045	1980	--	--	4.0	3.0	--	--	--
JAN									
06...	1440	2200	--	--	3.0	1.0	--	--	--
FEB									
24...	1017	2320	--	--	3.0	3.0	--	--	--
APR									
04...	0830	7470	--	--	8.5	7.0	--	--	--
MAY									
02...	1425	2430	277	--	19.5	11.0	--	--	--
JUN									
09...	1155	8420	--	--	20.5	10.5	--	--	--
29...	1215	8980	302	--	19.5	16.5	--	--	--
AUG									
02...	1200	2230	301	8.5	26.0	20.0	150	22	40
SEP									
20...	1205	2950	340	*8.6	12.0	11.5	170	--	45

\* Not a field determination.

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT									
18...	19	22	10	.7	4.1	240	--	200	41
NOV									
29...	--	--	--	--	--	--	--	--	--
JAN									
06...	--	--	--	--	--	--	--	--	--
FEB									
24...	--	--	--	--	--	--	--	--	--
APR									
04...	--	--	--	--	--	--	--	--	--
MAY									
02...	--	--	--	--	--	--	--	--	--
JUN									
09...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
AUG									
02...	11	8.4	11	.3	1.9	150	0	120	23
SEP									
20...	13	11	10	.4	2.5	180	--	--	24

DATE	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 CONSTIT- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT								
18...	17	.9	26	303	.41	376	.70	.05
NOV								
29...	--	--	--	--	--	--	--	--
JAN								
06...	--	--	--	--	--	--	--	--
FEB								
24...	--	--	--	--	--	--	--	--
APR								
04...	--	--	--	--	--	--	--	--
MAY								
02...	--	--	--	--	--	--	--	--
JUN								
09...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
AUG								
02...	6.6	.5	11	177	.24	1070	.08	.01
SEP								
20...	9.0	.6	14	--	--	1660	.03	.04

13073000 PORTNEUF RIVER AT TOPAZ, ID

LOCATION.--Lat 42°37'30", long 112°05'20", in SE¼ sec.23, T.9 S., R.37 E., Bannock County, Hydrologic Unit 17040208, on right bank 200 ft (60 m) upstream from Bob Smith Creek, 800 ft (240 m) downstream from Topaz siding, 1.5 mi (2.4 km) upstream from diversion dam of Portneuf-Marsh Valley Canal Co., 4 mi (6 km) west of Lava Hot Springs, and at mile 55.5 (89.3 km).

DRAINAGE AREA.--570 mi<sup>2</sup> (1,480 km<sup>2</sup>), approximately (includes that of Bob Smith Creek). Mean altitude, 6,080 ft (1,850 m).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1913 to September 1915, July 1919 to current year. Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1347: 1920-22, 1924-25(M). WSP 1567: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,918.00 ft (1,499.006 m) National Geodetic Vertical Datum of 1929 (levels by USGS). Prior to July 20, 1919, nonrecording gage at site 0.3 mi (0.5 km) downstream at datum 3.0 ft (0.91 m) lower. July 20, 1919, to June 22, 1954, nonrecording gage at site 0.3 mi (0.5 km) downstream at datum 2.00 ft (0.610 m) lower than present datum.

REMARKS.--Records good. Flow regulated by Portneuf Reservoir (capacity, 23,695 acre-ft or 29.2 hm<sup>3</sup>) and Chesterfield Reservoir on Twenty-Four Mile Creek (capacity, 685 acre-ft or 0.845 hm<sup>3</sup>). Diversions above station for irrigation of about 29,000 acres (12,000 hm<sup>2</sup>) of which about 7,400 acres (3,000 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination).

AVERAGE DISCHARGE.--61 years, 198 ft<sup>3</sup>/s (5.607 m<sup>3</sup>/s), 143,500 acre-ft/yr (177 km<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,120 ft<sup>3</sup>/s (202 m<sup>3</sup>/s) Feb. 1, 1963, gage height, 8.22 ft (2.505 m), result of highway fill failure 2 mi (3 km) upstream; minimum, 64 ft<sup>3</sup>/s (1.81 m<sup>3</sup>/s) Sept. 23, 1966, gage height, 2.27 ft (0.692 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 554 ft<sup>3</sup>/s (15.7 m<sup>3</sup>/s) May 17, gage height, 3.94 ft (1.201 m); minimum daily, 100 ft<sup>3</sup>/s (2.83 m<sup>3</sup>/s) Jan. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	128	141	120	128	146	450	358	397	189	201	169
2	106	126	198	100	131	146	465	373	380	186	204	169
3	106	123	270	103	136	144	373	390	369	192	204	166
4	104	123	198	112	138	146	320	394	369	201	198	166
5	104	126	152	118	138	161	309	380	380	213	201	172
6	106	133	152	128	152	175	284	358	387	201	198	178
7	106	128	146	138	149	172	313	328	390	192	192	172
8	104	128	131	150	146	178	428	305	394	189	192	169
9	106	121	133	152	141	178	404	291	390	195	192	152
10	106	121	133	138	141	189	362	309	390	198	195	149
11	104	121	137	135	146	192	358	362	387	204	195	141
12	104	123	142	133	141	198	339	425	350	192	192	138
13	106	121	158	130	138	184	328	448	281	169	207	131
14	113	123	175	130	138	175	320	465	277	161	216	129
15	113	131	193	130	141	169	313	502	257	152	192	129
16	113	128	180	130	133	169	387	536	240	161	184	130
17	116	131	150	130	128	172	373	552	229	186	181	133
18	118	128	143	130	133	178	313	548	213	181	175	134
19	109	128	136	130	136	186	291	533	210	184	175	132
20	111	126	131	128	136	201	288	506	207	186	164	138
21	111	128	126	131	136	219	295	487	201	189	152	142
22	111	138	128	131	136	246	281	483	195	189	152	139
23	113	136	131	128	136	288	270	480	192	166	152	138
24	116	141	133	121	138	354	260	470	184	186	149	137
25	113	149	132	131	141	354	263	465	184	189	152	137
26	116	201	131	133	144	350	313	450	181	189	152	136
27	121	181	131	131	152	350	350	434	184	186	152	133
28	123	169	132	128	144	331	347	417	189	192	152	131
29	128	155	135	131	---	320	350	414	192	198	155	130
30	131	141	139	126	---	316	358	422	189	201	158	130
31	128	---	134	128	---	335	---	419	---	201	169	---
TOTAL	3475	4056	4651	3984	3897	6922	10105	13304	8388	5818	5553	4350
MEAN	112	135	150	129	139	223	337	429	280	188	179	145
MAX	131	201	270	152	152	354	465	552	397	213	216	178
MIN	104	121	126	100	128	144	260	291	181	152	149	129
AC-FT	6890	8050	9230	7900	7730	13730	20040	26390	16640	11540	11010	8630

CAL YR 1977 TOTAL 57637 MEAN 158 MAX 270 MIN 100 AC-FT 114300  
WTR YR 1978 TOTAL 74503 MEAN 204 MAX 552 MIN 100 AC-FT 147800



PORTNEUF RIVER BASIN

139

13075000 MARSH CREEK NEAR MCCAMMON, ID

LOCATION.--Lat 42°37'50", long 112°13'30", in NE¼ sec.22, T.9 S., R.36 E., Bannock County, Hydrologic Unit 17040208, on left bank 10 ft (3 m) downstream from abandoned highway bridge, 70 ft (21 m) upstream from county road crossing, 2 mi (3 km) southwest of McCammon, and at mile 11.0 (17.7 km).

DRAINAGE AREA.--355 mi<sup>2</sup> (919 km<sup>2</sup>). Mean altitude, 5,630 ft (1,720 m).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,610 ft (1,405 m), by barometer. Prior to July 14, 1965, non-recording gage 10 ft (3 m) upstream at datum.

REMARKS.--Records fair. Diversions above station for irrigation of about 19,000 acres (7,700 hm<sup>2</sup>) of which about 5,500 acres (2,200 hm<sup>2</sup>) are by withdrawals from ground water and about 5,000 acres (2,000 hm<sup>2</sup>) are by diversions into Marsh Creek basin from Portneuf River through the Marsh Valley Canal (1966 determination). Part of Birch Creek (tributary to Marsh Creek) diverted into Devil Creek in Bear River basin.

AVERAGE DISCHARGE.--24 years, 83.4 ft<sup>3</sup>/s (2.36 m<sup>3</sup>/s), 60,420 acre-ft/yr (74.5 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,120 ft<sup>3</sup>/s (31.7 m<sup>3</sup>/s) Feb. 12, 1962, gage height, 13.25 ft (4.039 m); minimum observed, 20 ft<sup>3</sup>/s (0.57 m<sup>3</sup>/s) Aug. 5, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 205 ft<sup>3</sup>/s (5.81 m<sup>3</sup>/s) Apr. 8, 9, gage height, 4.91 ft (1.497 m); minimum, 25 ft<sup>3</sup>/s (0.71 m<sup>3</sup>/s) July 30, gage height, 3.15 ft (0.960 m); minimum gage height, 2.84 ft (0.866 m) Jan. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	66	86	71	72	83	149	122	71	37	29	63
2	68	67	109	60	75	82	170	128	72	35	26	64
3	66	68	158	64	82	79	154	124	73	36	27	64
4	66	67	117	62	86	81	150	120	72	35	28	64
5	67	68	97	62	88	97	146	119	71	37	30	67
6	68	77	92	94	111	119	147	122	67	38	32	72
7	68	72	93	87	108	102	155	119	59	47	34	72
8	68	70	80	81	131	97	194	117	57	41	35	79
9	68	68	73	79	108	94	195	113	54	39	34	77
10	67	67	82	80	106	102	174	112	48	39	39	78
11	68	69	80	85	132	101	164	114	46	38	45	86
12	68	72	84	90	126	102	159	114	38	37	41	92
13	68	71	88	83	113	111	151	109	33	36	50	89
14	69	71	101	86	108	102	150	104	40	33	67	86
15	68	73	122	103	103	96	150	97	37	32	57	85
16	68	71	107	124	93	96	153	89	40	33	57	85
17	66	70	88	132	83	94	169	95	51	35	54	86
18	65	70	88	119	82	91	153	101	46	35	53	86
19	65	68	86	99	79	92	147	106	43	35	52	85
20	65	64	79	96	84	93	145	101	39	32	54	85
21	64	64	67	94	85	94	142	100	37	32	59	85
22	63	62	69	87	81	100	139	102	36	34	61	81
23	59	74	71	80	79	121	135	103	36	38	59	80
24	63	79	74	73	80	139	132	98	33	36	60	80
25	63	110	76	74	83	124	129	96	30	34	71	76
26	62	157	77	71	86	125	133	98	33	31	70	72
27	63	117	76	71	92	130	131	87	37	29	64	71
28	63	105	73	72	88	132	126	78	37	29	63	70
29	65	98	72	73	---	134	124	76	38	28	61	71
30	69	96	79	72	---	137	122	75	36	25	61	59
31	68	---	81	71	---	140	---	75	---	27	63	---
TOTAL	2046	2351	2725	2595	2644	3290	4493	3214	1410	1073	1536	2310
MEAN	66.0	78.4	87.9	83.7	94.4	106	150	104	47.0	34.6	49.5	77.0
MAX	69	157	158	132	132	140	195	128	73	47	71	92
MIN	59	62	67	60	72	79	122	75	30	25	26	59
AC-FT	4060	4660	5410	5150	5240	6530	8910	6370	2800	2130	3050	4580

CAL YR 1977 TOTAL 23553 MEAN 64.5 MAX 158 MIN 26 AC-FT 46720  
WTR YR 1978 TOTAL 29687 MEAN 81.3 MAX 195 MIN 25 AC-FT 58880

## PORTNEUF RIVER BASIN

13075000 MARSH CREEK NEAR MCCAMMON, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STATION INSTAN- TANFOUS (CFS)	SPE- CIFIC CON- DUCTI- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	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 08...	1600	70	684	7.9	5.0	7.0	340	57	80
JUL 11...	1530	38	* 752	* 8.2	23.0	20.5	330	80	76

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	
NOV 08...	35	50	23	1.2	9.7	350	0	290	52
JUL 11...	35	50	24	1.2	12	310	--	250	56

DATE	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 CONSTIT- UENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FI)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
NOV 08...	61	.1	38	504	.69	95.9	1.3	.08
JUL 11...	53	.3	36	476	.65	48.8	1.0	.06

\* Not a field determination.

PORTNEUF RIVER BASIN

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13075500 PORTNEUF RIVER AT POCATELLO, ID

LOCATION.--Lat 42°52'20", long 112°28'05", in SE¼NW¼ sec.27, T.6 S., R.34 E., Bannock County, Hydrologic Unit 17040208, on left bank 1,400 ft (430 m) downstream from Carson Street Bridge, at Pocatello, 1.2 mi (1.9 km) upstream from Pocatello Creek and at mile 16.8 (27.0 km).

DRAINAGE AREA.--1,250 mi<sup>2</sup> (3,240 km<sup>2</sup>), approximately. Mean altitude, 5,850 ft (1,780 m).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to September 1897, March 1898 to October 1899, August 1911 to current year.

REVISED RECORDS.--WSP 1567: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,418.41 ft (1,346.731 m) National Geodetic Vertical Datum of 1929 (U.S. Corps of Engineers datum). May 18, 1897, to Oct. 14, 1899, nonrecording gage at site 1.6 mi (2.6 km) upstream at different datum. Aug. 31, 1911, to May 13, 1927, and Oct. 13, 1927, to June 13, 1928, nonrecording gage 0.3 mi (0.5 km) upstream at different datum. May 14 to Oct. 12, 1927, water-stage recorder near present site at different datum. June 14, 1928, to Sept. 28, 1950, water-stage recorder near Carson Street Bridge, 0.3 mi (0.5 km) upstream at same datum as former nonrecording gages at this site. Sept. 29, 1950, to May 20, 1968, water-stage recorder at Fremont Street site, 1.0 mi (1.6 km) upstream at datum 18.57 ft (5.660 m) higher.

REMARKS.--Records good. Flow regulated by Portneuf Reservoir formed by earth dam completed in 1912 and raised 7 ft (2.1 m) in 1950 (capacity, 23,695 acre-ft or 29.2 hm<sup>3</sup>; 16,410 acre-ft or 20.2 hm<sup>3</sup> prior to 1950) and Chesterfield Reservoir (capacity, 685 acre-ft or 0.845 hm<sup>3</sup>). Diversions above station for irrigation of about 55,000 acres (22,000 hm<sup>2</sup>) of which about 13,000 acres (5,300 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination).

AVERAGE DISCHARGE.--65 years (1913-16, 1918-78), 268 ft<sup>3</sup>/s (7.590 m<sup>3</sup>/s), 194,200 acre-ft/yr (239 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,990 ft<sup>3</sup>/s (84.7 m<sup>3</sup>/s) Feb. 14, 1962, gage height, 11.35 ft (3.459 m); minimum, 0.4 ft<sup>3</sup>/s (0.011 m<sup>3</sup>/s) July 3, 1961, gage height, 2.90 ft (0.884 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 819 ft<sup>3</sup>/s (23.2 m<sup>3</sup>/s) May 18, gage height, 6.63 ft (2.021 m); maximum gage height, 7.98 ft (2.432 m) Jan. 4 (backwater from ice); minimum discharge, 2.6 ft<sup>3</sup>/s (0.074 m<sup>3</sup>/s) July 13, gage height, 1.80 ft (0.549 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	191	260	210	268	313	766	056	444	112	22	75
2	123	189	300	200	268	312	813	060	417	110	35	72
3	121	189	341	230	275	310	792	088	411	105	35	68
4	125	187	300	260	281	306	736	700	415	103	52	62
5	149	198	275	290	286	330	678	096	407	101	32	60
6	148	209	270	299	312	388	646	070	386	107	45	72
7	151	212	260	325	338	383	640	044	373	100	47	81
8	151	207	230	306	354	366	718	004	367	100	42	79
9	149	209	250	295	358	371	762	078	367	100	33	91
10	157	214	259	299	341	381	760	078	369	96	32	98
11	174	211	259	302	367	394	748	024	360	94	35	98
12	167	216	270	299	386	398	732	054	315	86	42	101
13	167	220	303	315	362	400	712	062	282	20	54	112
14	169	227	340	310	354	377	690	054	245	40	60	113
15	173	232	363	323	347	360	676	090	225	40	108	121
16	169	241	351	325	339	349	698	744	213	44	100	142
17	164	239	292	320	297	349	742	748	202	56	100	153
18	167	243	279	315	286	356	718	794	192	47	93	155
19	171	241	263	310	288	383	662	760	180	60	83	171
20	166	232	263	308	290	417	638	712	161	56	81	178
21	162	220	239	301	295	446	630	072	140	52	79	174
22	158	224	260	295	292	484	624	040	121	51	75	194
23	164	238	289	284	286	546	596	034	114	51	75	200
24	157	259	263	263	288	602	572	024	99	52	70	198
25	155	245	263	265	297	618	556	014	101	56	68	191
26	158	266	268	270	312	614	586	084	103	45	83	185
27	164	349	266	272	326	634	556	050	105	42	84	178
28	167	288	263	265	325	652	676	018	108	45	77	174
29	176	261	266	260	---	666	666	002	109	45	77	180
30	194	240	286	268	---	680	660	064	110	38	74	180
31	194	---	250	265	---	704	---	068	---	45	72	---
TOTAL	4937	6897	8641	8855	8818	13889	20549	19808	7441	2099	1965	3956
MEAN	159	230	279	286	315	448	685	039	248	67.7	63.4	132
MAX	194	349	363	325	386	704	813	794	444	112	108	200
MIN	121	187	230	200	268	306	556	064	99	20	22	60
AC-FT	9790	13680	17140	17560	17490	27550	40760	39290	14760	4160	3900	7850

CAL YR 1977 TOTAL 64422 MEAN 176 MAX 363 MIN 13 AC-FT 127800  
WTR YR 1978 TOTAL 107855 MEAN 295 MAX 813 MIN 20 AC-FT 213900

## PORTNEUF RIVER BASIN

13075500 PORTNEUF RIVER AT POCATELLO, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

REMARKS.--Miscellaneous chemical data published for water years 1968-69.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	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)
NOV 08...	0945	210	*620	8.2	3.5	4.0	360	140	76	41
JUL 14...	1150	42	*615	8.1	--	19.0	260	39	56	28
SEP 28...	1240	17*	723	--	22.0	15.0	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 08...	17	9	.4	11	270	0	220	44	50
JUL 14...	37	23	1.0	8.4	270	0	221	37	42
SEP 28...	--	--	--	--	--	--	--	--	--

DATE	FLUO- RIDF, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTIT- UENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-F-T)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- SUS- PENDED (T/DAY)
NOV 08...	.2	20	459	.62	260	15	.05	152	86
JUL 14...	.3	22	364	.50	41.7	.02	.04	--	--
SEP 28...	--	--	--	--	--	--	--	--	--

\* Not a field determination.

13075900 FORT HALL MICHAUD CANAL NEAR POCATELLO, ID

LOCATION.--Lat 42°56'10", long 112°32'45", in SE¼SW¼ sec.36, T.5 S., R.33 E., Power County, Hydrologic Unit 17040208, Fort Hall Indian Reservation, 5 mi (8 km) downstream from Pocatello Creek and 6 mi (10 km) northwest of Pocatello.

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

GAGE.--Sparling meters at pumping plant.

REMARKS.--Records good. First diversion to this project started April 1964. Flow controlled by pumping plant which lifts water 90 ft (27 m) for irrigation of 8,690 acres (3,520 hm<sup>2</sup>) of land in Bureau of Indian Affairs project. Sparling meters rated by current-meter measurements.

COOPERATION.--Sparling-meter readings furnished by Bureau of Indian Affairs.

AVERAGE DISCHARGE.--15 years, 40.3 ft<sup>3</sup>/s (1.141 m<sup>3</sup>/s), 29,200 acre-ft/yr (36.0 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 224 ft<sup>3</sup>/s (6.34 m<sup>3</sup>/s) July 14, 1969; no flow for many days.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	.00	.00	.00	.00	.00	.00	.00	114	86	171	65
2	.00	.00	.00	.00	.00	.00	.00	.00	117	167	153	65
3	.00	.00	.00	.00	.00	.00	.00	.00	145	167	83	65
4	.00	.00	.00	.00	.00	.00	.00	.00	117	171	86	65
5	.00	.00	.00	.00	.00	.00	.00	.00	114	168	86	81
6	.00	.00	.00	.00	.00	.00	.00	.00	113	182	86	91
7	.00	.00	.00	.00	.00	.00	.00	.00	112	176	81	90
8	.00	.00	.00	.00	.00	.00	.00	.00	111	177	85	89
9	.00	.00	.00	.00	.00	.00	.00	.00	111	177	85	90
10	.00	.00	.00	.00	.00	.00	.00	.00	110	170	86	95
11	.00	.00	.00	.00	.00	.00	.00	.00	110	172	83	76
12	.00	.00	.00	.00	.00	.00	.00	.00	176	172	83	65
13	.00	.00	.00	.00	.00	.00	.00	.00	164	170	83	63
14	.00	.00	.00	.00	.00	.00	.00	81	166	174	85	65
15	.00	.00	.00	.00	.00	.00	.00	120	166	174	84	22
16	.00	.00	.00	.00	.00	.00	.00	120	166	174	84	.00
17	.00	.00	.00	.00	.00	.00	.00	120	166	173	78	.00
18	.00	.00	.00	.00	.00	.00	.00	40	166	172	72	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	162	171	72	57
20	.00	.00	.00	.00	.00	.00	.00	.00	162	172	71	77
21	.00	.00	.00	.00	.00	.00	.00	.00	163	172	80	65
22	.00	.00	.00	.00	.00	.00	.00	.00	163	172	98	65
23	.00	.00	.00	.00	.00	.00	.00	.00	163	172	108	65
24	.00	.00	.00	.00	.00	.00	.00	.00	161	173	106	65
25	.00	.00	.00	.00	.00	.00	.00	.00	162	172	106	24
26	.00	.00	.00	.00	.00	.00	.00	.00	159	171	106	37
27	.00	.00	.00	.00	.00	.00	.00	.00	162	172	106	37
28	.00	.00	.00	.00	.00	.00	.00	.00	163	172	108	19
29	.00	.00	.00	.00	---	.00	.00	.00	163	172	98	19
30	.00	.00	.00	.00	---	.00	.00	78	162	172	74	19
31	.00	---	.00	.00	---	.00	---	117	---	172	65	---
TOTAL	43.00	.00	.00	.00	.00	.00	.00	676.00	4389	5257	2852	1636.00
MEAN	1.39	.000	.000	.000	.000	.000	.000	21.8	146	170	92.0	54.5
MAX	43	.00	.00	.00	.00	.00	.00	120	176	182	171	95
MIN	.00	.00	.00	.00	.00	.00	.00	.00	110	86	65	.00
AC-FT	85	.00	.00	.00	.00	.00	.00	1340	8710	10430	5660	3250
CAL YR 1977	TOTAL	16851.00	MEAN 46.2	MAX 197	MIN .00	AC-FT 33420						
WTP YR 1978	TOTAL	14853.00	MEAN 40.7	MAX 182	MIN .00	AC-FT 29460						

## DIVERSIONS FROM AMERICAN FALLS RESERVOIR

13076400 MICHAUD CANAL AT AMERICAN FALLS, ID

LOCATION.--Lat 42°46'45", long 112°52'20", in SE¼SE¼ sec.30, T.7 S., R.31 E., Power County, Hydrologic Unit 17040209, 800 ft (244 m) downstream from American Falls Dam at American Falls.

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

GAGE.--Sparling meter in pipeline at pumping plant.

REMARKS.--Records good. Flow controlled by pumping plant which lifts water from American Falls Reservoir to point in NE¼ sec.32. Project irrigated 7,450 acres (3,020 hm<sup>2</sup>) from this canal and 3,440 acres (1,390 hm<sup>2</sup>) by pumping from ground water in 1978.

COOPERATION.--Record of pump operation furnished by Falls Irrigation District.

AVERAGE DISCHARGE.--21 years, 30.2 ft<sup>3</sup>/s (0.855 m<sup>3</sup>/s), 21,880 acre-ft/yr (27.0 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 154 ft<sup>3</sup>/s (4.361 m<sup>3</sup>/s) June 16-17, 21-29, 1976; no flow for many days each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	.00	.00	.00	.00	.00	.00	.00	70	148	107	74
2	27	.00	.00	.00	.00	.00	.00	.00	93	148	107	74
3	27	.00	.00	.00	.00	.00	.00	18	68	131	117	72
4	27	.00	.00	.00	.00	.00	.00	25	58	132	117	70
5	27	.00	.00	.00	.00	.00	.00	25	84	132	111	70
6	27	.00	.00	.00	.00	.00	.00	17	84	132	113	68
7	18	.00	.00	.00	.00	.00	.00	.00	84	149	106	57
8	18	.00	.00	.00	.00	.00	.00	19	84	149	106	57
9	18	.00	.00	.00	.00	.00	.00	35	94	149	98	57
10	18	.00	.00	.00	.00	.00	.00	34	94	146	98	57
11	12	.00	.00	.00	.00	.00	.00	34	94	149	98	40
12	.00	.00	.00	.00	.00	.00	.00	34	98	149	85	39
13	.00	.00	.00	.00	.00	.00	.00	61	102	150	85	34
14	.00	.00	.00	.00	.00	.00	.00	61	114	150	85	34
15	.00	.00	.00	.00	.00	.00	.00	61	114	150	85	25
16	.00	.00	.00	.00	.00	.00	.00	61	114	150	77	25
17	.00	.00	.00	.00	.00	.00	.00	52	94	151	77	25
18	.00	.00	.00	.00	.00	.00	.00	45	94	151	66	26
19	.00	.00	.00	.00	.00	.00	.00	.00	128	152	66	26
20	.00	.00	.00	.00	.00	.00	.00	.00	133	152	66	26
21	.00	.00	.00	.00	.00	.00	.00	.00	130	153	91	26
22	.00	.00	.00	.00	.00	.00	.00	36	130	134	91	26
23	.00	.00	.00	.00	.00	.00	.00	42	130	134	87	31
24	.00	.00	.00	.00	.00	.00	.00	42	130	135	87	31
25	.00	.00	.00	.00	.00	.00	.00	52	130	124	87	33
26	.00	.00	.00	.00	.00	.00	.00	52	130	137	76	37
27	.00	.00	.00	.00	.00	.00	.00	52	132	131	76	39
28	.00	.00	.00	.00	.00	.00	.00	52	132	131	76	39
29	.00	.00	.00	.00	---	.00	.00	52	132	106	76	34
30	.00	.00	.00	.00	---	.00	.00	70	148	106	76	31
31	.00	---	.00	.00	---	.00	---	70	---	107	76	---
TOTAL	246.00	.00	.00	.00	.00	.00	.00	1102.00	3232	4318	2769	1283
MEAN	7.94	.000	.000	.000	.000	.000	.000	35.5	108	139	89.3	42.8
MAX	27	.00	.00	.00	.00	.00	.00	70	148	153	117	74
MIN	.00	.00	.00	.00	.00	.00	.00	.00	68	106	66	25
AC-FT	488	.00	.00	.00	.00	.00	.00	2190	6410	8560	5490	2540
CAL YR 1977	TOTAL	11726.00	MEAN	32.1	MAX	147	MIN	.00	AC-FT	23260		
WTR YR 1978	TOTAL	12950.00	MEAN	35.5	MAX	153	MIN	.00	AC-FT	25690		

Snake River Main Stem

13076500 AMERICAN FALLS RESERVOIR AT AMERICAN FALLS, ID

LOCATION.--Lat 42°46'45", long 112°52'45", in SE¼SW¼ sec.30, T.7 S., R.31 E., Power County, Hydrologic Unit 17040206, at outlet gates near right abutment of American Falls Dam on Snake River, at American Falls, and at mile 714.7 (1,150.0 km).

DRAINAGE AREA.--13,580 mi<sup>2</sup> (35,170 km<sup>2</sup>), excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--March 1926 to current year.

GAGE.--Water-stage recorder. Prior to July 11, 1977, water-stage recorder at same datum. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by concrete gravity spillway and dam with earth embankments at each end. Partial storage began in 1926, full storage in 1927. Capacity, 1,700,000 acre-ft (2,096 hm<sup>3</sup>) between elevations 4,295.66 ft (1,309.317 m) and 4,354.50 ft (1,327.252 m). Elevations of bottom of outlet gate is 4,285.00 ft (1,306.068 m) and top of spillway radial gate 4,356.50 ft (1,327.861 m). Dead storage unknown. Water is used for power generation and for irrigation by canals diverting from Snake River at Minidoka and Milner Dams. From 1973-77, due to the condition of the dam, storage was limited to the spillway crest level, 4,343.2 ft (1,323.81 m). Reservoir was emptied in September 1977 to permit completion of the new section of the dam. Storage began on Oct. 14, 1977.

COOPERATION.--Reservoir elevations and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,748,000 acre-ft (2,160 hm<sup>3</sup>) June 21, 1963, elevation, 4,355.34 ft (1,327.508 m); minimum since full capacity was 0 acre-ft (0 hm<sup>3</sup>) Sept. 10 to Oct. 2, Oct. 6-13, 1977; minimum observed gage height, 4,294.90 ft (1,309.086 m) Sept. 14-16.

EXTREMES FOR CURRENT YEAR.--Maximum observed contents, 1,694,000 acre-ft (2,090 hm<sup>3</sup>) May 27, elevation, 4,354.39 ft (1,327.218 m); minimum contents, 0 acre-ft (0 hm<sup>3</sup>) Oct. 1, 2, 6-13; minimum observed gage height, 4,295.43 ft (1,309.247 m) Oct. 1.

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	136300	408300	710000	989100	1198000	1397000	1594000	1676000	1678000	1267000	859500
2	0	146000	417800	716900	997700	1203000	1407000	1601000	1673000	1666000	1254000	844200
3	390	154000	428400	726300	1006000	1208000	1421000	1605000	1669000	1659000	1240000	829000
4	260	161300	438600	734400	1015000	1213000	1428000	1603000	1668000	1650000	1225000	825200
5	90	169200	447700	741800	1026000	1217000	1441000	1605000	1670000	1639000	1213000	814400
6	0	177700	457600	750900	1037000	1222000	1453000	1610000	1674000	1632000	1198000	798100
7	0	186200	466500	761700	1045000	1227000	1460000	1613000	1674000	1624000	1186000	784800
8	0	194600	474700	772600	1054000	1234000	1464000	1617000	1674000	1613000	1173000	777200
9	0	203600	483000	783400	1066000	1244000	1477000	1618000	1669000	1600000	1152000	769700
10	0	213800	491300	794400	1077000	1251000	1485000	1620000	1662000	1585000	1143000	763900
11	0	222800	499700	805500	1085000	1255000	1496000	1618000	1665000	1568000	1125000	760600
12	0	231000	510000	814000	1094000	1260000	1510000	1622000	1667000	1551000	1119000	763900
13	0	240600	521400	821800	1101000	1265000	1518000	1629000	1669000	1537000	1092000	768900
14	3500	248200	533300	831600	1111000	1270000	1524000	1634000	1669000	1522000	1065000	772600
15	10400	254900	544700	843100	1119000	1278000	1536000	1640000	1668000	1506000	1053000	772900
16	18400	265500	556800	852600	1126000	1287000	1545000	1644000	1668000	1490000	1040000	778300
17	2600	276000	566800	859500	1133000	1295000	1553000	1656000	1671000	1476000	1031000	783400
18	34200	284600	575900	870000	1140000	1300000	1559000	1666000	1671000	1466000	1022000	783400
19	41700	293800	587200	879400	1149000	1304000	1560000	1678000	1675000	1458000	1011000	785200
20	49200	302900	597500	886800	1156000	1309000	1558000	1683000	1679000	1445000	1004000	789600
21	55800	312100	606800	894700	1160000	1314000	1559000	1687000	1683000	1432000	998600	791800
22	63300	321200	616200	905800	1165000	1322000	1560000	1689000	1682000	1420000	986500	794800
23	71000	329300	625900	914700	1170000	1329000	1567000	1689000	1682000	1408000	972300	798100
24	79400	338100	635600	922400	1175000	1334000	1570000	1687000	1679000	1395000	961000	799600
25	86100	347800	645200	930900	1180000	1342000	1574000	1689000	1677000	1380000	948900	801800
26	92200	358800	652800	939000	1184000	1351000	1578000	1693000	1676000	1365000	937800	803600
27	100300	369800	661700	947600	1189000	1359000	1579000	1694000	1683000	1347000	926400	801800
28	108100	379600	671700	955600	1194000	1364000	1580000	1690000	1685000	1330000	912300	802200
29	114900	389900	681600	964300	---	1372000	1584000	1684000	1685000	1317000	899000	801000
30	121800	399800	691900	972300	---	1379000	1591000	1679000	1683000	1300000	887200	795100
31	129100	---	702200	980600	---	1387000	---	1678000	---	1281000	872700	---
MAX	129100	399800	702200	980600	1194000	1387000	1591000	1694000	1685000	1678000	1267000	859500
MIN	.00	136300	408300	710000	989100	1198000	1397000	1594000	1662000	1621000	872700	760600
(+)	4309.58	4322.37	4332.60	4339.93	4344.68	4348.63	4352.52	4354.11	4354.19	4346.50	4337.27	4335.22
(+)	+129.1	+270.7	+302.4	+278.4	+213.4	+193	+204	+87	+5	-402	+408.3	-77.6

CAL YR 1977..... ‡ -68.5  
WTR YR 1978..... ‡ +795.1

† Elevation, in feet, at end of month.  
‡ Change in contents, in thousands of acre-feet.

## SNAKE RIVER MAIN STEM

13077000 SNAKE RIVER AT NEELEY, ID

LOCATION.--Lat 42°46'06", long 112°52'42", in NE¼SW¼ sec.31, T.7 S., R.31 E., Power County, Hydrologic Unit 17040209, on right bank 400 ft (122 m) upstream from fish hatchery buildings, 0.9 mi (1.4 km) downstream from American Falls Dam, at mile 713.8 (1,148.5 km). Records computed to show flow at former site in sec.11, T.8 S., R.30 E., 0.5 mi (0.8 km) north of Neeley and 2.5 mi (4.0 km) downstream from present site, by adding inflow between sites. Water-quality sampling site 300 ft (91 m) downstream.

DRAINAGE AREA.--13,600 mi<sup>2</sup> (35,200 km<sup>2</sup>), approximately, excluding indeterminate nontributary area on Snake River Plain.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1906 to current year. Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1317: 1910.

GAGE.--Water-stage recorder. Datum of gage is 4,241.6 ft (1,292.840 m) National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to Aug. 8, 1910, nonrecording gages and Aug. 8, 1910, to June 6, 1930, water-stage recorder at site 2.5 mi (4.0 km) downstream at different datum. June 7, 1930, to Mar. 19, 1945, water-stage recorder at site 0.4 mi (0.6 km) upstream at datum 0.4 ft (0.12 m) higher.

REMARKS.--Records excellent. Flow regulated by American Falls Reservoir (see sta 13076500) and other reservoirs, having a combined usable capacity of 4,600,000 acre-ft (5,670 hm<sup>3</sup>). Diversions above station for irrigation of about 1,080,000 acres (437,000 hm<sup>2</sup>) of which about 228,000 acres (92,000 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Considerable water leaks into the Snake Plain aquifer above the station some of which returns above American Falls Reservoir.

AVERAGE DISCHARGE.--52 years (1927-78), 7,171 ft<sup>3</sup>/s (203.1 m<sup>3</sup>/s), 5,195,000 acre-ft/yr (6,405 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 48,400 ft<sup>3</sup>/s (1,370 m<sup>3</sup>/s) June 20, 1918, gage height, 13.5 ft (4.11 m), site and datum then in use; minimum, 50 ft<sup>3</sup>/s (1.42 m<sup>3</sup>/s) Oct. 22, 23, Nov. 14-16, 1941, Oct. 29, 1961, Nov. 6, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,100 ft<sup>3</sup>/s (428 m<sup>3</sup>/s) July 31, gage height, 7.24 ft (2.207 m); minimum discharge, 53 ft<sup>3</sup>/s (1.50 m<sup>3</sup>/s) Feb. 7, gage height, 1.28 ft (0.390 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3710	184	177	190	500	2500	5080	11400	9060	12500	12000	9760
2	3870	114	181	190	495	2500	5390	11600	9380	13000	11900	9570
3	4090	290	181	190	500	2500	4990	11900	9380	13300	12100	9380
4	4220	294	181	187	495	2500	4920	12300	9380	13200	12000	9010
5	4090	298	181	194	500	2500	4920	12500	7740	13200	11800	8740
6	4090	302	184	201	500	2470	5120	12500	8740	12500	11800	8040
7	3900	306	184	190	278	2500	4920	12400	10200	11500	11800	7360
8	3840	306	184	190	201	2500	4890	12400	10400	11800	11900	7160
9	3750	310	184	190	201	2520	4890	12400	10300	12100	12000	6960
10	3810	286	184	190	302	2720	5640	12400	10300	12100	12000	6760
11	3900	218	184	194	466	2870	6520	12500	10100	12000	12100	6180
12	3960	208	187	197	466	2870	6840	12400	10300	12000	12200	5180
13	3930	208	187	194	689	2970	6560	12400	10600	11800	12300	4530
14	2810	211	184	194	908	2930	6680	12400	10500	11500	12300	4400
15	704	215	190	208	1180	2900	6760	11500	10200	11300	12200	4500
16	500	215	194	310	1400	2900	6800	9910	9670	11600	11700	4530
17	613	215	194	452	1380	2900	8080	10400	8700	11600	11300	4510
18	393	204	190	466	1380	2970	9570	11000	8610	11500	10700	4490
19	318	184	190	466	1380	2970	10600	13000	8610	11800	10400	4510
20	310	184	190	471	1380	2970	11100	14000	8520	12400	10100	4500
21	302	184	190	471	1540	2930	11200	13800	9060	12500	10200	4500
22	298	194	194	471	1810	2970	11100	13800	9870	12400	10300	4590
23	294	194	194	471	1810	2970	11000	13800	10200	12200	10400	4550
24	290	190	194	471	1810	3000	10900	13800	10900	12200	10300	4630
25	286	190	194	471	1810	3000	10900	13800	11200	12200	10400	4620
26	274	194	194	476	1810	3030	10900	13700	10900	12300	10400	4630
27	274	190	190	490	2190	3510	10800	13700	10100	12100	10400	4610
28	282	184	187	495	2500	3960	11000	13700	11300	12300	10300	4640
29	286	177	190	500	---	4060	11000	13400	12000	12000	10300	4620
30	282	177	194	500	---	5020	11000	12100	11900	12000	9910	4600
31	239	---	190	500	---	4460	---	9910	---	12200	9910	---
TOTAL	59915	6626	5822	10380	29881	93370	240070	386820	298120	377100	347420	176060
MEAN	1933	221	188	335	1067	3012	8002	12480	9937	12160	11210	5869
MAX	4220	310	194	500	2500	5020	11200	14000	12000	13300	12300	9760
MIN	239	114	177	187	201	2470	4890	9910	7740	11300	9910	4400
AC-FT	118800	13140	11550	20590	59270	185200	476200	767300	591300	748000	689100	349200
CAL YR 1977	TOTAL	1830533	MEAN	5015	MAX	11600	MIN	114	AC-FT	3631000		
WTR YR 1978	TOTAL	2031584	MEAN	5566	MAX	14000	MIN	114	AC-FT	4030000		

SNAKE RIVER MAIN STEM

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13077000 SNAKE RIVER AT NEELEY, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-71, 1973 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: July 1977 to current year.

INSTRUMENTATION.--Temperature recorder since July 8, 1977.

REMARKS.--Miscellaneous chemical data published for water years 1966, 1968-69. No temperature record Oct. 15 to Dec. 14, May 20-30 due to equipment malfunction and prove out of water.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURES: Maximum, 23.0°C Aug. 2-5, 1978.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 23.0°C Aug. 3-5; minimum, 0.5°C Dec. 19, 21.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)
OCT 27...	1300	300	617	7.0	22.0	10.5	20	11.8	123	22
NOV 29...	1145	200	537	* 8.3	4.0	3.0	9	12.8	110	24
DEC 21...	1530	190	* 564	* 8.2	-4.0	1.0	8	13.8	114	180
JAN 25...	1200	466	535	8.6	2.0	2.0	5	13.3	113	32
FEB 22...	1120	1840	422	7.9	.5	1.5	6	13.2	110	12
MAR 20...	1410	2690	* 490	8.1	14.5	4.5	6	12.5	112	15
APR 24...	1215	11100	* 466	7.7	15.0	8.5	5	11.6	115	11
MAY 31...	1930	8780	447	8.5	17.0	12.5	2	9.5	104	8
JUN 20...	1700	8700	388	8.4	22.0	16.0	1	7.0	82	25
AUG 03...	1200	12600	343	8.7	23.0	22.5	3	9.4	125	19
SEP 11...	1330	6000	336	8.7	16.5	18.0	2	7.9	97	72

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CU3)	ALKALINITY (MG/L AS CACU3)	SILICA, DISSOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-F T)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C. SUSPENDED (MG/L)
OCT 27...	--	180	0	148	23	348	.47	282	36
NOV 29...	450	--	--	--	24	347	.47	187	14
DEC 21...	150	--	--	--	25	349	.47	179	20
JAN 25...	76	200	12	184	21	331	.45	416	--
FEB 22...	K10	240	0	197	19	296	.40	1470	27
MAR 20...	K2	210	0	172	16	286	.39	2080	19
APR 24...	K1	170	0	139	13	269	.37	8060	20
MAY 31...	K2	180	5	156	9.5	241	.33	5710	7
JUN 20...	K7	170	5	148	9.2	243	.33	5710	20
AUG 03...	K11	140	10	131	9.7	217	.30	7380	17
SEP 11...	K130	140	17	143	16	223	.30	3610	12

\* Not a field determination.

K Results based on count outside ideal colony count range.

## SNAKE RIVER MAIN STEM

13077000 SNAKE RIVER AT NEELEY, ID--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 27...	.49	.01	.76	.77	1.3	5.6	.15	4	<10
NOV 29...	.81	.21	.89	1.1	1.9	8.5	.11	4	0
DEC 21...	.72	.08	.46	.54	1.3	5.6	.11	4	6
JAN 25...	.42	.01	.52	.59	1.0	4.5	.09	4	1
FEB 22...	.33	.01	.46	.47	.80	3.5	.04	3	0
MAR 20...	.23	.05	.50	.55	.78	3.5	.06	2	1
APR 24...	.00	.06	.60	.66	.66	2.9	.03	4	3
MAY 31...	.01	.04	.25	.29	.30	1.3	.02	4	8
JUN 20...	.00	.00	.15	.15	.15	.66	.04	3	7
AUG 03...	.02	.00	.64	.64	.66	2.9	.01	3	2
SEP 11...	.04	.47	.53	1.0	1.0	4.6	.10	4	1

DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PR)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	OIL AND GREASE (MG/L)
OCT 27...	10	<10	530	<100	.3	0	30	2.4	0
NOV 29...	0	6	270	5	.4	1	30	1.4	0
DEC 21...	0	8	300	9	.1	1	50	2.2	0
JAN 25...	0	4	150	4	.7	0	20	3.0	0
FEB 22...	0	2	160	5	.0	1	10	2.7	0
MAR 20...	10	3	250	0	.0	1	10	--	--
APR 24...	0	4	310	23	.1	0	10	2.1	0
MAY 31...	10	6	80	53	.0	0	10	1.9	0
JUN 20...	0	9	340	34	.1	0	10	2.2	0
AUG 03...	10	5	100	8	.0	0	10	4.2	0
SEP 11...	10	3	230	14	.1	0	0	7.1	0



## RAFT RIVER BASIN

13077700 GEORGE CREEK NEAR YOST, UT

LOCATION.--Lat 41°55'07", long 113°28'51", in SE¼SW¼SW¼ sec.20, T.14 N., R.14 W., Box Elder County, Hydrologic Unit 17040201, on right bank 1,000 ft (305 m) upstream from section corner and boundary of Sawtooth National Forest, 4.5 mi (7.2 km) southeast of Yost, 5 mi (8 km) south of Utah-Idaho State line, and 16 mi (26 km) southwest of Strevell, Idaho.

DRAINAGE AREA.--7.84 mi<sup>2</sup> (20.31 km<sup>2</sup>).

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,000 ft (2,134 m) from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--19 years, 7.49 ft<sup>3</sup>/s (0.212 m<sup>3</sup>/s), 5,426 acre-ft/yr (6.69 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 146 ft<sup>3</sup>/s (4.13 m<sup>3</sup>/s) June 10, 1963, gage height, 1.96 ft (0.597 m); minimum, 1.0 ft<sup>3</sup>/s (0.03 m<sup>3</sup>/s) July 14, 15, 16, 17, 18, 19, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 103 ft<sup>3</sup>/s (2.92 m<sup>3</sup>/s) June 9, gage height, 2.01 ft (0.613 m); minimum observed, 1.8 ft<sup>3</sup>/s (0.051 m<sup>3</sup>/s) Dec. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.1	1.8	1.8	1.8	2.0	12	13	37	25	8.2	3.0
2	2.3	2.0	1.8	1.8	1.8	2.0	9.2	13	39	21	8.5	2.9
3	2.3	2.0	1.8	1.8	1.8	2.0	7.7	15	44	20	7.3	3.0
4	2.3	2.0	1.8	1.8	1.8	2.0	6.7	18	53	16	6.8	3.2
5	2.3	2.0	1.8	1.8	1.8	2.0	5.0	17	58	14	6.9	3.3
6	2.3	2.0	1.8	1.8	2.0	2.0	4.6	17	63	13	6.4	4.1
7	2.3	2.0	1.8	1.8	2.0	2.0	4.6	18	65	11	6.2	3.3
8	2.3	2.0	1.8	1.8	2.0	2.0	5.0	19	62	8.7	6.1	3.2
9	2.3	2.0	1.8	1.8	2.0	2.0	5.0	23	68	8.2	6.0	3.1
10	2.3	2.0	1.8	1.8	2.0	2.0	5.5	26	84	8.2	6.0	3.8
11	2.3	2.0	1.8	1.8	2.0	2.0	5.5	31	75	8.2	5.4	3.9
12	2.3	2.0	1.8	1.8	2.0	2.0	6.3	34	63	8.2	5.4	3.3
13	2.3	2.0	1.8	1.8	2.0	2.0	6.7	38	72	8.2	7.0	3.1
14	2.3	2.0	1.8	1.8	2.0	2.0	7.2	40	84	8.2	6.2	3.1
15	2.0	2.0	1.8	1.8	2.0	2.0	7.7	41	83	8.2	5.8	3.0
16	2.0	2.0	1.8	1.8	2.0	2.0	8.2	39	74	8.2	5.9	3.0
17	2.0	2.0	1.8	1.8	2.0	2.0	8.7	29	57	8.2	5.4	2.8
18	2.0	2.0	1.8	1.8	2.0	2.3	8.2	23	47	8.2	5.2	3.1
19	2.0	2.0	1.8	1.8	2.0	2.5	8.2	22	45	8.2	4.4	3.1
20	2.0	2.0	1.8	1.8	2.0	2.9	8.7	22	51	8.2	4.6	3.0
21	2.0	2.0	1.8	1.8	2.0	3.4	9.2	24	62	8.2	4.5	3.0
22	2.0	2.0	1.8	1.8	2.0	5.5	9.9	33	68	8.2	4.1	2.7
23	2.0	2.0	1.8	1.8	2.0	5.0	9.2	30	64	8.2	4.0	2.6
24	2.0	2.0	1.8	1.8	2.0	5.0	9.2	28	54	8.2	3.9	2.5
25	2.0	2.0	1.8	1.8	2.0	4.6	9.9	34	45	8.2	3.4	2.5
26	2.0	2.0	1.8	1.8	2.0	5.0	11	29	39	8.2	3.5	2.4
27	2.0	1.8	1.8	1.8	2.0	5.9	11	27	31	8.2	3.3	2.4
28	2.0	1.8	1.8	1.8	2.0	6.7	11	28	26	7.7	3.2	2.2
29	2.0	1.8	1.8	1.8	---	7.2	11	33	30	8.2	3.2	2.3
30	2.0	1.8	1.8	1.8	---	7.2	12	40	29	8.2	3.1	2.3
31	2.0	---	1.8	1.8	---	9.2	---	38	---	8.7	3.2	---
TOTAL	66.2	59.3	55.8	55.8	55.2	106.4	244.1	842	1672	317.3	163.6	89.2
MEAN	2.14	1.98	1.80	1.80	1.97	3.43	8.14	27.2	55.7	10.2	5.28	2.97
MAX	2.3	2.1	1.8	1.8	2.0	9.2	12	41	84	25	8.5	4.1
MIN	2.0	1.8	1.8	1.8	1.8	2.0	4.6	13	26	7.7	3.1	2.2
AC-FT	131	118	111	111	109	211	484	1670	3320	629	325	177

CAL YR 1977 TOTAL 1444.8 MEAN 3.96 MAX 37 MIN 1.4 AC-FT 2870  
WTR YR 1978 TOTAL 3726.9 MEAN 10.2 MAX 84 MIN 1.8 AC-FT 7390

13078205 RAFT RIVER BELOW ONEMILE CREEK, NEAR MALTA, ID

LOCATION.--Lat 42°04'13", long 113°26'37", in NW¼SE¼SW¼ sec.32, T.15 S., R.26 E., Cassia County, Hydrologic Unit 17040210, Bureau of Land Management lands, on left bank 64 ft (19.5 m) downstream from county road crossing, 300 ft (91.4 m) downstream from Onemile Creek, 16 miles (26 km) southwest of Malta, and at mile 44.3 (71.3 km).

DRAINAGE AREA.--433 mi<sup>2</sup> (1,121 km<sup>2</sup>). Mean altitude, 6,300 ft (1,920 m).

PERIOD OF RECORD.--September 1946 to December 1953, May 1955 to June 1971, October 1975 to current year. Records since October 1975 equivalent to earlier records published as "at Peterson Ranch, near Bridge" (station 13078000) except for unusually heavy rainstorm runoff from Onemile Creek drainage.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,510 m), from topographic map. Prior to October 1975 at site 0.4 mi (0.6 km) upstream at different datum.

REMARKS.--Records fair. Diversions above station for irrigation of about 16,000 acres (6,500 hm<sup>2</sup>), 1966 determination.

AVERAGE DISCHARGE.--25 years, 17.2 ft<sup>3</sup>/s (0.49 m<sup>3</sup>/s), 12,460 acre-ft/yr (15.4 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,060 ft<sup>3</sup>/s (58.3 m<sup>3</sup>/s) Jan. 17, 1971, gage height, 5.51 ft (1.679 m), site and datum then in use; minimum, 0.8 ft<sup>3</sup>/s (0.02 m<sup>3</sup>/s) Jan. 23, 1961, gage height, 1.02 ft (0.311 m), site and datum then in use, result of ice jam upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 68 ft<sup>3</sup>/s (1.93 m<sup>3</sup>/s) Apr. 8, gage height, 3.54 ft (1.079 m); minimum daily, 6.5 ft<sup>3</sup>/s (1.18 m<sup>3</sup>/s) Oct. 8, 9, Aug. 21.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

2.7	5.7	3.2	32
2.9	12	3.6	72

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	6.9	15	15	19	24	48	32	29	12	8.3	8.3
2	6.7	6.8	17	13	19	23	51	32	26	12	8.6	8.0
3	6.6	7.2	16	14	19	25	47	35	40	10	7.7	7.1
4	6.6	7.1	17	16	19	26	45	33	40	12	7.1	6.8
5	6.6	8.3	15	17	21	27	44	37	38	12	7.7	7.1
6	6.7	8.3	15	16	20	28	42	39	37	12	7.7	8.9
7	6.7	8.6	16	15	21	28	46	45	41	12	8.0	8.3
8	6.5	8.3	15	15	21	27	61	45	40	12	7.4	7.4
9	6.5	8.3	14	16	21	26	56	42	37	11	7.4	7.4
10	6.7	8.9	14	17	21	28	53	29	34	9.6	7.7	7.7
11	6.7	9.3	15	17	23	28	49	30	40	9.3	8.3	8.0
12	6.8	9.6	17	18	21	28	45	30	32	9.6	8.0	8.6
13	6.8	12	17	17	20	28	43	32	25	9.6	8.0	9.6
14	6.8	12	17	18	22	27	44	38	23	11	8.0	8.6
15	6.8	13	18	18	21	25	42	37	29	10	7.7	9.3
16	7.0	13	19	19	20	25	42	35	28	10	7.1	8.6
17	7.0	13	17	19	18	25	44	46	24	10	7.1	8.0
18	6.8	13	17	19	20	25	41	48	20	10	7.4	8.0
19	7.0	12	14	18	22	23	40	48	19	9.6	7.1	8.6
20	7.2	11	13	18	23	25	37	43	22	10	6.8	7.1
21	7.4	12	12	18	23	30	33	33	21	9.6	6.5	8.3
22	7.2	13	14	18	23	42	34	40	19	9.6	6.8	8.3
23	7.4	14	15	17	23	55	32	45	16	9.6	7.1	8.3
24	7.3	15	16	15	24	50	31	50	15	9.6	6.8	8.3
25	7.3	15	15	15	25	47	29	52	14	9.6	7.1	8.3
26	7.5	18	15	18	24	43	29	46	15	9.3	7.1	8.3
27	7.7	17	15	18	24	43	32	44	17	8.6	7.4	8.3
28	7.6	17	16	17	24	43	33	40	15	8.9	7.4	8.0
29	7.6	16	16	18	---	41	35	35	13	9.3	7.7	8.3
30	7.8	15	17	18	---	40	34	38	13	9.3	8.0	8.3
31	7.6	---	17	18	---	42	---	41	---	8.9	8.3	---
TOTAL	217.7	348.6	486	525	601	997	1242	1220	782	316.0	233.3	244.1
MEAN	7.02	11.6	15.7	16.9	21.5	32.2	41.4	39.4	26.1	10.2	7.53	8.14
MAX	7.8	18	19	19	25	55	61	52	41	12	8.6	9.6
MIN	6.5	6.8	12	13	18	23	29	29	13	8.6	6.5	6.8
AC-FT	432	691	964	1040	1190	1980	2460	2420	1550	627	463	484
CAL YR 1977 TOTAL	4725.7											
WTR YR 1978 TOTAL	7212.7											
MEAN	12.9											
MAX	36											
MIN	5.3											
AC-FT	9370											
MEAN	19.8											
MAX	61											
MIN	6.5											
AC-FT	14310											

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

## SNAKE RIVER MAIN STEM

13080000 NORTH SIDE MINIDOKA CANAL NEAR MINIDOKA, ID

LOCATION.--Lat 42°40'15", long 113°29'00", in SE¼NW¼ sec.1, T.9 S., R.25 E., Minidoka County, Hydrologic Unit 17040209, on left bank 600 ft (180 m) downstream from headgates at Minidoka Dam and 6 mi (10 km) south of Minidoka.

PERIOD OF RECORD.--April 1908 to September 1978 (discontinued). Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 4,180.33 ft (1,274.165 m) National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). April to November 1910 at datum 0.08 ft (0.024 m) higher.

REMARKS.--Records excellent. Flow controlled by headgates. Canal diverts water from Lake Walcott at right end of Minidoka Dam for irrigation of 64,000 acres (25,900 hm<sup>2</sup>) under North Side Minidoka project. Diversion began in June 1907.

COOPERATION.--Gage-height record furnished by Bureau of Reclamation. Discharge record after July 1, 1978, furnished by Water District 01.

AVERAGE DISCHARGE.--37 years (1942-78), 608 ft<sup>3</sup>/s (17.22 m<sup>3</sup>/s), 440,500 acre-ft/yr (543 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,920 ft<sup>3</sup>/s (54.4 m<sup>3</sup>/s) July 14-18, 1969, June 26, 27, July 14-23, 1971; no flow for many days each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	351	.00	.00	.00	.00	.00	.00	835	1380	1740	1260	977
2	328	.00	.00	.00	.00	.00	.00	966	1400	1740	1250	977
3	331	.00	.00	.00	.00	.00	.00	1040	1330	1730	1250	977
4	336	.00	.00	.00	.00	.00	.00	1150	1160	1660	1230	977
5	346	.00	.00	.00	.00	.00	.00	1180	1030	1610	1180	975
6	347	.00	.00	.00	.00	.00	.00	1140	941	1610	1130	767
7	351	.00	.00	.00	.00	.00	.00	1090	943	1610	1260	603
8	360	.00	.00	.00	.00	.00	.00	1070	1030	1610	1300	501
9	363	.00	.00	.00	.00	.00	.00	1040	1180	1580	1310	473
10	370	.00	.00	.00	.00	.00	.00	1160	1260	1550	1430	441
11	375	.00	.00	.00	.00	.00	.00	1180	1270	1550	1440	345
12	151	.00	.00	.00	.00	.00	.00	1180	1280	1570	1320	296
13	.00	.00	.00	.00	.00	.00	.00	1180	1280	1610	1230	296
14	.00	.00	.00	.00	.00	.00	.00	1180	1280	1630	1210	295
15	.00	.00	.00	.00	.00	.00	.00	1210	1240	1640	1200	293
16	.00	.00	.00	.00	.00	.00	.00	1320	1140	1600	1180	291
17	.00	.00	.00	.00	.00	.00	43	1300	1140	1470	1090	291
18	.00	.00	.00	.00	.00	.00	146	1130	1130	1400	989	291
19	.00	.00	.00	.00	.00	.00	192	1030	1100	1480	945	291
20	.00	.00	.00	.00	.00	.00	251	1010	1100	1500	945	291
21	.00	.00	.00	.00	.00	.00	279	1000	1130	1530	1090	293
22	.00	.00	.00	.00	.00	.00	280	1000	1230	1390	1250	299
23	.00	.00	.00	.00	.00	.00	280	1060	1350	1310	1290	312
24	.00	.00	.00	.00	.00	.00	317	1130	1430	1450	1270	312
25	.00	.00	.00	.00	.00	.00	387	1140	1490	1470	1200	349
26	.00	.00	.00	.00	.00	.00	499	1140	1580	1430	1150	415
27	.00	.00	.00	.00	.00	.00	652	1110	1640	1470	1120	456
28	.00	.00	.00	.00	.00	.00	688	1060	1650	1380	1160	476
29	.00	.00	.00	.00	---	.00	742	1160	1690	1180	1170	485
30	.00	.00	.00	.00	---	.00	760	1240	1720	1130	1170	495
31	.00	---	.00	.00	---	.00	---	1310	---	1260	1080	---
TOTAL	4009.00	.00	.00	.00	.00	.00	5516.00	34741	38524	46890	37099	14540
MEAN	129	.000	.000	.000	.000	.000	.000	184	1121	1284	1513	485
MAX	375	.00	.00	.00	.00	.00	.00	760	1320	1720	1740	977
MIN	.00	.00	.00	.00	.00	.00	.00	.00	835	941	1130	291
AC-FT	7950	.00	.00	.00	.00	.00	.00	10940	68910	76410	93010	28840
CAL YR 1977	TOTAL	177715.00	MEAN	487	MAX	1790	MIN	.00	AC-FT	352500		
WTR YR 1978	TOTAL	181319.00	MEAN	497	MAX	1740	MIN	.00	AC-FT	359600		

13080500 SOUTH SIDE MINIDOKA CANAL NEAR MINIDOKA, ID

LOCATION.--Lat 42°39'45", long 113°29'20", in NW¼NW¼ sec.12, T.9 S., R.25 E., Cassia County, Hydrologic Unit 17040209, on right bank 900 ft (270 m) downstream from headgates at Minidoka Dam and 6 mi (10 km) south of Minidoka.

PERIOD OF RECORD.--April 1908 to September 1978 (discontinued). Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1347: 1910.

GAGE.--Water-stage recorder. Datum of gage is 4,184 ft (1,275 m) National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to 1910 at site 600 ft (180 m) upstream at same datum.

REMARKS.--Records good. Flow controlled by headgates. Canal diverts water from Lake Walcott at left end of Minidoka Dam for irrigation of 56,000 acres (23,000 hm<sup>2</sup>) under South Side Minidoka project. Diversion began in April 1908.

COOPERATION.--Gage-height record furnished by Bureau of Reclamation. Discharge record after July 1, 1978, furnished by water district 01.

- AVERAGE DISCHARGE.--37 years (1942-78), 483 ft<sup>3</sup>/s (13.68 m<sup>3</sup>/s), 349,900 acre-ft/yr (431 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,490 ft<sup>3</sup>/s (42.2 m<sup>3</sup>/s) July 12-16, 1967, July 11-20, 1969; no flow for many days each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	278	.00	.00	.00	.00	.00	.00	276	1030	1360	1060	878
2	275	.00	.00	.00	.00	.00	.00	320	1080	1370	1070	839
3	278	.00	.00	.00	.00	.00	.00	370	1080	1380	1070	826
4	280	.00	.00	.00	.00	.00	.00	483	1080	1400	1130	826
5	281	.00	.00	.00	.00	.00	.00	515	1070	1420	1160	823
6	278	.00	.00	.00	.00	.00	.00	509	1060	1410	1150	746
7	281	.00	.00	.00	.00	.00	.00	506	1070	1410	1140	616
8	284	.00	.00	.00	.00	.00	.00	504	1070	1410	1140	534
9	294	.00	.00	.00	.00	.00	.00	599	1080	1410	1150	539
10	296	.00	.00	.00	.00	.00	.00	746	1090	1410	1160	446
11	297	.00	.00	.00	.00	.00	.00	814	1090	1400	1150	300
12	162	.00	.00	.00	.00	.00	.00	814	1090	1400	1150	304
13	.00	.00	.00	.00	.00	.00	.00	810	1100	1400	1140	308
14	.00	.00	.00	.00	.00	.00	33	826	1100	1400	1080	308
15	.00	.00	.00	.00	.00	.00	88	927	1110	1390	1000	310
16	.00	.00	.00	.00	.00	.00	88	982	1110	1380	941	313
17	.00	.00	.00	.00	.00	.00	89	931	1100	1360	894	313
18	.00	.00	.00	.00	.00	.00	88	917	1100	1370	852	318
19	.00	.00	.00	.00	.00	.00	136	891	1090	1370	830	315
20	.00	.00	.00	.00	.00	.00	231	891	1090	1350	833	315
21	.00	.00	.00	.00	.00	.00	192	894	1100	1330	874	315
22	.00	.00	.00	.00	.00	.00	112	894	1220	1300	897	315
23	.00	.00	.00	.00	.00	.00	102	897	1330	1270	887	315
24	.00	.00	.00	.00	.00	.00	170	897	1370	1230	871	317
25	.00	.00	.00	.00	.00	.00	275	897	1370	1220	865	317
26	.00	.00	.00	.00	.00	.00	132	900	1370	1250	881	338
27	.00	.00	.00	.00	.00	.00	212	904	1360	1250	881	379
28	.00	.00	.00	.00	.00	.00	235	904	1350	1210	881	432
29	.00	.00	.00	.00	---	.00	238	907	1350	1140	881	473
30	.00	.00	.00	.00	---	.00	235	904	1360	1090	884	446
31	.00	---	.00	.00	---	.00	---	927	---	1060	884	---
TOTAL	3284.00	.00	.00	.00	.00	.00	2656.00	23556	34870	41150	30786	13824
MEAN	106	.000	.000	.000	.000	.000	88.5	760	1162	1327	993	461
MAX	297	.00	.00	.00	.00	.00	275	982	1370	1420	1160	878
MIN	.00	.00	.00	.00	.00	.00	.00	276	1030	1060	830	300
AC-FT	6510	.00	.00	.00	.00	.00	5270	46720	69160	81620	61060	27420
CAL YR 1977	TOTAL	146887.00	MEAN	402	MAX	1370	MIN	.00	AC-FT	291400		
WTR YR 1978	TOTAL	150126.00	MEAN	411	MAX	1420	MIN	.00	AC-FT	297800		

## SNAKE RIVER MAIN STEM

13081000 LAKE WALCOTT NEAR MINIDOKA, ID

LOCATION.--Lat 42°40'15", long 113°29'00", near center of sec.1, T.9 S., R.25 E., Minidoka County, Hydrologic Unit 17040209, on south wall in powerhouse at Minidoka Dam on Snake River, 6 mi (10 km) southeast of Minidoka, and at mile 675.0 (1,086.1 km).

DRAINAGE AREA.--15,700 mi<sup>2</sup> (40,700 km<sup>2</sup>), approximately, excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--April 1909 to current year.

GAGE.--Nonrecording gage. Datum of gage is Bureau of Reclamation datum, which is 49.52 ft (15.094 m) lower than National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by rock-fill dam with concrete core; storage began in 1906. Capacity, 107,240 acre-ft (132 hm<sup>3</sup>) between elevations 4,236.00 ft (1,291.133 m), sill of powerhouse penstock, and 4,246.00 ft (1,294.181 m), top of flashboards. Dead storage below elevation 4,236.00 ft (1,291.133 m) about 115,000 acre-ft (142 hm<sup>3</sup>). Water used for power development and irrigation on Minidoka project of Bureau of Reclamation. Contents given herein are above elevation 4,236.00 ft (1,291.133 m). Figures of daily contents computed from daily readings.

COOPERATION.--Daily elevations and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 110,700 acre-ft (136 hm<sup>3</sup>) Aug. 8, 1922, elevation, 4,246.28 ft (1,294.266 m); minimum, -101,410 acre-ft (125 hm<sup>3</sup>) Nov. 17, 1941, elevation, 4,215.19 ft (1,284.790 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 105,000 acre-ft (129 hm<sup>3</sup>) Apr. 18, 19, elevation, 4,245.85 ft (1,294.135 m); minimum observed, 38,700 acre-ft (47.7 hm<sup>3</sup>) Oct. 1, elevation, 4,239.88 ft (1,292.315 m).

Capacity table (elevation, in feet, and contents, in acre-feet)

4,237.0	9,540
4,240.0	40,000
4,244.0	83,500
4,246.0	107,200

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38700	86800	84000	76800	52700	51800	83500	99800	98200	86200	99200	99900
2	42300	86600	82600	77300	52000	53500	87300	99400	95800	86800	99500	100500
3	45800	86400	83400	76900	51000	53600	91500	99500	95800	88200	99500	100500
4	50300	85900	83100	76000	51400	54600	95200	101000	95700	89700	99500	100200
5	54700	85900	81700	75300	51000	54800	93300	101000	95900	93200	99000	99500
6	58900	85400	82400	74300	49700	55400	93100	103000	92900	95600	98900	99600
7	61900	85400	81300	73400	49300	56900	91600	102000	92900	97600	98800	99300
8	66800	84500	81100	73600	48400	57600	90500	102000	95000	98600	98000	99400
9	70300	84900	81400	74000	48200	58000	88900	101000	97400	100400	97800	100400
10	73800	85000	81100	73800	47400	58300	88000	101000	96600	101200	97600	100000
11	77200	84900	80400	73500	46500	60100	88800	100000	98000	100600	97400	99400
12	81100	84200	79900	73500	45200	61300	91100	100000	98800	101000	96900	99800
13	85900	84200	80600	72000	45900	61800	93400	99500	98800	101100	96900	100600
14	91500	83800	80300	70700	44500	62200	95100	99800	100000	101000	97400	99900
15	94000	83200	80600	69400	43600	64000	97600	99500	100700	100000	98600	98300
16	93900	83100	78800	70500	43700	65200	99500	98100	101600	98800	100000	96400
17	92900	83300	79700	69200	45900	66600	99600	95700	101000	97400	100200	96600
18	92600	83500	79000	68500	46100	67200	105000	95800	99400	97000	101400	94200
19	91900	83800	79900	67900	45700	68300	105000	97400	97600	95000	101900	95700
20	91100	83500	79700	67400	45800	69000	103000	98700	96900	94200	101900	95400
21	90600	83500	79000	66600	46000	70300	100000	100100	95200	94400	101400	95100
22	90300	83300	78800	65400	46100	71200	104000	100600	94500	95200	101000	95000
23	90100	83500	78500	67000	46900	71600	103000	100800	93700	96200	100200	94700
24	89500	84500	77900	66100	48000	71600	103000	100600	91900	96900	99800	95000
25	89200	84200	78100	65200	48700	72700	102000	101300	89200	97100	99200	95000
26	89100	83200	78400	63300	49500	73200	101000	101400	89600	97700	99000	95400
27	89200	84700	78400	61700	50500	73400	102000	101400	88200	98200	98800	95400
28	88800	83200	77900	60300	51100	74100	99500	101200	85900	98000	99200	94700
29	88300	84400	77400	58200	---	75600	99800	101200	85800	98200	99400	93600
30	86800	83800	77100	56600	---	77700	100000	101400	86000	98400	99900	92400
31	86800	---	76800	54800	---	82100	---	101400	---	98900	99600	---
MAX	94000	86800	84000	77300	52700	82100	105000	103000	101600	101200	101900	100600
MIN	38700	83100	76800	54800	43600	51800	83500	95700	85800	86200	96900	92400
(+)	4244.28	4244.02	4243.40	4241.40	4241.05	4243.87	4245.40	4245.52	4244.21	4245.31	4245.37	4244.76
(+)	+62700	-3000	-7000	-22000	-3700	+31000	+17900	+1400	-15400	+12900	+700	-7200

CAL YR 1977..... ‡ +39500

WTR YR 1978..... ‡ +68300

‡ Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

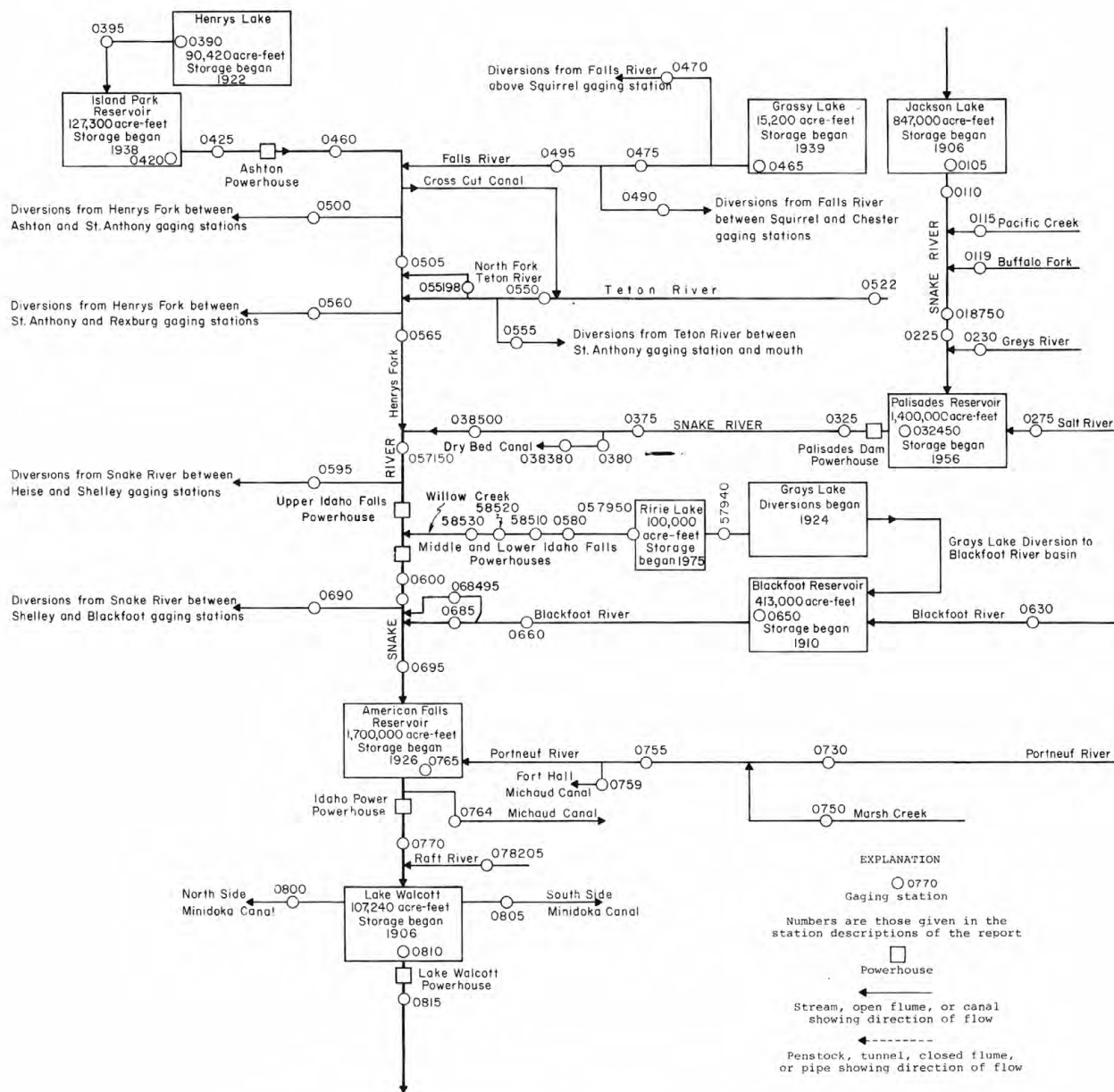


FIGURE 7.---Gaging stations in upper Snake River basin between Jackson Lake and Minidoka.

## SNAKE RIVER MAIN STEM

13081500 SNAKE RIVER NEAR MINIDOKA, ID

LOCATION.--Lat 42°40'23", long 113°29'58", in SW¼NE¼ sec.2, T.9 S., R.25 E., Minidoka County, Hydrologic Unit 17040209, on right bank 1 mi (2 km) downstream from Minidoka Dam, 6 mi (10 km) south of Minidoka, and at mile 673.5 (1,083.7 km).

DRAINAGE AREA.--15,700 mi<sup>2</sup> (40,700 km<sup>2</sup>), approximately, excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--August 1895 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "below Minidoka dam, at Howell's Ferry" 1911. Records for August 1895 to Apr. 20, 1910, at site 6 mi (10 km) downstream "at Montgomery Ferry."

REVISED RECORDS.--WSP 1347: 1911.

GAGE.--Water-stage recorder. Datum of gage is 4,132.2 ft (1,259.49 m) National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Apr. 21, 1910, nonrecording gage at site 6 mi (10 km) downstream at different datum. Apr. 21, 1910, to Aug. 28, 1911, nonrecording gage at present site and datum.

REMARKS.--Records good. Flow regulated by American Falls Reservoir (see sta 13076500), Lake Walcott (see sta 13081000) and other reservoirs, having a combined usable capacity of about 4,700,000 acre-ft (5,800 hm<sup>3</sup>). Diversions above station for irrigation of about 128,000 acres (51,800 hm<sup>2</sup>) below and about 1,200,000 acres (486,000 hm<sup>2</sup>) above station of which about 304,000 acres (123,000 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Considerable water leaks into the Snake Plain aquifer above station.

AVERAGE DISCHARGE.--52 years (1927-78), 6,182 ft<sup>3</sup>/s (175.1 m<sup>3</sup>/s), 4,479,000 acre-ft/yr (5,520 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft<sup>3</sup>/s (1,350 m<sup>3</sup>/s) May 29, 30, 1897, gage height, 12.6 ft (3.84 m), former site and datum; minimum, 37 ft<sup>3</sup>/s (1.05 m<sup>3</sup>/s) Jan. 28, Feb. 4, 11, 18, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,000 ft<sup>3</sup>/s (368 m<sup>3</sup>/s) May 23, gage height, 8.73 ft (2.661 m); minimum, 80 ft<sup>3</sup>/s (2.27 m<sup>3</sup>/s) Jan. 16, gage height, 1.43 ft (0.436 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	409	552	89	1070	2130	3050	10200	8850	9170	9240	7640
2	1320	373	525	556	1090	2210	3110	10300	7980	9360	9250	7630
3	1290	430	530	1110	1030	2250	2760	10700	7840	9470	9260	7560
4	1230	463	107	870	1010	2240	4200	10900	7870	9230	9240	7440
5	1150	469	505	777	1010	2250	5200	11200	7930	9160	9160	7240
6	1070	470	447	761	969	2270	5440	11300	7700	9030	9140	6680
7	1040	488	377	451	1020	2250	5470	11500	7700	8050	9210	6030
8	1040	453	570	84	1080	2260	5450	11600	7810	8430	9220	5570
9	1130	454	423	146	1020	2120	5410	11400	8070	8940	9200	5630
10	1140	475	413	458	1010	2300	5360	11300	8280	9450	9300	5310
11	1200	426	87	454	1020	2300	5630	11400	8250	9190	9500	5150
12	958	353	400	1120	1130	2340	5460	11300	8190	9330	9510	4310
13	785	356	490	1010	1260	2370	5470	11200	7980	9270	9480	3850
14	845	352	279	974	1190	2720	5550	11200	8130	9150	9490	3890
15	864	372	625	84	1210	2500	5690	10500	8220	9020	9210	3720
16	817	372	649	1000	1150	2380	5850	9280	8130	9200	9140	3830
17	757	351	477	1040	1550	2380	6010	9100	7750	9430	9180	3790
18	695	350	106	1030	1670	2380	8340	9160	7560	9600	8940	3880
19	680	356	516	1020	1650	2400	10300	10500	7450	9610	8630	3720
20	664	355	490	1040	1660	2430	10900	12200	7360	9600	8510	3720
21	568	359	682	973	1650	2410	10800	12300	7390	9550	8490	3640
22	483	364	594	86	1660	2580	10900	12400	7680	9450	8460	3570
23	485	355	553	1030	1650	2690	10900	12600	8180	9440	8430	3540
24	485	350	477	1140	1630	2740	10900	12800	8630	9420	8370	3530
25	457	355	87	1260	1670	2690	10500	12700	8840	9420	8330	3480
26	470	394	474	1660	1670	2690	10400	12800	8420	9450	8290	3480
27	488	369	491	1620	1920	2910	10300	12800	8420	9410	8350	3480
28	475	374	461	1620	2130	3000	10300	12800	8190	9490	8140	3780
29	474	384	431	1630	---	2940	10200	12500	8440	9490	8070	4010
30	480	374	515	1610	---	2970	10200	11300	8990	9280	7920	4020
31	465	---	531	1610	---	3010	---	9920	---	9150	7710	---
TOTAL	25365	11805	13864	28313	37779	77110	220050	351160	242230	287240	274370	143120
MEAN	818	394	447	913	1349	2487	7335	11330	8074	9266	8851	4771
MAX	1360	488	682	1660	2130	3010	10900	12800	8990	9610	9510	7640
MIN	457	350	87	84	969	2120	2760	9100	7360	8050	7710	3480
AC-FT	50310	23420	27500	56160	74930	152900	436500	696500	480500	569700	544200	283900
CAL YR 1977 TOTAL		1537664	MEAN	4213	MAX	8830	MIN	87	AC-FT	3050000		
WTR YR 1978 TOTAL		1712406	MEAN	4692	MAX	12800	MIN	84	AC-FT	3397000		

13081500 SNAKE RIVER NEAR MINIDOKA, ID--Continued

## WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: May 1977 to current year.

INSTRUMENTATION.--Temperature recorder since May 20, 1977.

REMARKS.--No temperature record Oct. 17 to Jan. 24, Feb. 16 to Mar. 20 due to equipment malfunction.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURES: Maximum, 23.5°C July 30, Aug. 10, 1978.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 23.5°C July 30, Aug. 10.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)
OCT						FEB					
08...	1720	1000	--	2.0	--	23...	1015	1670	574	2.0	2.0
18...	1030	724	540	10.5	9.5	MAK					
18...	1500	712	580	22.0	11.0	21...	1143	2400	--	12.0	9.0
19...	0900	682	535	10.0	9.5	APR					
19...	1430	682	532	20.0	11.0	26...	--	10400	--	11.0	--
20...	0900	664	543	8.0	10.0	MAY					
20...	1430	664	535	15.0	11.0	22...	2025	12300	--	27.0	--
NOV						JUN					
05...	1315	489	--	2.0	1.5	17...	--	7600	--	29.5	17.0
DEC											
14...	0830	88	--	3.5	2.0						



SNAKE RIVER MAIN STEM

159

13082030 SNAKE RIVER NEAR BURLEY, ID

LOCATION.--Lat 42°37'12", long 113°35'19", in SW¼SW¼ sec.19, T.9 S., R.25 E., Minidoka County, Hydrologic Unit 17040209, at old Highway 30 bridge, 3.8 mi (6.1 km) east of Rupert, and at mile 668.6 (1,076 km).

DRAINAGE AREA.--Not determined.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)
OCT 20...	0930	799	515	8.5	12.5	10.5	4	12.2	125	17
NOV 30...	1215	390	*545	*8.3	7.5	3.0	2	13.0	111	10
DEC 22...	1000	2560	539	*8.2	.0	.5	6	11.8	95	5
JAN 25...	1715	2360	531	8.4	3.0	1.5	4	12.9	107	22
FEB 23...	0830	1660	570	7.8	.0	1.5	4	12.5	104	5
MAR 21...	0915	2390	473	8.1	11.0	5.0	6	11.2	102	0
APR 24...	1530	11700	483	8.5	17.0	10.0	6	11.1	114	17
JUN 01...	1000	9690	428	8.5	15.5	13.0	3	9.1	100	9
JUN 21...	0930	7690	399	8.6	18.0	17.5	2	8.2	99	25
AUG 04...	1340	9730	410	8.7	22.5	22.5	4	8.8	116	23
SEP 12...	0930	4030	364	8.3	9.0	14.0	4	7.8	88	20

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	BICARBONATE (MG/L AS HC03)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CAC03)	SILICA, DISSOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 20...	30	230	--	189	22	317	.43	684	27
NOV 30...	K3	--	--	--	22	333	.45	351	8
DEC 22...	K2	--	--	--	23	338	.46	2340	13
JAN 25...	24	210	5	181	21	319	.43	2030	9
FEB 23...	77	210	0	172	19	321	.44	1440	22
MAR 21...	77	220	0	180	15	301	.41	1940	12
APR 24...	87	180	10	164	12	270	.37	8530	26
JUN 01...	25	170	5	148	9.1	247	.34	6460	4
JUN 21...	--	180	10	164	8.5	246	.33	5110	20
AUG 04...	K24	180	12	168	9.1	226	.31	5940	9
SEP 12...	59	180	0	148	14	223	.30	2430	17

\* Not a field determination.

K Results based on count outside ideal colony count range.

## SNAKE RIVER MAIN STEM

13082030 SNAKE RIVER NEAR BURLEY, ID--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT									
20...	.49	.08	.16	.24	.73	3.2	.06	4	10
NOV									
30...	.67	.04	.24	.28	.95	4.2	.05	4	0
DEC									
22...	.56	.04	.25	.32	.88	3.9	.07	3	0
JAN									
25...	.41	.03	.02	.05	.46	2.0	.08	3	0
FEB									
23...	.15	.03	.41	.44	.59	2.6	.05	3	0
MAR									
21...	.08	.04	.34	.38	.46	2.0	.05	1	1
APR									
24...	.00	.01	1.6	1.6	1.6	7.1	.04	3	3
JUN									
01...	.01	.03	.24	.32	.33	1.5	.02	4	3
21...	.00	.00	.53	.53	.53	2.3	.05	3	12
AUG									
04...	.01	.00	.62	.62	.63	2.8	.05	3	2
SEP									
12...	.13	.05	.56	.61	.74	3.3	.04	4	3

DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	OIL AND GREASE (MG/L)
OCT									
20...	5	<10	160	<100	.1	0	4	--	0
NOV									
30...	0	3	100	3	.5	1	20	1.5	0
DEC									
22...	0	5	140	6	.0	0	10	1.5	0
JAN									
25...	10	6	140	3	.0	0	10	1.5	0
FEB									
23...	0	4	110	6	.0	1	10	2.6	0
MAR									
21...	0	2	170	5	.0	2	10	2.1	0
APR									
24...	0	3	440	26	.1	0	10	2.7	0
JUN									
01...	10	5	180	22	.1	0	10	2.5	0
21...	0	7	780	35	.1	0	10	2.7	0
AUG									
04...	0	7	320	12	.0	0	20	3.2	--
SEP									
12...	0	4	320	12	.1	0	0	3.7	0

13082500 GOOSE CREEK ABOVE TRAPPER CREEK, NEAR OAKLEY, ID

LOCATION.--Lat 42°07'30", long 113°56'20", in sec.13, T.15 S., R.21 E., Cassia County, Hydrologic Unit 17040211, on right bank 0.2 mi (0.3 km) upstream from maximum flow line of Oakley Reservoir, 5 mi (8 km) upstream from Trapper Creek, 5 mi (8 km) south of Oakley Dam, 9 mi (14.5 km) southwest of Oakley, and at mile 35.1 (56.5 km).

DRAINAGE AREA.--633 mi<sup>2</sup> (1,640 km<sup>2</sup>). Mean altitude, 6,030 ft (1,837.9 m).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1911 to September 1916, March 1919 to current year. Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1567: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,770 ft (1,453.9 m), by barometer. Prior to Aug. 29, 1912, at site 200 ft (61.0 m) downstream at different datum.

REMARKS.--Records good. Deeded water rights are reported to apply to about 2,700 acres (1,090 hm<sup>2</sup>) above station. Diversions for irrigation are made as flow permits to a major part of this acreage. Flow of artesian well, completed in 1935, enters below station. Pumps on four wells above and one below gage may occasionally discharge into the channel. Practically entire flow passing station is stored in Oakley Reservoir (see sta 13083500).

AVERAGE DISCHARGE.--64 years, 46.6 ft<sup>3</sup>/s (1.32 m<sup>3</sup>/s), 33,760 acre-ft/yr (41.63 hm<sup>3</sup>).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,240 ft<sup>3</sup>/s (91.8 m<sup>3</sup>/s) Feb. 11, 1962, gage height, 9.3 ft (2.83 m), from rating curve extended above 200 ft<sup>3</sup>/s (5.66 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow July 22 to Aug. 10, Aug. 22-30, 1934, Aug. 15 to Oct. 3, 1935, July 22 to Sept. 25, 1940, Sept. 14, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 223 ft<sup>3</sup>/s (6.32 m<sup>3</sup>/s) May 6, gage height, 3.35 ft (1.021 m); minimum, 2.9 ft<sup>3</sup>/s (0.082 m<sup>3</sup>/s) Nov. 11, gage height, 1.10 ft (0.335 m), result of freezeup.

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Stage-discharge relation affected by ice Nov. 9, 10, 18-21, Dec. 10, 19-21)

1.2	4.4	2.0	40
1.3	6.3	2.5	94
1.5	12	3.0	164
1.7	20	3.5	265

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	22	28	21	33	39	133	181	97	13	12	12
2	14	23	28	36	32	38	142	185	81	8.0	9.8	11
3	13	22	29	37	34	39	143	189	80	9.8	9.2	11
4	14	21	34	31	33	41	137	192	95	17	11	10
5	15	22	32	35	35	44	136	208	90	16	10	11
6	16	21	30	35	35	47	124	221	84	18	11	17
7	16	21	29	34	36	48	122	194	76	18	11	35
8	16	20	25	29	37	47	131	189	69	18	9.2	32
9	15	19	21	35	37	46	134	165	67	17	9.2	24
10	15	16	22	35	38	49	122	152	67	15	9.2	20
11	15	19	25	34	39	49	115	146	69	11	9.2	22
12	15	25	35	33	39	52	116	152	66	6.8	8.6	22
13	15	25	32	31	32	55	123	176	63	6.3	9.2	23
14	16	23	32	33	35	53	131	178	51	6.1	11	21
15	18	22	35	35	35	48	136	178	46	6.5	12	20
16	20	22	35	40	34	46	136	176	43	8.6	11	18
17	20	20	32	39	22	46	146	191	41	8.3	11	18
18	20	21	35	38	30	45	149	189	40	8.0	12	19
19	20	19	23	37	40	46	142	174	40	8.8	13	22
20	21	17	21	37	39	50	134	156	41	10	11	25
21	21	15	18	36	42	57	133	140	37	12	11	25
22	21	16	21	35	40	72	130	136	22	10	12	24
23	22	23	25	32	39	89	129	139	20	14	11	23
24	21	32	35	21	38	96	124	148	19	14	10	23
25	21	35	38	30	39	99	120	157	23	13	11	22
26	21	35	40	40	39	94	124	154	22	11	10	22
27	21	32	35	36	41	93	139	140	22	11	10	21
28	21	32	34	32	39	99	157	123	20	12	10	20
29	21	31	35	31	---	106	171	112	19	14	10	20
30	21	30	36	28	---	112	176	105	14	14	11	20
31	22	---	32	35	---	122	---	97	---	13	11	---
TOTAL	563	703	932	1041	1012	1967	4055	5043	1524	368.2	326.6	613
MEAN	18.2	23.4	30.1	33.6	36.1	63.5	135	163	50.8	11.9	10.5	20.4
MAX	22	35	40	40	42	122	176	221	97	18	13	35
MIN	13	15	18	21	22	38	115	97	14	6.1	8.6	10
AC-FT	1120	1390	1850	2060	2010	3900	8040	10000	3020	730	648	1220
CAL YR 1977 TOTAL	9598.6	MEAN 26.3	MAX 94	MIN 5.0	AC-FT 19040							
WTR YR 1978 TOTAL	18147.8	MEAN 49.7	MAX 221	MIN 6.1	AC-FT 36000							



GOOSE CREEK BASIN

163

13083000 TRAPPER CREEK NEAR OAKLEY, ID

LOCATION.--Lat 42°10'10", long 113°58'20", in sec.34, T.14 S., R.21 E., Cassia County, Hydrologic Unit 17040211, on left bank 4 mi (6.4 km) upstream from Oakley Dam, 7 mi (11.3 km) southwest of Oakley, and at mile 3.0 (4.8 km).

DRAINAGE AREA.--53.7 mi<sup>2</sup> (139 km<sup>2</sup>). Mean altitude, 6,360 ft (1,938 m).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1911 to September 1916, March 1919 to current year. Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1063: 1941, 1943. WSP 1567: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,820 ft or 1,469 m (by barometer). Prior to Sept. 1, 1912, water-stage recorder at approximately present site at different datum, Apr. 8, 1913, to Sept. 30, 1916, and Mar. 28, 1919, to Aug. 15, 1931, at site 1 mi (1.6 km) upstream at different datum. Sept. 1, 1912, to Apr. 7, 1913, nonrecording gage at site 0.8 mi (1.3 km) downstream at different datum.

REMARKS.--Records good. A few small diversions above station. Flow of artesian well, completed in 1936, enters above. Practically entire flow passing station is stored in Oakley Reservoir (see sta 13083500).

AVERAGE DISCHARGE.--64 years, 15.0 ft<sup>3</sup>/s (0.425 m<sup>3</sup>/s) 10,870 acre-ft/yr (13.4 hm<sup>3</sup>/hr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 270 ft<sup>3</sup>/s (7.65 m<sup>3</sup>/s) Aug. 17, 1941, gage height, 6.99 ft (2.13 m) during cloudburst, from rating curve extended above 100 ft<sup>3</sup>/s (2.83 m<sup>3</sup>/s) on basis of velocity-area studies and peak flow over weir (a higher flow may have occurred during cloudburst Aug. 15, 1931); minimum discharge, 1.3 ft<sup>3</sup>/s (0.037 m<sup>3</sup>/s) Jan. 1, 1970, gage height, 4.53 ft (1.38 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 45 ft<sup>3</sup>/s (1.27 m<sup>3</sup>/s) May 4-6, 11-13, 15, 16, gage height, 5.27 ft (1.606 m); minimum, 3.8 ft<sup>3</sup>/s (0.108 m<sup>3</sup>/s) Feb. 17.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

4.8	8.3	5.3	48
4.9	13.5	5.5	71
5.1	28.5		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	12	12	13	15	31	39	29	17	12	12
2	11	13	13	14	13	15	32	40	28	17	11	12
3	11	12	13	13	13	15	30	40	29	17	11	12
4	11	12	15	13	13	15	33	42	28	18	11	12
5	11	12	13	13	13	16	31	42	27	17	11	14
6	11	12	13	13	14	17	30	42	26	17	11	23
7	11	12	13	13	14	16	32	39	25	17	11	14
8	11	12	13	13	14	17	32	37	25	16	11	13
9	11	12	12	13	14	17	31	35	25	16	11	13
10	12	12	13	13	15	18	29	41	25	15	11	14
11	12	12	13	13	15	17	29	40	25	15	11	14
12	12	12	13	13	14	18	29	41	24	14	11	13
13	12	12	13	13	13	17	30	41	24	14	12	13
14	12	12	15	13	14	17	30	41	24	14	12	13
15	12	12	18	15	13	16	29	44	24	14	12	13
16	12	12	16	14	13	16	31	44	23	14	12	13
17	12	12	15	14	13	16	33	42	23	13	12	13
18	12	12	14	14	14	17	30	41	22	13	12	14
19	12	12	14	14	14	18	29	38	22	13	12	14
20	12	11	10	14	14	19	30	36	21	13	11	13
21	12	11	14	14	14	20	32	36	21	13	11	13
22	12	14	15	13	14	23	30	37	20	13	11	12
23	12	12	14	12	14	23	30	37	19	12	11	12
24	12	12	14	13	14	24	30	36	19	12	11	12
25	12	14	14	13	15	22	31	35	19	12	11	12
26	12	16	13	13	15	23	33	34	19	12	11	13
27	12	14	13	13	15	25	35	32	19	12	11	13
28	13	13	13	13	15	26	35	31	18	13	11	12
29	13	13	13	13	---	27	36	30	18	13	11	12
30	13	13	14	13	---	29	38	29	17	12	11	13
31	13	---	13	13	---	31	---	29	---	12	12	---
TOTAL	367	373	421	410	389	605	941	1171	688	440	350	396
MEAN	11.8	12.4	13.6	13.2	13.9	19.5	31.4	37.8	22.9	14.2	11.3	13.2
MAX	13	16	18	15	15	31	38	44	29	18	12	23
MIN	11	11	10	12	13	15	29	29	17	12	11	12
AC-FT	728	740	835	813	772	1200	1870	2320	1360	873	694	785

CAL YR 1977 TOTAL 4866.4 MEAN 13.3 MAX 40 MIN 8.6 AC-FT 9650  
WTR YR 1978 TOTAL 6551.0 MEAN 17.9 MAX 44 MIN 10 AC-FT 12990



GOOSE CREEK BASIN

165

13083500 OAKLEY RESERVOIR NEAR OAKLEY, ID

LOCATION.--Lat 42°11'50", long 113°54'50", in sec.19, T.14 S., R.22 E., Cassia County, Hydrologic Unit 17040211, just upstream from right abutment of Oakley Dam on Goose Creek, 4 mi (6.4 km) southwest of Oakley, and at mile 29.9 (48.1 km).

DRAINAGE AREA.--729 mi<sup>2</sup> (1,888 km<sup>2</sup>).

PERIOD OF RECORD.--October 1912 to current year.

REVISED RECORDS.--WSP 1567: Drainage area.

GAGE.--Nonrecording gage. Altitude of gage is 4,630 ft (1,410 m), by barometer.

REMARKS.--Reservoir is formed by earth dam constructed in 1911-13; storage began in 1911. Usable capacity, 74,350 acre-ft (91.7 hm<sup>3</sup>) between gage heights 0.0, bottom of diversion tunnel, and 136.0 ft (41.5 m) crest of spillway. Dead storage negligible. Water is used for irrigation of lands along Goose Creek in Oakley Canal Co. project. Figures given herein represent usable contents.

COOPERATION.--Gage readings and capacity table furnished by Oakley Canal Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 74,600 acre-ft (92.0 hm<sup>3</sup>) June 15, 1921, gage height, 136.2 ft (41.5 m); reservoir drained at close of irrigation season in 1915, 1919-20, 1926, 1933, 1950, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 48,900 acre-ft (60.3 hm<sup>3</sup>) May 22, 30, gage height, 110.85 ft (33.79 m); minimum observed, 21,800 acre-ft (26.9 hm<sup>3</sup>) Oct. 10, gage height, 74.5 ft (22.71 m).

Capacity table (gage height, in feet, and contents, in acre-feet)

70.0	19,300	100.0	39,800
80.0	25,200	110.0	48,200
90.0	32,100	120.0	57,200

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	44400	---	---	30200	---
2	---	---	---	27300	---	---	---	---	---	---	---	---
3	---	23200	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	25500	---	---	---	---	---	---	---	---	---
6	---	---	---	---	30000	32500	37700	---	48100	---	---	---
7	---	23400	---	---	---	32400	---	---	---	---	29200	---
8	---	---	---	---	---	---	---	46600	---	---	---	---
9	---	---	---	27900	---	---	---	---	---	---	---	---
10	21800	---	---	---	---	---	38700	---	---	37800	---	---
11	---	---	---	---	---	---	---	---	---	---	---	25500
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	39500	---	---	---	---	---
14	---	23700	26300	---	---	33100	---	---	46100	36000	28200	25600
15	---	---	---	28300	---	---	---	47800	---	---	27900	---
16	---	---	26200	---	31000	---	---	---	---	---	---	---
17	22200	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	40800	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	25700
20	---	---	---	---	---	33900	---	---	44800	---	---	---
21	---	---	---	---	---	---	41600	---	---	---	27300	---
22	---	---	---	---	---	---	---	48900	---	---	---	---
23	---	---	---	29000	---	---	---	48700	---	---	---	---
24	22500	---	---	---	---	---	42400	---	---	32500	---	---
25	---	---	---	---	---	---	---	---	---	---	---	25900
26	---	---	---	29100	---	---	---	---	43000	---	---	---
27	---	---	27200	---	---	---	---	---	43100	---	---	---
28	---	24900	---	---	31700	---	---	---	---	---	26400	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	25100	---	---	---	---	44100	48900	41200	---	---	25700
31	23000	---	27200	24500	---	36000	---	48700	---	30800	26000	---
MAX	23000	25100	27200	29500	31700	36000	44100	---	---	---	30200	---
MIN	---	---	---	---	---	---	---	---	41200	30800	26000	---
(†)	76.4	---	83.1	86.5	---	95.2	---	110.6	101.8	88.3	81.25	80.7
(‡)	+1600	+2100	+2100	+2300	+2200	+4300	+8100	+4600	-7500	-10400	-4800	-300

CAL YR 1977..... † -14800  
WTR YR 1978..... ‡ +1100

† Gage height, in feet, at end of month.  
‡ Change in contents, in acre-feet.

## DIVERSIONS FROM SNAKE RIVER BETWEEN GOOSE CREEK AND SNAKE RIVER AT MILNER

13085500 MINIDOKA NORTH SIDE PUMP CANAL NEAR BURLEY, ID

LOCATION.--Lat 42°32'01", long 113°56'49", in SW¼SW¼ sec.24, T.10 S., R.21 E., Jerome County, Hydrologic Unit 17040209, at head of canal, 4 mi (6.4 km) east of Milner, and 8 mi (12.9 km) west of Burley.

PERIOD OF RECORD.--October 1956 to September 1978 (discontinued).

GAGE.--Sparling meter at pumping plant.

REMARKS.--Records good. Flow controlled by pumping plant which lifts water from Snake River for irrigation of 14,500 acres (5,870 hm<sup>2</sup>) of land in Minidoka North Side project.

COOPERATION.--Record of pump operation and 7 discharge measurements furnished by A and B Irrigation District. Discharge record after July 1, 1978, furnished by Water District 01.

AVERAGE DISCHARGE.--22 years, 72.2 ft<sup>3</sup>/s (2.045 m<sup>3</sup>/s), 52,310 acre-ft/yr (64.5 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 275 ft<sup>3</sup>/s (7.79 m<sup>3</sup>/s) July 15-24, 1975; no flow for many days each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	.00	.00	.00	.00	.00	.00	35	158	270	228	125
2	48	.00	.00	.00	.00	.00	.00	51	158	270	239	113
3	48	.00	.00	.00	.00	.00	.00	60	155	270	238	113
4	47	.00	.00	.00	.00	.00	.00	65	155	263	233	117
5	47	.00	.00	.00	.00	.00	.00	66	132	249	215	109
6	45	.00	.00	.00	.00	.00	.00	64	131	248	214	83
7	43	.00	.00	.00	.00	.00	.00	64	130	252	214	53
8	.00	.00	.00	.00	.00	.00	.00	68	125	249	218	47
9	.00	.00	.00	.00	.00	.00	.00	86	136	247	230	37
10	.00	.00	.00	.00	.00	.00	.00	104	147	246	231	37
11	.00	.00	.00	.00	.00	.00	.00	108	147	248	231	.00
12	.00	.00	.00	.00	.00	.00	.00	127	160	260	232	.00
13	.00	.00	.00	.00	.00	.00	.00	142	165	259	217	.00
14	.00	.00	.00	.00	.00	.00	.00	142	167	259	209	32
15	.00	.00	.00	.00	.00	.00	.00	160	166	255	206	27
16	.00	.00	.00	.00	.00	.00	.00	175	159	253	198	27
17	.00	.00	.00	.00	.00	.00	.00	165	160	252	185	.00
18	.00	.00	.00	.00	.00	.00	.00	166	161	242	182	.00
19	.00	.00	.00	.00	.00	.00	.00	160	167	234	174	.00
20	.00	.00	.00	.00	.00	.00	.00	160	162	245	175	.00
21	.00	.00	.00	.00	.00	.00	.00	160	177	248	177	.00
22	.00	.00	.00	.00	.00	.00	.00	163	198	247	175	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	166	216	247	.00
24	.00	.00	.00	.00	.00	.00	38	163	212	240	180	41
25	.00	.00	.00	.00	.00	.00	43	164	213	240	176	43
26	.00	.00	.00	.00	.00	.00	42	151	228	239	167	36
27	.00	.00	.00	.00	.00	.00	42	151	233	231	168	37
28	.00	.00	.00	.00	.00	.00	37	151	241	231	160	40
29	.00	.00	.00	.00	---	.00	33	151	257	230	154	44
30	.00	.00	.00	.00	---	.00	32	151	271	229	151	44
31	.00	---	.00	.00	---	.00	---	158	---	223	141	---
TOTAL	326.00	.00	.00	.00	.00	.00	267.00	3897	5287	7676	6099	1205.00
MEAN	10.5	.000	.000	.000	.000	.000	8.90	126	176	248	197	40.2
MAX	48	.00	.00	.00	.00	.00	43	175	271	270	239	125
MIN	.00	.00	.00	.00	.00	.00	.00	35	125	223	141	.00
AC-FT	647	.00	.00	.00	.00	.00	530	7730	10490	15230	12100	2390
CAL YR 1977	TOTAL	27450.00	MEAN 75.2	MAX 280	MIN .00	AC-FT 54450						
WTR YR 1978	TOTAL	24757.00	MEAN 67.8	MAX 271	MIN .00	AC-FT 49110						

DIVERSIONS FROM SNAKE RIVER BETWEEN GOOSE CREEK AND SNAKE RIVER AT MILNER

167

13085800 P. A. LATERAL NEAR MILNER, ID

LOCATION.--Lat 42°32'10", long 113°58'20", in SE¼SE¼ sec.22, T.10 S., R.21 E., Jerome County, Hydrologic Unit 17040209, on left bank 600 ft (180 m) downstream from pumping station, 2.8 mi (4.5 km) northeast of Milner, and 9 mi (14 km) west of Burley.

PERIOD OF RECORD.--October 1915 to September 1978 (discontinued). Monthly discharges only for some periods, published in WSP 1317.

GAGE.--Nonrecording gage read daily. Altitude of gage is 4,196 ft (1,279 m), river survey.

REMARKS.--Records good. Flow regulated by pumping plant which lifts water 65.3 ft (19.90 m) from Snake River for irrigation on North Side Twin Falls tract.

COOPERATION.--Gage-height record furnished by North Side Canal Co. Discharge furnished by Water District 01 after July 1, 1978.

AVERAGE DISCHARGE.--30 years (1949-78), 25.4 ft<sup>3</sup>/s (0.722 m<sup>3</sup>/s), 18,400 acre-ft/yr (22.7 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge observed, 82 ft<sup>3</sup>/s (2.32 m<sup>3</sup>/s) July 11, 1973; no flow for many days each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	16	55	71	64	53
2	.00	.00	.00	.00	.00	.00	.00	16	55	71	64	53
3	.00	.00	.00	.00	.00	.00	.00	17	56	72	69	53
4	.00	.00	.00	.00	.00	.00	.00	33	56	72	69	53
5	.00	.00	.00	.00	.00	.00	.00	33	56	73	69	53
6	.00	.00	.00	.00	.00	.00	.00	33	56	73	63	53
7	.00	.00	.00	.00	.00	.00	.00	33	56	74	63	50
8	.00	.00	.00	.00	.00	.00	.00	41	58	74	63	10
9	.00	.00	.00	.00	.00	.00	.00	44	58	74	63	.00
10	.00	.00	.00	.00	.00	.00	.00	44	58	74	63	.00
11	.00	.00	.00	.00	.00	.00	.00	55	55	75	63	.00
12	.00	.00	.00	.00	.00	.00	.00	57	55	75	63	.00
13	.00	.00	.00	.00	.00	.00	.00	57	55	76	66	.00
14	.00	.00	.00	.00	.00	.00	.00	57	47	76	66	.00
15	.00	.00	.00	.00	.00	.00	.00	57	47	77	65	.00
16	.00	.00	.00	.00	.00	.00	.00	57	50	77	65	.00
17	.00	.00	.00	.00	.00	.00	.00	57	56	77	65	.00
18	.00	.00	.00	.00	.00	.00	.00	57	56	77	59	.00
19	.00	.00	.00	.00	.00	.00	.00	57	56	77	59	18
20	.00	.00	.00	.00	.00	.00	.00	59	56	77	59	18
21	.00	.00	.00	.00	.00	.00	.00	59	52	75	59	18
22	.00	.00	.00	.00	.00	.00	.00	59	52	74	59	18
23	.00	.00	.00	.00	.00	.00	.00	59	50	73	59	18
24	.00	.00	.00	.00	.00	.00	.00	47	50	73	59	18
25	.00	.00	.00	.00	.00	.00	.00	47	52	73	58	18
26	.00	.00	.00	.00	.00	.00	.00	54	52	73	58	.00
27	.00	.00	.00	.00	.00	.00	.00	54	55	72	58	.00
28	.00	.00	.00	.00	.00	.00	.00	54	64	72	58	.00
29	.00	.00	.00	.00	---	.00	13	54	67	70	53	.00
30	.00	.00	.00	.00	---	.00	16	54	71	65	53	.00
31	.00	---	.00	.00	---	.00	---	55	---	65	53	---
TOTAL	.00	.00	.00	.00	.00	.00	29.00	1476	1662	2277	1907	504.00
MEAN	.0000	.0000	.0000	.0000	.0000	.0000	.97	47.6	55.4	73.5	61.5	16.8
MAX	.00	.00	.00	.00	.00	.00	16	59	71	77	69	53
MIN	.00	.00	.00	.00	.00	.00	.00	16	47	65	53	.00
AC-FT	.00	.00	.00	.00	.00	.00	58	2930	3300	4520	3780	1000
CAL YR 1977	TOTAL	9691.00	MEAN 26.6	MAX 78	MIN .00	AC-FT 19220						
WTP YR 1978	TOTAL	7855.00	MEAN 21.5	MAX 77	MIN .00	AC-FT 15580						

## DIVERSIONS FROM SNAKE RIVER BETWEEN GOOSE CREEK AND SNAKE RIVER AT MILNER

13086000 MILNER LOW-LIFT CANAL NEAR MILNER, ID

LOCATION.--Lat 42°31'10", long 114°00'36", in SE¼SE¼ sec.29, T.10 S., R.21 E., Twin Falls County, Hydrologic Unit 17040209, at head of canal and 0.6 mi (1.0 km) east of Milner.

PERIOD OF RECORD.--October 1919 to September 1978 (discontinued). Monthly discharge only for some periods, published in WSP 1317. Prior to October 1922, published as Murtaugh canal near Milner.

GAGE.--Rated pumps. Prior to May 1, 1945, water-stage recorder at site 600 ft (180 m) downstream.

REMARKS.--Records good. Flow controlled by pumping plant which lifts water from Snake River above Milner Dam for irrigation of 13,400 acres (5,420 hm<sup>2</sup>) of land in Milner low-lift irrigation district. Pumps rated by current-meter measurements.

COOPERATION.--Record of pump operation furnished by Milner low-lift irrigation district. Discharge record after July 1, 1978, furnished by Water District 01.

AVERAGE DISCHARGE.--34 years (1945-78), 81.9 ft<sup>3</sup>/s (2.319 m<sup>3</sup>/s), 59,340 acre-ft/yr (73.2 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 301 ft<sup>3</sup>/s (8.52 m<sup>3</sup>/s) July 16-18, 1964; no flow for many days each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	232	269	229	177
2	.00	.00	.00	.00	.00	.00	.00	.00	229	269	229	177
3	.00	.00	.00	.00	.00	.00	.00	17	228	.00	229	155
4	.00	.00	.00	.00	.00	.00	.00	55	216	153	217	142
5	.00	.00	.00	.00	.00	.00	.00	44	212	218	202	142
6	.00	.00	.00	.00	.00	.00	.00	44	224	243	200	105
7	.00	.00	.00	.00	.00	.00	.00	44	220	243	200	60
8	.00	.00	.00	.00	.00	.00	.00	65	214	243	200	60
9	.00	.00	.00	.00	.00	.00	.00	105	214	243	218	60
10	.00	.00	.00	.00	.00	.00	.00	151	214	259	250	60
11	.00	.00	.00	.00	.00	.00	.00	168	214	268	261	17
12	.00	.00	.00	.00	.00	.00	.00	176	214	268	261	.00
13	.00	.00	.00	.00	.00	.00	.00	176	214	278	261	.00
14	.00	.00	.00	.00	.00	.00	.00	176	214	293	261	.00
15	.00	.00	.00	.00	.00	.00	.00	176	214	293	261	.00
16	.00	.00	.00	.00	.00	.00	.00	188	214	293	261	.00
17	.00	.00	.00	.00	.00	.00	.00	206	214	293	233	.00
18	.00	.00	.00	.00	.00	.00	.00	212	214	293	233	.00
19	.00	.00	.00	.00	.00	.00	.00	212	214	293	223	.00
20	.00	.00	.00	.00	.00	.00	.00	218	197	293	223	.00
21	.00	.00	.00	.00	.00	.00	.00	220	189	293	234	.00
22	.00	.00	.00	.00	.00	.00	.00	239	189	269	239	.00
23	.00	.00	.00	.00	.00	.00	.00	246	189	269	239	.00
24	.00	.00	.00	.00	.00	.00	.00	246	189	269	239	.00
25	.00	.00	.00	.00	.00	.00	.00	246	189	269	224	.00
26	.00	.00	.00	.00	.00	.00	.00	246	189	253	199	.00
27	.00	.00	.00	.00	.00	.00	.00	246	205	253	182	21
28	.00	.00	.00	.00	.00	.00	.00	246	224	253	177	43
29	.00	.00	.00	.00	---	.00	.00	246	259	235	177	49
30	.00	.00	.00	.00	---	.00	.00	236	269	229	177	49
31	.00	---	.00	.00	---	.00	---	232	---	229	177	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	5082.00	6417	7826.00	6916	1317.00
MEAN	.000	.000	.000	.000	.000	.000	.000	164	214	252	223	43.9
MAX	.00	.00	.00	.00	.00	.00	.00	246	269	293	261	177
MIN	.00	.00	.00	.00	.00	.00	.00	.00	189	.00	177	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	10080	12730	15520	13720	2610
CAL YR 1977 TOTAL	28492.00			MEAN 78.1	MAX 265	MIN .00	AC-FT 56510					
WTR YR 1978 TOTAL	27558.00			MEAN 75.5	MAX 293	MIN .00	AC-FT 54660					

DIVERSIONS FROM SNAKE RIVER BETWEEN GOOSE CREEK AND SNAKE RIVER AT MILNER

169

13086500 GOODING CANAL AT MILNER, ID

LOCATION.--Headgates of canal, lat 42°31'36", long 114°00'34", in SW¼NW¼ sec.28, T.10 S., R.21 E., Jerome County, Hydrologic Unit 17040212, at Milner Dam.

PERIOD OF RECORD.--October 1929 to September 1978 (discontinued). Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder on Milner-Gooding Canal at site 3.4 mi (5.5 km) downstream, nonrecording gage on A lateral 1.9 mi (3.1 km) downstream, and differential recorder on control gates of North Side diversion 3.4 mi (5.5 km) downstream, all referred to Milner Lake.

REMARKS.--Records good. Gooding Canal divides into the three canals described in Gage paragraph. Milner-Gooding Canal delivers water to the Milner-Gooding project of the Bureau of Reclamation. The North Side diversion and A lateral carry water to part of the North Side Canal Co. project, which also receives water through the North Side Twin Falls Canal and P. A. lateral (stas 13087000 and 13085800). Discharge is computed by combining the discharge at the three measuring sites and adding 35 ft<sup>3</sup>/s (0.991 m<sup>3</sup>/s) for losses between Milner Lake and division points. Discharge after July 1, 1978, furnished by Water District 01.

AVERAGE DISCHARGE.--43 years (1936-78), total 1,052 ft<sup>3</sup>/s (29.79 m<sup>3</sup>/s), 762,200 acre-ft/yr (940 hm<sup>3</sup>/hr); Milner-Gooding project, 604 ft<sup>3</sup>/s (17.11 m<sup>3</sup>/s); North Side Canal Co. project, 448 ft<sup>3</sup>/s (12.69 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,770 ft<sup>3</sup>/s (78.4 m<sup>3</sup>/s) July 22, 1964, and July 18, 1967; no flow for many days.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	820	670	.00	.00	.00	.00	.00	1130	2360	2470	2400	2080
2	810	640	.00	.00	.00	.00	.00	1440	2350	2510	2390	2090
3	820	410	.00	.00	.00	.00	.00	1690	2380	2530	2390	2080
4	820	390	.00	.00	.00	.00	.00	1750	2370	2530	2370	2090
5	820	390	.00	.00	.00	.00	.00	1760	2360	2610	2370	2090
6	820	390	.00	.00	.00	.00	.00	1760	2360	2660	2360	1990
7	820	160	.00	.00	.00	.00	.00	1770	2370	2660	2370	1900
8	820	.00	.00	.00	.00	.00	.00	1760	2370	2640	2350	1900
9	790	.00	.00	.00	.00	.00	.00	1780	2380	2640	2340	1890
10	790	.00	.00	.00	.00	.00	.00	1790	2370	2650	2330	1880
11	790	.00	.00	.00	.00	.00	210	1910	2370	2640	2350	1850
12	780	.00	.00	.00	.00	.00	310	1970	2370	2640	2360	1490
13	770	.00	.00	.00	.00	.00	310	1970	2390	2620	2350	1240
14	730	.00	.00	.00	.00	.00	420	1970	2390	2620	2350	1220
15	700	.00	.00	.00	.00	.00	630	1950	2390	2610	2320	1220
16	670	.00	.00	.00	.00	.00	610	2040	2390	2580	2300	1260
17	660	270	.00	.00	.00	.00	610	2080	2390	2540	2310	1370
18	650	270	.00	.00	.00	.00	620	2070	2400	2540	2280	1370
19	640	270	.00	.00	.00	.00	560	2080	2400	2530	2210	1360
20	630	270	.00	.00	.00	.00	510	2080	2410	2520	2210	1360
21	660	270	.00	.00	.00	.00	510	2160	2400	2510	2190	1350
22	670	.00	.00	.00	.00	.00	600	2290	2370	2500	2190	1350
23	680	.00	.00	.00	.00	.00	880	2320	2330	2490	2190	1360
24	680	.00	.00	.00	.00	.00	880	2330	2340	2480	2130	1360
25	670	.00	.00	.00	.00	.00	890	2320	2320	2480	2120	1410
26	670	.00	.00	.00	.00	.00	1010	2320	2320	2470	2100	1480
27	680	.00	.00	.00	.00	.00	1110	2320	2330	2450	2110	1470
28	680	.00	.00	.00	.00	.00	1110	2320	2360	2450	2100	1490
29	670	.00	.00	.00	---	.00	1120	2320	2360	2430	2100	1480
30	670	.00	.00	.00	---	.00	1130	2340	2400	2430	2090	1480
31	670	---	.00	.00	---	.00	---	2350	---	2420	2080	---
TOTAL	22550	4400.00	.00	.00	.00	.00	14030.00	62140	71100	78850	70110	47960
MEAN	727	147	.000	.000	.000	.000	468	2005	2370	2544	2252	1599
MAX	820	670	.00	.00	.00	.00	1130	2350	2410	2660	2400	2090
MIN	630	.00	.00	.00	.00	.00	.00	1130	2320	2420	2080	1220
AC-FT	44730	8730	.00	.00	.00	.00	27830	123300	141000	156400	139100	95130

CAL YR 1977 TOTAL 343080.00 MEAN 940 MAX 2240 MIN .00 AC-FT 680500  
WTR YR 1978 TOTAL 371140.00 MEAN 1017 MAX 2660 MIN .00 AC-FT 736200

## DIVERSIONS FROM SNAKE RIVER BETWEEN GOOSE CREEK AND SNAKE RIVER AT MILNER

13087000 NORTH SIDE TWIN FALLS CANAL AT MILNER, ID

LOCATION.--Lat 42°31'47", long 114°01'11", in NE¼NW¼ sec.29, T.10 S., R.21 E., Jerome County, Hydrologic Unit 17040212, on right bank 0.6 mi (1.0 km) downstream from headgates at Milner Dam and 0.8 mi (1.3 km) north of Milner.

PERIOD OF RECORD.--May 1909 to September 1978 (discontinued). Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1347: 1912, 1917.

GAGE.--Water-stage recorder. Datum of gage is 4,123.4 ft (1,256.81 m) above mean sea level. Prior to Apr. 1, 1916, nonrecording gages at two sites within 0.5 mi (0.8 km) of present site at slightly different datum.

REMARKS.--Records good. Flow controlled by headgates. Water diverted by this canal and by P. A. lateral and part of that diverted by Gooding Canal, all at Milner, is used for irrigation of 160,000 acres (64,800 hm<sup>2</sup>) of land under the North Side Canal Co. system. Diversions began in April 1908.

COOPERATION.--Water-stage recorder inspected by North Side Canal Co. Record of discharge furnished by Water District 01 after July 1, 1978.

AVERAGE DISCHARGE.--43 years (1936-78), 1,197 ft<sup>3</sup>/s (33.90 m<sup>3</sup>/s), 867,200 acre-ft/yr (1,069 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,240 ft<sup>3</sup>/s (91.8 m<sup>3</sup>/s) July 22, 1964; no flow at times when headgates were closed.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	448	932	1890	2330	2600	1970
2	.00	.00	.00	.00	.00	.00	476	1020	1930	2380	2600	1960
3	.00	.00	.00	.00	.00	.00	500	1060	1920	2400	2640	1950
4	.00	.00	.00	.00	.00	.00	522	1060	1920	2410	2640	1940
5	.00	.00	.00	.00	.00	.00	558	1130	1930	2440	2590	1910
6	.00	.00	.00	.00	.00	.00	262	1200	1920	2590	2590	1740
7	.00	.00	.00	.00	.00	.00	251	1180	1890	2610	2600	1640
8	.00	.00	.00	.00	.00	.00	248	1200	1890	2620	2600	1470
9	.00	.00	.00	.00	.00	.00	253	1310	2010	2620	2590	1370
10	.00	.00	.00	.00	.00	.00	304	1370	2050	2630	2590	1200
11	.00	.00	.00	.00	.00	.00	309	1530	2080	2610	2590	988
12	.00	.00	.00	.00	.00	.00	413	1530	2090	2620	2590	900
13	.00	.00	.00	.00	.00	.00	413	1520	2080	2620	2550	892
14	.00	.00	.00	.00	.00	.00	410	1560	2060	2620	2500	884
15	.00	.00	.00	.00	.00	.00	410	1550	2090	2630	2430	868
16	.00	.00	.00	.00	.00	.00	404	1540	2070	2650	2370	856
17	.00	.00	.00	.00	.00	.00	419	1570	2060	2740	2230	789
18	.00	.00	.00	.00	.00	.00	434	1670	2060	2780	2140	593
19	.00	.00	.00	.00	.00	.00	446	1700	2060	2760	2120	455
20	.00	.00	.00	.00	.00	.00	455	1740	2070	2740	2110	500
21	.00	.00	.00	.00	.00	.00	542	1720	2060	2750	2090	332
22	.00	.00	.00	.00	.00	.00	567	1790	2050	2720	2070	128
23	.00	.00	.00	.00	.00	.00	688	1840	2100	2710	2060	123
24	.00	.00	.00	.00	.00	.00	712	1830	2160	2710	2050	118
25	.00	.00	.00	.00	.00	.00	712	1820	2320	2700	2000	116
26	.00	.00	.00	.00	.00	.00	772	1810	2300	2700	2000	112
27	.00	.00	.00	.00	.00	86	904	1820	2260	2700	2020	207
28	.00	.00	.00	.00	.00	172	928	1810	2230	2670	1990	219
29	.00	.00	.00	.00	---	446	932	1820	2230	2660	1980	278
30	.00	.00	.00	.00	---	446	932	1830	2270	2670	1980	309
31	.00	---	.00	.00	---	413	---	1800	---	2650	1970	---
TOTAL	.00	.00	.00	.00	.00	1563.00	15624	47262	62050	81440	71880	26817
MEAN	.000	.000	.000	.000	.000	50.4	521	1525	2068	2627	2319	894
MAX	.00	.00	.00	.00	.00	446	932	1840	2320	2780	2640	1970
MIN	.00	.00	.00	.00	.00	.00	248	932	1890	2330	1970	112
AC-FT	.00	.00	.00	.00	.00	3100	30990	93740	123100	161500	142600	53190
CAL YR 1977	TOTAL	288150.00	MEAN	789	MAX	2710	MIN	.00	AC-FT	571500		
WTR YR 1978	TOTAL	306636.00	MEAN	840	MAX	2780	MIN	.00	AC-FT	608200		

DIVERSIONS FROM SNAKE RIVER BETWEEN GOOSE CREEK AND SNAKE RIVER AT MILNER

171

13087500 SOUTH SIDE TWIN FALLS CANAL AT MILNER, ID

LOCATION.--Lat 42°31'19", long 114°00'59", in SW¼SE¼ sec.29, T.10 S., R.21 E., Twin Falls County, Hydrologic Unit 17040212, on right bank 30 ft (9 m) upstream from highway bridge and 900 ft (270 m) downstream from headgates at Milner Dam.

PERIOD OF RECORD.--May 1909 to September 1978 (discontinued). Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1347: 1910-16.

GAGE.--Water-stage recorder. Datum of gage is 4,121.5 ft (1,256.23 m) National Geodetic Vertical Datum of 1929. Prior to May 13, 1913, nonrecording gage and May 13, 1913, to Apr. 24, 1914, water-stage recorder near present site, and Apr. 25, 1914, to May 13, 1960, water-stage recorder at site 50 ft (15 m) upstream, all at same datum.

REMARKS.--Records good. Flow controlled by headgates. Diversions began in March 1905 when 30,000 acres (12,100 hm<sup>2</sup>) was reported as irrigated. By 1912 this had increased to 147,000 acres (59,500 hm<sup>2</sup>), and in 1965 the irrigated area was reported to be 203,000 acres (82,200 hm<sup>2</sup>).

COOPERATION.--Water-stage recorder inspected by Twin Falls Canal Co. Discharge after July 1, 1978, furnished by Water District 01.

AVERAGE DISCHARGE.--52 years (1927-78), 1,717 ft<sup>3</sup>/s (48.63 m<sup>3</sup>/s), 1,245,000 acre-ft/yr (1,535 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,600 ft<sup>3</sup>/s (130 m<sup>3</sup>/s) Aug. 12, 1918, including about 1,200 ft<sup>3</sup>/s (34.0 m<sup>3</sup>/s) wasted through spillway below station and returned to river; maximum daily discharge for irrigation use, 4,000 ft<sup>3</sup>/s (113 m<sup>3</sup>/s) July 16, 1971; no flow during nonirrigation season several years.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	448	932	1890	2330	2600	1970
2	.00	.00	.00	.00	.00	.00	476	1020	1930	2380	2600	1960
3	.00	.00	.00	.00	.00	.00	500	1060	1920	2400	2640	1950
4	.00	.00	.00	.00	.00	.00	522	1060	1920	2410	2640	1940
5	.00	.00	.00	.00	.00	.00	558	1130	1930	2440	2590	1910
6	.00	.00	.00	.00	.00	.00	262	1200	1920	2590	2590	1740
7	.00	.00	.00	.00	.00	.00	251	1180	1890	2610	2600	1640
8	.00	.00	.00	.00	.00	.00	248	1200	1890	2620	2600	1470
9	.00	.00	.00	.00	.00	.00	253	1310	2010	2620	2590	1370
10	.00	.00	.00	.00	.00	.00	304	1370	2050	2630	2590	1200
11	.00	.00	.00	.00	.00	.00	309	1530	2080	2610	2590	988
12	.00	.00	.00	.00	.00	.00	413	1530	2090	2620	2590	900
13	.00	.00	.00	.00	.00	.00	413	1520	2080	2620	2550	892
14	.00	.00	.00	.00	.00	.00	410	1560	2060	2620	2500	884
15	.00	.00	.00	.00	.00	.00	410	1550	2090	2630	2430	868
16	.00	.00	.00	.00	.00	.00	404	1540	2070	2650	2370	856
17	.00	.00	.00	.00	.00	.00	419	1570	2060	2740	2230	789
18	.00	.00	.00	.00	.00	.00	434	1670	2060	2780	2140	593
19	.00	.00	.00	.00	.00	.00	446	1700	2060	2760	2120	455
20	.00	.00	.00	.00	.00	.00	455	1740	2070	2740	2110	500
21	.00	.00	.00	.00	.00	.00	542	1720	2060	2750	2090	332
22	.00	.00	.00	.00	.00	.00	567	1790	2050	2720	2070	128
23	.00	.00	.00	.00	.00	.00	688	1840	2100	2710	2060	123
24	.00	.00	.00	.00	.00	.00	712	1830	2160	2710	2050	118
25	.00	.00	.00	.00	.00	.00	712	1820	2320	2700	2000	116
26	.00	.00	.00	.00	.00	.00	772	1810	2300	2700	2000	112
27	.00	.00	.00	.00	.00	86	904	1820	2260	2700	2020	207
28	.00	.00	.00	.00	.00	172	928	1810	2230	2670	1990	219
29	.00	.00	.00	.00	---	446	932	1820	2230	2660	1980	278
30	.00	.00	.00	.00	---	446	932	1830	2270	2670	1980	309
31	.00	---	.00	.00	---	413	---	1800	---	2650	1970	---
TOTAL	.00	.00	.00	.00	.00	1563.00	15624	47262	62050	81440	71880	26817
MEAN	.000	.000	.000	.000	.000	50.4	521	1525	2068	2627	2319	894
MAX	.00	.00	.00	.00	.00	446	932	1840	2320	2780	2640	1970
MIN	.00	.00	.00	.00	.00	.00	248	932	1890	2330	1970	112
AC-FT	.00	.00	.00	.00	.00	3100	30990	93740	123100	161500	142600	53190
CAL YR 1977	TOTAL	288150.00	MEAN	789	MAX	2710	MIN	.00	AC-FT	571500		
WTR YR 1978	TOTAL	306636.00	MEAN	840	MAX	2780	MIN	.00	AC-FT	608200		

## SNAKE RIVER BASIN

## 13087900 LAKE MILNER AT MILNER, ID

LOCATION.--Lat 42°31'25", long 114°00'47", in SW¼NE¼SE¼ sec.29, T.10 S., R.21 E., Twin Falls County, Hydrologic Unit 17040209, near left end of Milner Dam on Snake River, at Milner, at mile 640.0 (1,029.8 km).

DRAINAGE AREA.--17,180 mi<sup>2</sup> (44,500 km<sup>2</sup>), approximately, excluding indeterminate nontributary area on Snake River Plain.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,122.51 ft (1,256.541 m) National Geodetic Vertical Datum of 1929. October 1974 to May 1978, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by a concrete gravity dam constructed in 1904 with first diversions in 1905. The dam is primarily a diversion dam. Capacity is a function of the river flow and the lake elevation at the dam. No precise limits on capacity can be set, but computations indicate 48,500 acre-ft (59.8 hm<sup>3</sup>) of usable storage at a lake gage of 12.0 ft (3.66 m) and a river flow of 25,000 ft<sup>3</sup>/s (708 m<sup>3</sup>/s), and 7,430 acre-ft (9.16 hm<sup>3</sup>) at a gage of 1.5 ft (0.457 m) and a river flow of 1,000 ft<sup>3</sup>/s (28.3 m<sup>3</sup>/s). Dead storage unknown. Water is used for irrigation by canals diverting at the dam and by pumps from the reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 45,800 acre-ft (56.5 hm<sup>3</sup>) May 23, 24, 1976; maximum gage height observed, 11.40 ft (3.475 m) Aug. 1, 1975; minimum contents observed, 6,990 acre-ft (8.62 hm<sup>3</sup>) Nov. 3, 1977, gage height, 3.40 ft (1.056 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 38,800 acre-ft (47.8 hm<sup>3</sup>) May 27; maximum gage height observed, 11.33 ft (3.453 m) May 27; minimum contents observed, 6,990 acre-ft (8.62 hm<sup>3</sup>) Nov. 3; minimum gage height observed, 2.90 ft (0.884 m) Oct. 19, 20.

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24500	7360	12000	14200	13100	15900	20900	34600	35700	35600	36600	35200
2	23800	7160	12500	13700	13000	16500	22300	34600	34900	36200	36600	35200
3	22900	6990	12900	13100	14000	16100	23700	35900	34700	36900	36700	35100
4	21900	7690	12500	12700	12900	16100	26300	36300	34800	37200	36600	34900
5	20900	7960	12500	14300	12900	16100	29600	36900	35100	37200	36400	34800
6	19300	8240	12400	15000	12900	16000	31100	36500	34600	37100	36300	34400
7	17200	8430	12600	14900	11700	16100	30900	37000	34400	35800	36200	33400
8	16400	8130	13000	16100	11300	16200	31100	37300	34400	36400	36100	32900
9	15000	9200	13600	14100	12900	15700	30000	36900	34700	36900	36000	32900
10	13700	9980	13600	14300	12900	15800	29900	36600	35000	37400	35800	32400
11	13200	10600	13100	14600	13200	16400	29600	36700	35700	36900	36000	32600
12	12800	11300	12400	15800	13300	16400	29300	36800	36100	36900	36000	32800
13	12400	11600	13200	16400	13600	16500	29300	36900	36000	36600	36300	32600
14	10700	12300	12800	17700	13600	16900	29100	36700	35900	36300	37000	32300
15	9460	12300	13400	17400	13600	16600	29000	36200	36100	35900	35700	31600
16	8750	11900	13400	17700	13400	16500	29000	35100	36000	35600	36800	31400
17	8140	12300	13200	17700	14600	16300	29400	34500	36000	36000	36900	30600
18	7650	12400	12500	18500	14200	16000	32200	34400	35400	36400	36800	32200
19	7140	12400	12900	20200	15000	15500	35000	35700	34600	36400	36500	32200
20	7140	12400	13500	20700	15700	15300	35200	38000	34200	36400	36200	31600
21	7290	12400	14200	21200	15700	15500	34300	38400	33200	36600	36000	30700
22	7180	12400	12800	19800	15200	15800	34200	38400	33000	36600	35400	29100
23	7500	13000	13400	16300	15000	16400	34200	38400	33400	36700	35300	27300
24	7500	13000	13500	13800	14800	16400	34200	38600	33200	36800	35300	26000
25	7500	12400	13300	13500	15000	16400	34100	38600	35200	36700	35100	24800
26	7500	12300	13200	14200	15000	16500	34600	38700	33800	36600	35000	24600
27	7500	12400	13200	14700	15400	16600	34600	38800	35300	36400	35200	24700
28	7500	11600	13200	14400	16500	17100	34200	38700	34700	36900	35200	25800
29	7690	11900	13300	14400	---	18200	34100	38000	34500	37200	35500	28200
30	7500	11600	13500	14400	---	19000	34500	37200	35200	37100	35400	29800
31	7500	---	13800	14200	---	19600	---	35900	---	36800	35300	---
MAX	24500	13000	14200	21200	16500	19600	35200	38800	36100	37400	37000	35200
MIN	7140	6990	12000	12700	11300	15300	20900	34400	33000	35600	35000	24600

WTP YR 1978 MAX 38800 MIN 6990

SNAKE RIVER MAIN STEM

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13087900 LAKE MILNER AT MILNER DAM, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

REMARKS.--Discharge computed using gaging station 13088000 0.4 mi (0.6 km) downstream and releases into canal at Milner Dam.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)
NOV 29...	1800	570	657	*8.2	4.0	3.5	3	11.6	101	32
DEC 22...	0745	620	*632	--	.0	.5	3	11.3	91	11
JAN 26...	0815	1000	*592	8.3	1.0	1.0	4	11.2	92	30
FEB 22...	1500	1840	510	8.0	1.0	1.5	3	11.2	93	8
MAR 20...	1800	2510	559	7.7	14.0	8.0	5	9.2	90	18
APR 25...	0930	11000	488	8.6	13.0	9.0	6	10.8	108	15
JUN 01...	1600	8020	469	8.4	20.5	13.5	4	9.1	99	9
23...	1115	8340	456	8.6	23.0	18.0	3	8.9	108	23
AUG 03...	1600	9710	395	8.7	26.0	22.5	4	9.2	121	15
SEP 13...	1100	4910	377	8.6	14.5	14.0	4	8.9	100	64

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	SILICA, DISSOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
NOV 29...	K4	--	--	--	24	392	.53	603	1
DEC 22...	K6	--	--	--	25	386	.53	646	8
JAN 26...	130	220	0	180	22	350	.48	945	7
FEB 22...	96	270	0	221	20	339	.46	1680	15
MAR 20...	K13	230	0	189	16	319	.43	2160	7
APR 25...	K180	150	14	147	12	295	.40	8760	25
JUN 01...	K2	180	5	156	9.2	247	.34	5350	10
23...	K870	170	12	159	7.7	247	.34	5560	42
AUG 03...	52	170	10	156	9.0	233	.32	6110	0
SEP 13...	39	160	12	151	12	237	.32	3140	24

\* Not a field determination.  
 K Results based on count outside ideal colony count range.

## SNAKE RIVER MAIN STEM

13087900 LAKE MILNER AT MILNER DAM, ID--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO- GEN, NO2+N03 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N03)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
NOV 29...	1.5	.36	.42	.78	2.3	10	.24	4	1
DEC 22...	1.4	.28	.37	.65	2.1	9.1	.23	3	0
JAN 26...	.67	.39	.61	1.0	1.7	7.4	.17	3	0
FEB 22...	.45	.24	.57	.81	1.3	5.6	.13	3	0
MAR 20...	.21	.37	.34	.71	.92	4.1	.13	3	1
APR 25...	.00	.01	1.6	1.6	1.6	7.1	.05	3	3
JUN 01...	.05	.01	.89	.90	.95	4.2	.03	4	5
23...	.05	.00	.61	.61	.66	2.9	.07	3	7
AUG 03...	.11	.00	.60	.60	.71	3.1	.04	3	2
SEP 13...	.16	.12	.72	.84	1.0	4.4	.06	4	8

DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	OIL AND GREASE (MG/L)
NOV 29...	0	4	150	4	.0	1	30	2.2	0
DEC 22...	0	7	110	7	.0	0	20	2.6	0
JAN 26...	10	5	100	2	.0	0	10	2.6	0
FEB 22...	0	3	140	5	.0	1	10	1.1	0
MAR 20...	0	3	180	6	.0	9	20	2.7	0
APR 25...	0	3	370	20	.1	0	10	2.4	0
JUN 01...	5	5	270	31	.2	0	20	1.7	0
23...	0	6	300	20	.1	0	10	2.6	0
AUG 03...	0	4	180	4	.0	0	10	3.5	0
SEP 13...	0	6	300	8	.0	0	20	--	0

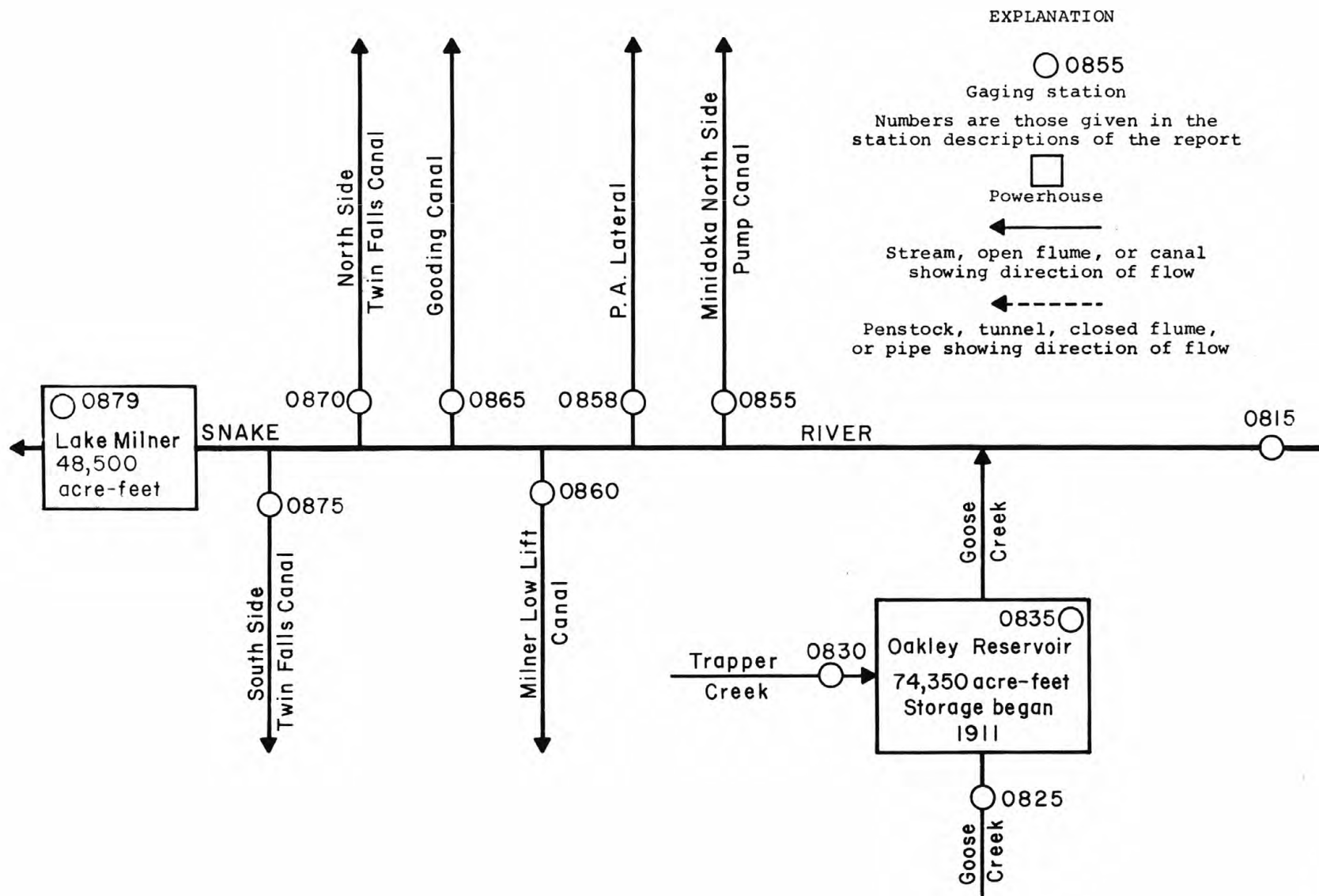


FIGURE 8.--Gaging stations in Snake River basin between Minidoka and Milner.

## SNAKE RIVER MAIN STEM

13088000 SNAKE RIVER AT MILNER, ID

LOCATION.--Lat 42°31'41", long 114°01'04", in SW¼NE¼ sec.29, T.10 S., R.21 E., Twin Falls County, Hydrologic Unit 17040212, on left bank 200 ft (60 m) downstream from highway bridge at Milner, 0.4 mi (0.6 km) downstream from Milner Dam, and at mile 638.7 (1,027.7 km).

DRAINAGE AREA.--17,180 mi<sup>2</sup> (44,500 km<sup>2</sup>), approximately, excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--May 1909 to current year. Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1347: 1909-12, 1915-16, 1942-44, 1946-48.

GAGE.--Water-stage recorder. Datum of gage is 4,062.9 ft (1,238.37 m) National Geodetic Vertical Datum of 1929. Prior to May 28, 1919, nonrecording gages at slightly different sites and datums.

REMARKS.--Records good. Flow regulated by American Falls Reservoir (see sta 13076500), Lake Walcott (see sta 13081000), and other reservoirs having a combined usable capacity of about 4,700,000 acre-ft (5,800 hm<sup>3</sup>). Considerable water leaks into the Snake Plain aquifer above station. Diversions above station for irrigation of about 1,990,000 acres (805,000 hm<sup>2</sup>) of which about 504,000 acres (204,000 hm<sup>2</sup>) are by withdrawals from ground water and about 436,000 acres (176,000 hm<sup>2</sup>) are irrigated below station. Return flow in large part enters Snake River between Milner and King Hill station. At times practically entire flow is diverted during irrigation season.

COOPERATION.--Observer readings furnished by Twin Falls Canal Co. and North Side Canal Co.

AVERAGE DISCHARGE.--52 years (1927-78), 2,471 ft<sup>3</sup>/s (69.98 m<sup>3</sup>/s), 1,790,000 acre-ft/yr (2,210 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,000 ft<sup>3</sup>/s (1,130 m<sup>3</sup>/s) June 21, 1918, gage height, 19.9 ft (6.07 m), site and datum then in use; minimum, 2 ft<sup>3</sup>/s (0.057 m<sup>3</sup>/s) Mar. 17-28, 1936, Aug. 9 to Sept. 7, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,750 ft<sup>3</sup>/s (276 m<sup>3</sup>/s) Apr. 20, gage height, 13.60 ft (4.145 m); minimum, 4.5 ft<sup>3</sup>/s (0.127 m<sup>3</sup>/s) Oct. 15, gage height, 1.43 ft (0.436 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	8.7	568	616	1820	2310	1930	6370	1020	55	307	523
2	10	7.3	592	584	1520	2360	1860	5470	152	56	302	523
3	9.9	7.0	609	564	1260	2310	1880	4310	151	222	294	519
4	9.6	7.1	609	588	1230	2330	1940	4410	151	330	288	519
5	9.0	7.4	576	637	1180	2320	2980	5710	152	182	288	519
6	8.4	7.8	599	674	1150	2280	5140	6060	151	535	288	794
7	7.8	8.4	589	707	1130	2390	5210	6080	186	603	288	1170
8	7.5	9.1	602	717	1030	2390	5410	6120	136	69	288	629
9	6.8	10	623	682	1080	2360	5400	5470	70	207	288	629
10	6.5	11	634	678	1120	2310	5340	4620	60	100	294	624
11	6.3	147	635	675	1100	2360	4860	4200	61	120	294	564
12	5.8	271	595	667	1110	2350	4680	4180	65	67	294	543
13	5.5	318	601	709	1220	2380	4570	4350	65	64	294	729
14	5.0	372	613	757	1300	2460	4330	4270	65	63	299	984
15	4.6	405	589	787	1270	2770	4150	3340	64	63	432	891
16	5.6	313	607	756	1290	2720	3890	2300	65	62	335	555
17	7.8	248	647	774	1310	2620	3650	1950	66	62	531	523
18	8.6	247	627	811	1430	2670	5270	1710	65	63	777	519
19	8.7	246	602	840	1640	2590	8070	2130	63	299	620	1060
20	9.0	242	606	1000	1790	2500	9450	4570	63	305	519	1770
21	10	294	592	1580	1880	2550	9180	5140	62	305	519	2110
22	10	398	591	1820	1890	2560	9080	4880	60	305	511	2300
23	9.9	533	615	1850	1860	2620	8770	4660	59	305	511	2280
24	9.7	627	632	1870	1840	2660	8570	4700	59	307	519	2200
25	9.7	620	644	1760	1820	2740	8110	4840	61	307	519	2020
26	9.7	589	614	1560	1820	2710	7360	4860	61	307	519	1480
27	9.6	602	609	1810	1810	2360	6990	4850	57	305	519	868
28	8.7	575	615	1870	2160	2150	6950	5000	56	305	523	436
29	8.7	584	623	1830	---	2170	6780	4540	55	310	523	315
30	8.5	556	620	1880	---	2260	6710	3830	55	313	523	329
31	8.5	---	620	1850	---	2110	---	2480	---	310	523	---
TOTAL	256.4	8270.8	18898	33903	41060	75670	168510	137400	3456	6906	13029	28925
MEAN	8.27	276	610	1094	1466	2441	5617	4432	115	223	420	964
MAX	11	627	647	1880	2160	2770	9450	6370	1020	603	777	2300
MIN	4.6	7.0	568	564	1030	2110	1860	1710	55	55	288	315
AC-FT	509	16410	37480	67250	81440	150100	334200	272500	6850	13700	25840	57370

CAL YR 1977 TOTAL 346180.1 MEAN 948 MAX 4900 MIN 2.6 AC-FT 686600  
WTR YR 1978 TOTAL 536284.2 MEAN 1469 MAX 9450 MIN 4.6 AC-FT 1064000

SNAKE RIVER MAIN STEM

13090000 SNAKE RIVER NEAR KIMBERLY, ID

LOCATION.--Lat 42°35'28", long 114°21'34", in NE¼NW¼ sec.4, T.10 S., R.18 E., Twin Falls County, Hydrologic Unit 17040212, on left bank 1,200 ft (370 m) downstream from Twin Falls powerplant, 2.2 mi (3.5 km) upstream from Shoshone Falls, 4 mi (6.4 km) north of Kimberly, and at mile 617.5 (993.6 km).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1923 to current year.

REVISED RECORDS.--WSP 1347: 1924-26, 1928-30, 1942-44, 1946-48.

GAGE.--Water-stage recorder. Datum of gage is 3,362.67 ft (1,024.942 m) National Geodetic Vertical Datum of 1929 (levels by Idaho Power Co.). Prior to Aug. 31, 1938, at site 2,000 ft (610 m) downstream at different datum.

REMARKS.--Records excellent. Flow regulated by American Falls Reservoir 96.5 mi (155.3 km) upstream (see sta 13076500) and other reservoirs having a combined usable capacity of 4,700,000 acre-ft (5,800 hm<sup>3</sup>). Diurnal fluctuation caused by hydroelectric powerplant 1,200 ft (370 m) upstream. At times practically entire flow is diverted at Milner during irrigation season; no diversions between Milner and Kimberly. Diversion above station for irrigation of about 2,020,000 acres (817,000 hm<sup>2</sup>) of which about 537,000 acres (217,000 hm<sup>2</sup>) are by withdrawals from ground water and about 364,000 acres (147,000 hm<sup>2</sup>) are irrigated below the station. Considerable water leaks into the Snake Plain aquifer upstream, a small part of which returns through springs a few miles above station.

AVERAGE DISCHARGE.--55 years, 2,883 ft<sup>3</sup>/s (81.65 m<sup>3</sup>/s), 2,089,000 acre-ft/yr (2,580 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,200 ft<sup>3</sup>/s (770 m<sup>3</sup>/s) July 4, 1927, gage height, 14.76 ft (4.499 m), site and datum then in use, from rating curve extended above 20,000 ft<sup>3</sup>/s (566 m<sup>3</sup>/s); minimum recorded, 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s) May 17, 1944, gage height, 1.15 ft (0.350 m); minimum daily recorded, 95 ft<sup>3</sup>/s (2.69 m<sup>3</sup>/s) Apr. 20, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,890 ft<sup>3</sup>/s (280 m<sup>3</sup>/s) Apr. 20, gage height, 14.58 ft (4.444 m); minimum, 193 ft<sup>3</sup>/s (5.47 m<sup>3</sup>/s) Sept. 29, gage height, 3.29 ft (1.003 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

2.4	86	8.0	1,870
3.0	155	10.0	3,270
4.0	314	12.0	5,600
5.0	563	15.0	10,700
6.0	918		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	403	367	914	947	2120	2610	2240	6630	1860	374	687	927
2	406	356	932	933	1990	2620	2170	5850	798	377	691	925
3	405	347	964	899	1700	2610	2120	4930	518	392	684	927
4	396	358	969	894	1580	2610	2190	4270	541	560	671	934
5	395	369	945	940	1570	2610	2560	5540	498	672	660	941
6	409	354	934	990	1520	2570	4950	6360	499	715	660	1060
7	409	349	955	1010	1530	2660	5170	6360	499	2050	658	1600
8	398	348	931	1050	1430	2670	5330	6360	528	732	662	1240
9	398	348	958	1030	1420	2650	5380	6360	495	535	665	1050
10	405	348	978	1010	1470	2590	5310	6360	413	530	660	1080
11	401	343	986	1010	1480	2630	4960	6360	436	464	662	1050
12	393	449	969	1000	1470	2670	4680	5280	444	468	662	973
13	386	603	946	998	1510	2660	4540	4990	409	417	668	967
14	388	731	968	1060	1650	2720	4380	5010	441	417	678	1260
15	384	708	970	1110	1660	3020	4170	4170	428	410	682	1450
16	378	751	929	1110	1620	3050	4070	2740	420	417	804	1110
17	379	677	975	1090	1660	2950	3640	2380	432	424	779	923
18	379	585	994	1110	1700	2950	4780	2130	434	426	945	924
19	379	584	958	1150	1860	2930	7950	2160	435	444	1180	983
20	377	582	937	1200	2060	2820	9620	4070	425	650	950	1900
21	377	562	938	1640	2150	2850	9460	5150	424	677	916	2320
22	376	662	905	2110	2200	2860	9340	4960	412	678	900	2550
23	383	784	944	2150	2170	2900	9070	4810	397	695	906	2620
24	379	974	965	2170	2150	2890	8880	4630	382	712	899	2530
25	373	999	978	2180	2130	2980	8470	4940	392	701	890	2410
26	374	998	970	1920	2130	2970	7740	4880	400	687	923	2080
27	374	951	944	2000	2120	2790	7190	4900	393	692	910	1560
28	369	952	945	2170	2270	2460	7130	5020	392	703	926	1040
29	370	934	953	2150	---	2440	7020	4790	380	705	918	708
30	367	920	970	2140	---	2490	6880	4160	382	708	920	645
31	367	---	952	2190	---	2470	---	3200	---	710	913	---
TOTAL	11977	18293	29576	43361	50320	84700	171390	149350	14907	19142	24729	40687
MEAN	386	610	954	1399	1797	2732	5713	4818	497	617	798	1356
MAX	409	999	994	2190	2270	3050	9620	6630	1860	2050	1180	2620
MIN	367	343	905	894	1420	2440	2120	2130	380	374	658	645
AC-FT	23760	36280	58660	86010	99810	168000	340000	296200	29570	37970	49050	80700
CAL YR 1977	TOTAL	455651	MEAN	1248	MAX	4920	MIN	95	AC-FT	903800		
WTR YR 1978	TOTAL	658432	MEAN	1804	MAX	9620	MIN	343	AC-FT	1306000		

## SNAKE RIVER MAIN STEM

13090000 SNAKE RIVER NEAR KIMBERLY, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 01...	1340	364	704	--	16.0	8.0	--	--	--
JAN 25...	1400	2250	556	--	4.5	3.5	--	--	--
MAY 22...	1545	4640	506	8.7	17.0	15.0	190	23	47
JUN 26...	1250	452	580	--	25.0	17.5	--	--	--
AUG 17...	2020	877	484	8.6	13.5	18.5	200	27	50

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS CU3)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 01...	--	--	--	--	--	--	--	--	--
JAN 25...	--	--	--	--	--	--	--	--	--
MAY 22...	17	26	23	.8	4.3	200	0	160	47
JUN 26...	--	--	--	--	--	--	--	--	--
AUG 17...	18	30	24	.9	5.1	210	0	170	52

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS ST02)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
NOV 01...	--	--	--	--	--	--	--	--
JAN 25...	--	--	--	--	--	--	--	--
MAY 22...	25	.7	11	277	.38	3470	--	.03
JUN 26...	--	--	--	--	--	--	--	--
AUG 17...	26	.5	23	312	.42	739	.92	.05

13091000 BLUE LAKES SPRING NEAR TWIN FALLS, ID

LOCATION.--Lat 42°36'53", long 114°28'06", in NE¼NW¼SE¼ sec.28, T.9 S., R.17 E., Jerome County, Hydrologic Unit 17040212, on left bank at outlet of upper Blue Lake, 0.6 mi (0.9 km) upstream from mouth, 1.2 mi (1.9 km) northwest of Perrine Memorial Bridge, 3.5 mi (5.6 km) north of Twin Falls, and 610.5 mi (982.3 km) upstream from mouth of Snake River.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1950 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,300 ft (1,010 m), from topographic map.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--28 years, 214 ft<sup>3</sup>/s (6.060 m<sup>3</sup>/s), 155,000 acre-ft/yr (191 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 256 ft<sup>3</sup>/s (7.25 m<sup>3</sup>/s) Nov. 10, 11, 1951, Oct. 24 to Nov. 13, 1952, Sept. 29, 30, 1953, Oct. 23, 24, 1957; minimum daily, 175 ft<sup>3</sup>/s (4.96 m<sup>3</sup>/s) May 15-21, 1977.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	220	216	212	205	199	199	199	205	212	202	196
2	220	220	216	212	205	199	199	199	205	212	199	196
3	220	220	212	208	205	199	199	199	205	212	199	199
4	220	220	216	208	205	199	199	199	206	212	199	199
5	220	224	216	208	205	199	199	199	208	212	199	199
6	220	220	216	208	205	199	199	196	208	212	196	199
7	219	220	216	208	205	199	199	199	208	208	196	199
8	218	220	216	208	205	199	199	199	208	208	196	199
9	216	220	216	208	205	196	199	199	205	212	196	199
10	220	216	216	205	205	196	199	199	205	212	196	199
11	220	216	212	205	205	196	199	199	205	208	196	199
12	220	220	216	205	205	196	199	199	205	208	196	199
13	220	220	216	205	205	196	199	199	208	208	196	199
14	220	216	216	205	202	196	199	199	208	208	193	199
15	220	216	216	208	202	196	199	199	208	208	193	199
16	220	216	216	208	199	196	199	199	208	208	193	199
17	220	216	216	208	199	196	199	199	208	208	193	199
18	220	216	212	208	199	196	199	199	208	208	193	199
19	220	216	212	208	199	196	199	202	208	208	196	199
20	220	220	212	208	199	196	199	202	210	205	196	199
21	220	220	212	208	199	196	199	202	212	205	196	199
22	220	216	212	208	199	196	199	202	212	205	196	199
23	220	216	212	205	199	196	199	202	212	205	196	199
24	220	216	208	205	199	196	199	202	212	202	196	199
25	224	216	208	205	199	196	202	202	212	205	196	202
26	220	216	212	205	199	196	202	202	212	205	196	202
27	220	216	212	205	199	196	202	204	216	205	196	202
28	220	216	212	205	199	199	202	205	216	202	196	202
29	220	216	212	205	---	199	202	205	212	202	196	202
30	220	216	212	205	---	199	199	205	212	202	196	202
31	220	---	212	205	---	199	---	205	---	202	196	---
TOTAL	6813	6536	6624	6414	5656	6112	5985	6219	6267	6429	6079	5982
MEAN	220	218	214	207	202	197	200	201	209	207	196	199
MAX	224	224	216	212	205	199	202	205	216	212	202	202
MIN	216	216	208	205	199	196	199	196	205	202	193	196
AC-FT	13510	12960	13140	12720	11220	12120	11870	12340	12430	12750	12060	11870
CAL YR 1977	TOTAL	72985	MEAN 200	MAX 224	MIN 175	AC-FT	144800					
WTR YR 1978	TOTAL	75116	MEAN 206	MAX 224	MIN 193	AC-FT	149000					



ROCK CREEK BASIN

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13093095 ROCK CREEK NEAR MOUTH, NEAR TWIN FALLS, ID

LOCATION.--Lat 42°37'25", long 114°31'58", in SW¼SW¼ sec.24, T.9 S., R.16 E., Twin Falls County, Hydrologic Unit 17040212, on right bank 0.8 mi (1.2 km) upstream from mouth, and 6 mi (10 km) northwest of Twin Falls.

DRAINAGE AREA.--300 mi<sup>2</sup> (483 km<sup>2</sup>).

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,150 ft (960 m), from topographic map. Record obtained at site 2 mi (3 km) upstream 1922-47; records not comparable.

REMARKS.--Records good except those for September, which are fair. Flow partially regulated by fish hatchery and irrigation waste flow above station. Many diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,120 ft<sup>3</sup>/s (60.0 m<sup>3</sup>/s) from slope-area measurement after failure of irrigation canal, May 12, 1978, gage height, 9.08 ft, (2.768 m); minimum, 73 ft<sup>3</sup>/s (2.07 m<sup>3</sup>/s) Mar. 18, 1977, gage height, 3.37 ft (1.027 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,120 ft<sup>3</sup>/s (60.0 m<sup>3</sup>/s) from slope-area measurement after failure of irrigation canal, May 12, gage height, 9.08 ft (2.768 m); minimum, 92 ft<sup>3</sup>/s (2.61 m<sup>3</sup>/s) Feb. 18, gage height, 3.55 ft (1.082 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

3.6	97	6.0	480
4.0	153	7.0	710
5.0	313	8.0	1,070

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	259	172	151	115	101	105	229	274	193	220	266	305
2	262	171	151	109	101	103	237	341	201	230	262	306
3	260	170	151	115	103	104	223	265	241	248	259	311
4	261	172	148	123	102	109	217	267	247	258	260	316
5	258	171	143	123	105	103	204	405	279	262	262	344
6	254	165	146	125	108	100	188	488	234	350	263	418
7	249	163	145	119	112	101	188	415	223	516	255	363
8	249	160	137	116	112	105	187	316	227	312	241	373
9	255	158	134	120	112	107	168	239	230	326	245	446
10	247	156	134	128	115	111	160	223	235	318	255	494
11	243	158	135	123	116	118	160	214	246	220	252	480
12	243	156	137	122	110	137	161	227	258	217	253	414
13	243	157	140	120	108	128	171	274	282	221	254	422
14	236	155	150	122	104	125	177	742	278	220	258	384
15	230	154	150	135	107	118	181	282	262	219	259	376
16	232	151	136	124	102	115	192	284	237	227	270	373
17	230	151	142	126	98	113	195	280	240	231	276	377
18	227	155	140	123	101	119	191	265	260	231	270	410
19	229	155	128	123	101	130	184	248	255	232	275	415
20	228	147	119	126	101	141	184	253	244	232	277	395
21	224	152	117	122	99	158	192	233	234	239	278	350
22	215	160	126	114	98	181	192	236	218	245	274	274
23	199	159	142	115	98	198	188	217	221	256	279	264
24	193	160	132	104	99	208	197	224	222	255	288	254
25	188	168	128	107	101	206	192	233	217	247	287	244
26	184	179	126	108	103	198	208	230	224	250	292	237
27	185	168	124	102	105	194	224	224	233	252	308	231
28	182	160	123	101	104	181	250	217	220	262	308	227
29	181	153	123	102	---	191	262	218	206	270	298	216
30	176	149	134	101	---	198	280	203	210	272	297	212
31	172	---	128	102	---	214	---	208	---	271	300	---
TOTAL	6996	4805	4220	3630	2926	4419	5987	10065	7077	8109	8421	10231
MEAN	224	160	136	117	105	143	200	325	236	262	272	341
MAX	262	179	151	135	116	214	280	427	282	516	308	494
MIN	172	147	117	101	98	100	160	203	193	217	241	212
AC-FT	13880	9530	8370	7200	5800	8770	11880	19460	14040	16080	16700	20290

CAL YR 1977 TOTAL 64233 MEAN 176 MAX 273 MIN 78 AC-FT 127400  
WTR YR 1978 TOTAL 76886 MEAN 211 MAX 927 MIN 98 AC-FT 152500

## SNAKE RIVER MAIN STEM

13094000 SNAKE RIVER NEAR BUHL, ID

LOCATION.--Lat 42°39'58", long 114°42'41", in NW¼NW¼ sec.9, T.9 S., R.15 E., Twin Falls County, Hydrologic Unit 17040212, on left bank 2 mi (3.2 km) downstream from Niagara Springs, 3.8 mi (6.1 km) upstream from outlet of Clear Lakes, 6 mi (9.7 km) northeast of Buhl, and at mile 596.8 (960.3 km).

PERIOD OF RECORD.--December 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,951.9 ft (899.74 m) National Geodetic Vertical Datum of 1929 (stadia levels). Jan. 17, 1947, to July 12, 1965, at datum 1.00 ft (0.305 m) higher. Prior to Jan. 17, 1947, nonrecording gage at datum 1.0 ft (0.30 m) higher.

REMARKS.--Records good. Flow regulated by American Falls Reservoir 116.8 mi (187.9 km) upstream (see sta 13076500). Diurnal fluctuation caused by hydroelectric plants upstream. No diversion except by small ranch ditches between this station and station at Milner, where at times practically entire flow is diverted during irrigation seasons. Diversions above station for irrigation of about 2,030,000 acres (822,000 hm<sup>2</sup>) of which about 542,000 acres (219,000 hm<sup>2</sup>) are by withdrawals from ground water and about 230,000 acres (93,000 hm<sup>2</sup>) are irrigated below station. In addition, about 26,000 acres (11,000 hm<sup>2</sup>) are irrigated above station by diversions from Salmon Falls Creek. Considerable water leaks into the Snake Plain aquifer upstream, some of which returns above the station.

AVERAGE DISCHARGE.--31 years, 5,089 ft<sup>3</sup>/s (144.1 m<sup>3</sup>/s), 3,687,000 acre-ft/yr (4,546 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,700 ft<sup>3</sup>/s (671 m<sup>3</sup>/s) June 24, 1964, gage height, 11.54 ft (3.517 m, present datum); minimum, 1,580 ft<sup>3</sup>/s (44.7 m<sup>3</sup>/s) Mar. 28, 1963, gage height, 0.83 ft (0.253 m, present datum).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,600 ft<sup>3</sup>/s (329 m<sup>3</sup>/s) Apr. 21, gage height, 7.30 ft (2.225 m); minimum, 1,880 ft<sup>3</sup>/s (53.2 m<sup>3</sup>/s) June 30, gage height, 1.43 ft (0.436 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Shifting-control method used July 18 to Sept. 30)

1.2	1,780	4.0	4,760
1.5	1,980	6.0	8,500
2.0	2,380	8.0	13,400

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2230	1970	2380	2310	3410	3860	3670	8560	3970	1900	2410	2670
2	2210	1960	2370	2270	3350	3920	3550	8030	3000	1930	2360	2690
3	2220	1960	2400	2270	3090	3950	3450	6650	2440	1980	2360	2710
4	2220	1950	2410	2270	2870	3930	3520	6060	2350	2080	2340	2730
5	2210	1980	2410	2270	2830	3950	3650	7220	2360	2290	2350	2890
6	2200	1960	2370	2330	2800	3930	5900	8310	2260	2330	2320	3200
7	2210	1930	2370	2350	2790	3900	6790	8240	2160	3280	2310	3320
8	2210	1930	2380	2360	2790	3990	6940	8080	2150	3060	2260	3560
9	2210	1910	2360	2380	2670	3960	7030	7800	2160	2390	2260	3290
10	2220	1900	2370	2390	2710	3930	6890	6680	2120	2270	2270	3330
11	2200	1900	2390	2360	2760	3930	6700	6250	2130	2150	2260	3390
12	2190	1900	2410	2340	2740	4040	6220	6550	2190	2060	2290	3250
13	2190	2010	2380	2330	2720	3970	6140	7410	2180	2050	2300	3160
14	2160	2120	2400	2330	2810	4030	6090	7520	2140	2020	2330	3140
15	2160	2230	2430	2430	2900	4250	5810	6510	2130	2000	2330	3320
16	2150	2220	2390	2470	2890	4430	5780	4750	2110	2030	2480	3290
17	2150	2260	2380	2440	2860	4330	5330	4150	2180	2050	2610	3070
18	2130	2180	2420	2430	2890	4260	5790	3830	2220	2040	2620	3060
19	2120	2110	2390	2440	2990	4330	8750	3620	2310	2050	2810	3050
20	2110	2110	2330	2490	3220	4200	11100	4910	2240	2090	2860	3330
21	2100	2110	2290	2600	3340	4170	11300	6870	2180	2270	2750	4100
22	2070	2130	2330	3190	3430	4260	11100	6850	2110	2310	2690	4300
23	2050	2210	2360	3410	3420	4280	10900	6540	2060	2330	2660	4490
24	2030	2320	2360	3460	3390	4300	10700	6410	2020	2370	2710	4420
25	2000	2480	2350	3470	3360	4360	10400	6780	1990	2340	2690	4320
26	2000	2540	2360	3310	3360	4390	9680	6740	2000	2330	2700	4030
27	1990	2480	2340	3180	3380	4340	9000	6810	2000	2320	2730	3520
28	1990	2440	2320	3410	3360	3830	8970	6890	1960	2360	2730	3110
29	1980	2410	2330	3430	---	3750	8910	6930	1940	2390	2710	2760
30	1980	2390	2370	3400	---	3820	8720	6210	1900	2420	2650	2520
31	1970	---	2360	3470	---	3930	---	5360	---	2410	2680	---
TOTAL	65860	64000	73510	83590	85130	126560	218780	203520	66960	69900	77830	100020
MEAN	2125	2133	2371	2696	3040	4083	7293	6565	2232	2255	2511	3334
MAX	2230	2540	2430	3470	3430	4430	11300	8560	3970	3280	2860	4490
MIN	1970	1900	2290	2270	2670	3750	3450	3620	1900	1900	2260	2520
AC-FT	130600	126900	145800	165800	168900	251000	434000	403700	132800	138600	154400	198400
CAL YR 1977	TOTAL	1040790	MEAN	2851	MAX	6500	MIN	1780	AC-FT	2064000		
WTP YR 1978	TOTAL	1235660	MEAN	3385	MAX	11300	MIN	1900	AC-FT	2451000		

## BOX CANYON SPRINGS BASIN

183

13095500 BOX CANYON SPRINGS NEAR WENDELL, ID

LOCATION.--Lat 42°42'29", long 114°48'35", in SW¼NW¼NW¼ sec.28, T.8 S., R.14 E., Gooding County, Hydrologic Unit 17040212, on left bank 150 ft (46 m) downstream from waterfall, at mile 0.5 (0.8 km), 0.8 mi (1.3 km) downstream from source, 7.5 mi (12.1 km) southwest of Wendell, and 588.8 mi (947.4 km) upstream from mouth of Snake River.

PERIOD OF RECORD.--April 1950 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,950 ft (899 m), from topographic map.

REMARKS.--Records good. No regulation or surface diversion above station. Discharge affected by variable surface waste from irrigation, which flows over rimrocks into springs above station.

AVERAGE DISCHARGE.--28 years, 406 ft<sup>3</sup>/s (11.50 m<sup>3</sup>/s), 294,100 acre-ft/yr (363 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 483 ft<sup>3</sup>/s cfs m<sup>3</sup>/s Oct. 9, 14, 15, 18, 19, 1965; minimum daily, 345 ft<sup>3</sup>/s (9.77 m<sup>3</sup>/s) May 19-22, May 27 to June 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	393	387	377	367	359	353	353	349	345	351	373	389
2	393	387	377	367	359	353	353	351	345	351	373	391
3	395	387	377	365	357	353	353	351	345	353	373	391
4	393	387	377	365	357	353	353	353	347	355	373	391
5	395	389	377	365	357	353	351	351	347	359	375	393
6	395	387	375	365	357	353	351	351	349	359	375	394
7	393	387	377	365	357	353	351	351	349	359	373	396
8	393	385	375	363	357	353	351	351	347	359	375	397
9	393	385	375	365	357	353	351	351	347	361	377	399
10	393	385	373	365	357	353	351	351	349	363	375	400
11	393	385	373	363	359	353	351	351	349	363	377	401
12	393	383	373	363	357	353	351	349	347	363	377	403
13	391	383	373	363	357	353	351	349	349	361	379	403
14	391	383	373	363	357	353	351	349	349	363	381	403
15	391	383	373	363	357	353	351	349	349	363	380	403
16	391	383	373	363	355	351	351	349	351	365	380	403
17	391	383	373	363	355	353	351	347	349	365	387	405
18	391	383	373	361	355	353	349	347	351	365	385	406
19	391	383	371	361	355	353	349	345	351	365	387	405
20	391	381	369	361	355	353	351	345	351	365	387	404
21	389	381	369	361	353	353	351	345	349	365	388	405
22	389	381	371	361	353	353	351	345	349	365	388	405
23	389	381	371	361	353	353	351	347	351	367	387	404
24	389	379	369	361	353	353	351	347	351	367	387	404
25	389	379	369	359	353	351	351	347	353	369	387	404
26	389	379	369	359	353	351	351	347	353	369	387	405
27	389	379	367	351	353	351	351	345	353	371	386	405
28	389	379	367	359	353	351	351	345	351	373	386	405
29	389	377	367	359	---	351	351	345	351	373	388	405
30	387	377	367	359	---	351	351	345	351	373	389	405
31	387	---	367	359	---	353	---	345	---	373	390	---
TOTAL	12125	11488	11537	11225	9960	10929	10534	10793	10478	11273	11825	12024
MEAN	391	383	372	362	356	353	351	348	349	364	381	401
MAX	395	389	377	367	359	353	353	353	353	373	390	406
MIN	387	377	367	351	353	351	349	345	345	351	373	389
AC-FT	24050	22790	22880	22260	19760	21680	20890	21410	20780	22360	23450	23850
CAL YR 1977 TOTAL	137709			MEAN 377	MAX 397	MIN 361	AC-FT 273100					
WTR YR 1978 TOTAL	134191			MEAN 368	MAX 406	MIN 345	AC-FT 266200					

## SALMON FALLS CREEK BASIN

13105000 SALMON FALLS CREEK NEAR SAN JACINTO, NV

LOCATION.--Lat 41°56'40", long 114°41'15", in NE¼SW¼ sec.23, T.47 N., R.64 E., Elko County, Hydrologic Unit 17040213, on right bank in canyon, 630 ft (192 m) downstream from bridge on U.S. Highway 93, 550 ft (168 m) downstream from Shoshone Creek, and 5 mi (8 km) north of San Jacinto.

DRAINAGE AREA.--1,450 mi<sup>2</sup> (3,760 km<sup>2</sup>), approximately. Mean altitude, 6,350 ft (1,935 m).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1909 to June 1910 (gage heights only), June 1910 to September 1916, October 1918 to current year. Monthly discharge only for some periods published in WSP 1317. Prior to October 1910, published as Salmon Falls "River."

REVISED RECORDS.--WSP 1934: 1943(M).

GAGE.--Water-stage recorder. Altitude of gage is 5,120 ft (1,561 m) by barometer. Prior to June 6, 1910, nonrecording gage at nearby site at different datum. June 6, 1910, to Sept. 30, 1916, Oct. 1, 1918, to Aug. 28, 1964, water-stage recorder at site 35 ft (11 m) upstream at same datum.

REMARKS.--Records fair. Diversions above station for irrigation of about 18,200 acres (7,370 hm<sup>2</sup>) 1966 determination. Salmon Dam of Salmon River Canal Co. is 15 mi (24 km) downstream (see sta 13106500).

AVERAGE DISCHARGE.--66 years (1911-16, 1919-78), 140 ft<sup>3</sup>/s (3.96 m<sup>3</sup>/s), 101,400 acre-ft/yr (125 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,430 ft<sup>3</sup>/s (68.8 m<sup>3</sup>/s) May 18, 1975, gage height, 10.83 ft (3.301 m); maximum gage height, 12.65 ft (3.856 m) Feb. 12, 1962; minimum, 2.6 ft<sup>3</sup>/s (0.074 m<sup>3</sup>/s) Sept. 4, 1961, gage height, 3.37 ft (1.027 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 665 ft<sup>3</sup>/s (18.8 m<sup>3</sup>/s) Apr. 2, gage height, 7.20 ft (2.195 m); minimum, 19 ft<sup>3</sup>/s (0.538 m<sup>3</sup>/s) Nov. 20, gage height, 4.13 ft (1.259 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Shifting-control method used Apr. 13 to May 12, June 21 to July 21)

4.1	15	5.5	207
4.2	22	6.0	325
4.4	39	6.5	456
4.6	60	7.2	665
5.0	114		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	49	54	53	61	74	643	480	371	115	41	28
2	45	48	58	50	61	76	648	468	375	111	40	27
3	44	50	59	58	62	82	584	468	384	107	41	25
4	44	50	60	54	64	84	509	498	392	131	42	25
5	44	51	61	58	63	44	475	515	366	148	41	32
6	45	51	58	54	66	104	432	507	361	127	40	52
7	44	50	57	54	70	109	408	482	384	113	38	63
8	44	48	58	55	72	110	415	471	433	104	37	55
9	44	47	53	56	70	123	400	427	458	97	36	48
10	45	48	55	54	74	128	375	416	459	91	37	50
11	45	49	56	60	76	135	367	444	473	82	38	57
12	45	49	57	61	73	145	390	482	419	72	37	65
13	45	50	61	60	65	126	414	490	370	67	35	56
14	45	50	62	60	64	123	432	487	360	60	36	53
15	46	50	66	64	66	108	419	526	343	63	38	49
16	45	51	73	66	60	103	427	588	320	62	39	47
17	46	51	64	65	52	111	454	592	305	62	36	46
18	46	49	66	64	60	115	434	545	265	57	35	50
19	47	47	54	64	61	147	395	482	252	57	33	57
20	48	31	38	67	65	203	378	436	225	54	30	61
21	48	34	35	65	68	248	384	420	199	57	29	61
22	47	56	52	63	67	248	393	422	186	59	26	58
23	48	65	61	56	65	365	378	463	178	55	23	59
24	47	64	63	48	66	401	354	544	165	53	22	57
25	48	62	63	63	69	404	341	575	161	50	21	56
26	48	64	58	63	74	411	371	543	150	46	22	54
27	49	62	59	61	76	436	445	474	144	45	23	54
28	49	60	61	56	77	471	468	418	135	46	24	53
29	49	60	61	54	---	515	462	393	124	47	23	52
30	50	60	62	54	---	558	473	394	117	45	22	52
31	51	---	61	60	---	612	---	394	---	43	22	---
TOTAL	1437	1556	1816	1851	1867	7024	13078	14864	8874	2326	1007	1502
MEAN	46.4	51.9	58.6	59.7	66.7	227	436	474	296	75.0	32.5	50.1
MAX	51	65	73	67	77	612	648	592	473	148	42	65
MIN	44	31	35	48	52	74	341	393	117	43	21	25
AC-FT	2850	3090	3600	3670	3700	13930	25940	29480	17600	4610	2000	2980
CAI. YR 1977	TOTAL	26106	MEAN	71.5	MAX	255	MTN	18	AC-FT	51780		
WTR YR 1978	TOTAL	57202	MEAN	157	MAX	648	MTN	21	AC-FT	113500		



## SALMON FALLS CREEK BASIN

13106000 SALMON RIVER CANAL CO. CANAL NEAR ROGERSON, ID

LOCATION.--Lat 42°13'10", long 114°44'20", in sec.7, T.14 S., R.15 E., Twin Falls County, Hydrologic Unit 17040213, Bureau of Land Management lands, on left bank 0.5 mi (0.8 km) downstream from Salmon River Canal Co. reservoir and 7 mi (11.3 km) west of Rogerson.

PERIOD OF RECORD.--April 1937 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,506 m) by barometer. Oct. 1, 1953, to Sept. 30, 1954, nonrecording gage at same site and datum.

REMARKS.--Records excellent. Canal diverts from Salmon River Canal Co. reservoir (see sta 13106500) for irrigation of land in Salmon River Canal Co. project.

AVERAGE DISCHARGE.--41 years, 106 ft<sup>3</sup>/s (3.00 m<sup>3</sup>/s), 76,800 acre-ft/yr (94.7 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 660 ft<sup>3</sup>/s (18.7 m<sup>3</sup>/s) July 21-24, 1944; no flow for long periods in each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	341	400	399	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	343	399	393	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	355	401	390	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	356	392	392	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	360	371	391	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	368	378	386	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	396	401	387	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	402	400	388	.00
9	.00	.00	.00	.00	.00	.00	.00	163	406	398	387	.00
10	.00	.00	.00	.00	.00	.00	.00	208	410	405	387	.00
11	.00	.00	.00	.00	.00	.00	.00	175	422	432	385	.00
12	.00	.00	.00	.00	.00	.00	.00	216	422	433	378	.00
13	.00	.00	.00	.00	.00	.00	.00	230	418	437	371	.00
14	.00	.00	.00	.00	.00	.00	.00	239	419	441	352	.00
15	.00	.00	.00	.00	.00	.00	.00	257	417	450	345	.00
16	.00	.00	.00	.00	.00	.00	.00	307	410	460	310	.00
17	.00	.00	.00	.00	.00	.00	.00	307	392	493	290	.00
18	.00	.00	.00	.00	.00	.00	.00	307	378	488	267	.00
19	.00	.00	.00	.00	.00	.00	.00	313	363	483	287	.00
20	.00	.00	.00	.00	.00	.00	.00	316	362	490	304	.00
21	.00	.00	.00	.00	.00	.00	.00	318	358	487	315	.00
22	.00	.00	.00	.00	.00	.00	.00	320	363	475	320	.00
23	.00	.00	.00	.00	.00	.00	.00	327	367	461	317	.00
24	.00	.00	.00	.00	.00	.00	.00	352	375	462	306	.00
25	.00	.00	.00	.00	.00	.00	.00	348	392	469	292	.00
26	.00	.00	.00	.00	.00	.00	.00	327	382	468	285	.00
27	.00	.00	.00	.00	.00	.00	.00	329	377	458	279	.00
28	.00	.00	.00	.00	.00	.00	.00	311	381	449	285	.00
29	.00	.00	.00	.00	---	.00	.00	312	375	422	296	.00
30	.00	.00	.00	.00	---	.00	.00	325	381	416	300	.00
31	.00	---	.00	.00	---	.00	---	329	---	403	219	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	6636.00	11491	13522	10403	.00
MEAN	.000	.000	.000	.000	.000	.000	.000	214	383	436	336	.000
MAX	.00	.00	.00	.00	.00	.00	.00	352	422	493	399	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	341	371	219	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	13160	22790	26820	20630	.00
CAL YR 1977	TOTAL	38795.00	MEAN	106	MAX	478	MIN	.00	AC-FT	76950		
WTR YR 1978	TOTAL	42052.00	MEAN	115	MAX	493	MIN	.00	AC-FT	83410		

## 13106500 SALMON RIVER CANAL CO. RESERVOIR NEAR ROGERSON, ID

LOCATION.--Lat 42°12'40", long 114°44'00", in NE¼ sec.18, T.14 S., R.15 E., Twin Falls County, Hydrologic Unit 17040213, Bureau of Land Management lands, at Salmon Falls Dam on Salmon Falls Creek, 7.5 mi (12.1 km) west of Rogerson, and at mile 46.0 (74.0 km).

DRAINAGE AREA.--1,610 mi<sup>2</sup> (4,170 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--January 1922 to current year.

GAGE.--Nonrecording gage. Datum of gage is 4,945.8 ft (1,507.5 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by gravity-section concrete-arch dam completed in 1911; storage began in 1910. Usable capacity, 182,650 acre-ft (225 hm<sup>3</sup>) between gage heights 0.0 (bottom of outlet tunnel) and 80.0 ft (24.4 m) maximum operating level. Dead storage, 48,000 acre-ft (59.2 hm<sup>3</sup>). Water is used for irrigation of lands in Salmon River Canal Co. project. Figures given herein represent usable contents.

COOPERATION.--Gage readings and capacity table furnished by Salmon River Canal Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 166,000 acre-ft (205 hm<sup>3</sup>) June 24, 1975, gage height, 75.00 ft (22.860 m); minimum observed, 125 acre-ft (0.154 hm<sup>3</sup>) Sept. 21 to Oct. 5, 1934, gage height, 0.1 ft (0.03 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 79,500 acre-ft (98.0 hm<sup>3</sup>) May 29, gage height, 44.20 ft (13.472 m); minimum observed, 21,400 acre-ft (26.4 hm<sup>3</sup>) Sept. 1, gage height, 14.95 ft (4.557 m).

## Capacity table (gage height, in feet, and contents, in acre-feet)

14.0	19,900	30.0	48,800
16.0	23,200	40.0	69,800
20.0	30,000	50.0	93,800

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24100	25500	27500	30300	33000	36000	48800	70200	79000	67900	42600	21400
2	24200	25600	27600	30300	33100	36000	50100	70900	78900	67300	41900	---
3	24200	---	27700	30400	33200	36100	51300	71200	78700	66800	41100	---
4	24300	25700	27800	30500	33300	36200	52600	71900	78600	66100	40400	---
5	24300	25800	27900	30500	33400	36300	53600	72600	78500	65500	39500	---
6	24300	25900	28000	30600	33600	36600	54200	73500	78200	65000	38600	---
7	24400	---	28000	30700	33600	36900	54800	74400	78100	64300	37800	21500
8	24400	---	28100	30800	33700	37100	55500	75300	77800	63700	36900	21600
9	24500	26000	28200	30900	33800	37200	56300	75800	77600	63000	36000	21700
10	24500	---	28200	31000	33900	37500	56900	76100	77300	62400	35400	21800
11	24500	---	28400	31100	34000	37800	57400	76300	77200	61600	34700	21900
12	24500	26100	28500	31200	34100	38000	58100	76500	77100	60800	34000	22000
13	24600	---	28600	31300	34200	38200	58700	76800	76800	59900	33100	22100
14	24600	26200	28600	31400	34300	38400	59600	77100	76400	59100	32200	22200
15	24700	26300	28800	31500	34500	38800	60200	77300	75900	58300	31300	---
16	24700	26300	28900	31600	34600	38900	60900	77600	75600	57400	30700	22300
17	24800	---	29000	31700	34800	39200	61600	77900	75300	56600	30300	---
18	24800	---	29200	31800	34800	39400	62200	78200	74800	55600	29800	---
19	24900	26400	29200	31900	34800	39700	62800	78600	74400	54600	29300	22400
20	24900	---	29200	32000	34900	39800	63500	78900	74100	53600	28500	22500
21	25000	26500	29300	32100	35000	40100	64200	78900	73900	52600	27900	22600
22	25000	---	29300	32100	35200	40600	64600	78800	73300	51800	27300	22700
23	25100	26600	29300	32100	35300	41100	65300	78700	72600	50800	26700	---
24	25200	26800	29300	32200	35400	41800	65900	78800	72200	49800	26100	22800
25	25200	26900	29400	32300	35500	42600	66500	78800	71600	49000	25300	22900
26	25300	27100	29500	32400	35600	43400	67000	78900	71000	48000	24800	22900
27	25300	27200	29700	32500	35700	44000	67400	79300	70400	47100	24100	22900
28	25300	27300	29700	32600	35900	44900	68100	79400	69800	46200	23500	23000
29	25400	---	29800	32700	---	45800	68800	79500	69300	45300	22800	---
30	25400	27400	30000	32800	---	46700	69500	79400	68600	44400	22100	23100
31	25500	---	30100	32900	---	47700	---	79300	---	43500	21500	---
MAX	25500	27400	30100	32900	35900	47700	69500	79500	79000	67900	42600	23100
MIN	24100	25500	27500	30300	33000	36000	48800	70200	68600	43500	21500	---

## SALMON FALLS CREEK BASIN

13108150 SALMON FALLS CREEK NEAR HAGERMAN, ID

LOCATION.--Lat 42°41'47", long 114°51'15", in SW¼SE¼SE¼ sec.30, T.8 S., R.14 E., Twin Falls County, Hydrologic Unit 17040213, on left bank 25 ft (8 m) upstream from U.S. Highway 30, at mile 1.9 (3.1 km), and 8.5 mi (13.7 km) south of Hagerman.

DRAINAGE AREA.--2,120 mi<sup>2</sup> (5,490 km<sup>2</sup>), approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,900 ft (880 m), from topographic map.

REMARKS.--Records good. Flow completely regulated by Salmon River Canal Co. reservoir 44 mi (71 km) upstream (see sta 13106500). Entire available supply is diverted above the dam for irrigation. Flow below the dam is derived from leakage past the dam and return flow from adjacent land. Several diversions by pumping from the left bank below the dam are used for irrigation of land most of which is outside the basin. Flow past gage is partially regulated during irrigation season by small diversion dam 0.9 mi (1.4 km) upstream.

AVERAGE DISCHARGE.--8 years, 164 ft<sup>3</sup>/s (4.64 m<sup>3</sup>/s), 118,800 acre-ft/yr (146 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,360 ft<sup>3</sup>/s (38.5 m<sup>3</sup>/s) Jan. 19, 1972, gage height, 9.04 ft (2.755 m); minimum, 5.8 ft<sup>3</sup>/s (0.16 m<sup>3</sup>/s) July 9, 1977, gage height, 2.51 ft (0.765 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 371 ft<sup>3</sup>/s (10.5 m<sup>3</sup>/s) Sept. 6, gage height, 5.84 ft (1.780 m); minimum, 9.8 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s) May 17, gage height, 2.80 ft (0.853 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Shifting-control method used Mar. 19 to Sept. 30)

2.8	14	4.0	138
3.0	23	4.5	218
3.3	46	5.0	306
3.6	81		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	166	160	148	141	144	132	155	117	44	65	93
2	195	167	161	145	141	144	133	127	90	38	55	94
3	203	169	159	145	142	144	132	114	101	77	47	90
4	214	173	158	146	139	144	132	120	112	130	38	91
5	230	176	155	153	139	145	130	166	115	145	34	177
6	218	176	156	148	141	141	130	203	107	144	43	288
7	211	175	155	144	141	139	133	180	93	104	40	281
8	224	173	159	142	142	139	144	153	90	44	34	277
9	235	175	159	142	141	139	135	147	87	40	32	268
10	242	173	159	145	142	130	120	138	87	34	38	279
11	242	174	160	142	144	126	99	139	95	28	38	293
12	243	176	162	141	141	129	129	133	98	31	38	297
13	243	175	161	140	141	124	136	84	98	37	47	282
14	242	176	163	140	139	132	139	55	84	27	69	256
15	237	178	158	144	138	138	133	52	115	26	79	245
16	230	182	155	143	135	135	139	50	130	24	99	250
17	228	184	157	143	127	135	145	55	118	28	138	254
18	218	186	156	144	133	136	175	87	117	39	130	272
19	208	189	153	144	135	135	187	88	136	38	126	265
20	210	191	149	144	138	138	188	93	105	38	124	261
21	194	189	145	144	138	136	169	94	102	41	120	254
22	183	174	148	143	139	139	151	91	91	33	81	247
23	182	166	153	141	141	139	153	81	78	31	67	237
24	182	168	155	141	144	138	150	82	79	32	59	228
25	173	171	156	138	144	136	145	102	81	37	63	224
26	169	171	152	142	144	135	141	109	77	43	75	223
27	168	169	150	145	145	135	147	120	67	47	83	219
28	168	166	150	141	144	135	164	121	50	49	94	216
29	165	165	150	142	---	133	148	126	33	46	91	213
30	167	164	154	142	---	133	150	126	36	47	82	219
31	166	---	151	141	---	133	---	133	---	62	82	---
TOTAL	6377	5237	4819	4443	3919	4229	4309	3524	2789	1584	2211	6893
MEAN	206	175	155	143	140	136	144	114	93.0	51.1	71.3	230
MAX	243	191	163	153	145	145	188	203	136	145	138	297
MIN	165	164	145	138	127	124	99	50	33	24	32	90
AC-FT	12650	10390	9560	8810	7770	8390	8550	6990	5530	3140	4390	13670
CAL YR 1977	TOTAL	46918	MEAN 129	MAX 243	MIN 13	AC-FT	93060					
WTR YR 1978	TOTAL	50334	MEAN 138	MAX 297	MIN 24	AC-FT	99840					



## MUD LAKE-LOST RIVER BASINS

13112000 CAMAS CREEK AT CAMAS, ID

LOCATION.--Lat 44°00'10", long 112°13'12", in SE¼SE¼ sec.21, T.8 N., R.36 E., Jefferson County, Hydrologic Unit 17040214, on left bank 150 ft (46 m) upstream from county road bridge, 250 ft (76 m) upstream from Union Pacific Railroad bridge at Camas, and about 1.1 mi (1.8 km) upstream from Beaver Creek.

DRAINAGE AREA.--400 mi<sup>2</sup> (1,040 km<sup>2</sup>), approximately. Mean altitude, 6,450 ft (1,966 m).

PERIOD OF RECORD.--April 1925 to October 1970, April 1971 to current year.

REVISED RECORDS.--WSP 813: 1935. WSP 1123: 1947. WSP 1567: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,806.84 ft (1,465.125 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 21, 1925, nonrecording gage at site 0.1 mi (0.2 km) downstream at different datum. Aug. 21, 1925, to Mar. 25, 1927, nonrecording gage and Mar. 26, 1927, to Sept. 14, 1938, water-stage recorder at site 250 ft (76 m) upstream at datum 2.01 ft (0.613 m) higher.

REMARKS.--Records good. Diversions above station for irrigation of about 8,100 acres or 3,280 hm<sup>2</sup> (1966 determination). No water diverted into flood channel about 25 mi (40 km) upstream.

COOPERATION.--Water-stage recorder inspected by employees of Water District 31.

AVERAGE DISCHARGE.--51 years (1927-70, 1972-78), 34.0 ft<sup>3</sup>/s (0.963 m<sup>3</sup>/s), 24,600 acre-ft/yr (30.3 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,220 ft<sup>3</sup>/s (34.6 m<sup>3</sup>/s) May 2 or 3, 1952, gage height, 6.53 ft (1.990 m); from rating curve extended above 510 ft<sup>3</sup>/s (14.4 m<sup>3</sup>/s); no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 701 ft<sup>3</sup>/s (19.9 m<sup>3</sup>/s) May 3, 4, gage height, 5.49 ft (1.673 m); no flow on many days.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	21	472	170	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	36	534	147	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	32	648	130	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	47	667	126	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	32	598	126	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	31	456	125	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	37	341	132	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	55	294	146	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	70	297	150	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	82	276	143	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	94	351	152	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	114	405	169	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	116	335	145	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	107	293	116	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	110	299	102	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	120	356	92	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	150	498	88	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	118	485	78	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	99	377	64	.00	.00	.00
20	.00	.00	.00	.00	.00	.48	99	327	55	.00	.00	.00
21	.00	.00	.00	.00	.00	.84	127	283	52	.00	.00	.00
22	.00	.00	.00	.00	.00	.96	121	281	33	.00	.00	.00
23	.00	.00	.00	.00	.00	3.4	98	259	30	.00	.00	.00
24	.00	.00	.00	.00	.00	2.7	77	259	22	.00	.00	.00
25	.00	.00	.00	.00	.00	1.1	72	299	13	.00	.00	.00
26	.00	.00	.00	.00	.00	2.2	110	299	10	.00	.00	.00
27	.00	.00	.00	.00	.00	4.0	213	275	26	.00	.00	.00
28	.00	.00	.00	.00	.00	1.8	283	240	24	.00	.00	.00
29	.00	.00	.00	.00	---	2.9	356	185	11	.00	.00	.00
30	.00	.00	.00	.00	---	8.1	417	169	4.2	.00	.00	.00
31	.00	---	.00	.00	---	10	---	175	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	38.48	3444	11033	2681.2	.00	.00	.00
MEAN	.000	.000	.000	.000	.000	1.24	115	356	89.4	.000	.000	.000
MAX	.00	.00	.00	.00	.00	10	417	667	170	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	21	169	4.2	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	76	6830	21880	5320	.00	.00	.00
CAL YR 1977 TOTAL	1249.10		MEAN 3.42	MAX 292	MIN .00	AC-FT 2480						
WTR YR 1978 TOTAL	17196.68		MEAN 47.1	MAX 667	MIN .00	AC-FT 34110						

13112000 CAMAS CREEK AT CAMAS, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72 (partial-record station), 1974-75, 1976 to current year.  
REMARKS.--Miscellaneous chemical data published for water years 1968-69.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS AS CaCO3 (MG/L)	HARDNESS, NONCARBONATE (MG/L CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
JUN 06...	1450	124	156	7.8	20.0	71	1	20

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
JUN 06...	5.0	3.5	9	.2	1.7	85	0	70	4.0

DATE	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
JUN 06...	1.3	.1	19	97	.13	32.5	.08	.05

## MUD LAKE-LOST RIVER BASINS

13113000 BEAVER CREEK AT SPENCER, ID

LOCATION.--Lat 44°21'20", long 112°10'45", in NW¼SE¼ sec.23, T.12 N., R.36 E., Clark County, Hydrologic Unit 17040214, on left bank 62 ft (19 m) upstream from State Highway 22, 0.4 mi (0.6 km) southeast of Spencer Post Office, and 2.5 mi (4.0 km) upstream from Rattlesnake Creek.

DRAINAGE AREA.--120 mi<sup>2</sup> (310 km<sup>2</sup>), approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1938 to September 1940 (published as "near Spencer"), October 1940 to November 1952, October 1968 to current year (no winter records 1942-52).

GAGE.--Water-stage recorder. Altitude of gage is 5,850 ft (1,783 m) by barometer. December 1938 to November 1952 nonrecording gage. Prior to October 1940, at site 1.6 mi (2.6 km) upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 850 acres or 340 hm<sup>2</sup> (1966 determination).

AVERAGE DISCHARGE.--12 years (1940-41, 1969-78), 45.0 ft<sup>3</sup>/s (1.274 m<sup>3</sup>/s), 32,600 acre-ft/yr (40.2 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft<sup>3</sup>/s (33.7 m<sup>3</sup>/s) May 18, 1975, gage height, 9.84 ft (2.999 m), from rating curve extended above 400 ft<sup>3</sup>/s (11.3 m<sup>3</sup>/s) on basis of computation of peak flow through culvert; minimum observed, 0.5 ft<sup>3</sup>/s (0.014 m<sup>3</sup>/s) Jan. 26, 1942, Feb. 22, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 383 ft<sup>3</sup>/s (10.8 m<sup>3</sup>/s) Apr. 1, 2, gage height, 5.61 ft (1.710 m); maximum gage height, 6.15 ft (1.875 m) Mar. 24 (backwater from ice); minimum daily discharge, 4.4 ft<sup>3</sup>/s (0.125 m<sup>3</sup>/s) Sept. 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	23	16	9.0	8.6	10	366	134	87	21	20	9.4
2	26	15	19	5.4	8.8	9.5	336	133	79	20	17	8.7
3	22	18	20	7.2	9.0	8.2	161	121	76	19	15	6.6
4	21	16	17	9.8	10	8.4	122	106	75	22	13	4.4
5	19	16	15	12	14	8.8	117	99	70	28	12	4.6
6	18	13	17	13	14	9.2	114	94	68	27	15	18
7	21	11	17	13	12	11	131	90	65	25	12	20
8	22	10	11	13	10	12	184	91	62	21	8.8	16
9	20	9.0	13	13	9.5	13	179	89	59	25	7.9	12
10	20	12	14	13	8.5	14	157	92	59	28	8.3	16
11	20	13	12	13	8.0	13	184	91	68	20	8.8	44
12	19	15	11	13	7.2	12	139	87	63	18	8.1	29
13	17	17	11	13	6.6	10	112	82	55	17	9.4	26
14	17	17	13	13	7.1	9.5	103	83	52	16	15	21
15	17	19	15	13	8.0	9.2	108	87	50	15	17	19
16	16	32	14	12	6.4	9.6	155	100	49	15	16	17
17	15	36	11	12	7.0	10	145	111	49	13	24	16
18	15	8.4	9.0	12	7.4	12	104	132	46	16	20	19
19	15	6.0	8.0	11	7.8	15	101	147	47	17	17	24
20	14	5.7	7.5	10	7.8	27	106	114	43	22	14	29
21	14	6.8	7.0	10	7.6	38	114	106	40	29	12	27
22	14	9.4	7.4	10	7.4	45	91	98	38	25	11	24
23	14	14	8.0	9.2	7.4	50	87	98	36	21	10	20
24	14	20	10	7.0	7.6	49	81	99	30	19	10	19
25	14	29	11	7.8	8.2	42	92	99	29	17	8.9	18
26	14	27	12	8.5	9.6	37	157	94	33	15	8.6	18
27	14	29	12	9.0	11	37	170	89	29	15	9.7	17
28	14	22	12	9.7	11	60	130	85	26	26	13	16
29	14	20	12	10	---	120	117	82	23	32	11	16
30	17	17	12	9.5	---	174	118	81	23	33	10	16
31	16	---	11	8.5	---	213	---	85	---	25	10	---
TOTAL	545	506.3	384.9	329.6	247.5	1096.4	4281	3099	1529	662	392.5	550.7
MEAN	17.6	16.9	12.4	10.6	8.84	35.4	143	100	51.0	21.4	12.7	18.4
MAX	32	36	20	13	14	213	366	147	87	33	24	44
MIN	14	5.7	7.0	5.4	6.4	8.2	81	81	23	13	7.9	4.4
AC-FT	1080	1000	763	654	491	2170	8490	6150	3030	1310	779	1090
CAL YR 1977	TOTAL	7065.50	MEAN	19.4	MAX	150	MIN	.80	AC-FT	14010		
WTR YR 1978	TOTAL	13623.90	MEAN	37.3	MAX	366	MIN	4.4	AC-FT	27020		

MUD LAKE-LOST RIVER BASINS

13113000 BEAVER CREEK AT SPENCER, ID--Continued

WATER-QUALITY RECORDS

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

REMARKS.--Miscellaneous chemical data published for water years 1973-74.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS AS CaCO3 (MG/L)	HARDNESS, NONCARBONATE (MG/L CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
OCT 19...	1235	15	430	*8.3	5.0	220	0	62
JUN 06...	1240	69	333	*8.0	12.5	210	13	60

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 19...	16	9.7	9	.3	1.3	270	0	221	6.6
JUN 06...	14	8.0	8	.2	1.2	240	0	197	8.5

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 19...	5.6	.2	20	255	.35	10.3	.03	.05
JUN 06...	4.3	.2	14	229	.31	43.0	.19	.06

\* Not a field determination.

## MUD LAKE-LOST RIVER BASINS

13114000 BEAVER CREEK AT CAMAS, ID

LOCATION.--Lat 44°00'27", long 112°13'25", in NW¼SW¼ sec.21, T.8 N., R.36 E., Jefferson County, Hydrologic Unit 17040214, on right bank 0.1 mi (0.2 km) west of railroad crossing at Camas and about 1.4 mi (2.3 km) upstream from mouth.

DRAINAGE AREA.--510 mi<sup>2</sup> (1,320 km<sup>2</sup>), approximately. Mean altitude, 6,190 ft (1,887 m).

PERIOD OF RECORD.--April 1921 to current year (flood season only 1971-78).

GAGE.--Water-stage recorder. Altitude of gage is 4,790 ft (1,460 m), by barometer. Prior to Dec. 22, 1949, nonrecording gages at nearby sites at present datum.

REMARKS.--Records good. Flow affected by irrigation diversions above Dubois, 14 mi (22.5 km) above station, and by heavy channel losses below Dubois. Diversions above station for irrigation of about 5,800 acres or 2,350 hm<sup>2</sup> (1966 determination).

COOPERATION.--Occasional inspections of recorder by Watermaster of Water District 31.

AVERAGE DISCHARGE.--49 years (1922-70), 6.00 ft<sup>3</sup>/s (0.170 m<sup>3</sup>/s), 4,350 acre-ft/yr (5.36 hm<sup>3</sup>/yr);

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 322 ft<sup>3</sup>/s (9.12 m<sup>3</sup>/s) May 18, 1975, gage height, 4.52 ft (1.378 m); no flow for long periods in each year; no flow for entire water years 1929, 1931-37, 1940, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 224 ft<sup>3</sup>/s (6.34 m<sup>3</sup>/s) Apr. 2, gage height, 4.02 ft (1.225 m); no flow for long periods.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						.00	163	43	51	.00	.00	.00
2						.00	212	49	44	.00	.00	.00
3						.00	136	65	37	.00	.00	.00
4						.00	70	60	35	.00	.00	.00
5						.00	43	55	28	.00	.00	.00
6						.00	43	49	22	.00	.00	.00
7						.00	43	51	8.0	.00	.00	.00
8						.00	98	48	6.5	.00	.00	.00
9						.00	109	41	6.0	.00	.00	.00
10						.00	91	35	7.5	.00	.00	.00
11						.00	98	43	12	.00	.00	.00
12						.00	89	49	12	.00	.00	.00
13						.00	61	48	6.0	.00	.00	.00
14						.00	44	44	.54	.00	.00	.00
15						.00	47	55	.00	.00	.00	.00
16						.00	55	85	.00	.00	.00	.00
17						.00	97	118	.00	.00	.00	.00
18						.00	62	112	.40	.00	.00	.00
19						.00	47	133	.93	.00	.00	.00
20						.00	41	94	.02	.00	.00	.00
21						.00	49	71	.00	.00	.00	.00
22						.00	43	51	.00	.00	.00	.00
23						.00	27	51	.00	.00	.00	.00
24						.00	12	65	.00	.00	.00	.00
25						.00	10	83	.00	.00	.00	.00
26						.00	27	79	.00	.00	.00	.00
27						.00	78	70	.00	.00	.00	.00
28						.00	56	62	.00	.00	.00	.00
29						.00	41	53	.00	.00	.00	.00
30						5.0	40	48	.00	.00	.00	.00
31						70	---	51	---	.00	.00	---
TOTAL	---	---	---	---	---	75.00	2032	1961	276.89	.00	.00	.00
MEAN	---	---	---	---	---	2.42	67.7	63.3	9.23	.000	.000	.000
MAX	---	---	---	---	---	70	212	133	51	.00	.00	.00
MIN	---	---	---	---	---	.00	10	35	.00	.00	.00	.00
AC-FT	---	---	---	---	---	149	4030	3890	549	.00	.00	.00

## 13115000 MUD LAKE NEAR TERRETON, ID

LOCATION.--Lat 43°53'25", long 112°21'28", in NE¼SE¼ sec.32, T.7 N., R.35 E., Jefferson County, Hydrologic Unit 17040215, at mouth of Camas Creek, 4.4 mi (7.1 km) northeast of First Owsley pumphouse, and 5.5 mi (8.8 km) northeast of Terretton.

DRAINAGE AREA.--1,130 mi<sup>2</sup> (2,930 km<sup>2</sup>), approximately, not including Medicine Lodge Creek.

PERIOD OF RECORD.--April 1921 to current year.

REVISED RECORDS.--WSP 1567: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,774.99 ft (1,455.417 m) National Vertical Datum of 1929. Prior to Oct. 31, 1931, nonrecording gages at or near pumphouse (now used as a supplementary gage) at same datum. Oct. 31, 1931, to Sept. 30, 1954, water-stage recorder at site 2.7 mi (4.3 km) southwest and 2 mi (3.2 km) north of First Owsley pumphouse at same datum; Oct. 1, 1954, to Sept. 8, 1978, water-stage recorder at site 670 ft (204 m) north of mouth of Camas Creek at same datum.

REMARKS.--Mud Lake is a perched body of water confined by earth dikes and fed by ground water and surface tributaries augmented by well flows and surface inflow from North Lake. Water for irrigation is diverted from lake by pumping. During low-lake stages, inflow from Camas Creek may be bypassed through Camas Creek diversion canal directly to lake outlet channel leading to First Owsley pumping plant. Bypass was not used during 1978. Other irrigation diversions are made by various means from adjacent lakes and wells and Camas Creek above lake. Area of Mud Lake is varied from time to time by changes in dikes. Figures given herein represent contents above gage height -4.0 ft (-1.22 m). Capacity table prepared from surveys made by Geological Survey and adjusted for changes in dikes. High winds are frequent, and stage at recorder during wind does not usually represent the mean for the lake. For complete description of Mud Lake region, see WSP 818.

COOPERATION.--Water-stage recorder inspected by employees of Water District 31.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 61,660 acre-ft (76.0 hm<sup>3</sup>) May 5, 1923, gage height, 9.20 ft (2.804 m); practically no contents Oct. 1 to Nov. 15, 1937, due to bypassing Camas Creek (see Remarks).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 33,900 acre-ft (41.8 hm<sup>3</sup>) May 10, gage height, 7.82 ft (2.384 m); minimum contents, 7,400 acre-ft (9.12 hm<sup>3</sup>) Sept. 30.

## Capacity table (elevation, in feet, and contents, in acre-feet)

1.0	5,460	4.0	15,800	8.0	37,900
2.0	8,150	6.0	25,700	9.0	44,700
3.0	11,600				

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FER	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9550	8600	9660	11300	14100	16800	20000	24500	28900	22300	12300	11500
2	9590	8560	9720	11300	14200	16900	20000	29300	28400	22200	12700	11500
3	9620	8400	9790	11500	14400	17000	19500	29600	28000	22100	12800	11500
4	9690	8430	9720	11600	14600	17000	19500	30400	27400	22100	12800	11600
5	9830	8760	9720	11700	14700	17100	19600	31000	27000	21800	12800	11400
6	9720	8790	9790	11800	14900	17300	19600	31000	26500	21800	12700	11400
7	9620	8760	10100	11800	15000	17300	20300	32000	26100	21600	12600	11200
8	9590	8630	10200	11900	15100	17400	20500	33000	25600	21300	12600	11100
9	9660	8530	10200	12000	15300	17400	20700	33300	25700	21000	12600	11100
10	9520	8500	10200	12100	15500	17500	21000	33900	24300	20700	13900	11300
11	9450	8600	10300	12300	15600	17500	21200	33000	24500	20400	13400	11300
12	9450	8690	10400	12300	15700	17600	21500	33000	22800	20000	13400	11300
13	9450	9050	10500	12300	15700	17700	21800	33200	23400	19500	13200	11400
14	9420	8860	10600	12300	15800	17900	22100	33400	24400	19000	13100	11200
15	9380	8920	10400	12500	15800	18000	22400	33500	25500	18700	12700	11200
16	9350	8950	10400	12700	15900	18000	23500	33300	24400	18300	12500	10800
17	9350	8990	10500	12700	16000	18100	22900	33300	24000	17700	12300	10400
18	9320	8990	10600	12900	16100	18200	23100	33300	23600	17000	12300	10000
19	9220	9050	10700	13000	16100	18300	23200	33300	23200	16200	12100	9720
20	9150	9020	10700	13100	16200	18500	23900	33400	22900	15700	11900	9520
21	8950	9150	10700	13100	16300	18500	23600	33000	22800	15200	11800	9220
22	8890	9150	10700	13200	16300	18700	23800	33700	22600	14700	11500	8920
23	8820	9220	10800	13300	16400	18800	23900	33600	22500	14700	11500	8630
24	8760	9280	10800	13400	16500	18900	24100	33200	22400	14200	11400	8340
25	8630	9350	10900	13500	16500	19000	24400	33200	22300	13600	11400	7970
26	8660	9380	10900	13600	16600	19000	25100	32600	22500	13100	11400	7670
27	8890	9480	11000	13600	16700	19300	25700	31900	22600	12500	11200	7550
28	8470	9520	11000	13800	16800	19400	26400	31000	22700	12400	11400	7580
29	9020	9590	11100	13900	---	19400	27300	30500	22700	12100	11400	7550
30	8760	9450	11200	14000	---	19400	28000	30000	22500	11900	11500	7400
31	8600	---	11300	14100	---	19900	---	29400	---	12100	11600	---
MAX	9830	9590	11300	14100	16800	19900	28000	33900	28900	22300	13900	11600
MIN	8470	8400	9660	11300	14100	16800	19500	28500	22300	11900	11200	7400
(†)	2.14	2.40	2.90	3.60	4.21	4.88	6.39	6.63	5.40	3.11	2.98	1.75
(‡)	-990	+850	-1850	+2800	+2700	+3100	+8100	+1400	-6900	-10400	-500	-4200

CAL YR 1977..... † -4200

WTR YR 1978..... † -2190

† Gage height, in feet, at end of month.

‡ Change in contents, in acre-feet.

## MUD LAKE-LOST RIVER BASINS

13115000 MUD LAKE NEAR TERRETON, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72 (partial-record station), 1974-75, 1976 to current year.  
REMARKS.--Miscellaneous chemical data published for water years 1968-72.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	WEATHER (WMO CODE NUMBER)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)
OCT 26...	1500	8660	314	--	23.0	12.5	2	120	0
JUL 20...	1543	15700	187	9.5	28.0	26.0	--	85	4
AUG 22...	1000	11500	206	*8.5	--	25.5	--	93	0

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CAC03)
OCT 26...	33	9.6	10	15	.4	2.3	150	--	120
JUL 20...	20	8.5	9.3	19	.4	2.3	--	--	81
AUG 22...	23	8.6	10	19	.5	--	120	--	98

DATE	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT 26...	17	8.0	.5	28	184	.25	.43	.03
JUL 20...	7.7	6.2	.4	7.7	111	.15	.04	.06
AUG 22...	6.9	7.1	.5	29	148	.20	.33	.04

\* Not a field determination.

## MUD LAKE-LOST RIVER BASINS

197

13116970 BIRCH CREEK NEAR KAUFMAN GUARD STATION, NEAR LONE PINE, ID

LOCATION.--Lat 44°15'14", long 112°59'00", in NW¼SE¼ sec.27, T.11 N., R.29 E., Lemhi County, Hydrologic Unit 17040216, 1.8 mi (2.9 km) upstream from Kaufman guard station and 5.5 mi (8.9 km) northwest of Lone Pine.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1977 to September 1978 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1977 to September 1978 (discontinued).

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 20.0°C July 14; minimum, 3.0°C Feb. 16, 18, 19.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE, SURF (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DEMAND, (PERCENT SATURATION)	OXYGEN, CHEMICAL (LOW LEVEL) (MG/L)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L CaCO3)
NOV 29...	1300	37	277	9.0	6.0	11.0	1	--	--	22	160	22
JAN 16...	1620	37	304	8.7	-3.0	8.5	1	9.7	105	8	170	14
MAR 01...	1330	32	290	8.3	-5.0	10.0	2	10.2	113	0	160	29
APR 06...	1510	39	290	8.7	7.0	12.5	1	9.6	114	7	170	19
MAY 10...	1440	35	288	8.7	14.0	16.5	1	9.6	123	13	160	9
JUN 07...	1630	35	*317	8.5	22.0	15.5	1	8.6	124	5	160	25
JUL 18...	0925	35	295	8.2	15.5	13.0	0	8.9	106	0	160	23
AUG 30...	1630	27	297	8.3	19.0	13.5	1	8.3	100	14	170	28

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)
NOV 29...	40	15	5.0	6	.2	.9	140	14	138	.3	.0	--
JAN 16...	42	15	5.1	6	.2	.9	170	10	156	.6	--	--
MAR 01...	39	15	4.7	6	.2	.9	160	0	131	1.3	--	23
APR 06...	42	16	5.1	6	.2	.9	170	7	151	.6	--	24
MAY 10...	40	15	4.9	6	.2	.9	160	12	151	.6	--	24
JUN 07...	41	15	5.3	7	.2	.8	160	2	135	.8	--	35
JUL 18...	42	14	5.0	6	.2	.9	170	0	140	1.7	.2	23
AUG 30...	44	14	5.2	6	.2	.9	170	0	140	1.4	--	24

\* Not a field determination.

MUD LAKE--LOST RIVER BASINS

13116970 BIRCH CREEK NEAR KAUFMAN GUARD STATION, NEAR LONE PINE, ID--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (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)	NITROGEN, TOTAL (MG/L AS NO3)
NOV 29...	3.5	.2	164	.22	16.4	.24	.00	.35	.35	.59	2.6
JAN 16...	3.4	.2	177	.24	17.9	.20	.00	.08	.08	.28	1.2
MAR 01...	3.6	.2	169	.23	14.8	.19	.00	.01	.01	.20	.89
APR 06...	3.5	.2	176	.24	18.5	.15	.03	.12	.15	.30	1.3
MAY 10...	4.1	.2	180	.24	17.0	.11	.00	.34	.34	.45	2.0
JUN 07...	3.5	.2	179	.24	16.9	.08	.00	.11	.11	.19	.84
JUL 18...	3.4	.2	180	.24	17.0	.18	.00	.66	.66	.84	3.7
AUG 30...	3.4	.1	173	.24	12.6	.09	.01	.26	.27	.36	1.6

DATE	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS P04)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ANTI-MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
NOV 29...	.00	.00	40	2	4	300	0	70	1	0	0
JAN 16...	.00	.00	--	--	--	--	--	--	--	--	--
MAR 01...	.00	.00	--	--	--	--	--	--	--	--	--
APR 06...	.00	.00	--	--	--	--	--	--	--	--	--
MAY 10...	.01	.03	--	--	--	--	--	--	--	--	--
JUN 07...	.00	.00	--	--	--	--	--	--	--	--	--
JUL 18...	.01	.03	30	0	2	200	0	50	1	0	0
AUG 30...	.00	.00	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CYANIDE, TOTAL (MG/L AS CN)
NOV 29...	?	50	6	0	.0	3	5	1	0	6	.00
JAN 16...	--	--	--	--	--	--	--	--	--	--	--
MAR 01...	--	--	--	--	--	--	--	--	--	--	--
APR 06...	--	--	--	--	--	--	--	--	--	--	--
MAY 10...	--	--	--	--	--	--	--	--	--	--	--
JUN 07...	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	4	40	6	0	.0	0	4	1	0	10	.00
AUG 30...	--	--	--	--	--	--	--	--	--	--	--

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	DI-AZINON, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRIETHION, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	TOTAL TRIETHION, TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV 29...	1300	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUL 18...	0925	.00	.00	.00	.00	.00	.00	.00	6.0	.00	.00



## MUD LAKE-LOST RIVER BASINS

13116980 BIRCH CREEK AT KAUFMAN GUARD STATION, NEAR LONE PINE, ID

LOCATION.--Lat 44°14'29", long 112°58'15", in SE¼SW¼NW¼ sec.35, T.11 N., R.29 E., Lemhi County, Hydrologic Unit 17040216, Targhee National Forest, 0.6 mi (1 km) upstream from Kaufman guard station and 4.6 mi (7.4 km) northwest of Lone Pine.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1977 to September 1978 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1977 to September 1978 (discontinued).

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 19.5°C July 26, Aug. 6; minimum, 2.0°C Jan. 1.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WUPF (DEG C)	TURBIDITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	HARDNESS AS CaCO3 (MG/L)	HARDNESS, NONCARBONATE (MG/L CaCO3)	
NOV 28...	1720	79	269	8.8	5	7.5	2	--	--	24	170	15
JAN 16...	1435	76	302	8.8	-2.0	7.5	1	10.7	113	8	160	20
MAR 02...	1430	49	316	8.1	-6.0	8.5	2	10.1	109	19	160	0
APR 05...	1500	83	269	8.8	10.0	14.0	1	9.6	117	0	170	27
MAY 11...	1315	80	*321	8.7	5.5	11.0	1	10.0	114	11	170	23
JUN 08...	1500	74	330	8.7	19.5	17.0	1	9.1	124	7	160	29
JUL 18...	1030	72	318	8.4	19.0	12.5	1	9.9	117	11	160	17
AUG 30...	1515	46	293	8.4	25.0	14.5	1	9.3	114	17	160	17

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)
NOV 28...	40	16	5.4	7	.2	1.1	160	14	155	.5	--	4.8
JAN 16...	40	15	5.2	7	.2	1.0	150	10	140	.4	--	4.5
MAR 02...	41	15	5.0	6	.2	.9	200	0	160	2.5	24	4.9
APR 05...	41	16	5.7	7	.2	1.0	150	12	143	.4	24	5.2
MAY 11...	42	16	5.5	7	.2	1.0	170	5	150	.6	25	5.5
JUN 08...	39	15	5.8	7	.2	1.0	150	5	131	.5	33	5.1
JUL 18...	41	15	5.4	7	.2	1.0	170	2	143	1.1	23	4.7
AUG 30...	41	14	7.1	9	.2	1.0	150	12	143	1.1	23	4.5

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (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)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
NOV 28...	.2	183	.25	39.0	.32	.06	.00	.02	.34	1.5	.01	.03
JAN 16...	.2	172	.23	35.3	.27	.00	.07	.07	.29	1.3	.05	.15
MAR 02...	.2	165	.22	22.0	.25	.01	.01	.02	.27	1.2	.00	.00
APR 05...	.2	177	.24	39.7	.16	.04	.17	.21	.37	1.6	.00	.00
MAY 11...	.2	186	.25	40.2	.16	.00	.17	.17	.33	1.5	.01	.03
JUN 08...	.2	178	.24	35.7	.13	.01	.30	.31	.44	1.9	.00	.00
JUL 18...	.2	181	.25	35.4	.16	.00	.22	.22	.38	1.7	.01	.03
AUG 30...	.2	172	.23	21.4	.05	.01	.25	.26	.31	1.4	.00	.00

\* Not a field determination.



## MUD LAKE-LOST RIVER BASINS

13116990 BIRCH CREEK NEAR LONE PINE, ID

LOCATION.--Lat 44°13'46", long 112°58'30", in NE¼SE¼NE¼ sec.3, T.10 N., R.29 E., Clark County, Hydrologic Unit 17040216, 200 ft (61 m) upstream from State Highway 28 crossing and 3.7 mi (6.0 km) northwest of Lone Pine.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1977 to September 1978 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1977 to September 1978 (discontinued).

REMARKS.--No temperature record Dec. 31 to Jan. 15, Jan. 26 to Feb. 28 due to equipment malfunction.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 21.0°C Aug. 11.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L CaCO3)
NOV 28...	1510	95	251	8.9	.5	8.0	2	--	--	21	170	32
JAN 16...	1230	94	298	8.6	-2.0	6.0	6	10.8	109	11	170	27
MAR 01...	1130	85	304	7.8	-4.0	5.0	2	11.0	109	0	170	--
APR 05...	1245	103	282	8.7	9.0	12.5	1	9.6	114	7	170	24
MAY 10...	1315	101	282	8.7	12.5	12.5	1	9.7	115	14	170	0
JUN 07...	1430	92	305	8.5	20.0	15.5	1	8.6	118	6	170	30
JUL 18...	1120	93	321	8.6	19.5	14.0	1	9.4	114	7	160	20
AUG 29...	1645	43	* 310	8.5	26.0	17.5	2	8.2	108	22	150	7

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)	SULFATE, DIS-SOLVED (MG/L AS SO4)
NOV 28...	42	16	5.3	6	.2	1.0	140	14	138	.3	.0	--
JAN 16...	42	16	5.1	6	.2	1.0	150	12	143	.7	--	--
MAR 01...	41	16	5.0	6	.2	1.0	--	0	--	--	--	27
APR 05...	42	16	5.4	6	.2	1.0	150	14	146	.6	--	26
MAY 10...	43	16	5.2	6	.2	1.0	190	14	179	.7	--	27
JUN 07...	41	16	5.5	7	.2	.9	160	5	140	.9	--	36
JUL 18...	41	15	5.1	6	.2	.9	150	10	140	.7	.4	25
AUG 29...	37	15	7.1	9	.2	1.1	160	7	143	.9	--	25

DATE	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (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)	NITROGEN, TOTAL (MG/L AS NO3)
NOV 28...	4.8	.2	168	.23	43.1	.28	.00	4.3	4.3	4.6	20
JAN 16...	5.1	.2	182	.25	46.2	.23	.01	.04	.05	.28	1.2
MAR 01...	4.8	.2	182	.25	41.8	.26	.03	.03	.06	.32	1.4
APR 05...	5.3	.2	178	.24	49.5	.17	.04	.15	.19	.36	1.6
MAY 10...	5.6	.2	190	.26	51.8	.15	.09	.05	.14	.29	1.3
JUN 07...	5.1	.2	185	.25	46.0	.14	.01	.16	.17	.31	1.4
JUL 18...	4.7	.2	180	.24	45.3	.16	.00	.20	.20	.36	1.6
AUG 29...	4.7	.1	179	.24	20.9	.09	.01	.50	.51	.60	2.7

\* Not a field determination.





## MUD LAKE-LOST RIVER BASINS

205

13117020 BIRCH CREEK AT BLUE DOME INN, NR RENO, ID

LOCATION.--Lat 44°09'14", long 112°54'24", in NE¼SW¼ sec.32, T.10 N., R.30 E., Clark County, Hydrologic Unit 17040216, on left bank 40 ft (12 m) upstream from bridge on Highway 28, 0.2 mi (0.3 km) downstream from Blue Dome Inn, 9 mi (14 km) southeast of former Reno Post Office, and 34 mi (55 km) west of Dubois.

DRAINAGE AREA.--380 mi<sup>2</sup> (980 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--June 1967 to current year (no winter records most years). Prior to June 1972 at site 40 ft (12 m) downstream at same datum.

GAGE.--Water-stage recorder. Altitude of gage is 6,050 ft (1,840 m), from topographic map.

REMARKS.--Records fair. Diversions above station for irrigation of about 280 acres or 110 hm<sup>2</sup> (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 149 ft<sup>3</sup>/s (4.22 m<sup>3</sup>/s) July 30, 1969, gage height, 1.56 ft (0.475 m); minimum recorded, 47 ft<sup>3</sup>/s (1.33 m<sup>3</sup>/s) June 26-29, 1977, gage height, 1.53 ft (0.466 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 103 ft<sup>3</sup>/s (2.92 m<sup>3</sup>/s) May 1, gage height, 1.98 ft (0.604 m); minimum recorded, 54 ft<sup>3</sup>/s (1.53 m<sup>3</sup>/s) June 2, gage height, 1.54 ft (0.469 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	85	85	70	87	85	92	93	69	59	66	62
2	81	85	85	75	87	83	88	92	63	59	67	63
3	81	85	87	85	87	85	86	90	66	59	65	63
4	79	85	87	87	87	87	86	88	65	60	65	63
5	79	85	87	85	87	82	86	88	65	59	65	64
6	79	85	85	85	89	82	86	90	64	59	64	69
7	81	85	85	85	88	82	92	90	62	59	61	64
8	81	83	84	85	89	82	92	88	62	63	61	63
9	81	80	83	85	88	82	88	87	62	62	63	63
10	81	83	83	85	87	81	87	86	64	60	63	65
11	83	85	83	87	87	81	86	86	64	59	64	67
12	87	85	83	87	87	81	86	86	63	59	62	67
13	85	85	85	87	87	81	86	85	62	59	62	69
14	85	85	85	87	87	80	86	85	62	59	62	69
15	85	85	87	89	87	81	87	85	61	59	62	70
16	85	85	85	87	87	81	94	88	62	61	63	69
17	85	85	85	87	87	80	90	87	61	59	64	70
18	85	84	85	87	87	80	87	90	62	58	60	78
19	85	82	75	87	87	81	87	90	62	60	62	84
20	85	80	65	87	88	82	87	87	61	61	63	85
21	85	83	65	87	87	84	87	80	61	61	63	84
22	85	85	70	87	87	85	86	72	60	60	62	84
23	85	85	75	80	87	86	86	71	61	60	63	82
24	85	85	80	84	87	87	85	70	60	60	59	82
25	85	85	82	86	87	68	86	70	60	59	60	82
26	85	85	83	87	87	91	91	71	60	59	62	82
27	85	85	84	87	87	93	88	70	60	60	61	82
28	85	85	85	87	87	90	88	70	60	64	61	82
29	85	85	85	89	---	88	90	69	59	62	61	81
30	85	85	85	87	---	87	97	68	59	63	62	81
31	85	---	85	87	---	87	---	69	---	67	63	---
TOTAL	2589	2530	2548	2647	2443	2605	2643	2541	1862	1868	1941	2189
MEAN	83.5	84.3	82.2	85.4	87.3	84.0	88.1	82.0	62.1	60.3	62.6	73.0
MAX	87	85	87	89	89	93	97	93	69	67	67	85
MIN	79	80	65	70	87	80	85	68	59	58	59	62
AC-FT	5140	5020	5050	5250	4850	5170	5240	5040	3690	3710	3850	4340
WTR YR 1978	TOTAL	28406	MEAN	77.8	MAX	97	MIN	58	AC-FT	56340		

## MUD LAKE-LOST RIVER BASINS

13117030 BIRCH CREEK AT EIGHT-MILE CANYON ROAD, NEAR RENO, ID

LOCATION.--Lat 44°04'49", long 112°52'30", in sec.28, T.9 N., R.30 E., Clark County, Hydrologic Unit 17040216, Bureau of Land Management lands, 300 ft (91 m) downstream from Eight-Mile Canyon road crossing, 5.5 mi (8.8 km) downstream from Blue Dome Inn, and 14 mi (23 km) southeast of Reno.

DRAINAGE AREA.--400 mi<sup>2</sup> (1,040 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--June 1967 to current year (no winter records).

GAGE.--Water-stage recorder. Altitude of gage is 5,770 ft (1,760 m), from topographic map.

REMARKS.--Records fair. Diversions above station for irrigation of about 350 acres, (140 hm<sup>2</sup>) 1966 determination.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 108 ft<sup>3</sup>/s (3.06 m<sup>3</sup>/s) July 31, 1969, gage height, 1.62 ft (0.494 m); minimum recorded, 11 ft<sup>3</sup>/s (0.31 m<sup>3</sup>/s) July 5, 1967, gage height, 0.97 ft (0.296 m).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge recorded, 86 ft<sup>3</sup>/s (2.44 m<sup>3</sup>/s) Apr. 1; maximum gage height recorded, 1.27 ft (0.387 m) Apr. 7, 8, 16, 30; minimum daily recorded, 34 ft<sup>3</sup>/s (0.96 m<sup>3</sup>/s) Sept. 1-3.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

0.8	30
1.0	44
1.2	65
1.4	90

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58						86	78	48	40	44	34
2	58						85	77	44	40	45	34
3	58						82	76	47	40	44	34
4	60						82	76	47	42	44	36
5	60						78	76	47	41	44	36
6	60						77	77	44	40	41	41
7	61						80	76	43	41	39	38
8	61						81	75	41	43	39	37
9	61						80	73	41	41	41	36
10	62						77	72	40	40	42	39
11	63						77	71	41	39	41	41
12	63						76	69	40	39	42	41
13	63						76	66	40	40	40	43
14	64						76	65	39	39	41	42
15	64						76	64	39	38	41	43
16	64						80	67	40	40	42	43
17	65						77	67	39	39	40	43
18	69						76	69	39	40	38	48
19	70						75	69	40	41	40	53
20	70						73	67	40	44	40	52
21	70						75	65	40	43	40	52
22	70						73	54	39	40	39	52
23	72						73	53	39	40	37	51
24	71						72	51	38	40	35	50
25	71						72	52	39	40	38	50
26	71						76	52	39	38	37	49
27	71						76	51	40	40	35	50
28	71						75	52	40	44	35	50
29	71						76	51	40	42	35	51
30	72						78	48	40	42	35	51
31	72						---	49	---	46	36	---
TOTAL	2036						2316	2008	1233	1262	1230	1320
MEAN	65.7						77.2	64.8	41.1	40.7	39.7	44.0
MAX	72						86	78	48	46	45	53
MIN	58						72	48	38	38	35	34
AC-FT	4040						4590	3980	2450	2500	2440	2620

MUD LAKE-LOST RIVER BASINS

207

13118700 LITTLE LOST RIVER BELOW WET CREEK, NEAR HOWE, ID

LOCATION.--Lat 44°08'19", long 113°14'39", in NW¼SE¼ sec.4, T.9 N., R.27 E., Butte County, Hydrologic Unit 17040217, Bureau of Land Management lands, on right bank at Clyde School, 0.6 mi (1.0 km) downstream from Wet Creek, and 27 mi (43 km) northwest of Howe.

DRAINAGE AREA.--440 mi<sup>2</sup> (1,140 km<sup>2</sup>), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,880 ft (1,792 m), from topographic map.

REMARKS.--Records good except those for December to April, which are poor. Diversions above station for irrigation of about 3,800 acres (1,500 hm<sup>2</sup>) of which about 2,000 acres (800 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination).

AVERAGE DISCHARGE.--20 years, 67.8 ft<sup>3</sup>/s (1.920 m<sup>3</sup>/s), 49,120 acre-ft/yr (60.6 hm<sup>3</sup>/yr).

EXTREMES for PERIOD OF RECORD.--Maximum discharge, 509 ft<sup>3</sup>/s (14.4 m<sup>3</sup>/s) June 16, 1975, gage height, 3.19 ft (0.972 m), but may have been more during period of doubtful gage-height record in 1958; maximum gage height recorded, 4.75 ft (1.448 m) Jan. 12, 1968 (ice jam); minimum discharge recorded, 2.8 ft<sup>3</sup>/s (0.079 m<sup>3</sup>/s) Dec. 13, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 374 ft<sup>3</sup>/s (10.6 m<sup>3</sup>/s) June 14, gage height, 3.17 ft (0.966 m); minimum daily, 16 ft<sup>3</sup>/s (0.453 m<sup>3</sup>/s) Nov. 20.

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Stage-discharge relation affected by ice Nov. 17-23, Dec. 8, 9, Dec. 17 to Jan. 6, Jan. 20 to Feb. 26, Mar. 1-6)

1.5	16	2.4	125
1.7	30	2.7	204
1.9	48	3.0	309
2.1	72	3.2	385

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	45	21	19	23	29	88	106	173	181	85	60
2	52	45	22	22	23	28	81	112	167	170	77	60
3	52	38	24	23	23	28	70	116	195	164	73	60
4	52	34	24	24	23	30	72	118	201	164	72	60
5	50	34	24	25	23	31	70	116	210	164	69	60
6	48	34	21	25	24	31	66	108	229	154	68	93
7	47	34	22	24	23	32	70	102	264	152	66	102
8	48	32	19	23	24	33	70	93	282	154	64	81
9	47	27	20	23	23	33	66	88	293	147	62	76
10	48	23	21	24	22	33	66	97	309	140	62	76
11	48	22	22	24	23	33	68	106	294	135	62	84
12	48	24	22	24	22	34	68	106	251	127	61	76
13	48	24	23	24	21	34	68	104	282	123	61	74
14	48	25	23	24	22	35	68	114	355	118	61	73
15	48	28	24	24	21	34	69	149	328	118	61	70
16	47	26	24	24	20	35	77	181	309	123	61	72
17	47	24	24	25	19	36	74	170	278	114	61	71
18	47	20	22	26	19	37	66	154	260	108	61	70
19	47	17	21	26	22	36	68	144	246	102	61	78
20	47	16	19	26	25	37	68	135	233	99	61	78
21	47	17	20	25	25	38	68	137	229	99	60	76
22	47	17	21	25	26	38	66	154	233	90	60	75
23	47	17	22	25	27	41	65	175	223	87	61	74
24	46	19	22	23	27	42	64	189	213	82	61	73
25	46	20	20	23	27	43	66	189	207	81	61	72
26	46	22	20	23	28	46	77	175	195	77	60	70
27	46	22	19	23	30	47	85	159	181	74	60	68
28	46	23	20	23	30	47	85	152	173	90	60	68
29	46	24	22	24	---	52	86	164	170	102	60	68
30	47	23	22	22	---	72	99	181	175	101	60	68
31	47	---	21	23	---	81	---	184	---	93	61	---
TOTAL	1483	776	671	738	665	1206	2176	4278	7158	3733	1973	2186
MEAN	47.8	25.9	21.6	23.8	23.8	38.9	72.5	138	239	120	63.6	72.9
MAX	53	45	24	26	30	81	99	189	355	181	85	102
MIN	46	16	19	19	19	28	64	88	167	74	60	60
AC-FT	2940	1540	1330	1460	1320	2390	4320	8490	14200	7400	3910	4340
CAL YR 1977 TOTAL	18677		MEAN 51.2	MAX 260	MIN 16	AC-FT 37050						
WTR YR 1978 TOTAL	27043		MEAN 74.1	MAX 355	MIN 16	AC-FT 53640						

## MUD LAKE-LOST RIVER BASINS

13118700 LITTLE LOST RIVER BELOW WET CREEK, NEAR HOWE, ID--Continued

## WATER-QUALITY RECORDS

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

REMARKS.--Miscellaneous chemical data published for water years 1973-75.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACU3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 11...	0930	20	154	--	-1.5	.5	--	--	--
DEC 16...	0930	23	254	--	-5.5	1.0	--	--	--
JAN 18...	0920	26	245	--	-5.0	1.5	--	--	--
FEB 28...	1050	26	245	--	-4.0	1.0	--	--	--
APR 04...	1325	71	227	--	3.0	5.0	--	--	--
MAY 09...	0945	92	180	8.4	10.0	6.5	94	4	22
AUG 09...	0920	62	262	--	23.0	10.5	--	--	--
SEPT 22...	1100	75	253	8.1	14.0	5.0	140	12	36

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CU3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 11...	--	--	--	--	--	--	--	--
DEC 16...	--	--	--	--	--	--	--	--
JAN 18...	--	--	--	--	--	--	--	--
FEB 28...	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--
MAY 09...	9.5	4.3	4	.2	.8	110	90	7.2
AUG 09...	--	--	--	--	--	--	--	--
SEPT 22...	11	3.5	5	.1	.8	150	0	120

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FI)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
NOV 11...	--	--	--	--	--	--	--	--
DEC 16...	--	--	--	--	--	--	--	--
JAN 18...	--	--	--	--	--	--	--	--
FEB 28...	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--
MAY 09...	3.2	.1	14	115	.16	28.8	--	.06
AUG 09...	--	--	--	--	--	--	--	--
SEPT 22...	3.2	.1	11	152	.21	30.9	.04	.02

13118895 BIG SPRING CREEK LEFT CHANNEL NEAR CLYDE, ID

LOCATION.--Lat 44°02'40", long 113°12'40", in NW¼NW¼ sec.11, T.8 N., R.27 E., Butte County, Hydrologic Unit 17040217, 6.8 mi (10.8 km) southeast of Clyde and 9.8 mi (15.8 km) upstream from mouth.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1977 to July 1978 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1977 to July 1978 (discontinued).

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Minimum, 2.0°C January 24.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DEMAND, CHEMICAL (PERCENT SATURATION)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	
NOV 30...	0830	10	273	8.2	-1.5	4.5	1	--	--	25	170	6
JAN 18...	1040	10	344	8.2	-4.0	5.0	1	10.2	98	8	170	11
FEB 28...	1200	9.7	315	9.0	-3.0	5.0	1	10.4	100	0	150	0
APR 04...	1215	11	286	8.4	3.0	7.0	0	10.3	104	7	180	6
MAY 09...	1130	11	359	8.4	12.0	8.0	0	10.8	111	5	180	4
JUN 06...	1130	10	347	8.2	23.5	11.0	0	11.0	122	6	170	11

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV 30...	42	17	6.9	8	.2	1.0	200	0	164	2.0	--	6.5
JAN 18...	42	17	6.8	8	.2	.9	200	0	160	2.0	--	6.5
FEB 28...	30	18	6.5	9	.2	.9	37	77	160	.3	10	6.4
APR 04...	43	18	7.0	8	.2	.9	210	2	180	1.4	11	7.0
MAY 09...	43	18	6.9	8	.2	.9	200	7	176	1.4	11	7.1
JUN 06...	42	17	7.0	8	.2	.9	200	0	160	2.0	21	7.0

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (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)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)
NOV 30...	.1	195	.27	5.37	.62	.06	.00	.06	.68	3.0	.01	.03
JAN 18...	.1	188	.26	5.23	.48	.01	.21	.22	.70	3.1	.01	.03
FEB 28...	.1	173	.24	4.54	.49	.04	.00	.01	.50	2.2	.00	.00
APR 04...	.1	188	.26	5.58	.47	.03	.16	.19	.66	2.9	.01	.03
MAY 09...	.1	191	.26	5.78	.41	.00	.14	.14	.55	2.4	.02	.06
JUN 06...	.1	187	.25	5.30	.40	.00	.19	.19	.59	2.6	.01	.03



13118900 BIG SPRING CREEK BELOW FORKS, NEAR CLYDE, ID

LOCATION.--Lat 44°01'55", long 113°12'20", in SE¼SW¼ sec.11, T.8 N., R.27 E., Butte County, Hydrologic Unit 17040217, Bureau of Land Management lands, 7.9 mi (12.7 km) southeast of Clyde and 8.7 mi (14.0 km) upstream from mouth.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1977 to June 1978 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L CaCO3)
NOV 30...	0920	16	252	8.7	.0	2.5	1	--	--	27	180	16
JAN 18...	1200	17	324	8.6	-3.0	5.0	1	11.3	108	10	170	11
FEB 28...	1300	14	297	9.0	.0	5.0	1	11.0	105	0	170	24
APR 04...	1000	19	302	8.6	3.0	5.5	2	10.4	101	6	190	18
MAY 09...	1415	16	320	8.8	17.5	13.5	1	10.6	124	8	170	11
JUN 06...	1525	16	345	8.7	25.0	18.0	1	9.7	125	6	160	22

DATE	CALCIUM DISSOLVED (MG/L AS Ca)	MAGNESIUM, DISSOLVED (MG/L AS Mg)	SODIUM, DISSOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)
NOV 30...	42	18	6.6	7	.2	.9	190	5	164	.6	.0	--
JAN 18...	41	17	6.5	8	.2	.9	170	12	159	.8	--	--
FEB 28...	40	17	6.4	8	.2	.9	80	48	150	.3	--	11
APR 04...	45	18	6.6	7	.2	.9	200	5	172	.8	--	10
MAY 09...	41	17	6.6	8	.2	.9	180	7	159	.5	--	13
JUN 06...	38	17	7.0	8	.2	.9	150	12	140	.6	--	18

DATE	CHLORIDE, DISSOLVED (MG/L AS Cl)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (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)	NITROGEN, TOTAL (MG/L AS NO3)
NOV 30...	6.5	.1	172	.23	7.43	.53	.00	.06	.06	.59	2.6
JAN 18...	6.6	.1	183	.25	8.40	.37	.01	.01	.02	.39	1.7
FEB 28...	6.4	.2	169	.23	6.39	.45	.01	.01	.02	.47	2.1
APR 04...	6.8	.1	180	.24	9.38	.44	.03	.10	.19	.63	2.8
MAY 09...	7.2	.1	185	.25	8.09	.33	.00	.40	.40	.73	3.2
JUN 06...	6.9	.1	176	.24	7.60	.25	.00	.26	.26	.51	2.3



MUD LAKE-LOST RIVER BASINS

213

13118920 BIG SPRING CREEK NEAR CLYDE, ID

LOCATION.--Lat 43°38'40", long 113°09'27", in NE¼NE¼SW¼ sec.31, T.8 N., R.28 E., Butte County, Hydrologic Unit 17040217, Bureau of Land Management lands, 4.5 mi (7.2 km) upstream from mouth and 11.9 mi (19.2 km) southeast of Clyde.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1977 to April 1978 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1977 to April 1978 (discontinued).

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Minimum, 0.0°C on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED SATURATION (%)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L CaCO3)
NOV 29...	1530	14	284	8.9	--	4.5	1	--	--	25	170	11
JAN 18...	1330	15	331	8.6	-2.5	1.5	1	11.6	100	14	180	16
FEB 28...	1400	13	292	8.9	2.0	.0	5	12.0	100	0	160	0

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
NOV 29...	40	17	5.6	8	.2	.9	170	12	159	.4	--	6.5
JAN 18...	41	18	6.5	7	.2	.9	190	5	164	.8	--	6.6
FEB 28...	39	16	6.2	8	.2	.8	29	84	160	.4	9.7	6.2

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (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)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
NOV 29...	.1	186	.25	7.03	.48	.07	.00	.06	.54	2.4	.00	.00
JAN 18...	.1	181	.25	7.33	.40	.00	.07	.07	.47	2.1	.00	.00
FEB 28...	.1	174	.24	6.11	.43	.00	.10	.10	.53	2.3	.00	.00



MUD LAKE-LOST RIVER BASINS

215

13119000 LITTLE LOST RIVER NEAR HOWE, ID

LOCATION.--Lat 43°53'10", long 113°06'00", in SW¼SE¼ sec.34, T.7 N., R.28 E., Butte County, Hydrologic Unit 17040217, Bureau of Land Management lands, on left bank 0.2 mi (0.3 km) upstream from diversion dam of Blaine County Investment Co. and 7 mi (11 km) northwest of Howe.

DRAINAGE AREA.--703 mi<sup>2</sup> (1,820 km<sup>2</sup>). Mean altitude, 7,370 ft (2,246 m).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1921 to current year (no winter records prior to October 1940). Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1637: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,020 ft (1,530 m), by barometer. Prior to Sept. 2, 1938, nonrecording gage at site 120 ft (37 m) downstream at datum 1.39 ft (0.424 m) higher.

REMARKS.--Records good except those for December to March, which are fair. Diversions above station for irrigation of about 11,500 acres (4,650 hm<sup>2</sup>) of which about 7,600 acres (3,100 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination).

AVERAGE DISCHARGE.--38 years (1941-78), 76.6 ft<sup>3</sup>/s (2.169 m<sup>3</sup>/s), 55,500 acre-ft/yr (68.4 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 450 ft<sup>3</sup>/s (12.7 m<sup>3</sup>/s) Aug. 11, 1936, during cloudburst, gage height, 5.4 ft (1.65 m), present site and datum from rating curve extended above 220 ft<sup>3</sup>/s (6.23 m<sup>3</sup>/s); maximum gage height observed, 6.63 ft (2.021 m) Jan. 23, 1957 (backwater from ice); minimum discharge observed, 4.1 ft<sup>3</sup>/s (0.116 m<sup>3</sup>/s) Dec. 12, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 221 ft<sup>3</sup>/s (6.26 m<sup>3</sup>/s) June 16-18, gage height, 3.87 ft (1.180 m); minimum daily discharge, 26 ft<sup>3</sup>/s (0.736 m<sup>3</sup>/s) Nov. 20, Feb. 17.

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Stage-discharge relation affected by ice Nov. 18-22, Dec. 8, 9, Dec. 17 to Jan. 9, Jan. 21 to Feb. 4, Feb. 8, 13-21; shifting-control method used June 4-21)

2.1	21	3.0	113
2.4	45	3.3	154
2.7	75	3.8	225

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	73	37	27	30	33	99	122	182	188	86	82
2	77	79	38	31	30	34	100	121	175	184	85	82
3	73	68	40	32	29	34	91	122	185	177	85	82
4	73	61	40	31	29	32	91	122	192	175	80	82
5	73	63	40	31	30	32	92	131	192	175	76	82
6	71	63	37	31	30	32	87	127	193	168	75	112
7	65	62	38	30	29	32	96	118	199	163	74	140
8	66	55	33	31	31	33	92	112	205	163	74	102
9	71	52	35	31	30	33	87	112	203	163	74	92
10	73	49	39	30	30	33	85	121	205	154	74	90
11	74	49	36	31	30	33	85	133	209	151	79	97
12	72	50	33	33	30	33	85	137	200	149	75	97
13	73	49	34	33	28	33	86	136	191	145	73	95
14	73	45	35	30	30	34	88	146	202	145	76	94
15	72	46	39	31	29	34	91	165	215	140	81	94
16	72	46	37	30	27	34	97	191	220	140	80	92
17	67	40	36	30	26	35	99	206	221	140	83	90
18	69	32	33	30	31	38	95	193	220	134	85	91
19	69	28	31	30	31	45	92	185	220	125	85	105
20	71	26	30	31	30	49	92	160	220	123	82	105
21	71	27	33	30	29	51	92	159	220	122	80	104
22	72	28	33	30	30	54	92	166	220	112	77	101
23	72	28	32	31	30	62	90	186	218	104	76	100
24	72	30	32	30	30	63	88	193	217	100	76	96
25	72	32	30	33	30	63	88	203	211	96	79	94
26	71	34	30	31	30	65	95	199	205	94	79	92
27	71	34	28	30	31	67	101	185	198	95	79	92
28	72	36	30	30	30	68	101	172	193	118	79	90
29	72	39	32	31	---	72	102	171	191	130	80	90
30	74	39	32	28	---	81	113	180	189	122	80	90
31	75	---	29	31	---	87	---	180	---	92	80	---
TOTAL	2224	1363	1062	949	830	1429	2792	4866	6111	4287	2447	2855
MEAN	71.7	45.4	34.3	30.6	29.6	46.1	93.1	157	204	138	78.9	95.2
MAX	77	79	40	33	31	87	113	206	221	188	86	140
MIN	65	26	28	27	26	32	85	112	175	92	73	82
AC-FT	4410	2700	2110	1880	1650	2830	5540	9650	12120	8500	4850	5660
CAL YR 1977	TOTAL	24801	MEAN 67.9	MAX 218	MIN 21	AC-FT 49190						
WTR YR 1978	TOTAL	31215	MEAN 85.5	MAX 221	MIN 26	AC-FT 61910						

## MUD LAKE-LOST RIVER BASINS

13119000 LITTLE LOST RIVER NEAR HOWE, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

REMARKS.--Miscellaneous chemical data published for water years 1967, 1969.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
NOV 11...	1210	43	311	--	1.5	1.5	--	--	--
DEC 16...	1315	36	396	--	-3.0	2.0	--	--	--
JAN 17...	1610	31	408	--	1.5	4.0	--	--	--
FEB 27...	1600	30	402	--	4.0	1.5	--	--	--
APR 03...	1430	93	354	--	5.0	7.0	--	--	--
MAY 08...	1535	109	300	8.2	16.0	11.0	140	9	33
JUN 05...	1645	185	222	--	27.5	15.5	--	--	--
AUG 09...	1205	74	311	--	31.0	14.5	--	--	--
SEP 22...	1400	101	313	8.4	19.0	9.0	160	14	41

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
NOV 11...	--	--	--	--	--	--	--	--	--
DEC 16...	--	--	--	--	--	--	--	--	--
JAN 17...	--	--	--	--	--	--	--	--	--
FEB 27...	--	--	--	--	--	--	--	--	--
APR 03...	--	--	--	--	--	--	--	--	--
MAY 08...	14	7.3	10	.3	1.5	160	0	130	13
JUN 05...	--	--	--	--	--	--	--	--	--
AUG 09...	--	--	--	--	--	--	--	--	--
SEP 22...	14	6.4	8	.2	1.3	170	4	150	17

DATE	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
NOV 11...	--	--	--	--	--	--	--	--
DEC 16...	--	--	--	--	--	--	--	--
JAN 17...	--	--	--	--	--	--	--	--
FEB 27...	--	--	--	--	--	--	--	--
APR 03...	--	--	--	--	--	--	--	--
MAY 08...	7.2	.1	13	168	.23	49.4	--	.07
JUN 05...	--	--	--	--	--	--	--	--
AUG 09...	--	--	--	--	--	--	--	--
SEP 22...	7.2	.1	12	189	.26	51.5	.47	.02

## MUD LAKE-LOST RIVER BASINS

217

13119500 BLAINE COUNTY INVESTMENT CO.'S CANAL NEAR HOWE, ID

LOCATION.--Lat 43°52'50", long 113°05'40", in NE¼NE¼ sec.3, T.6 N., R.28 E., Butte County, Hydrologic Unit 17040217, Bureau of Land Management lands, on left end of weir, 900 ft (270 m) downstream from headgates, and 7 mi (11 km) northwest of Howe.

PERIOD OF RECORD.--April 1924 to September 1978 (discontinued), prior to 1938, irrigation seasons only.

GAGE.--Nonrecording gage and Parshall flume. Altitude of gage is 5,020 ft (1,530 m), from nearby barometric determination. Prior to June 26, 1927, at site 700 ft (210 m) upstream at different datum. June 26, 1927, to May 6, 1945, at site 180 ft (55 m) upstream at present datum.

REMARKS.--Records good. Canal diverts from Little Lost River in NE¼NE¼ sec.3, T.6 N., R.28 E., for irrigation of lands in project of Blaine County Investment Co.

COOPERATION.--Gage readings furnished by Water District 33.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 146 ft<sup>3</sup>/s (4.13 m<sup>3</sup>/s) Apr. 26, 1966; no flow for long periods each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	.00	12					---	80	62	58	26	8.0	
2	.00	18					---	82	58	57	24	8.0	
3	.00	21					---	78	58	56	24	8.0	
4	.00	23					---	75	65	52	24	8.0	
5	.00	26					---	77	69	50	22	8.0	
6	.00	28					---	82	69	50	22	8.0	
7	.00	28					---	81	69	50	20	8.0	
8	3.3	7.7					---	77	71	50	19	8.0	
9	8.3	.00					---	67	72	50	17	8.0	
10	8.3	---					---	62	75	45	15	8.0	
11	8.3	---					---	56	78	41	15	8.0	
12	8.3	---					---	50	78	41	12	7.7	
13	8.3	---					---	50	68	41	10	7.7	
14	8.3	---					---	50	66	37	10	7.1	
15	8.3	---					---	50	69	32	10	6.5	
16	8.3	---					---	50	73	31	10	6.5	
17	8.3	---					---	55	76	31	10	6.5	
18	8.3	---					---	64	76	31	11	6.5	
19	8.3	---					---	67	76	31	12	6.8	
20	8.3	---					---	55	76	24	12	7.7	
21	8.3	---					---	45	76	20	10	8.0	
22	8.3	---					---	46	69	20	8.6	8.0	
23	8.3	---					---	52	67	20	8.3	9.0	
24	8.3	---					---	26	56	69	17	8.0	9.0
25	8.3	---					---	62	67	69	16	8.0	9.0
26	8.3	---					---	62	76	69	16	8.0	9.0
27	8.3	---					---	69	71	63	16	8.0	9.0
28	8.3	---					---	76	61	58	16	8.0	9.0
29	8.3	---					---	77	48	56	18	8.0	9.0
30	8.3	---					---	78	47	56	24	8.0	9.0
31	9.3	---					---	56	---	27	8.0	---	
TOTAL	195.20	---					---	1933	2056	1068	415.9	239.0	
MEAN	6.30	---					---	62.4	68.5	34.5	13.4	7.97	
MAX	9.3	---					---	82	78	58	26	9.0	
MIN	.00	---					---	45	56	16	8.0	6.5	
AC-FT	387	---					---	3630	4080	2120	825	474	

## MUD LAKE-LOST RIVER BASINS

13120000 NORTH FORK BIG LOST RIVER AT WILD HORSE, NEAR CHILLY, ID

LOCATION.--Lat 43°55'59", long 114°06'47", in NE¼SE¼ sec.17, T.7 N., R.20 E., Custer County, Hydrologic Unit 17040218, in Challis National Forest, on right bank 0.2 mi (.3 km) upstream from East Fork, 2 mi (3.2 km) downstream from Wild Horse damsite, and 16 mi (25.7 km) southwest of Chilly.

DRAINAGE AREA.--114 mi<sup>2</sup> (295 km<sup>2</sup>). Mean altitude, 8,540 ft (2,603 m).

PERIOD OF RECORD.--March 1944 to current year. Prior to October 1967, published as Big Lost River at Wild Horse, near Chilly.

GAGE.--Water-stage recorder. Altitude of gage is 6,820 ft (2,079 m), from topographic map.

REMARKS.--Records good except those for February, which are fair. There are several small ranch diversions upstream for local irrigation.

AVERAGE DISCHARGE.--34 years, 105 ft<sup>3</sup>/s (2.974 m<sup>3</sup>/s), 12.51 in/yr (318 mm/yr), 76,100 acre-ft/yr (93.8 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,420 ft<sup>3</sup>/s (40.2 m<sup>3</sup>/s) June 12, 1965, gage height, 6.39 ft (1.948 m); minimum, 6.1 ft<sup>3</sup>/s (0.17 m<sup>3</sup>/s) Feb. 25, Mar. 14, 1977, gage height, 1.03 ft (0.314 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft<sup>3</sup>/s (8.50 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	(ft)	(m)			(ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	(ft)	(m)
May 15	0400	350	9.91	3.49	1.064	June 14	0315	608	17.2	4.22	1.286
May 24	0215	375	10.6	3.57	1.088	Sept. 6	0915	411	11.6	3.69	1.125
June 10	0345	*770	21.8	4.60	1.402						

Minimum discharge, 7.2 ft<sup>3</sup>/s (0.20 m<sup>3</sup>/s) Mar. 14, 15, gage height, 1.06 ft (0.323 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.2	13	3.0	215
1.4	24	3.5	353
1.6	38	4.0	523
2.0	72	4.5	723
2.5	129		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	36	23	20	20	20	18	69	90	246	370	130	45		
2	35	24	23	22	20	17	60	97	254	350	120	44		
3	35	23	23	23	20	18	51	109	277	320	115	42		
4	35	23	23	23	19	20	51	120	284	300	110	41		
5	35	23	20	23	20	19	47	115	337	250	105	125		
6	35	24	22	22	20	19	46	105	445	235	102	304		
7	34	23	24	21	20	19	46	99	531	250	100	211		
8	33	20	21	23	20	19	44	94	464	270	92	186		
9	32	18	21	22	19	17	44	99	656	260	88	144		
10	32	20	24	22	19	17	47	121	685	270	84	156		
11	32	21	24	22	19	16	55	144	476	290	82	144		
12	31	22	23	22	19	17	55	140	405	260	78	129		
13	31	22	25	20	18	17	55	147	466	240	79	119		
14	31	21	24	23	19	16	55	213	561	230	79	108		
15	30	22	26	22	18	16	56	334	501	240	72	99		
16	30	21	23	22	17	16	61	307	445	265	76	90		
17	29	18	22	22	16	17	54	251	392	235	74	85		
18	29	18	24	21	19	19	51	215	401	210	69	90		
19	29	16	20	22	19	19	53	186	375	200	64	87		
20	29	16	19	22	19	19	55	177	366	195	60	84		
21	29	16	23	22	18	19	54	202	388	190	56	84		
22	27	18	25	21	18	20	50	292	401	175	55	83		
23	27	18	24	20	18	21	50	356	418	170	54	84		
24	27	19	24	18	19	21	50	356	425	165	51	83		
25	27	20	22	22	19	21	54	298	382	160	50	83		
26	27	23	22	21	19	23	60	254	328	155	49	80		
27	27	22	22	20	19	25	64	226	307	150	48	78		
28	27	22	21	20	18	28	71	233	330	190	47	76		
29	27	22	23	21	---	34	79	301	350	195	47	72		
30	27	20	23	18	---	41	89	307	385	165	47	70		
31	25	---	22	21	---	55	---	275	---	150	46	---		
TOTAL	940	620	702	663	528	663	1676	6263	12276	7105	2329	3126		
MEAN	30.3	20.7	22.6	21.4	18.9	21.4	55.9	202	409	229	75.1	104		
MAX	36	24	26	23	20	55	89	356	685	370	130	304		
MIN	25	16	19	18	16	16	44	90	246	150	46	41		
CFSM	.27	.18	.20	.19	.17	.19	.49	1.77	3.59	2.01	.66	.91		
IN.	.31	.20	.23	.22	.17	.22	.55	2.04	4.01	2.32	.76	1.02		
AC-FT	1860	1230	1390	1320	1050	1320	3320	12420	24350	14090	4620	6200		
CAL YR 1977	TOTAL	20150	MEAN	55.2	MAX	476	MIN	13	CFSM	.48	IN	6.58	AC-FT	39970
WTR YR 1978	TOTAL	36891	MEAN	101	MAX	685	MIN	16	CFSM	.89	IN	12.04	AC-FT	73170

NOTE.--No gage-height record Jan. 25 to Mar. 8 and June 28 to Aug. 8.

13120500 BIG LOST RIVER AT HOWELL RANCH, NEAR CHILLY, ID

LOCATION.--Lat 43°59'54", long 114°01'12", in NE¼NW¼ sec.30, T.8 N., R.21 E., Custer County, Hydrologic Unit 17040218, on left bank at Howell Ranch, 2.1 mi (3.4 km) downstream from Burnt Creek, 7.7 mi (12.4 km) downstream from East Fork, 9 mi (14.5 km) southwest of Chilly, and 21 mi (33.8 km) northwest of Mackay.

DRAINAGE AREA.--450 mi<sup>2</sup> (1,170 km<sup>2</sup>). Mean altitude, 8,590 ft (2,618 m).

PERIOD OF RECORD.--April 1904 to November 1914, May 1920 to current year (no winter records 1904, 1906-14, 1920-48).

REVISED RECORDS.--WSP 1287: Drainage area. WSP 1317: 1905.

GAGE.--Water-stage recorder. Datum of gage is 6,621.95 ft (2,018.37 m) National Geodetic Vertical Datum of 1929. See WSP 1737 for history of changes prior to June 11, 1920.

REMARKS.--Records good except those for winter periods, which are poor. No regulation. Diversions above station for irrigation of about 3,000 acres (1,210 hm<sup>2</sup>), 1966 determination.

AVERAGE DISCHARGE.--31 years (1905, 1949-78), 323 ft<sup>3</sup>/s (9.15 m<sup>3</sup>/s), 9.75 in/yr (247.6 mm/yr), 234,000 acre-ft/yr (288 hm<sup>3</sup>).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft<sup>3</sup>/s (125 m<sup>3</sup>/s) May 25, 1967, gage height, 6.02 ft (1.835 m); minimum observed, 19 ft<sup>3</sup>/s (0.54 m<sup>3</sup>/s) Dec. 12, 1939 (discharge measurement).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 900 ft<sup>3</sup>/s (25.5 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)
May 16	0400	938	26.6	2.94	0.896	June 14	0530	2050	58.1	4.13	1.259
May 24	0645	1040	29.5	3.07	.936	June 30	0430	1590	45.0	3.67	1.119
June 10	0400	*2310	65.4	4.36	1.329	Sept. 6	1230	1680	47.6	3.87	1.180

Minimum daily discharge, 45 ft<sup>3</sup>/s (1.27 m<sup>3</sup>/s) Nov. 20.

Rating table (gage height, in feet, and discharge, in cubic feet per second) (Shifting-control method used June 8 to July 4, July 11)

0.9	41	1.7	226
1.0	55	2.0	346
1.1	72	2.5	608
1.3	112	3.0	938
1.5	163	4.4	2,240

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	75	62	72	74	66	190	229	738	1380	423	147
2	102	74	68	80	71	64	140	247	764	1330	379	142
3	100	72	66	90	70	62	130	274	831	1260	351	139
4	98	74	64	86	70	68	125	294	824	1080	337	139
5	96	71	60	86	70	76	120	282	923	916	319	408
6	95	71	65	86	70	75	120	262	1270	859	319	1220
7	95	66	70	84	72	74	120	247	1600	909	307	771
8	94	60	64	86	70	74	115	240	1800	1000	286	573
9	92	55	64	88	72	70	120	255	2040	975	274	433
10	92	62	74	84	70	70	130	315	2200	1010	262	428
11	90	62	70	82	68	68	140	389	1660	1070	255	433
12	89	66	70	82	69	74	145	379	1350	982	244	379
13	89	66	76	78	69	66	145	398	1580	887	233	342
14	88	62	78	90	65	66	145	551	1940	873	233	315
15	87	65	82	88	66	70	150	824	1840	923	216	290
16	86	64	74	88	65	70	155	894	1620	997	222	270
17	85	58	70	88	60	74	140	751	1380	852	229	255
18	84	54	74	88	56	74	135	850	1410	725	209	274
19	84	48	68	88	68	80	140	573	1280	662	196	266
20	84	45	66	94	68	80	145	545	1270	650	184	258
21	84	46	72	90	66	82	140	579	1410	620	175	262
22	82	48	86	90	64	84	135	791	1520	573	167	258
23	86	48	84	85	64	86	130	953	1570	556	164	255
24	86	52	82	76	64	86	135	1010	1570	528	158	262
25	84	53	78	84	68	87	142	887	1400	523	153	262
26	82	66	78	80	68	90	175	751	1160	507	150	251
27	84	60	78	76	67	96	187	881	1080	496	150	240
28	84	62	76	72	67	100	187	893	1210	681	147	229
29	86	60	86	72	---	110	209	852	1380	693	147	222
30	86	56	86	74	---	130	233	909	1460	568	150	216
31	80	---	80	66	---	160	---	824	---	474	150	---
TOTAL	2761	1821	2271	2573	1891	2532	4423	17535	42080	25559	7189	9939
MEAN	89.1	60.7	73.3	83.0	67.5	81.7	147	566	1403	824	232	331
MAX	107	75	86	94	74	160	233	1010	2200	1380	423	1220
MIN	80	45	60	66	56	62	115	229	738	474	147	139
AC-FT	5480	3610	4500	5100	3750	5020	8770	34780	83470	50700	14260	19710

CAL YR 1977 TOTAL 61533 MEAN 169 MAX 1540 MIN 45 AC-FT 122100  
 WTR YR 1978 TOTAL 120574 MEAN 330 MAX 2200 MIN 45 AC-FT 239200

NOTE.--No gage-height record Oct. 22 to Nov. 24.

## MUD LAKE-LOST RIVER BASINS

13124030 HAMILTON SPRINGS NEAR MACKAY, ID

LOCATION.--Lat 43°50'28", long 113°51'53", in NE¼NE¼ sec.29, T.8 N., R.22 E., Custer County, Hydrologic Unit 17040218, at springs, 5.7 mi (9.2 km) south of Chilly and 13.7 mi (22.1 km) northwest of Mackay.  
 DRAINAGE AREA.--Not determined.  
 PERIOD OF RECORD.--February to September 1978 (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (°C)	TEMPER- ATURE (°C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
FEB 15...	1415	23	222	8.4	-3.0	9.0	1	9.0	98	29	120	14
APR 24...	1530	25	235	8.1	13.5	9.0	0	5.0	57	7	120	5
JUN 08...	0900	32	249	8.2	17.5	9.5	0	7.0	76	5	110	8
JUN 28...	1000	28	190	7.6	21.0	9.0	0	5.0	70	17	120	5
AUG 08...	1400	38	245	8.4	26.5	10.0	1	10.0	112	--	120	0
SEP 20...	1545	37	174	8.1	12.5	9.0	1	5.2	56	47	120	5

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	
FEB 15...	34	8.6	4.6	8	.2	1.0	*130	0	110	.8	16	2.7
APR 24...	33	9.2	4.8	8	.2	1.0	*140	0	110	1.8	16	2.6
JUN 08...	32	8.4	4.6	8	.2	1.1	130	0	110	1.3	13	2.6
JUN 28...	34	8.6	4.8	8	.2	1.0	140	0	110	5.6	15	2.6
AUG 08...	33	8.6	5.0	8	.2	1.2	140	3	120	.9	14	2.8
SEP 20...	35	7.9	4.5	7	.2	1.0	140	0	115	1.8	15	2.7

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 °C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)
FEB 15...	.3	135	.18	4.38	.09	.02	.00	.02	.11	.49	.02	.06
APR 24...	.3	134	.18	9.04	.12	.01	.31	.32	.44	1.9	.01	.03
JUN 08...	.3	129	.18	11.1	.08	.00	2.0	2.0	2.1	9.2	.01	.03
JUN 28...	.3	132	.18	9.98	.08	.00	.00	.00	.08	.35	.01	.03
AUG 08...	.4	136	.19	14.0	.00	.03	1.2	1.2	1.2	5.3	.01	.03
SEP 20...	.3	132	.18	13.2	.27	.01	.20	.21	.48	2.1	.02	.06

\* Not a field determination.

MUD LAKE-LOST RIVER BASINS

13126000 MACKAY RESERVOIR NEAR MACKAY, ID

LOCATION.--Lat 43°57'05", long 113°40'28", in NW¼NE¼SW¼ sec.12, T.7 N., R.23 E., Custer County, Hydrologic Unit 17040218, on gate-control tower of Mackay Dam on Big Lost River and 4 mi (6.4 km) northwest of Mackay.

DRAINAGE AREA.--788 mi<sup>2</sup> (2,040 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 6,000 ft (1,828 m), Utah Construction Co. datum, or 6,000.4 ft (1,828.9 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 15, 1959, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earth- and rock-fill dam, which was reconstructed in 1917-18; storage impounded by original dam not recorded. Crest of spillway was raised 5 ft (1.5 m) in September 1956. Capacity is 44,370 acre-ft (54.7 hm<sup>3</sup>) between gage heights 7.0 (2.1 m) and 66.5 ft (20.27 m), crest of spillway. Dead storage reported to be about 125 acre-ft (0.154 hm<sup>3</sup>). Water is used for irrigation of about 33,000 acres (13,400 hm<sup>2</sup>) in Big Lost River irrigation district. About 12,700 acres (5,140 hm<sup>2</sup>) irrigated from Big Lost River and tributaries above reservoir by surface diversions, and about 10,200 acres (4,130 hm<sup>2</sup>) irrigated by subirrigation. Considerable seepage around dam because of its porous foundation, but the greater part of this water returns to Big Lost River between reservoir and station below reservoir, near Mackay. Prior to Oct. 1, 1959, contents below 1,000 acre-ft (1.233 hm<sup>3</sup>) may be in error at times as readings at gage were too low because of fall in outlet channel. Figures given herein represent usable contents.

COOPERATION.--Capacity table furnished by Water District 34.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 46,070 acre-ft (56.8 hm<sup>3</sup>) May 14, 1976, gage height, 67.73 ft (20.644 m); no available contents during periods in 1919-20, 1924, 1926, 1929, 1931-35, 1974; minimum gage height observed, 6.3 ft (1.92 m) Aug. 5, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 41,730 acre-ft (51.4 hm<sup>3</sup>) June 26, gage height, 64.55 ft (19.675 m); minimum recorded, 1,640 acre-ft (2.02 hm<sup>3</sup>) Oct. 16, gage height, 14.04 ft (4.279 m).

Capacity table (gage height, in feet, and contents, in acre-feet)

10.0	580	35.0	12,020
15.0	1,934	40.0	15,800
20.0	3,740	50.0	24,680
25.0	5,990	60.0	35,900
30.0	8,730	65.0	42,300

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	6030	14270	20620	25370	---	---	34500	31980	41200	25250	2790
2	---	6340	14500	20750	25500	---	---	34620	30980	41210	24370	2730
3	---	6620	14730	20930	---	---	---	34660	30150	41190	23450	2660
4	---	6880	14990	21090	---	---	---	34680	29500	41070	22380	2580
5	---	7180	15190	21330	---	---	---	34780	28950	40790	21300	2590
6	---	7530	15420	21480	---	---	32220	34830	28580	40290	20280	3050
7	---	7750	15650	21650	26160	---	32380	34900	28510	39880	19170	3930
8	---	8000	15870	21820	26240	29480	32520	34910	29020	39490	18100	4690
9	---	8270	16090	22000	---	29590	32600	35010	29850	39200	17010	5380
10	---	8530	16280	22170	---	---	32650	35070	30820	38970	16040	5920
11	---	8820	16520	22330	---	---	32740	35130	31330	38840	15100	6510
12	---	9120	16740	22480	---	---	32780	35130	31350	38600	14230	7040
13	---	9400	16900	22650	---	---	32850	35170	31440	38250	13400	7590
14	---	9700	17140	22810	---	30110	32950	35220	32220	37850	12560	8120
15	---	9980	17390	22990	---	---	33050	35300	33150	37470	11710	8630
16	1640	10270	17590	23170	---	---	33250	35290	33910	37200	10890	9050
17	1930	10580	17800	23310	---	---	33330	35360	34380	36850	10080	9160
18	2200	10820	18020	23410	---	---	33370	35450	34730	36360	9260	9920
19	2470	11090	18230	---	---	---	33480	35470	35050	35730	8460	10340
20	2790	11360	18400	---	---	---	33580	35500	35220	35070	7690	10820
21	3010	11630	18620	---	27820	---	33660	35460	35720	34370	7000	11140
22	3330	11890	18790	---	27910	---	33720	35350	37640	33630	6340	11540
23	3610	12160	19020	---	28010	---	33790	35340	39630	32790	5720	11920
24	3880	12440	19220	24300	28130	---	33860	35390	41190	31970	5150	12290
25	4150	12700	19380	24430	28230	---	33950	35390	41670	30990	4620	12650
26	4430	12960	19570	24570	28340	---	34060	35170	41730	29970	4220	12990
27	4710	13220	19730	24700	28450	---	34140	34800	41570	29030	3880	13330
28	4980	13490	19950	24840	28570	31460	34240	34360	41290	28130	3560	13690
29	5270	13740	20120	24980	---	31540	34340	33790	41170	27520	3290	14010
30	5510	13990	20380	25140	---	31640	34420	33340	41140	26830	3090	14340
31	5760	---	20470	25250	---	31750	---	32790	---	27130	2900	---
MAX	---	13990	20470	---	---	---	---	35500	41730	41210	25250	14340
MIN	---	6030	14270	---	---	---	---	32790	28510	26830	2900	2580

## MUD LAKE-LOST RIVER BASINS

## 13127000 BIG LOST RIVER BELOW MACKAY RESERVOIR, NEAR MACKAY, ID

LOCATION.--Lat 43°56'20", long 113°38'50", in SW¼NE¼ sec.18, T.7 N., R.24 E., Custer County, Hydrologic Unit 17040218, on left bank 1.4 mi (2.3 km) downstream from head of Sharp ditch, 1.6 mi (2.6 km) downstream from Mackay Reservoir, and 2.5 mi (4 km) northwest of Mackay.

DRAINAGE AREA.--813 mi<sup>2</sup> (2.106 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1903 to August 1906 and May 1912 to March 1915 (published as "near Mackay"), January 1919 to current year.

REVISED RECORDS.--WSP 1347: 1904-6.

GAGE.--Water-stage recorder. Datum of gage is 5,946.39 ft (1,812 m) National Geodetic Vertical Datum of 1929. Nonrecording gage prior to May 12, 1912, and June 5, 1912, to Apr. 28, 1913, at sites within 1 mi (1.6 km) upstream at different datums, May 12 to June 4, 1912, at site 1.5 mi (2.4 km) upstream (above Sharp ditch) at different datum, Apr. 29, 1913, to Mar. 15, 1915, at site 1 mi (1.6 km) downstream (below Streeter ditch) at different datum.

REMARKS.--Records good. Flow completely regulated by Mackay Reservoir (see sta 13126000). Sharp ditch is only diversion between station and reservoir; about 12,700 acres (4,140 hm<sup>2</sup>) of land are irrigated by diversions from river and tributaries above reservoir by surface diversions, and 10,200 acres (4,130 hm<sup>2</sup>) irrigated by subirrigation.

AVERAGE DISCHARGE.--62 years (water years 1905, 1913-14, 1920-78), 302 ft<sup>3</sup>/s (8.55 m<sup>3</sup>/s), 218,800 acre-ft/yr (270 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,990 ft<sup>3</sup>/s (94.7 m<sup>3</sup>/s) June 10, 1921, gage height, 5.79 ft (1.765 m); minimum, 16 ft<sup>3</sup>/s (0.45 m<sup>3</sup>/s) Oct. 27, 1967, gage height, 1.11 ft (0.338 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,360 ft<sup>3</sup>/s (38.5 m<sup>3</sup>/s) June 11, 12, gage height, 4.02 ft (1.225 m); minimum, 41 ft<sup>3</sup>/s (1.16 m<sup>3</sup>/s) Oct. 5, gage height, 1.31 ft (0.399 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.3	41	3.0	633
1.5	64	4.0	1,300
2.0	162	5.0	2,040
2.5	356		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17A	51	63	85	99	108	117	119	956	1090	889	284
2	17A	44	65	85	99	108	117	119	1010	1090	869	263
3	17A	45	67	85	99	108	117	119	1070	1090	850	267
4	59	46	64	85	100	108	119	119	936	1060	882	263
5	48	45	68	86	100	108	119	119	882	1020	876	251
6	51	46	68	86	100	108	119	119	916	1020	863	229
7	56	48	69	87	100	108	121	119	963	984	863	225
8	56	48	69	87	100	110	119	119	977	950	869	207
9	56	49	71	88	102	110	117	119	1030	950	850	197
10	56	49	71	88	102	110	117	119	1250	922	805	204
11	56	51	72	88	102	110	117	119	1340	902	765	194
12	57	52	72	89	102	112	119	119	1280	922	726	175
13	57	52	73	89	102	112	119	119	1190	929	707	178
14	57	52	75	89	102	112	119	119	1180	929	720	169
15	57	53	76	90	104	112	119	131	1140	922	701	157
16	57	56	76	90	104	112	121	149	1060	922	694	157
17	57	56	76	91	104	115	117	166	997	916	713	163
18	57	54	77	93	104	115	117	240	997	936	701	166
19	57	54	78	94	104	115	117	292	970	943	676	166
20	58	54	78	95	104	117	119	324	943	956	657	174
21	58	56	79	95	104	117	119	361	837	970	633	172
22	58	56	79	96	106	117	119	391	243	977	614	172
23	58	56	81	96	106	117	119	411	236	984	590	178
24	60	56	81	97	106	117	119	486	381	970	549	181
25	64	56	82	97	106	117	119	572	896	984	509	181
26	59	56	82	97	106	117	121	614	1000	963	459	181
27	53	56	82	97	106	117	119	651	1040	950	416	166
28	56	60	83	97	106	119	119	676	1030	956	396	157
29	56	62	84	97	---	119	121	752	1070	956	376	163
30	56	62	84	98	---	117	121	758	1090	936	351	163
31	58	---	84	99	---	117	---	850	---	909	328	---
TOTAL	2122	1581	2333	2836	2879	3509	3562	9490	28860	30008	20897	5803
MEAN	68.5	52.7	75.3	91.5	103	113	119	306	962	968	674	193
MAX	17A	62	84	99	106	119	121	850	1340	1090	889	284
MIN	4A	44	63	85	99	108	117	119	236	902	328	157
AC-FT	4210	3140	4630	5630	5710	6960	7070	18820	57240	59520	41450	11510

CAL YR 1977 TOTAL 70529 MEAN 193 MAX 701 MIN 44 AC-FT 139900  
WTR YR 1978 TOTAL 113880 MEAN 312 MAX 1340 MIN 44 AC-FT 225900

13127000 BIG LOST RIVER BELOW MACKAY RESERVOIR, NEAR MACKAY, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72, 1974 to current year.

REMARKS.--Miscellaneous chemical data published for water years 1966-69, 1973.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
OCT 23...	1140	54	196	--	10.5	6.0	--	--	--
JAN 18...	0950	94	300	--	.0	1.5	--	--	--
APR 23...	1445	122	255	--	9.0	15.5	--	--	--
JUN 09...	0815	998	283	8.0	12.5	11.0	140	12	38
JUN 27...	1800	1040	175	7.5	28.0	12.5	110	23	32
SEP 21...	1115	170	272	8.3	9.0	9.0	150	14	42

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 23...	--	--	--	--	--	--	--	--	--
JAN 18...	--	--	--	--	--	--	--	--	--
APR 23...	--	--	--	--	--	--	--	--	--
JUN 09...	9.8	5.9	9	.2	1.4	150	0	120	13
JUN 27...	8.2	4.2	7	.2	1.2	110	0	90	15
SEP 21...	9.8	5.5	8	.2	1.5	160	0	130	18

DATE	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 23...	--	--	--	--	--	--	--	--
JAN 18...	--	--	--	--	--	--	--	--
APR 23...	--	--	--	--	--	--	--	--
JUN 09...	3.1	.2	11	156	.21	420	--	.00
JUN 27...	3.7	.2	9.0	128	.17	359	.09	.03
SEP 21...	4.5	.3	13	175	.24	80.3	.42	.03

## MUD LAKE-LOST RIVER BASINS

13132500 BIG LOST RIVER NEAR ARCO, ID

LOCATION.--Lat 43°35'00", long 113°16'10", in SW¼ sec.17, T.3 N., R.27 E., Butte County, Hydrologic Unit 17040218, on right bank 0.4 mi (0.6 km) downstream from slough entering from left bank and 4 mi (6.4 km) southeast of Arco.

DRAINAGE AREA.--1,410 mi<sup>2</sup> (3,650 km<sup>2</sup>), approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1946 to September 1961, May 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,240 ft (1,597 m) by barometer. Prior to Oct. 14, 1952, at site 800 ft (244 m) upstream at datum 3.08 ft (0.939 m) higher.

REMARKS.--Records fair except those for November to April, which are poor. Flow regulated by Mackay Reservoir (see sta 13126000). Station is below all large diversions for irrigation in Big Lost River valley. About 57,500 acres (23,300 hm<sup>2</sup>) of land irrigated by diversions from river and tributaries and by ground-water withdrawals above station. About 10,200 acres (4,100 hm<sup>2</sup>) irrigated by subirrigation above Mackay Reservoir.

AVERAGE DISCHARGE.--27 years, 97.6 ft<sup>3</sup>/s (2.76 m<sup>3</sup>/s), 70,710 acre-ft/yr (87.19 hm<sup>3</sup>).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft<sup>3</sup>/s (53.5 m<sup>3</sup>/s) July 5, 1967, gage height, 7.68 ft (2.341 m); no flow on many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1965, reached a stage of 8.03 ft (2.448 m), from floodmarks, discharge, 2,500 ft<sup>3</sup>/s (70.8 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 50 ft<sup>3</sup>/s (1.42 m<sup>3</sup>/s) June 16, gage height, 3.25 ft (0.991 m); minimum, no flow May 29, 30, June 2, 4, 6.

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Stage-discharge relation affected by ice Dec. 8-10)

1.92	0	2.4	7.6
2.0	.4	2.6	14
2.1	1.3	2.9	28
2.2	2.9	3.2	53

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	5.6	6.5	2.5	3.0	2.4	4.6	3.7	.05	5.8	16	20
2	3.9	7.0	7.0	2.7	2.8	2.4	4.2	3.8	.00	22	23	17
3	4.1	7.5	6.5	2.4	3.3	2.5	3.9	3.1	2.1	30	10	15
4	5.5	8.0	6.5	3.8	3.0	2.5	3.8	2.6	.00	28	8.8	16
5	5.3	8.0	7.0	3.8	2.8	2.5	3.7	3.3	.20	37	7.9	17
6	4.4	7.5	6.5	3.8	3.2	2.6	3.8	2.9	.00	29	9.5	23
7	3.3	6.5	6.6	3.2	3.0	2.7	3.9	2.6	.05	29	8.5	37
8	3.1	6.0	5.2	2.8	3.1	2.8	4.0	2.1	.05	32	4.6	36
9	3.9	5.0	5.6	2.7	3.0	2.9	4.2	1.5	.10	31	5.8	34
10	3.3	5.5	4.8	2.4	3.0	2.9	4.4	1.2	.00	32	9.8	32
11	1.5	6.0	4.9	3.3	2.9	2.8	4.7	.85	.40	25	9.5	32
12	1.3	7.0	5.0	3.6	2.9	2.7	4.1	.48	11	21	12	38
13	1.1	7.5	5.2	3.5	2.8	2.6	4.1	.94	36	19	12	41
14	1.0	7.0	5.5	3.4	2.7	2.5	4.2	.67	24	18	11	37
15	.94	6.5	5.9	3.1	2.6	2.4	4.3	.67	32	17	12	38
16	1.6	5.5	5.0	3.2	2.6	2.5	4.6	.76	44	18	12	38
17	4.8	5.0	4.7	3.1	2.7	2.7	5.5	.85	42	18	16	36
18	4.6	5.0	4.5	3.4	2.8	2.7	5.0	1.0	30	16	15	36
19	5.8	4.5	4.3	3.5	2.7	2.8	4.6	1.2	36	5.5	15	36
20	4.8	4.5	4.2	3.4	2.5	2.8	4.4	.67	32	4.8	14	37
21	6.0	4.0	3.6	3.4	2.3	2.8	4.3	.35	20	9.5	14	42
22	6.3	4.5	3.8	3.3	2.2	2.9	4.3	.30	18	8.5	13	41
23	6.3	5.5	4.2	3.3	2.1	3.0	4.3	.25	11	9.8	13	39
24	6.3	6.5	4.6	3.4	2.5	3.1	4.4	.25	7.4	9.5	16	38
25	6.1	7.5	4.3	3.4	2.8	3.3	4.5	.67	5.5	7.9	16	37
26	6.1	7.5	3.9	3.5	2.7	3.5	4.3	.57	8.5	6.0	13	37
27	6.1	7.0	3.7	3.2	2.7	3.7	4.0	.20	7.7	9.5	12	37
28	5.8	6.5	3.4	3.1	2.6	3.9	3.8	.05	5.3	13	15	39
29	5.8	7.5	4.2	3.1	---	4.3	3.7	.00	5.1	13	15	37
30	5.5	7.0	4.0	3.0	---	4.6	3.6	.00	5.8	13	17	29
31	5.5	---	3.7	3.1	---	5.0	---	.15	---	13	18	---
TOTAL	133.34	188.6	154.8	100.4	77.3	92.8	127.2	37.68	384.25	550.8	394.4	992
MEAN	4.30	6.29	4.99	3.24	2.76	2.99	4.24	1.22	12.8	17.8	12.7	33.1
MAX	6.3	8.0	7.0	3.8	3.3	5.0	5.5	3.8	44	37	23	42
MIN	.94	4.0	3.4	2.5	2.1	2.4	3.6	.00	.00	4.8	4.6	15
AC-FT	264	374	307	194	153	184	252	75	762	1090	782	1970
CAL YR 1977 TOTAL	6080.87											
MEAN	16.7											
MAX	61											
MIN	.25											
AC-FT	12060											
WTR YR 1978 TOTAL	3233.57											
MEAN	8.86											
MAX	44											
MIN	.00											
AC-FT	6410											

NOTE.--No gage-height record Oct. 31 to Dec. 6, Dec. 11 to May 2.

MUD LAKE-LOST RIVER BASINS

13132500 BIG LOST RIVER NEAR ARCO, ID--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
OCT 23...	1430	6.6	437	--	21.5	10.5	--	--	--
DEC 06...	1400	6.4	487	--	3.0	.0	--	--	--
JAN 30...	1515	2.3	458	--	-3.0	1.0	--	--	--
MAR 13...	1445	2.2	501	--	-1.0	1.0	--	--	--
APR 25...	1545	3.9	459	--	7.5	11.5	--	--	--
JUN 06...	1530	.10	238	--	26.0	24.0	--	--	--
JUL 12...	0900	24	278	--	18.5	14.5	--	--	--
SEP 21...	1400	41	402	* 8.2	16.0	13.0	210	21	61

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 23...	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	--	--	--	--	--
JAN 30...	--	--	--	--	--	--	--	--	--
MAR 13...	--	--	--	--	--	--	--	--	--
APR 25...	--	--	--	--	--	--	--	--	--
JUN 06...	--	--	--	--	--	--	--	--	--
JUL 12...	--	--	--	--	--	--	--	--	--
SEP 21...	15	9.3	9	.3	1.8	230	0	189	25

DATE	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 23...	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	--	--	--	--
JAN 30...	--	--	--	--	--	--	--	--
MAR 13...	--	--	--	--	--	--	--	--
APR 25...	--	--	--	--	--	--	--	--
JUN 06...	--	--	--	--	--	--	--	--
JUL 12...	--	--	--	--	--	--	--	--
SEP 21...	9.0	.3	14	249	.34	27.8	.02	.00

\* Not a field determination.

## SNAKE RIVER BASIN

13132600 SAND SPRING ABOVE PONDS, NEAR HAGERMAN, ID

LOCATION.--Lat 42°43'36", long 114°50'00", in SE¼ sec.17, T.8 S., R.14 E., Gooding County, Hydrologic Unit 17040212, 0.5 mi (0.8 km) upstream from mouth and 7 mi (11.3 km) southeast of Hagerman. Temperature recorder is at head of spring in NW¼NE¼ sec.21.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--Water years 1954 to current year (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: January to September 1978 (discontinued).

REMARKS.--Miscellaneous chemical data published for water years prior to 1978.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
NOV										
01...	1525	91	354	7.6	19.5	13.0	--	--	--	--
30...	1400	E90	366	7.6	--	14.0	--	--	--	--
JAN										
09...	1100	74	329	8.0	4.5	14.5	0	--	10.0	109
MAR										
06...	1410	84	386	8.0	11.0	14.5	0	--	9.5	104
APR										
05...	1400	E75	338	7.9	--	15.0	--	--	--	--
23...	1230	73	401	8.0	14.5	14.5	3	--	8.9	97
MAY										
24...	1030	78	*374	7.9	11.0	14.5	0	--	8.7	95
JUN										
28...	0815	75	360	8.0	14.0	14.5	0	--	8.8	96
JUL										
26...	1130	--	405	7.8	--	--	--	.10	--	--
AUG										
19...	0850	104	378	8.1	12.0	14.5	0	--	9.0	98
SEP										
24...	1115	102	369	8.1	19.0	14.0	1	--	8.0	86

DATE	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
NOV								
01...	--	160	7	34	17	21	22	.7
30...	--	160	22	35	18	20	21	.7
JAN								
09...	16	160	20	34	18	20	21	.7
MAR								
06...	6	160	4	34	17	20	21	.7
APR								
05...	--	150	2	33	16	19	21	.7
23...	9	150	13	33	17	19	21	.7
MAY								
24...	4	150	2	33	16	20	22	.7
JUN								
28...	2	160	2	35	17	20	21	.7
JUL								
26...	--	160	20	36	17	21	21	.7
AUG								
19...	7	160	16	36	16	21	22	.7
SEP								
24...	--	160	25	38	17	21	21	.7

\* Not a field determination.

13132600 SAND SPRING ABOVE PONDS, NEAR HAGERMAN, ID--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUU- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
NOV 01...	180	0	150	6.4	34	16	.6	--	.34
NOV 30...	170	0	140	6.8	33	17	.6	235	.32
JAN 09...	170	0	140	2.7	--	15	.6	240	.33
MAR 06...	190	0	156	3.0	32	16	.7	227	.31
APR 05...	180	0	148	3.6	32	13	.6	229	.31
APR 23...	170	0	140	2.7	32	16	.7	231	.31
MAY 24...	180	0	148	3.6	30	17	.6	239	.33
JUN 28...	190	0	160	3.0	34	17	.6	233	.32
JUL 26...	170	0	139	4.3	33	18	.6	241	.33
AUG 19...	170	0	140	2.2	34	18	.6	235	.32
SEP 24...	170	0	140	2.2	36	20	.7	253	.34

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
NOV 01...	61.9	--	--	--	--	--	--	--	--
NOV 30...	57.1	.97	.03	--	--	--	--	--	--
JAN 09...	48.3	.88	.04	.27	.31	1.2	5.3	.04	.12
MAR 06...	51.4	.75	.01	.09	.10	.85	3.8	.03	.09
APR 05...	--	.86	.00	.27	.27	1.1	5.0	--	--
APR 23...	45.5	.75	.03	.12	.15	.90	4.0	.01	.03
MAY 24...	49.9	.72	.01	.59	.60	1.3	5.8	.02	.06
JUN 28...	47.1	.90	.01	.29	.30	1.2	5.3	.01	.03
JUL 26...	--	.94	.00	.15	.15	1.1	4.8	--	--
AUG 19...	66.0	.60	.00	.68	.68	1.3	5.7	.03	.09
SEP 24...	69.7	1.0	.00	.15	.15	1.2	5.1	.02	.06



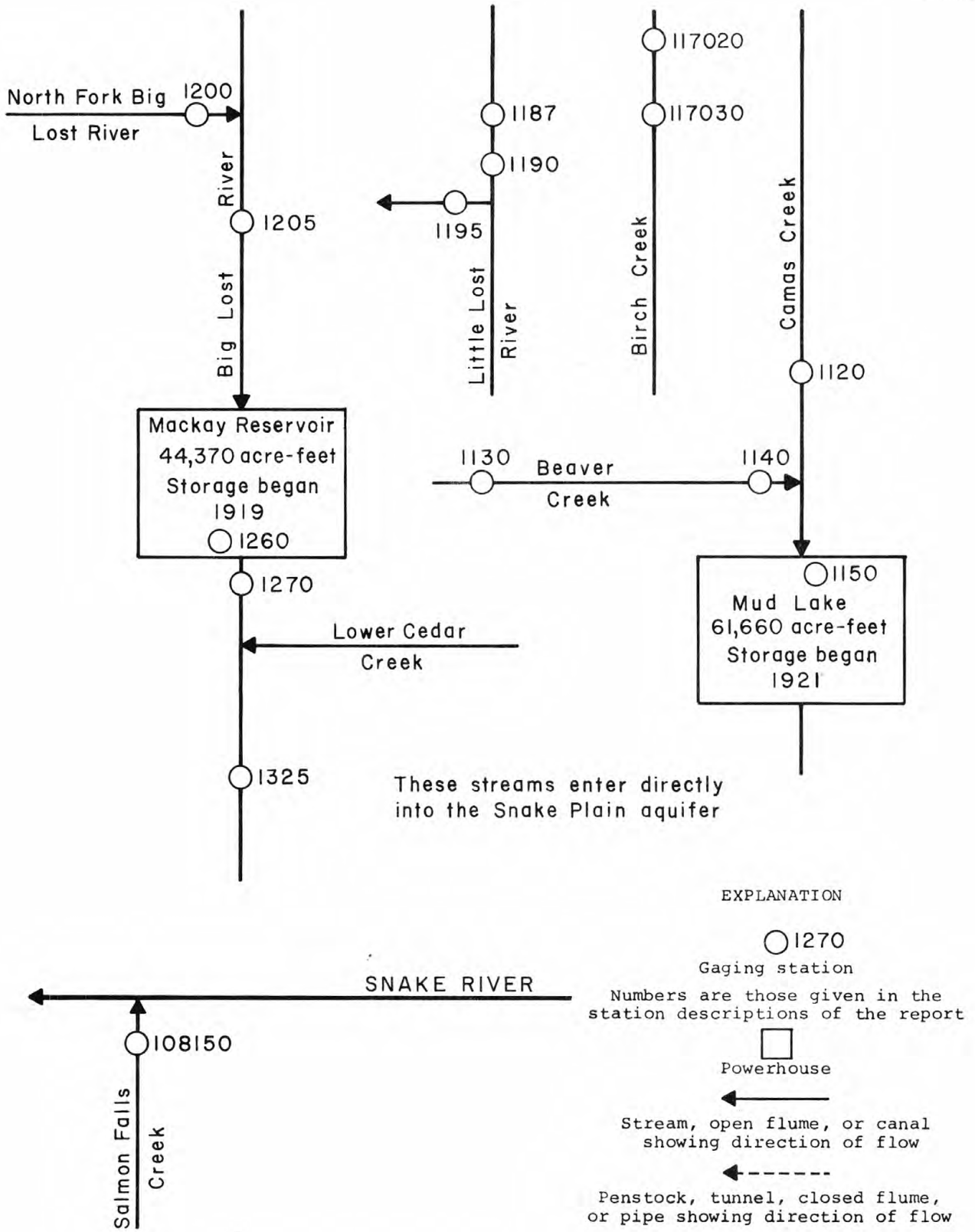


FIGURE 9 .--Gaging stations in Mud Lake-Lost River basins.

## SNAKE RIVER MAIN STEM

13135000 SNAKE RIVER BELOW LOWER SALMON FALLS, NEAR HAGERMAN, ID

LOCATION.--Lat 42°50'55", long 114°54'02", in NW¼ sec.2, T.7 S., R.13 E., Gooding County, Hydrologic Unit 17040212, on right bank 0.5 mi (0.8 km) downstream from Lower Salmon Falls powerplant, 1 mi (1.6 km) upstream from Big Wood River, 2.2 mi (3.5 km) north of Hagerman, and at mile 572.5 (921.2 km).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for October 1937, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 2,727.7 ft (831.403 m) National Geodetic Vertical Datum of 1929 (stadia levels). Prior to Jan. 3, 1950, at site 340 ft (103.6 m) upstream.

REMARKS.--Records good except those for January, February, and May to July, which are fair. Flow regulated by American Falls Reservoir 141.6 mi (227.8 km) upstream (see sta 13076500). Diurnal fluctuation caused by hydroelectric plants upstream. At times, practically entire flow is diverted at Milner during irrigation seasons; only minor diversions below Milner. Most of the percolation upstream into the Snake Plain aquifer returns above station, including some water diverted from Big Wood River. Diversions above station for irrigation of about 2,330,000 acres (943,000 hm<sup>2</sup>) of which about 665,000 acres (269,000 hm<sup>2</sup>) are by withdrawals from ground water and about 83,000 acres (33,600 hm<sup>2</sup>) are irrigated below station.

AVERAGE DISCHARGE.--41 years, 9,049 ft<sup>3</sup>/s (256 m<sup>3</sup>/s), 6,556,000 acre-ft/yr (8,084 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,200 ft<sup>3</sup>/s (884 m<sup>3</sup>/s) June 24, 1964, gage height, 15.73 ft (4.795 m); minimum, probably less than 100 ft<sup>3</sup>/s (2.83 m<sup>3</sup>/s) Jan. 10, 11, 1950, when river was below intake pipes; minimum daily, 3,970 ft<sup>3</sup>/s (112 m<sup>3</sup>/s) July 8, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,300 ft<sup>3</sup>/s (490 m<sup>3</sup>/s) Apr. 11, gage height, 11.20 ft (3.414 m); minimum, 1,970 ft<sup>3</sup>/s (55.8 m<sup>3</sup>/s) Apr. 1, gage height, 4.02 ft, (1.225 m); minimum daily, 5,040 ft<sup>3</sup>/s (143 m<sup>3</sup>/s) June 30.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

5.0	3,300	8.0	9,160
6.0	5,000	10.0	14,100
7.0	6,980	12.0	19,500

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6180	5870	6330	5700	7400	6990	7540	12600	7500	5090	5980	6510
2	6190	5860	6270	5600	7200	7910	7060	11600	7000	5180	5910	6630
3	6160	5900	6280	5800	7000	7600	6770	10700	6400	5280	6030	6580
4	6210	5970	6230	5600	6500	7720	7100	10200	6000	5520	5900	6680
5	6220	5850	6310	5200	6700	7500	7140	11000	6200	5730	5950	7080
6	6150	5880	6300	6050	6800	7490	9100	12200	5890	5950	5880	8030
7	6150	6020	6340	5400	6900	7490	10400	12800	5340	6060	5890	7810
8	6220	5720	6170	6400	6800	7610	10300	12300	5410	6620	5710	8320
9	6190	5770	6280	6400	6350	7910	11300	12100	5410	5920	5760	8110
10	6180	5820	6450	5500	6600	7730	10600	11000	5460	5850	5790	8140
11	6230	5820	5990	6600	6800	7640	10400	10900	5720	5930	5840	8260
12	6200	5760	6280	6200	6450	7230	10400	9600	5800	5800	5840	8160
13	6190	5810	6240	5950	6700	7710	9650	11100	5740	5580	5820	8070
14	6210	6030	6350	6000	6600	7720	9850	11000	5520	5530	5980	7860
15	6150	6100	6400	6000	6950	7800	9900	11500	5630	5380	6020	7910
16	6130	6100	7100	7600	7300	8090	8870	8700	5500	5390	6300	8090
17	6120	6170	5740	7000	7000	7920	9400	7700	5720	5340	6740	7830
18	6130	6070	6490	6000	6800	8080	9040	8600	5690	5560	6620	7790
19	6060	6070	5990	6000	6600	7930	11700	8000	5920	5460	6820	7980
20	6100	6010	6460	6000	6500	7770	13600	7500	5770	5510	7010	7930
21	6070	5990	5590	6400	7040	7670	15100	10100	5730	5340	6820	8850
22	5990	6140	5300	6600	7530	7970	14600	9500	5540	5740	6610	9030
23	6020	6050	5820	7600	7120	8310	14700	10100	5360	5770	6540	9270
24	5980	6270	5850	6600	7120	7850	14300	10500	5400	5920	6570	9180
25	5890	6430	5800	7000	6930	7920	14600	10500	5260	5900	6510	9090
26	5860	6480	5740	6800	7100	7910	13300	10600	5410	5790	6380	8700
27	5960	6450	6080	6900	7100	8000	12800	10200	5400	5760	6540	8240
28	5920	6320	5830	7000	6950	7580	12700	10700	5200	5900	6530	7780
29	5880	6390	5690	6500	---	7090	12800	10400	5130	5960	6580	7280
30	5880	6250	5800	7500	---	7420	12700	10100	5040	6010	6510	7040
31	5930	---	6000	7000	---	7540	---	9800	---	6050	6560	---
TOTAL	188750	181370	189500	196900	192840	239100	327720	323600	171090	176820	193940	238230
MEAN	6089	6046	6113	6352	6887	7713	10920	10440	5703	5704	6256	7941
MAX	6230	6480	7100	7600	7530	8310	15100	12800	7500	6620	7010	9270
MIN	5860	5720	5300	5200	6350	6990	6770	7500	5040	5090	5710	6510
AC-FT	374400	359700	375900	390600	382500	474300	650000	641900	339400	350700	384700	472500

CAL YR 1977 TOTAL 2394510 MEAN 6560 MAX 10600 MIN 4480 AC-FT 4750000  
WTR YR 1978 TOTAL 2619860 MEAN 7178 MAX 15100 MIN 5040 AC-FT 5196000

NOTE.--No gage-height record Dec. 30 to Feb. 20, Apr. 30 to June 12, July 2-27.

## BIG WOOD RIVER BASIN

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13139500 BIG WOOD RIVER AT HAILEY, ID

LOCATION.--Lat 43°31'02", long 114°19'14", in SW¼NE¼SW¼ sec.9, T.2 N., R.18 E., Blaine County, Hydrologic Unit 17040219, on left bank 15 ft (4.6 m) upstream from county road crossing, 0.2 mi (0.3 km) southwest of Hailey, 0.4 mi (0.6 km) upstream from Croy Creek, and at mile 91.0 (146.4 km).

DRAINAGE AREA.--640 mi<sup>2</sup> (1,660 km<sup>2</sup>), approximately. Mean altitude, 7,620 ft (2,323 m).

PERIOD OF RECORD.--July to December 1889, June 1915 to current year. Published as Wood River at Hailey in 1889. Previously published as Big Wood River and Big Wood Slough combined discharge.

GAGE.--Water-stage recorder. Datum of gage is 5,295.42 ft (1,614.044 m) National Geodetic Vertical Datum of 1929. Nov. 16, 1934, to Oct. 15, 1970, at datum 2.00 ft (0.610 m) higher. July to December 1889 nonrecording gage at nearby site at different datum. June 11, 1915, to Nov. 15, 1934, nonrecording gages at present site at different datum. Nov. 10, 1971, to Sept. 30, 1972, nonrecording gages at different sites at present datum.

REMARKS.--Records good. Diversions above station for irrigation of about 10,000 acres or 4,000 hm<sup>2</sup> (1966 determination) of which about 1,200 acres (490 hm<sup>2</sup>) are below station. Storage above station is negligible.

AVERAGE DISCHARGE.--63 years, 380 ft<sup>3</sup>/s (10.76 m<sup>3</sup>/s), 275,300 acre-ft/yr (339 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,970 ft<sup>3</sup>/s (141 m<sup>3</sup>/s) about June 16, 1974, gage height, 7.20 ft (2.195 m), from floodmark; maximum gage height, 10.66 ft (3.249 m), present datum, June 12, 1921; no flow Sept. 15-23, Nov. 20, 22, 23, 1931, Oct. 25, 1937.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,760 ft<sup>3</sup>/s (78.2 m<sup>3</sup>/s) June 10, gage height, 5.39 ft (1.643 m); minimum discharge, 99 ft<sup>3</sup>/s (2.80 m<sup>3</sup>/s) Dec. 21, Jan. 24, gage height, 0.89 ft (0.271 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Shifting-control method used June 20 to Sept. 30; stage-discharge relation affected by ice  
Dec. 19, 20, Jan. 1, 2, 24-30, Feb. 17-19)

0.9	100	2.5	598
1.0	116	3.0	851
1.2	151	3.8	1,350
1.5	217	4.6	1,970
2.0	385	5.4	2,330

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	144	131	126	127	124	741	994	1220	1610	509	250
2	157	146	144	121	131	127	651	1050	1220	1520	483	247
3	157	142	147	128	133	134	557	1170	1260	1480	462	238
4	159	142	147	137	127	142	522	1190	1310	1320	441	235
5	159	141	138	141	133	142	470	1060	1470	1160	425	322
6	155	141	131	139	139	138	433	949	1890	1080	413	608
7	153	140	145	136	139	135	445	900	2250	1090	401	557
8	153	131	135	137	138	139	429	905	2440	1170	385	491
9	153	122	119	139	137	140	462	960	2550	1140	377	421
10	149	130	137	141	131	140	509	1150	2620	1170	377	421
11	146	139	134	143	139	139	598	1310	2230	1210	370	421
12	144	140	137	142	136	142	613	1230	1860	1140	359	409
13	142	139	141	132	124	139	608	1210	1850	1060	351	393
14	142	138	146	142	130	134	589	1410	2140	1020	359	385
15	142	141	177	150	134	132	613	1840	2090	1060	340	377
16	142	140	162	148	128	133	686	1790	2000	1080	344	362
17	142	129	146	148	114	144	622	1550	1800	966	355	351
18	144	121	147	140	108	149	580	1390	1800	884	337	337
19	142	114	123	140	125	157	575	1250	1690	830	322	326
20	144	108	111	140	133	165	608	1190	1550	788	312	315
21	146	106	110	130	128	176	589	1300	1650	716	301	308
22	146	114	130	134	129	191	557	1660	1750	681	298	305
23	147	118	137	123	131	205	530	1850	1790	666	294	298
24	146	126	137	108	137	215	530	1870	1810	627	288	291
25	147	134	135	108	141	215	580	1660	1660	613	278	298
26	151	149	127	113	141	235	825	1410	1490	589	269	294
27	147	152	124	116	139	269	905	1260	1370	575	265	288
28	144	148	123	116	126	333	900	1210	1460	627	259	281
29	144	145	126	118	---	401	966	1370	1620	617	256	275
30	147	138	135	125	---	496	1010	1440	1660	575	256	275
31	147	---	134	128	---	608	---	1340	---	539	256	---
TOTAL	4598	4018	4216	4089	3678	6139	18703	40874	53500	29603	10742	10379
MEAN	148	134	136	132	131	198	623	1319	1783	955	347	346
MAX	161	152	177	150	141	608	1010	1870	2620	1610	509	608
MIN	142	106	110	108	108	124	429	900	1220	539	256	235
AC-FT	9120	7970	8360	8110	7300	12180	37100	81070	106100	58720	21310	20590
CAL YR 1977 TOTAL		69818	MEAN 191	MAX 1120	MIN 106	AC-FT 138500						
WTR YR 1978 TOTAL		190539	MEAN 522	MAX 2620	MIN 106	AC-FT 377900						

## BIG WOOD RIVER BASIN

13139500 BIG WOOD RIVER AT HAILEY, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: May 1977 to current year (discontinued).

REMARKS.--No temperature record Dec. 16 to Apr. 6 due to equipment malfunction.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURES: Maximum, 19.0°C Aug. 3, 1977.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 18.5°C Aug. 4, 8, 10.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPF- CIFIC CON- DUCTI- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)
OCT					
17...	0745	243	187	7.0	7.5
NOV					
12...	0845	142	308	.5	3.5
DEC					
17...	0845	137	269	-6.5	.5
FEB					
02...	0915	128	328	-7.5	.5
MAR					
16...	0900	136	316	-4.5	1.0
APR					
28...	1400	854	243	9.5	9.5
JUN					
10...	1430	2560	175	9.5	6.5
JUL					
25...	1005	654	230	22.0	11.0
SEP					
12...	0940	414	294	5.0	9.0



## BIG WOOD RIVER BASIN

13141000 BIG WOOD RIVER NEAR BELLEVUE, ID

LOCATION.--Lat 43°19'40", long 114°20'25", in NW&NE¼ sec.20, T.1 S., R.18 E., Blaine County, Hydrologic Unit 17040219, on right bank at downstream end of Mahoney Flat, 1.5 mi (2.4 km) upstream from maximum flow line of Magic Reservoir, 2.8 mi (4.5 km) upstream from Camas Creek, 10.5 mi (16.9 km) southwest of Bellevue, and at mile 76.0 (122.3 km).

DRAINAGE AREA.--824 mi<sup>2</sup> (2,134 km<sup>2</sup>), approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1911 to current year (no winter records prior to October 1943 except water years 1916, 1921-22, 1940-41).

GAGE.--Water-stage recorder. Altitude of gage is 4,800 ft or 1,463 m (from topographic map). Prior to July 8, 1921, at site 0.1 mi (0.2 km) downstream at different datum. July 8, 1921, to Oct. 5, 1954, at site 0.2 mi (0.3 km) upstream at different datum. Oct. 6, 1954, to Oct. 25, 1965, at site 1 mi (1.6 km) upstream at different datum.

REMARKS.--Records fair. Diversions above station for irrigation of about 21,800 acres (8,800 hm<sup>2</sup>) of which about 400 acres (160 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Storage above station is negligible.

COOPERATION.--Recorder inspected by employees of Water District 37.

AVERAGE DISCHARGE.--40 years (1916, 1922, 1940-41, 1943-78), 303 ft<sup>3</sup>/s (8.581 m<sup>3</sup>/s), 219,500 acre-ft/yr (271 hm<sup>3</sup>).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,130 ft<sup>3</sup>/s (117 m<sup>3</sup>/s) May 25, 1956; maximum gage height, 6.43 ft (1.960 m) May 12, 1958, site and datum then in use; minimum discharge recorded, 7 ft<sup>3</sup>/s (0.20 m<sup>3</sup>/s) Apr. 14, 1932, gage height, 1.10 ft (0.335 m), site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,200 ft<sup>3</sup>/s (62.3 m<sup>3</sup>/s) June 10, gage height, 5.61 ft (1.710 m); minimum daily, 26 ft<sup>3</sup>/s (0.74 m<sup>3</sup>/s) Nov. 21; minimum gage height, 2.53 ft (0.771 m) Nov. 28.

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Shifting-control method used June 3, June 17 to Sept. 30; stage-discharge relation affected by ice Dec. 20, Jan. 1, 2, 24, Feb. 17, 18)

2.5	24	3.6	224
2.7	37	4.0	442
3.0	70	4.5	845
3.3	125	5.0	1,360
		5.6	2,080

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	32	28	34	32	36	596	827	836	1170	172	58
2	41	31	29	35	33	36	628	855	790	1150	162	58
3	41	31	35	35	34	36	557	920	790	1120	153	57
4	41	30	36	35	34	36	527	989	817	1040	141	57
5	41	30	32	36	34	41	505	969	873	949	126	75
6	41	30	30	36	37	43	456	892	1060	827	123	123
7	41	30	29	36	37	42	469	817	1360	790	119	165
8	41	29	28	35	37	44	462	763	1630	799	108	193
9	40	29	28	36	37	48	442	772	1860	790	96	225
10	40	29	28	36	38	51	462	673	2070	781	96	200
11	42	29	28	36	37	56	512	1010	1970	790	94	208
12	40	29	29	35	36	61	527	1020	1630	737	92	206
13	40	28	29	36	36	61	527	989	1490	694	90	204
14	40	28	37	35	36	61	512	1060	1560	644	92	201
15	39	28	136	41	36	62	520	1300	1610	611	90	190
16	39	28	51	41	36	61	565	1390	1550	611	92	193
17	38	28	41	40	35	64	542	1320	1420	542	104	190
18	38	28	36	38	35	69	505	1200	1300	462	100	196
19	36	27	34	38	35	82	498	1070	1260	366	90	210
20	36	27	34	37	34	92	512	930	1160	360	85	209
21	36	26	33	35	34	108	505	883	1170	326	79	206
22	35	27	33	36	34	123	490	1060	1210	294	75	206
23	35	27	33	35	35	153	476	1280	1240	289	73	190
24	35	28	33	36	35	179	462	1390	1270	251	70	180
25	35	28	33	35	35	189	483	1340	1220	212	65	178
26	34	29	33	35	35	208	580	1150	1120	182	61	167
27	33	29	32	35	36	256	703	959	999	172	58	150
28	33	28	33	33	36	284	711	873	989	197	58	149
29	33	29	33	35	---	343	745	883	1110	204	60	155
30	33	29	34	35	---	403	817	939	1180	193	60	160
31	32	---	33	32	---	463	---	911	---	182	62	---
TOTAL	1171	861	1121	1106	949	3811	16296	31634	38544	17735	2946	4959
MEAN	37.8	28.7	36.2	35.7	35.3	123	543	1020	1285	572	95.0	165
MAX	42	32	136	41	38	483	817	1390	2070	1170	172	225
MIN	32	26	28	32	32	36	442	763	790	172	58	57
AC-FT	2320	1710	2220	2190	1960	7560	32320	62750	76450	35180	5840	9840
CAI YR 1977 TOTAL	17905			49.1	MAX	289	MIN	26	AC-FT	35510		
WTR YR 1978 TOTAL	121173			332	MAX	2070	MIN	26	AC-FT	240300		

## BIG WOOD RIVER BASIN

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13141000 BIG WOOD RIVER NEAR BELLEVUE, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72, 1974, 1976 to current year.  
 REMARKS.--Miscellaneous chemical data published for water years 1973, 1975.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANFOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV									
12...	1045	28	342	--	5.0	3.5	--	--	--
DEC									
14...	1330	39	318	--	2.5	5.5	--	--	--
FEB									
02...	1145	30	382	--	-.5	2.5	--	--	--
MAR									
14...	1700	66	406	--	1.0	6.5	--	--	--
APR									
01...	1000	575	288	--	7.5	6.5	--	--	--
27...	1535	769	266	--	6.5	8.0	--	--	--
JUN									
10...	0830	2030	188	7.6	10.5	8.5	86	5	26
JUL									
24...	1700	239	209	8.3	33.5	10.0	140	15	41
SEP									
11...	1700	204	294	7.8	17.0	14.0	160	16	50

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	
NOV									
12...	--	--	--	--	--	--	--	--	
DEC									
14...	--	--	--	--	--	--	--	--	
FEB									
02...	--	--	--	--	--	--	--	--	
MAR									
14...	--	--	--	--	--	--	--	--	
APR									
01...	--	--	--	--	--	--	--	--	
27...	--	--	--	--	--	--	--	--	
JUN									
10...	5.0	2.6	6	.1	1.1	98	0	80	7.6
JUL									
24...	8.6	4.0	6	.1	1.2	150	0	120	13
SEP									
11...	9.3	5.0	6	.2	1.5	180	0	150	17

DATE	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)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
NOV								
12...	--	--	--	--	--	--	--	--
DEC								
14...	--	--	--	--	--	--	--	--
FEB								
02...	--	--	--	--	--	--	--	--
MAR								
14...	--	--	--	--	--	--	--	--
APR								
01...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
JUN								
10...	1.5	.2	11	103	.14	565	.01	.20
JUL								
24...	2.3	.3	13	158	.21	102	.08	.01
SEP								
11...	2.7	.3	16	191	.26	105	.11	.00

## BIG WOOD RIVER BASIN

## 13141500 CAMAS CREEK NEAR BLAINE, ID

LOCATION.--Lat 43°19'59", long 114°32'27", in NW¼SE¼ sec.15, T.1 S., R.16 E., Camas County, Hydrologic Unit 17040220, on left bank 0.2 mi (0.3 km) north of Macon siding on Hill City branch of Union Pacific Railroad, 0.2 mi (0.3 km) downstream from Willow Creek, 2.6 mi (4.2 km) upstream from maximum flow line of Magic Reservoir, 4 mi (6.4 km) southeast of Blaine, and at mile 7.0 (11.3 km).  
DRAINAGE AREA.--648 mi<sup>2</sup> (1,678 km<sup>2</sup>). Mean altitude, 5,600 ft (1,707 m).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1912 to September 1921 and April 1923 to October 1925 (fragmentary), March 1926 to September 1944 (no winter records), October 1944 to current year. Published as Malad River near Blaine 1912-14.  
REVISED RECORDS.--WSP 1217: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,870 ft (1,484 m) by barometer. Prior to June 22, 1966, at site 600 ft (183 m) downstream at datum 0.66 ft (0.20 m) lower.

REMARKS.--Records good. Flow regulated by Mormon Reservoir on McKinney Creek, capacity, 31,240 acre-ft (38.5 hm<sup>3</sup>), and three minor reservoirs, combined capacity, 580 acre-ft (0.72 hm<sup>3</sup>). Diversions above station for irrigation of about 9,400 acres (3,800 hm<sup>2</sup>) of which about 1,500 acres (610 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination).

AVERAGE DISCHARGE.--34 years, 186 ft<sup>3</sup>/s (5.268 m<sup>3</sup>/s), 134,800 acre-ft/yr (166 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 9,780 ft<sup>3</sup>/s (277 m<sup>3</sup>/s) Apr. 8, 1943; maximum gage height, 16.2 ft or 4.94 m (site and datum then in use) Feb. 3, 1963, from floodmark; minimum discharge recorded, 1.2 ft<sup>3</sup>/s (34 dm<sup>3</sup>/s) Aug. 11, 12, 1959; minimum gage height, 1.04 ft or 0.317 m (site and datum then in use) Aug. 23, 25, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft<sup>3</sup>/s (14.2 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Apr. 2	2045	*2580 73.1	*11.08 3.377	Apr. 29	0915	834 23.6	6.31 1.923

Minimum discharge, 1.9 ft<sup>3</sup>/s (53.8 dm<sup>3</sup>/s) Aug. 2-6, gage height, 2.92 ft (0.890 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

2.9	1.4	3.5	21	5.0	325
3.0	2.7	3.7	35	7.0	1,120
3.1	4.8	3.9	54	9.0	1,910
3.2	7.9	4.2	95	10.8	2,490
3.3	11	4.5	161		

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.8	10	12	19	27	2450	671	273	108	2.1	2.4
2	2.6	3.8	10	12	21	27	2480	644	259	106	2.1	2.6
3	2.6	4.0	12	15	21	29	2340	655	255	103	1.9	2.7
4	2.6	4.2	13	15	21	30	2190	683	245	110	1.9	2.7
5	2.6	4.2	10	15	22	31	2070	663	242	123	1.9	3.3
6	2.6	4.2	10	15	23	33	1910	597	242	121	2.1	8.3
7	2.6	4.2	11	15	24	34	2090	534	245	114	2.4	10
8	2.6	3.8	9.0	14	24	34	2250	500	242	110	2.3	9.0
9	2.6	4.0	7.9	15	24	37	2210	492	242	97	2.3	7.9
10	2.6	4.6	9.7	15	23	41	2170	500	245	89	2.3	9.3
11	2.7	4.8	9.3	15	25	45	2070	527	252	85	2.3	10
12	2.7	4.8	10	15	25	49	1950	531	235	81	2.3	9.0
13	2.7	5.4	10	14	23	51	1650	511	213	74	2.3	8.6
14	2.9	5.1	32	16	23	51	1490	507	192	69	2.3	8.6
15	3.8	5.1	134	19	25	54	1290	519	186	65	2.3	8.3
16	3.8	6.4	52	20	22	55	1110	550	175	58	2.2	7.3
17	3.5	7.3	34	20	21	56	1140	534	167	53	2.2	7.3
18	3.5	7.0	25	19	21	61	1080	485	156	43	2.3	8.3
19	3.1	6.0	15	20	23	70	914	447	158	30	2.3	8.6
20	3.1	7.3	12	20	23	90	742	424	153	24	2.3	9.0
21	3.1	7.0	15	19	23	125	762	405	146	20	2.3	9.3
22	2.9	8.6	15	19	25	189	766	424	138	15	2.3	9.0
23	2.9	9.3	15	16	25	259	698	450	138	11	2.3	8.6
24	3.1	9.7	15	15	26	355	624	447	134	9.0	2.3	8.3
25	3.8	9.7	15	16	27	458	570	428	132	5.7	2.3	7.6
26	4.2	12	14	19	27	481	605	386	129	4.4	2.3	7.3
27	3.8	12	13	18	27	585	684	348	125	3.3	2.3	7.0
28	3.8	10	14	18	27	822	778	314	121	2.9	2.3	6.7
29	3.5	11	15	21	---	1010	806	295	112	3.1	2.4	6.7
30	3.8	11	16	18	---	1500	726	295	108	2.9	2.4	7.0
31	3.8	---	14	21	---	1940	---	287	---	2.6	2.4	---
TOTAL	96.5	200.3	596.9	521	660	8629	42615	15053	5660	1742.9	69.7	220.7
MEAN	3.11	6.68	19.3	16.8	23.6	278	1421	486	189	56.2	2.25	7.36
MAX	4.2	12	134	21	27	1940	2480	683	273	123	2.4	10
MIN	2.6	3.8	7.9	12	19	27	570	287	108	2.6	1.9	2.4
AC-FT	191	397	1180	1030	1310	17120	84530	29860	11230	3460	138	438
CAL YR 1977	TOTAL	4386.1	MEAN	12.0	MAX	134	MIN	2.3	AC-FT	8700		
WTR YR 1978	TOTAL	76065.0	MEAN	208	MAX	2480	MIN	1.9	AC-FT	150900		

BIG WOOD RIVER BASIN

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13141500 CAMAS CREEK NEAR BLAINE, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72, 1974 to current year.

REMARKS.--Miscellaneous chemical data published for water year 1973.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
NOV 10...	1515	4.8	197	--	4.0	6.5	--	--	--
DEC 14...	1100	20	222	--	2.5	2.5	--	--	--
FEB 01...	1300	16	275	--	-5.5	.5	--	--	--
MAR 15...	1330	57	225	--	.5	1.5	--	--	--
APR 01...	1230	2300	148	--	12.5	3.5	--	--	--
05...	1105	2010	138	--	10.5	4.0	--	--	--
27...	0845	656	149	--	5.0	7.5	--	--	--
JUN 09...	1500	241	142	8.2	17.5	16.5	61	0	19
JUL 24...	1205	9.3	86	--	29.5	21.0	--	--	--
SEP 11...	1200	10	237	8.1	13.0	12.0	99	0	31

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
NOV 10...	--	--	--	--	--	--	--	--	--
DEC 14...	--	--	--	--	--	--	--	--	--
FEB 01...	--	--	--	--	--	--	--	--	--
MAR 15...	--	--	--	--	--	--	--	--	--
APR 01...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
JUN 09...	3.3	5.9	17	.3	1.8	74	0	61	3.9
JUL 24...	--	--	--	--	--	--	--	--	--
SEP 11...	5.3	12	20	.5	2.3	130	0	110	11

DATE	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
NOV 10...	--	--	--	--	--	--	--	--
DEC 14...	--	--	--	--	--	--	--	--
FEB 01...	--	--	--	--	--	--	--	--
MAR 15...	--	--	--	--	--	--	--	--
APR 01...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
JUN 09...	2.9	.2	16	91	.12	59.2	.35	.03
JUL 24...	--	--	--	--	--	--	--	--
SEP 11...	3.8	.3	23	157	.21	4.38	1.0	.02

## BIG WOOD RIVER BASIN

## 13142000 MAGIC RESERVOIR NEAR RICHFIELD, ID

LOCATION.--Lat 43°15'19", long 114°21'25", in SE¼NE¼NE¼ sec.18, T.2 S., R.18 E., Blaine County, Hydrologic Unit 17040219, at Magic Dam on Big Wood River, 18 mi (29 km) northwest of Richfield, and at mile 67.5 (108.6 km).

DRAINAGE AREA.--1,600 mi<sup>2</sup> (4,140 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--February 1909 to current year. Monthend contents only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1217: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 4,000 ft (1,219 m) Idaho Irrigation Co. datum, which is reported to be about 137 ft (42 m) below National Geodetic Vertical Datum. Datum of gages prior to Oct. 1, 1942, was 4,000 ft (1,219 m) lower. Datum of gages Oct. 1, 1942, to Sept. 30, 1974, was 800 ft (244 m) higher.

REMARKS.--Reservoir is formed by earth- and rock-fill dam, completed in 1909, and raised 5 ft (1.5 m) in 1917. Capacity is 191,500 acre-ft (236 hm<sup>3</sup>) between gage heights 821.4 ft (250.36 m), 2.9 ft above bottom of outlet pipe and 935.0 ft (285.0 m), top of 5-ft flashboards. Dead storage unknown. Water is used for irrigation of about 68,000 acres (27,500 hm<sup>2</sup>) of land in Carey Act project of Big Wood Canal Co. Diversions above station for irrigation of about 32,600 acres (13,200 hm<sup>2</sup>) of which about 1,900 acres (769 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination). Figures given herein represent usable contents including bank storage. Gage read in the morning.

COOPERATION.--Gage readings and capacity table furnished by Water District 37.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 195,400 acre-ft (241 hm<sup>3</sup>) May 11-13, 1969, gage height, 936.0 ft (285.29 m), present datum; no storage for several days in 1909, 1919-20, 1924, 1928, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 193,100 acre-ft (238 hm<sup>3</sup>) May 6, 7, 23, June 8, 9 gage height, 935.4 ft (285.11 m); minimum observed, 3,780 acre-ft (4.66 hm<sup>3</sup>) Oct. 1, gage height, 840.3 ft (256.12 m).

## Capacity table (gage height, in feet, and contents, in acre-feet)

834	1,860	870	31,200	910	111,900
840	3,660	880	47,700	920	139,500
850	9,190	890	66,800	930	172,600
860	18,400	900	87,700	936	195,400

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3780	7090	8340	13900	16900	20800	57800	182200	191900	191900	163400	118200
2	3820	7220	8480	13900	17000	21100	65800	185300	191900	192300	162000	117100
3	3940	7340	8620	14000	17100	21300	72800	188400	191900	192300	160300	115500
4	4020	7470	9050	14100	17300	21400	79000	191100	191900	192300	158600	114500
5	4100	7540	9800	14100	17500	21400	85500	192700	191500	192300	156900	113400
6	4180	7670	10000	14100	17700	21600	90900	193100	191900	191900	155300	112400
7	4310	7800	10100	14100	17900	22000	95600	193100	191900	191100	153600	111600
8	4400	7860	10200	14100	18100	22300	101800	192700	193100	190700	152000	110600
9	4480	8000	10300	14100	18200	22500	107500	192700	193100	190300	150400	109800
10	4620	8070	10300	14100	18400	22700	112900	192700	192700	189900	148800	109300
11	4710	8140	10500	14100	18600	22800	118400	192300	192700	189500	146900	108500
12	4810	8200	10600	14100	18700	23000	123800	192300	191900	189200	145300	108000
13	4900	8270	10700	14200	18800	23200	128800	192300	191100	188800	143800	107800
14	4990	8340	11100	14400	18900	23300	132800	192300	191500	188000	141900	107500
15	5090	8000	11500	14600	19100	23500	136500	192300	191900	187200	140100	107300
16	5190	7150	11900	14800	19200	23600	140100	192700	192300	186400	138600	107000
17	5340	6320	12100	14800	19300	23700	143800	192300	192300	185300	137100	106300
18	5440	6430	12300	15000	19400	24000	147200	192300	192300	184500	135700	106000
19	5550	6540	12500	15100	19500	24900	150400	191900	192300	183000	134200	105500
20	5650	6660	12500	15200	19700	25900	153000	191500	191900	181900	132800	105000
21	5760	6660	12600	15400	19800	26200	155600	191900	191900	180400	131600	104800
22	5870	6790	12800	15600	20100	26500	158300	192300	191500	178900	130200	104500
23	5980	7090	13000	15700	20300	26900	160600	193100	191500	177400	128800	104300
24	6090	7150	13200	15800	20400	27100	163000	192700	192300	175900	126300	103800
25	6200	7280	13300	15900	20700	27500	165100	192300	192300	174100	126600	103300
26	6320	7670	13400	16000	20800	28200	167200	192300	192300	172600	125500	103000
27	6490	7800	13500	16100	20800	35200	170100	191900	192300	171200	123800	102500
28	6600	7930	13600	16400	20800	38200	173000	191900	191900	169700	123000	102000
29	6720	8070	13700	16500	---	41600	176300	191900	191900	168000	121900	101300
30	6850	8200	13800	16600	---	45700	179200	191500	191900	166500	120900	100800
31	6970	---	13900	16700	---	51000	---	191900	---	165100	117600	---
MAX	6970	8340	13900	16700	20800	51000	179200	193100	193100	192300	163400	118200
MIN	3780	6320	8340	13900	16900	20800	57800	182200	191100	165100	117600	100800
(+)	846.7	848.6	855.6	858.4	862.1	881.8	931.8	935.1	935.1	927.9	912.2	905.6
(+)	+3270	+1230	+5700	+2800	+4100	+30200	+128200	+12700	0	-26800	-47500	-16800

CAL YR 1977..... † -49900  
WTR YR 1978..... † +97100

† Gage height, in feet, at end of month.  
† Change in contents, in acre-feet.

BIG WOOD RIVER BASIN

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13142500 BIG WOOD RIVER BELOW MAGIC DAM, NEAR RICHFIELD, ID

LOCATION.--Lat 43°15'00", long 114°21'30", in NE¼SE¼ sec.18, T.2 S., R.18 E., Blaine County, Hydrologic Unit 17040219, Bureau of Land Management lands, on right bank 0.5 mi (0.8 km) downstream from Magic Dam, 18 mi (28.9 km) northwest of Richfield, and at mile 67.0 (107.8 km).

DRAINAGE AREA.--1,600 mi<sup>2</sup> (4,140 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--April 1911 to current year (no winter records 1912).

GAGE.--Water-stage recorder. Altitude of gage is 4,665 ft (1,422 m) by barometer.

REMARKS.--Records good. Flow regulated by Magic Reservoir 0.5 mi (0.8 km) upstream (see sta 13142000), Mormon Reservoir on tributary of Camas Creek (capacity, 31,240 acre-ft or 38.5 hm<sup>3</sup>), and smaller reservoirs having combined capacity of about 680 acre-ft (0.838 hm<sup>3</sup>). Diversions above station for irrigation of about 32,600 acres (13,190 hm<sup>2</sup>) of which about 1,900 acres (770 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination).

AVERAGE DISCHARGE.--66 years (1913-78), 462 ft<sup>3</sup>/s (13.08 m<sup>3</sup>/s), 334,700 acre-ft/yr (413 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft<sup>3</sup>/s (283 m<sup>3</sup>/s) Apr. 26, 1952, gage height, 15.68 ft (4.78 m), from floodmark; no flow Feb. 3, 1915.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,840 ft<sup>3</sup>/s (80.4 m<sup>3</sup>/s) June 9, gage height, 6.89 ft (2.100 m); minimum daily, 0.9 ft<sup>3</sup>/s (0.026 m<sup>3</sup>/s) Nov. 7; minimum gage height, 1.60 ft (0.488 m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.6	0.4	3.0	187
1.8	4.8	3.5	359
1.9	9.0	4.5	918
2.0	15	5.5	1,630
2.2	33	7.0	2,950
2.5	74		

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

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.4	1.8	1.8	1.7	3.7	3.7	18	1060	1360	972	724
2	1.5	1.2	1.8	2.0	1.8	2.3	3.7	32	1000	1360	969	724
3	1.4	1.2	1.8	1.8	1.8	2.3	4.0	213	1070	1360	967	724
4	1.4	1.2	1.8	1.8	1.8	2.5	4.2	562	1080	1340	967	735
5	1.4	1.2	1.8	2.0	2.3	2.5	4.0	1180	1080	1320	964	741
6	1.4	1.2	2.0	1.8	2.0	2.5	4.5	1500	1130	1270	963	674
7	1.2	1.0	1.7	1.8	2.3	2.5	4.8	1440	1230	1230	962	661
8	1.4	1.0	1.8	1.8	2.0	2.5	4.5	1330	1640	1190	937	651
9	1.4	1.0	1.8	1.8	2.5	2.8	4.8	1290	2440	1180	927	584
10	1.4	1.0	1.8	2.0	2.3	2.8	5.2	1380	2550	1180	927	562
11	1.4	1.0	1.8	2.0	2.5	2.8	4.8	1570	2430	1180	925	527
12	1.2	1.0	1.8	2.0	2.3	3.4	5.6	1520	2140	1150	925	414
13	1.2	1.0	2.0	2.0	2.3	3.1	6.0	1510	1670	1110	937	377
14	1.4	128	2.0	2.0	2.3	2.8	6.4	1500	1360	1120	940	372
15	1.4	386	2.0	2.3	2.3	3.1	6.9	1050	1470	1150	944	362
16	1.2	470	1.8	2.3	2.3	3.3	6.4	1950	1550	1160	905	388
17	1.2	307	2.0	2.3	3.1	3.1	6.4	2000	1540	1150	865	420
18	1.2	3.1	2.0	2.0	2.3	3.1	7.3	1800	1510	1140	855	411
19	1.2	2.5	3.1	2.3	2.3	3.4	7.8	1550	1570	1130	817	412
20	1.2	2.3	2.0	2.0	2.3	3.4	7.8	1090	1480	1160	774	411
21	1.2	2.3	2.0	2.0	3.1	2.8	7.8	1000	1490	1150	746	391
22	1.2	2.0	1.8	2.0	2.0	3.4	8.3	1160	1290	1120	743	379
23	1.2	2.0	1.8	2.3	1.8	3.7	8.8	1800	1240	1100	708	378
24	1.2	2.0	1.7	3.7	2.3	3.4	9.8	1080	1340	1090	682	378
25	1.2	2.0	1.8	2.3	2.0	3.1	10	1830	1390	1070	681	399
26	1.4	2.0	1.8	2.0	2.0	3.1	11	1630	1370	1030	682	432
27	1.4	2.0	4.2	3.1	2.3	3.1	11	1270	1390	1010	641	453
28	1.4	1.8	1.8	4.0	2.0	3.1	12	1060	1350	1000	652	459
29	1.4	1.8	1.8	2.0	---	3.4	13	1070	1360	993	682	457
30	1.2	1.8	1.8	2.0	---	3.4	18	1060	1370	986	682	455
31	1.2	---	1.8	2.0	---	3.7	---	1070	---	975	712	---
TOTAL	40.5	1333.0	60.9	67.2	62.0	94.1	218.5	39915	44560	35764	26123	15055
MEAN	1.31	44.4	1.96	2.17	2.21	3.04	7.28	1288	1485	1154	843	502
MAX	1.5	470	4.2	4.0	3.1	3.7	18	2000	2550	1360	972	741
MIN	1.2	1.0	1.7	1.8	1.7	2.3	3.7	18	1060	975	681	362
AC-FT	80	2640	121	133	123	187	433	79170	88380	70940	51810	29860
CAL YR 1977	TOTAL	54674.8	MEAN 150	MAX 787	MIN 1.0	AC-FT 108400						
WTP YR 1978	TOTAL	163293.2	MEAN 447	MAX 2550	MIN 1.0	AC-FT 323900						

## BIG WOOD RIVER BASIN

## 13148200 LITTLE WOOD RESERVOIR NEAR CAREY, ID

LOCATION.--Lat 43°25'30", long 114°01'30", in SW¼ sec.12, T.1 N., R.20 E., Blaine County, Hydrologic Unit 17040221, at gate-control structure near right end of Little Wood Dam on Little Wood River, 8.5 mi (13.7 km) northwest of Carey, and at mile 78.8 (126.8 km).

DRAINAGE AREA.--279 mi<sup>2</sup> (723 km<sup>2</sup>).

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

GAGE.--Nonrecording gage. Datum of gage is 5,100 ft (1,554 m) National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earth- and rock-fill dam constructed in 1939 and raised 39.9 ft (12.2 m) in 1959. Storage began Feb. 12, 1941. Capacity of reservoir is 29,960 acre-ft (36.9 hm<sup>3</sup>) between gage heights 27.4 (8.4 m), 0.4 ft (0.1 m) below bottom of outlet gates, and 137.3 ft (41.8 m), spillway crest. Water is used for irrigation of land near Carey. Contents shown for days when readings were furnished and at monthend. Readings are made at various times of the day.

COOPERATION.--Gage readings and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 30,940 acre-ft (38.1 hm<sup>3</sup>) June 10, 1963, gage height, 138.99 ft (42.364 m); minimum observed, 66 acre-ft (0.081 hm<sup>3</sup>) Aug. 17, 1959, gage height, 30.22 ft (9.211 m), but may have been less during period Aug. 14 to Sept. 13, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 30,000 acre-ft (37.0 hm<sup>3</sup>) July 6, gage height, 137.38 ft (41.873 m); minimum contents observed, 939 acre-ft (1.158 hm<sup>3</sup>) Oct. 2, gage height, 46.00 ft (14.021 m).

## Capacity table (gage height, in feet, and contents, in acre-feet)

36.0	286	80.0	6,370
40.0	504	90.0	9,160
50.0	1,300	100.0	12,500
60.0	2,490	120.0	20,900
70.0	4,150	140.0	31,500

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978  
AM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	6480	5600	7790	14800	28200	29000	29800	---	8590
2	930	---	---	6230	5640	7850	16100	28300	28800	29900	---	8480
3	---	---	---	6570	5770	7920	17000	28500	28600	30000	---	8380
4	---	---	---	6520	5900	7970	18000	28500	28600	30000	---	8270
5	---	---	4560	6670	6630	8040	18900	28700	28600	30000	18100	8170
6	---	2460	---	6710	6170	8100	19500	28700	28700	30000	---	8060
7	---	---	---	6760	6310	8150	20400	28300	28800	30000	---	8180
8	---	---	---	6810	6450	8210	20400	27800	29100	30000	---	8300
9	---	2640	---	6850	6590	8260	20600	27700	29400	30000	---	8430
10	---	---	---	6900	6730	8310	20600	28100	29800	29900	15200	8550
11	---	---	---	6950	6870	8370	22100	28200	30000	29800	15100	8680
12	---	---	---	6980	7120	8420	22100	28200	29900	29800	---	8800
13	---	2930	---	7020	7160	8470	22000	28300	29800	29600	---	8940
14	1820	---	---	7100	7240	8530	21800	28300	29700	29400	13000	9090
15	---	---	5340	7190	7320	8580	22000	28600	29600	29100	---	9230
16	---	---	5480	7280	7400	8640	22500	28600	29600	28800	---	9370
17	---	---	---	7370	7480	8690	22600	28600	29500	28500	---	9520
18	---	---	---	7460	7560	8740	23000	28300	29400	28200	11700	9610
19	---	---	---	7570	7640	8800	23600	28300	29300	27600	---	9690
20	---	3360	---	7650	7710	8850	24100	28100	29200	27100	---	9780
21	---	---	---	7740	7790	9040	24500	28400	29300	26500	---	9860
22	---	---	---	7830	7790	9230	25100	28700	29300	25900	---	9950
23	---	---	---	7900	7790	9470	25500	29100	29400	25300	---	10000
24	---	---	---	8050	7790	9710	26000	29700	29400	24700	---	10100
25	---	---	---	8150	7790	10000	26500	29600	29400	24200	---	10200
26	---	---	---	8240	7790	10300	27200	29500	29400	23600	---	10300
27	1930	3900	---	8340	7790	10700	27800	29400	29400	23100	9500	10400
28	---	---	---	8440	7790	11100	27500	29200	29400	22400	---	10500
29	---	---	6460	8530	---	11800	27700	29100	29400	21400	9120	10600
30	---	4110	---	8620	---	12600	28100	29100	29700	19500	---	10700
31	2050	---	6480	8720	---	13600	---	29100	---	19500	8850	---
MAX	2050	4110	6480	7460	7790	13600	28100	29700	30000	30000	---	10700
MIN	---	---	---	5240	5600	7790	14800	27700	28600	19500	8850	8060
(+)	56.70	69.80	80.45	76.47	85.35	102.97	134.00	135.78	136.86	117.07	88.99	94.76
(-)	+1430	+2060	+2370	-960	+2270	+5810	+14500	+1000	+600	-10200	-10650	+1850

CAL YR 1977..... † -350  
WTR YR 1978..... † +10100

† Gage height, in feet, at end of month.  
‡ Change in contents, in acre-feet.

## 13148500 LITTLE WOOD RIVER NEAR CAREY, ID

LOCATION.--Lat 43°23'20", long 114°00'00", in E½ sec.30, T.1 N., R.21 E., Blaine County, Hydrologic Unit 17040221, on right bank 0.3 mi (0.5 km) upstream from West Canal, 1.3 mi (2.1 km) upstream from East Canal, 2 mi (3.2 km) downstream from Little Fish Creek, 3 mi (4.8 km) downstream from Little Wood Reservoir, 6 mi (9.7 km) northwest of Carey, and at mile 75.5 (121.5 km).

DRAINAGE AREA.--312 mi<sup>2</sup> (808 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to May 1905 (gage heights and discharge measurements only), September 1926 to November 1942, April 1943 to current year. Monthly discharge only for some periods, published in WSP 1317. Records for February 1920 to September 1926 at site 6 mi (9.7 km) upstream not equivalent owing to diversion and inflow.

GAGE.--Water-stage recorder. Datum of gage is 4,990.59 ft (1,521 m) National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Apr. 28, 1904, to May 31, 1905, nonrecording gage, Sept. 20, 1926, to Apr. 22, 1938, water-stage recorder, and Apr. 23 to Aug. 17, 1938, nonrecording gage, all at datum 0.74 ft (0.23 m) higher.

REMARKS.--Records good. Flow regulated by Little Wood Reservoir 3 mi (4.8 km) upstream (see sta 13148200) and other upstream storage in Campbell, Cameron, and Howard Reservoirs on South Fork Muldoon and Little Fish Creeks, combined capacity, 690 acre-ft (0.85 hm<sup>3</sup>). Diversions above station for irrigation of about 1,500 acres (610 hm<sup>2</sup>), 1966 determination.

AVERAGE DISCHARGE.--51 years (1927-42, 1944-78), 150 ft<sup>3</sup>/s (4.25 m<sup>3</sup>/s), 108,700 acre-ft/yr (134 hm<sup>3</sup>/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,000 ft<sup>3</sup>/s (170 m<sup>3</sup>/s), due to failure of reservoirs on Little Fish Creek Apr. 20, 1938, gage height, 12.81 ft (3.904 m), present datum, from floodmark, from rating curve extended above 1,800 ft<sup>3</sup>/s (51.0 m<sup>3</sup>/s); maximum discharge since dam failure, 2,680 ft<sup>3</sup>/s (75.9 m<sup>3</sup>/s) Apr. 27, 1952, gage height, 8.95 ft (2.728 m); minimum, 1 ft<sup>3</sup>/s (28 dm<sup>3</sup>/s) Jan. 26, 1945, Jan. 20, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 867 ft<sup>3</sup>/s (24.6 m<sup>3</sup>/s) Apr. 27, gage height, 5.56 ft (1.695 m); minimum daily, 1.3 ft<sup>3</sup>/s (0.037 m<sup>3</sup>/s) Oct. 14, Nov. 11-14.

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Stage-discharge relation affected by ice Nov. 18, 19, Dec. 8, 9, 17-23, 26, 28, Dec. 30 to Jan. 3, Feb. 16-23)

1.3	0.6	2.1	22	3.5	220
1.4	1.4	2.3	37	4.0	340
1.5	2.5	2.5	57	4.5	485
1.7	6.5	3.0	125	5.5	843
1.9	12				

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	2.5	1.6	26	5.3	45	71	619	445	299	367	132
2	10	2.2	1.6	26	3.2	44	52	594	469	272	364	132
3	10	2.1	1.6	26	3.2	44	35	587	463	267	362	130
4	10	2.1	1.7	38	3.4	46	106	633	442	294	359	132
5	11	2.1	1.6	27	2.8	46	76	665	418	282	348	133
6	11	2.0	1.6	27	3.4	45	69	697	430	251	330	115
7	11	2.0	1.6	26	3.4	45	287	735	451	251	324	47
8	11	2.0	1.6	26	3.5	45	577	605	473	275	319	46
9	11	2.1	1.6	26	4.1	46	547	340	463	270	317	46
10	11	1.4	1.6	26	3.5	45	507	463	495	289	314	47
11	9.5	1.3	1.6	27	3.5	33	378	517	514	287	309	43
12	2.5	1.3	1.7	27	3.2	11	827	543	491	291	299	29
13	1.6	1.3	1.8	24	3.9	17	781	543	491	309	296	29
14	1.3	1.3	6.2	6.5	2.8	35	626	567	491	324	294	29
15	3.9	1.4	45	7.0	3.0	35	533	705	501	348	291	29
16	6.7	1.4	7.0	6.2	3.2	44	668	777	495	373	260	28
17	7.0	1.4	3.9	6.5	3.2	58	537	727	479	370	249	28
18	7.3	1.5	3.5	36	3.2	62	275	679	466	395	222	29
19	7.8	1.5	3.4	103	3.2	65	229	570	409	409	209	29
20	8.4	1.6	2.9	112	3.2	67	291	476	384	415	195	29
21	8.4	2.2	2.5	125	7.0	69	251	409	367	430	193	29
22	8.4	2.4	2.4	135	44	75	166	409	367	427	191	29
23	8.9	2.3	2.4	162	44	86	158	409	373	424	191	28
24	8.9	1.8	2.5	177	45	91	158	479	384	421	189	28
25	8.9	1.5	2.3	175	45	86	171	629	364	418	189	28
26	9.2	1.6	2.3	175	45	90	322	550	332	415	187	28
27	9.5	1.6	2.3	173	45	100	658	507	314	412	181	28
28	9.5	1.5	2.3	137	46	98	668	469	311	409	158	29
29	9.5	1.4	6.2	8.6	---	86	507	421	267	407	147	34
30	8.9	1.4	26	5.1	---	81	570	421	270	389	133	47
31	3.5	---	26	3.7	---	71	---	421	---	370	133	---
TOTAL	255.6	52.2	170.3	1905.6	389.2	1811	11101	17166	12609	10793	7920	1570
MEAN	8.25	1.74	5.49	61.5	13.9	58.4	370	554	420	348	255	52.3
MAX	11	2.5	45	177	46	100	827	777	514	430	367	133
MIN	1.3	1.3	1.6	3.7	2.8	11	35	340	267	251	133	28
AC-FT	507	104	338	3780	772	3590	22020	34050	25010	21410	15710	3110
CAL YR 1977 TOTAL	18311.3			50.2	MAX 267	MIN 1.3	AC-FT	36320				
WTR YR 1978 TOTAL	65742.9			180	MAX 827	MIN 1.3	AC-FT	130400				

## BIG WOOD RIVER BASIN

13148500 LITTLE WOOD RIVER NEAR CAREY, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.  
 REMARKS.--Miscellaneous chemical data published for water years 1973-74.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STRFAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 09...	1400	1.5	358	--	1.5	1.5	--	--	--
DEC 15...	1245	60	107	--	-0.5	.5	--	--	--
JAN 31...	1145	3.5	201	--	-6.0	.5	--	--	--
MAR 14...	1030	35	300	--	-2.5	1.5	--	--	--
APR 26...	1430	390	189	--	2.5	7.5	--	--	--
JUN 09...	1115	457	*191	8.2	12.5	11.5	91	9	25
JUL 25...	1515	436	171	--	34.0	16.0	--	--	--
SEP 12...	1400	29	*219	8.7	12.0	13.0	110	10	30

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 09...	--	--	--	--	--	--	--	--	--
DEC 15...	--	--	--	--	--	--	--	--	--
JAN 31...	--	--	--	--	--	--	--	--	--
MAR 14...	--	--	--	--	--	--	--	--	--
APR 26...	--	--	--	--	--	--	--	--	--
JUN 09...	7.0	4.8	10	.2	1.6	100	0	82	9.6
JUL 25...	--	--	--	--	--	--	--	--	--
SEP 12...	8.1	4.8	4	.2	1.5	120	0	98	12

DATE	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 CONSTIT- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
NOV 09...	--	--	--	--	--	--	--	--
DEC 15...	--	--	--	--	--	--	--	--
JAN 31...	--	--	--	--	--	--	--	--
MAR 14...	--	--	--	--	--	--	--	--
APR 26...	--	--	--	--	--	--	--	--
JUN 09...	3.1	.1	14	115	.16	142	.20	.02
JUL 25...	--	--	--	--	--	--	--	--
SEP 12...	2.4	.1	12	131	.18	10.3	.10	.03

\* Not a field determination.

## BIG WOOD RIVER BASIN

243

13150430 SILVER CREEK AT SPORTSMAN ACCESS, NEAR PICABO, ID

LOCATION.--Lat 43°19'22", long 114°06'29", in SE¼NW¼ sec.20, T.1 S., R.20 E., Blaine County, Hydrologic Unit 17040221, on right bank at sportsman access road crossing to campground, 0.6 mi (1.0 km) downstream from State Highway 68 crossing, 2.3 mi (3.7 km) northwest of Picabo, and 4.3 mi (6.9 km) southeast of Gannett.

DRAINAGE AREA.--70 mi<sup>2</sup> (181 km<sup>2</sup>), approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,850 ft (1,478 m) from topographic map.

REMARKS.--Records poor. No regulation. Several diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 502 ft<sup>3</sup>/s (14.2 m<sup>3</sup>/s) Apr. 6, 1976, gage height, 8.35 ft (2.545 m); maximum gage height, 8.75 ft (2.667 m) Sept. 6, 1978 (backwater from aquatic growth); minimum daily, 69 ft<sup>3</sup>/s (1.95 m<sup>3</sup>/s) June 30, July 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 359 ft<sup>3</sup>/s (10.2 m<sup>3</sup>/s) Mar. 29, gage height, 7.96 ft (2.426 m); maximum gage height, 8.75 ft (2.667 m) Sept. 6 (backwater from aquatic growth); minimum, 91 ft<sup>3</sup>/s (2.58 m<sup>3</sup>/s) May 25, gage height, 6.67 ft (2.033 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	127	136	135	127	128	227	139	101	141	180	180
2	105	127	143	135	127	130	207	139	103	147	180	172
3	105	123	145	135	128	130	187	136	106	153	180	168
4	103	125	153	134	128	132	185	132	111	157	180	165
5	103	127	147	132	128	139	211	137	111	153	180	169
6	106	127	143	134	137	139	192	137	108	153	185	238
7	108	128	145	132	137	139	200	136	106	149	185	270
8	109	127	139	132	141	141	231	134	105	145	185	228
9	112	129	139	132	137	143	196	132	109	149	190	226
10	114	130	139	134	141	149	176	134	111	151	190	233
11	115	130	134	134	139	153	165	130	108	149	190	244
12	108	128	137	134	139	163	155	128	109	147	190	243
13	118	130	137	134	137	163	155	130	108	145	195	245
14	118	130	149	132	139	159	151	130	109	147	200	241
15	117	134	242	141	139	157	149	120	108	143	205	243
16	117	134	227	145	139	157	151	120	110	145	205	244
17	118	132	172	145	136	157	149	123	118	143	205	238
18	115	132	159	141	137	163	143	118	119	142	200	237
19	117	130	157	141	132	170	143	122	119	145	200	232
20	117	127	155	141	130	183	143	109	122	146	205	236
21	117	127	152	139	130	203	141	105	120	150	205	238
22	115	143	150	137	132	222	137	103	125	157	210	242
23	117	130	145	134	132	240	137	102	123	165	205	242
24	118	127	141	135	132	262	137	102	120	170	205	239
25	122	128	141	129	130	284	137	98	120	174	200	234
26	122	132	139	131	130	291	149	99	122	174	200	233
27	123	136	139	125	130	312	151	102	127	170	195	237
28	125	136	139	130	128	335	145	102	130	180	195	232
29	125	134	137	130	---	335	141	101	136	190	190	228
30	127	134	137	130	---	319	141	98	139	185	185	232
31	127	---	136	125	---	260	---	99	---	185	185	---
TOTAL	3565	3904	4654	4174	3742	6058	4932	3697	3463	4850	6005	6809
MEAN	115	130	150	135	134	195	164	119	115	156	194	227
MAX	127	143	242	145	141	335	231	139	139	190	210	270
MIN	102	123	134	128	127	128	137	98	101	141	180	165
AC-FT	7070	7740	9230	8260	7420	12020	9780	7330	6870	9620	11910	13510

CAL YR 1977 TOTAL 43868 MEAN 120 MAX 242 MIN 69 AC-FT 87010  
WTR YR 1978 TOTAL 55853 MEAN 153 MAX 335 MIN 98 AC-FT 110800

NOTE.--No gage-height record July 26 to Sept. 1.

## BIG WOOD RIVER BASIN

13150430 SILVER CREEK AT SPORTSMAN ACCESS, NEAR PICABO, ID--Continued

## WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS, (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 11...	1600	127	425	--	6.0	2.5	--	--	--
DEC 17...	1130	166	407	--	-4.5	1.0	--	--	--
FEB 01...	1000	126	391	--	-8.5	.5	--	--	--
MAR 14...	1335	160	438	--	.5	3.5	--	--	--
APR 28...	0915	145	460	--	4.5	7.5	--	--	--
JUN 10...	1235	109	395	8.3	11.5	12.5	200	1	56
JUL 26...	0850	171	350	--	31.5	21.0	--	--	--
SEP 13...	1700	239	392	8.4	17.0	12.0	220	10	63

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)
NOV 11...	--	--	--	--	--	--	--	--	--
DEC 17...	--	--	--	--	--	--	--	--	--
FEB 01...	--	--	--	--	--	--	--	--	--
MAR 14...	--	--	--	--	--	--	--	--	--
APR 28...	--	--	--	--	--	--	--	--	--
JUN 10...	14	5.0	5	.2	1.4	240	0	200	16
JUL 26...	--	--	--	--	--	--	--	--	--
SEP 13...	14	5.6	5	.2	1.8	250	0	210	19

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS S102)	SOLIDS, SUM OF CONSTIT- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FI)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
NOV 11...	--	--	--	--	--	--	--	--
DEC 17...	--	--	--	--	--	--	--	--
FEB 01...	--	--	--	--	--	--	--	--
MAR 14...	--	--	--	--	--	--	--	--
APR 28...	--	--	--	--	--	--	--	--
JUN 10...	2.3	.2	14	229	.31	67.4	.30	.00
JUL 26...	--	--	--	--	--	--	--	--
SEP 13...	3.0	.3	16	247	.34	159	.34	.02

## 13152500 BIG WOOD RIVER NEAR GOODING, ID

LOCATION.--Lat 42°53'12", long 114°48'08", in NE¼NE¼SW¼ sec.21, T.6 S., R.14 E., Gooding County, Hydrologic Unit 17040219, on right bank at Hudson Ranch, 3.1 mi (5.0 km) downstream from bridge on Bliss-Gooding highway, 4.2 mi (6.8 km) downstream from Little Wood River, 5.5 mi (8.8 km) upstream from diversion dam for King Hill project, 6 mi (9.7 km) southwest of Gooding, and at mile 7.2 (11.6 km).

DRAINAGE AREA.--2,990 mi<sup>2</sup> (7,740 km<sup>2</sup>), approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1916 to current year (fragmentary October 1923 to September 1926; no winter records for water years 1923, 1936-37, 1942; irrigation seasons only for water years 1927-35). October 1950 to September 1959, published as Malad River near Gooding.

REVISED RECORDS.--WSP 1347: 1934.

GAGE.--Water-stage recorder. Altitude of gage is 3,345 ft or 1,020 m (from topographic map). Prior to Apr. 13, 1921, nonrecording gage at present site and datum.

REMARKS.--Records good except those for February to March, which are poor. Flow regulated by Magic Reservoir (see sta 13142000) and by several smaller reservoirs on tributaries and affected by deliveries from canals diverting from Snake River at Milner. Diversions above station for irrigation of about 144,000 acres (58,300 hm<sup>2</sup>) of which about 4,000 acres (1,620 hm<sup>2</sup>) are by withdrawals from ground water (1966 determination).

AVERAGE DISCHARGE.--46 years (1917-22, 1938-41, 1943-78), 271 ft<sup>3</sup>/s (7.67 m<sup>3</sup>/s), 196,300 acre-ft/yr (242 hm<sup>3</sup>/yr)\*

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,860 ft<sup>3</sup>/s (251 m<sup>3</sup>/s) Dec. 22, 1964, gage height, 12.15 ft (3.703 m), from floodmarks; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,300 ft<sup>3</sup>/s (36.8 m<sup>3</sup>/s) May 7, gage height, 6.16 ft (1.878 m); minimum, no flow Oct. 21, 23, Nov. 12-19.

Rating table (gage height, in feet, and discharge, in cubic feet per second)  
(Shifting-control method used Oct. 1 to Nov. 20, Dec. 23, 24, Jan. 5, Jan. 30 to Feb. 1;  
stage-discharge relation affected by ice Nov. 21-23, Dec. 19-22, 27, Jan. 1-4, 13, 23-25, 27, 28)

0.3	0	0.8	6.9	3.0	256
.4	.3	1.0	13	4.0	486
.5	1.5	1.4	36	5.0	785
.6	2.9	2.0	96	6.1	1270

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	8.3	15	33	6.3	58	165	568	122	16	90	86
2	6.7	20	19	31	14	60	164	454	141	12	85	88
3	16	21	26	22	19	52	125	371	154	20	90	96
4	15	19	21	6.9	18	65	100	460	197	52	96	95
5	13	11	19	4.9	38	85	353	573	205	101	121	135
6	13	3.4	21	40	70	110	258	678	181	114	125	371
7	13	1.3	23	88	150	110	252	1260	172	159	131	485
8	12	.66	26	70	370	110	262	1210	172	172	125	381
9	13	.30	15	48	240	105	237	1050	190	133	125	442
10	14	.18	18	50	230	95	290	816	949	82	131	542
11	7.4	.01	11	79	150	65	296	672	1200	74	126	659
12	5.6	.00	11	112	100	75	268	742	1130	73	139	694
13	12	.00	39	118	70	65	129	772	901	69	154	666
14	8.6	.00	37	95	50	63	252	703	551	54	178	415
15	3.1	.00	170	339	32	75	286	605	227	36	191	322
16	1.0	.00	218	434	20	85	294	605	197	25	240	317
17	.90	.00	59	410	15	110	302	823	294	29	367	307
18	2.3	.00	66	300	23	120	339	956	348	25	364	378
19	.66	.00	36	139	35	169	333	813	337	24	369	434
20	.18	4.3	16	100	50	188	237	596	311	28	333	390
21	.00	7.0	19	83	45	250	167	339	278	29	288	396
22	.00	10	6.9	71	40	286	200	112	240	35	268	333
23	.00	20	3.1	48	50	240	280	53	186	43	225	374
24	.78	17	4.3	27	60	170	278	442	112	60	185	351
25	3.7	7.6	67	43	95	97	280	762	72	63	156	324
26	4.9	30	60	48	90	91	278	736	99	57	117	292
27	1.6	32	49	44	80	178	272	626	126	55	92	333
28	1.3	31	32	39	60	272	434	369	110	47	90	311
29	1.0	30	32	8.9	---	227	641	167	78	59	78	353
30	2.1	23	35	9.5	---	207	669	118	42	73	73	376
31	5.1	---	48	6.7	---	180	---	109	---	77	94	---
TOTAL	181.02	297.05	1222.3	2947.9	2220.3	4083	8441	18560	9325	1896	5246	10748
MEAN	5.84	9.90	39.4	95.1	79.3	132	281	599	311	61.2	169	358
MAX	16	32	218	434	370	286	669	1260	1200	172	369	694
MIN	.00	.00	3.1	4.9	6.3	52	100	53	42	12	73	86
AC-FT	359	589	2420	5850	4400	8100	16740	36810	18500	3760	10410	21320

CAL YR 1977 TOTAL 26058.33 MEAN 71.4 MAX 614 MIN .00 AC-FT 51690  
WTR YR 1978 TOTAL 65167.57 MEAN 179 MAX 1260 MIN .00 AC-FT 129300

NOTE.--No gage-height record Feb. 4 to Mar. 18.

## BIG WOOD RIVER BASIN

13152500 BIG WOOD RIVER NEAR GOODING, ID--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
DEC 18...	0935	60	317	--	-3.0	.0	--	--	--
FEB 03...	0840	23	179	--	.5	1.5	--	--	--
MAR 18...	0845	118	333	--	8.0	5.5	--	--	--
APR 30...	1050	668	421	--	9.0	11.0	--	--	--
JUN 11...	1445	1250	290	7.9	15.5	14.5	120	16	33
JUL 27...	1450	58	*391	9.9	31.0	28.0	170	32	44
SEP 14...	1015	397	343	--	14.5	17.5	--	--	--

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
DEC 18...	--	--	--	--	--	--	--	--	--
FEB 03...	--	--	--	--	--	--	--	--	--
MAR 18...	--	--	--	--	--	--	--	--	--
APR 30...	--	--	--	--	--	--	--	--	--
JUN 11...	9.8	12	17	.5	3.0	130	0	110	21
JUL 27...	15	19	19	.6	4.7	170	0	140	37
SEP 14...	--	--	--	--	--	--	--	--	--

DATE	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
DEC 18...	--	--	--	--	--	--	--	--
FEB 03...	--	--	--	--	--	--	--	--
MAR 18...	--	--	--	--	--	--	--	--
APR 30...	--	--	--	--	--	--	--	--
JUN 11...	9.4	.4	12	166	.23	560	.37	.03
JUL 27...	16	.6	6.6	227	.31	35.5	.02	.08
SEP 14...	--	--	--	--	--	--	--	--

\* Not a field determination.

## 13153000 KING HILL CANAL NEAR HAGERMAN, ID

LOCATION.--Lat 42°52'05", long 114°54'40", in SE¼SE¼ sec.28, T.6 S., R.13 E., Twin Falls County, Hydrologic Unit 17040212, on left bank 600 ft (183 m) below outlet of inverted siphon crossing Snake River, 0.8 mi (1.3 km) west of highway bridge over Big Wood River, and 3.6 mi (5.8 km) north of Hagerman.

PERIOD OF RECORD.--March 1930 to July 1978 (discontinued), irrigation seasons only 1930-37, 1940-46.

REVISED RECORDS.--WSP 723: 1930.

GAGE.--Water-stage recorder. Altitude of gage is 2,850 ft (869 m), from topographic map. Prior to June 1, 1949, nonrecording gages at several sites within 0.6 mi (1.0 km) of present site at various datums. June 1, 1949, to May 22, 1951, nonrecording gage at present site and datum. May 23, 1951, to Sept. 30, 1961, water-stage recorder 0.5 mi (0.8 km) upstream at different datum. Oct. 1, 1961, to Mar. 24, 1971, water-stage recorder 125 ft (38 m) downstream at different datum.

REMARKS.--Records good. This canal, which is operated by King Hill Irrigation District to provide water for irrigation of about 10,000 acres (4,050 hm<sup>2</sup>), diverts from Idaho Power Co.'s canal, which diverts from Big Wood River (Malad Springs water).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 376 ft<sup>3</sup>/s (10.6 m<sup>3</sup>/s) June 14, 1973; no flow or minor leakage at headgate during nonirrigation seasons and other periods when gates are closed.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	286	.00	.00	.00	.00	.00	.00	300	301	330		
2	287	.00	.00	.00	.00	.00	.00	301	275	330		
3	288	.00	.00	.00	.00	.00	135	301	304	329		
4	288	.00	.00	.00	.00	.00	219	304	304	329		
5	289	.00	.00	.00	.00	.00	220	304	305	330		
6	291	.00	.00	.00	.00	.00	221	304	305	326		
7	289	.00	.00	.00	.00	.00	221	305	307	287		
8	286	.00	.00	.00	.00	.00	222	304	307	316		
9	288	.00	.00	.00	.00	.00	223	304	278	314		
10	278	.00	.00	.00	.00	.00	222	304	314	100		
11	268	.00	.00	.00	.00	.00	226	308	312	.00		
12	273	.00	.00	.00	.00	.00	223	307	312	.00		
13	176	.00	.00	.00	.00	.00	225	308	313	192		
14	24	.00	.00	.00	.00	.00	222	309	313	310		
15	.00	.00	.00	.00	.00	.00	222	309	313	310		
16	.00	.00	.00	.00	.00	.00	222	329	310	318		
17	.00	.00	.00	.00	.00	.00	222	234	313	320		
18	.00	.00	.00	.00	.00	.00	221	317	316	287		
19	.00	.00	.00	.00	.00	.00	221	341	279	316		
20	.00	.00	.00	.00	.00	.00	222	341	317	317		
21	.00	.00	.00	.00	.00	.00	225	339	318	317		
22	.00	.00	.00	.00	.00	.00	221	337	328	317		
23	.00	.00	.00	.00	.00	.00	221	328	337	318		
24	.00	.00	.00	.00	.00	.00	185	325	342	318		
25	.00	.00	.00	.00	.00	.00	221	317	343	274		
26	.00	.00	.00	.00	.00	.00	222	307	343	320		
27	.00	.00	.00	.00	.00	.00	278	267	308	322		
28	.00	.00	.00	.00	.00	.00	301	304	336	322		
29	.00	.00	.00	.00	---	.00	304	301	333	296		
30	.00	.00	.00	.00	---	.00	300	300	305	324		
31	.00	---	.00	.00	---	.00	---	252	---	326		
TOTAL	3611.00	.00	.00	.00	.00	.00	6387.00	9511	9391	8815.00	---	---
MEAN	116	.000	.000	.000	.000	.000	213	307	313	284	---	---
MAX	291	.00	.00	.00	.00	.00	304	341	343	330	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	234	275	.00	---	---
AC-FT	7160	.00	.00	.00	.00	.00	12670	18870	18630	17480	---	---
CAL YR 1977	TOTAL	60266.00	MEAN	165	MAX	349	MIN	.00	AC-FT	119500		



SNAKE RIVER MAIN STEM

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13154500 SNAKE RIVER AT KING HILL, ID--Continued  
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1951 to current year.

WATER TEMPERATURES: March 1951 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 595 micromhos June 19, 1968; minimum daily, 296 micromhos May 15, 1974.

WATER TEMPERATURES: Maximum daily, 23°C Aug. 2, 1955; minimum daily, 3.0°C Dec. 11, 16, 1972.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 554 micromhos Dec. 4; minimum daily, 446 micromhos Dec. 13.

WATER TEMPERATURES: Maximum daily, 21.0°C July 29 to Aug. 1; minimum daily, 8.0°C Dec. 20-22, Jan. 1-3.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, 0.7 UM-MF (COLS./ 100 ML)
OCT											
11...	1300	7900	507	8.5	19.0	14.0	6	--	12.8	135	--
NOV											
08...	1100	7320	429	8.3	7.0	8.5	3	--	13.9	130	<1
DEC											
13...	1330	8360	490	8.2	7.0	10.0	3	--	10.7	104	K10
JAN											
12...	1130	6990	485	8.2	13.0	11.0	5	--	11.0	109	K5
FEB											
22...	1330	11900	*517	7.6	7.0	10.0	4	--	11.5	111	K4
MAR											
15...	1300	12300	400	8.5	14.0	10.5	3	--	11.6	113	<1
APR											
11...	1630	17200	464	8.3	16.0	13.0	4	--	10.2	105	K6
MAY											
15...	1200	13000	401	8.8	20.5	16.0	25	--	8.8	96	120
JUN											
05...	1515	7250	402	8.5	31.0	21.0	3	--	13.3	159	K24
JUL											
12...	1500	7260	494	8.4	29.0	21.5	--	1.7	13.2	162	K25
AUG											
08...	1100	7260	352	8.0	26.5	19.0	--	2.5	10.5	122	K9
SEP											
08...	1500	10500	*513	8.0	17.0	17.0	--	4.3	8.4	95	--

DATE	STREP- TOCOCCI FFCAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AU- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)
OCT											
11...	120	200	20	47	21	33	26	1.0	4.6	200	12
NOV											
08...	110	210	25	46	22	32	25	1.0	4.5	220	0
DEC											
13...	K1000	210	30	48	21	32	25	1.0	5.1	220	0
JAN											
12...	180	200	17	46	20	31	25	1.0	5.0	220	0
FEB											
22...	K40	210	--	52	20	32	24	1.0	4.7	--	0
MAR											
15...	K34	190	18	43	19	30	25	1.0	4.4	200	5
APR											
11...	110	200	33	46	20	27	22	.8	4.7	200	0
MAY											
15...	540	200	20	47	21	27	22	.8	5.1	200	12
JUN											
05...	K56	190	14	46	19	27	23	.8	4.2	190	12
JUL											
12...	76	190	4	45	20	30	25	.9	4.7	212	7
AUG											
08...	90	190	26	45	20	28	23	.9	4.5	200	0
SEP											
08...	K1700	190	0	45	19	30	25	.9	4.8	260	0

\* Not a field determination.

K Results based on count outside ideal colony count range.

## SNAKE RIVER MAIN STEM

13154500 SNAKE RIVER AT KING HILL, ID--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT 11...	180	53	29	.7	35	309	334	.42	6590	1.2	--
NOV 08...	180	52	27	.6	36	316	329	.43	6250	1.4	.00
DEC 13...	180	55	26	.6	35	318	331	.43	7180	1.5	.00
JAN 12...	180	52	22	.6	34	320	319	.44	6040	1.4	.06
FEB 22...	--	49	25	.7	33	311	--	.42	9990	1.0	.01
MAR 15...	172	49	30	.6	28	305	308	.41	10100	1.0	.03
APR 11...	160	47	30	.7	22	279	296	.38	13000	.78	.04
MAY 15...	180	45	26	.7	21	285	303	.39	10000	.02	.03
JUN 05...	176	44	22	.7	26	275	295	.37	5380	.57	.00
JUL 12...	186	46	26	.6	32	304	316	.41	5960	1.0	.00
AUG 08...	164	47	27	.6	27	298	298	.41	5840	1.5	.00
SEP 08...	213	52	25	.6	30	315	335	.43	8930	1.1	.01

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C)
OCT 11...	--	.25	--	--	1.5	6.4	.04	--	--	--	--
NOV 08...	--	--	--	.35	--	--	.05	.04	2.0	--	--
DEC 13...	--	--	--	.16	--	--	.07	.05	--	2.3	.1
JAN 12...	--	--	--	.30	--	--	.09	.07	1.5	--	--
FEB 22...	.51	.52	.23	.29	1.5	6.7	.07	.05	2.5	--	--
MAR 15...	.31	.34	.01	.33	1.3	5.9	.04	.04	1.9	--	--
APR 11...	.14	.18	.03	.15	.96	4.3	.07	.02	2.7	--	--
MAY 15...	.68	.71	.38	.33	.73	3.2	.13	.06	3.4	--	--
JUN 05...	.54	.54	.05	.49	1.1	4.9	.04	.01	2.2	2.3	.9
JUL 12...	.63	.63	.00	.74	1.6	7.2	.05	.03	1.9	--	--
AUG 08...	.33	.33	.00	.35	1.8	8.1	.03	.03	1.6	--	--
SEP 08...	.46	.47	.12	.35	1.6	7.0	.07	.07	--	4.8	--

SNAKE RIVER MAIN STEM

13154500 SNAKE RIVER AT KING HILL, ID--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDE TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVE (UG/L AS AS)	BARIUM, TOTAL RECov- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDE RECov- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVE (UG/L AS BA)	CADMIUM TOTAL RECov- ERABLE (UG/L AS CD)	CADMIUM SUS- PENDE RECov- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVE (UG/L AS CD)	CHRO- MIUM, TOTAL RECov- ERABLE (UG/L AS CR)
DEC 13...	4	0	4	100	100	0	2	0	2	0
MAR 15...	3	0	4	100	0	100	3	0	3	10
JUN 05...	4	1	3	300	100	200	0	--	3	10
SEP 08...	7	3	4	400	0	400	8	7	1	10

DATE	CHRO- MIUM, SUS- PENDE RECov. (UG/L AS CR)	CHRO- MIUM, DIS- SOLVE (UG/L AS CR)	CORAL TOTAL RECov- ERABLE (UG/L AS CO)	CORAL SUS- PENDE RECov- ERABLE (UG/L AS CO)	CORAL, DIS- SOLVE (UG/L AS CO)	COPPER, TOTAL RECov- ERABLE (UG/L AS CU)	COPPER, SUS- PENDE RECov- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVE (UG/L AS CU)	IRON, TOTAL RECov- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECov- ERABLE (UG/L AS FE)
DEC 13...	0	0	1	1	0	7	5	2	150	--
MAR 15...	10	0	0	0	0	4	4	0	160	--
JUN 05...	10	0	1	1	0	2	1	1	20	20
SEP 08...	10	0	0	0	0	6	5	1	350	330

DATE	IRON, DIS- SOLVE (UG/L AS FE)	LEAD, TOTAL RECov- ERABLE (UG/L AS PB)	LEAD, SUS- PENDE RECov- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVE (UG/L AS PB)	MANGA- NESE, TOTAL RECov- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECov. (UG/L AS MN)	MANGA- NESE, DIS- SOLVE (UG/L AS MN)	MERCURY TOTAL RECov- ERABLE (UG/L AS HG)	MERCURY SUS- PENDE RECov- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVE (UG/L AS HG)
DEC 13...	10	26	10	16	10	0	20	.5	.5	.0
MAR 15...	20	15	0	19	20	10	10	.0	.0	.0
JUN 05...	0	5	0	5	0	0	0	.1	.1	.0
SEP 08...	20	55	46	9	30	20	10	.0	.0	.0

DATE	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVE (UG/L AS SE)	SILVER, TOTAL RECov- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE RECov- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVE (UG/L AS AG)	ZINC, TOTAL RECov- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECov- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVE (UG/L AS ZN)
DEC 13...	1	0	1	0	0	0	10	0	20
MAR 15...	0	0	0	0	0	0	10	10	0
JUN 05...	1	0	1	0	0	0	10	0	10
SEP 08...	1	0	1	0	0	0	30	20	10

13154500 SNAKE RIVER AT KING HILL, ID--Continued  
 PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO JULY 1978

DATE TIME	OCT 11,77 1300	NOV 8,77 1100	MAR 15,78 1300	MAY 15,78 1200	JUN 5,78 1515	JUL 12,78 1500						
TOTAL CELLS/ML	15000	2400	5700	10000	5700	6800						
DIVERSITY: DIVISION	0.8	0.2	1.2	0.7	0.9	1.1						
..CLASS	0.8	0.2	1.2	0.7	0.9	1.3						
...ORDER	1.3	0.5	1.8	1.1	1.4	2.1						
...FAMILY	1.6	0.5	2.3	1.8	1.7	2.7						
....GENUS	2.7	0.6	2.4	1.8	2.1	3.7						
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT		
CHLOROPHYTA (GREEN ALGAE)												
..CHLOROPHYCEAE												
...ULOTRICHALES												
...ULOTRICHACEAE												
....RAPHIDONEMA	110	1	--	--	--	--	--	--	--			
...CHLOROCOCCALES												
...MICRACTINIACEAE												
....GOLENKINIA	--	--	--	--	* 0	--	--	70	1			
...MICRACTINIUM	230	2	--	260	5	--	--	140	2			
...OOCYSTACEAE												
....ANKISTRODES MUS	230	2	--	--	130	1	370	7	140	2		
....CHODATELLA	--	--	--	--	290	3	150	3	70	1		
....KIRCHNERIELLA	--	--	--	--	--	--	--	--	180	3		
...SCENEDESMACEAE												
....ACTINASTRUM	--	--	--	--	--	--	--	--	280	4		
....CRUCIGENIA	--	--	--	--	* 0	--	--	--	--	--		
...SCENEDESMUS	920	6	45	2	260	5	250	2	110	2		
...TETRASTRUM	460	3	--	--	130	2	* 0	--	--	140	2	
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	110	1	--	--	--	210	2	74	1	180	3	
...VOLVOCAEAE												
....PANDORINA	--	--	--	--	--	--	--	--	1100#	17		
CHRYSOPHYTA												
..BACILLARIOPHYCEAE												
...CENTRALES												
...COSCINODISCAEAE												
....CYCLOTELLA	920	6	2200#	91	2500#	44	670	7	3600#	64	1500#	23
...MELOSIRA	--	--	--	--	--	--	--	410	7	810	12	
...SKELETONEMA	690	5	--	--	--	--	--	--	--	700	10	
...STEPHANODISCUS	1700	12	23	1	--	--	--	--	--	--	--	
...THALASSIOSIRA	7500#	51	--	--	--	--	--	--	--	--	--	
..PFNNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	--	--	--	--	--	--	--	--	35	1	
...COCCONEIS	--	--	45	2	65	1	--	74	1	140	2	
...RHOICOSPHENIA	--	--	23	1	--	--	* 0	--	--	70	1	
...CYMBELLACEAF												
....CYMBELLA	--	--	--	--	--	--	--	110	2	70	1	
...DIATOMACEAE												
....DIATOMA	--	--	--	--	98	2	84	1	110	2	--	--
...FRAGILARIACEAE												
....ASTERIONELLA	--	--	--	--	850	15	7300#	72	--	--	--	--
...FRAGILARIA	570	4	--	--	--	--	--	--	--	--	--	
...SYNEDRA	230	2	--	--	33	1	--	--	--	--	--	
...GOMPHONEMATAEAE												
....GOMPHONEMA	--	--	--	--	33	1	--	--	--	35	1	
...NAVICULACEAF												
....NAVICULA	110	1	45	2	65	1	170	2	37	1	180	3
...STAURONEIS	--	--	--	--	33	1	* 0	--	--	--	--	
...NITZSCHIAEAE												
....NITZSCHIA	460	3	* 0	0	33	1	84	1	37	1	250	4
...TABELLARIACEAE												
....TABELLARIA	--	--	--	--	--	--	460	5	220	4	--	--
..CHRYSOPHYCEAE												
...CHRYSOMONADALES												
...OCHROMONADACEAE												
....OCHROMONAS	--	--	--	--	--	--	--	--	--	250	4	
CRYPTOPHYTA (CRYPTOMONADS)												
..CRYPTOPHYCEAE												
...CRYPTOMONIDALES												
...CRYPTOCHRYSTIDACEAE												
....RHODOMONAS	110	1	--	--	--	--	--	--	--	--	--	
CYANOPHYTA (BLUE-GREEN ALGAE)												
..CYANOPHYCEAE												
...CHROCOCCOCCALES												
...CHROCOCCOCCAEAE												
....ANACYSTIS	--	--	--	--	1300#	23	--	--	340	6	140	2
...HORMOGONALES												
...OSCILLATORIACEAE												
....LYNGBYA	--	--	--	--	--	--	250	2	--	--	--	--

13154500 SNAKE RIVER AT KING HILL, ID--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO JULY 1978

(CONTINUED)

DATE TIME	OCT 11,77 1300	NOV 8,77 1100	MAR 15,78 1300	MAY 15,78 1200	JUN 5,78 1515	JUL 12,78 1500				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
EUGLENOPHYTA (EUGLENIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
....EUGLENACEAE										
.....TRACHELUMONAS	--	-	--	-	--	-	84	1	--	-
PYRPHOPHYTA (FIRE ALGAE)										
..DINOPHYCEAE										
...PERIDINIALES										
....PERIDINIACEAE										
.....PERIDINIUM	340	2	23	1	--	-	--	-	35	1

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

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LENGTH OF EXPO- SURE (DAYS)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERI- PHYTON CHROMO- FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- FLUOROM (MG/M2)
AUG 08...	27	1.57	.709	.450	.310

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT								
11...	1300	14	299	95	99	100	--	--
NOV								
08...	1100	7	138	93	100	--	--	--
DEC								
13...	1330	8	181	92	100	--	--	--
JAN								
12...	1130	10	189	86	100	--	--	--
FEB								
22...	1330	11	353	--	--	--	--	--
MAR								
15...	1300	8	266	96	100	--	--	--
APR								
11...	1630	17	789	81	85	90	98	100
MAY								
15...	1200	37	1300	97	98	100	--	--
JUN								
05...	1515	16	313	48	49	63	98	100
JUL								
12...	1500	6	118	--	--	--	--	--
AUG								
08...	1100	5	98	95	100	--	--	--
SEP								
08...	1500	11	312	86	90	92	94	100

## SNAKE RIVER MAIN STEM

13154500 SNAKE RIVER AT KING HILL, ID--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	533	522	547	527	509	508	485	480	477	492	496	502
2	533	520	552	529	518	510	480	474	476	485	500	500
3	534	520	552	524	520	517	478	477	468	492	496	495
4	535	516	554	516	514	500	483	478	470	483	497	501
5	535	517	548	524	483	502	479	475	469	494	491	498
6	534	515	549	514	484	500	485	488	469	500	494	499
7	535	519	552	519	476	502	478	486	480	510	490	511
8	534	517	548	511	482	497	502	476	478	495	489	510
9	531	515	545	523	487	504	491	473	478	512	491	509
10	534	517	548	518	499	496	490	473	477	511	493	509
11	532	518	533	514	474	499	494	483	473	499	492	506
12	532	517	531	525	500	501	486	475	463	489	493	504
13	526	514	446	511	504	506	487	477	471	489	492	503
14	533	515	498	490	506	504	489	477	477	486	491	500
15	525	516	491	512	511	504	486	482	478	485	494	502
16	527	524	505	496	510	502	484	467	491	487	507	507
17	527	528	506	476	511	507	483	473	491	492	497	503
18	527	528	526	489	515	501	484	463	488	489	496	502
19	529	528	516	509	511	490	486	461	492	489	506	506
20	527	525	522	508	517	477	484	467	493	488	500	512
21	528	519	536	515	513	477	485	502	493	493	503	504
22	527	521	531	477	518	480	487	500	492	494	501	511
23	527	522	522	514	512	480	483	487	493	503	503	515
24	525	520	528	533	522	482	484	481	497	504	500	512
25	524	519	522	522	518	478	483	479	495	496	502	513
26	520	522	523	532	520	484	485	473	494	500	500	494
27	522	536	525	531	510	474	481	479	500	496	499	494
28	521	533	531	520	514	480	481	480	499	508	498	494
29	519	536	525	519	---	475	482	480	495	496	498	495
30	523	536	533	518	---	470	479	477	499	498	497	493
31	522	---	527	522	---	477	---	480	---	504	506	---
MEAN	528	522	528	514	506	493	485	478	484	495	497	503
WTR YR 1978	MEAN	503	MAX	554	MIN	446						

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.5	12.5	12.0	8.0	9.0	11.0	14.0	13.5	16.0	18.5	21.0	18.0
2	14.0	12.5	10.5	8.0	9.0	10.5	13.5	13.0	16.0	19.0	20.0	18.0
3	15.0	12.0	11.0	8.0	9.5	9.5	13.0	12.5	16.5	19.0	20.0	18.5
4	14.0	12.0	11.0	8.5	10.0	10.0	13.0	12.0	17.0	18.5	19.5	19.0
5	14.5	12.0	10.0	9.0	10.0	10.0	13.5	12.0	18.0	18.0	20.0	18.5
6	14.0	12.5	11.0	9.5	10.5	10.5	13.0	12.5	18.0	18.5	20.0	18.0
7	14.0	12.0	10.5	10.0	10.0	11.0	12.5	12.0	18.0	18.5	20.0	18.0
8	14.0	12.0	10.0	10.0	10.5	11.0	13.0	13.0	18.5	19.0	20.0	17.0
9	13.5	11.0	9.5	9.5	10.0	11.5	13.0	13.5	19.0	19.5	20.0	17.0
10	13.5	10.5	10.0	10.0	9.5	11.5	13.0	14.5	17.0	20.0	20.0	16.5
11	13.0	11.0	10.0	10.0	9.0	15.0	12.0	14.0	18.0	20.0	20.0	15.5
12	13.0	11.0	10.5	10.0	9.5	12.0	12.5	14.5	18.0	19.5	20.0	15.0
13	14.0	11.5	10.0	10.0	9.0	11.5	13.0	15.0	19.0	19.0	18.5	15.0
14	14.0	12.0	10.5	10.5	9.0	11.0	14.0	16.0	18.5	20.0	18.0	15.5
15	14.5	12.0	10.0	10.0	9.5	10.5	13.5	14.5	18.0	20.0	17.0	16.0
16	14.5	11.5	10.0	10.0	9.0	11.0	12.5	14.0	18.0	20.0	17.0	15.5
17	14.0	11.0	9.0	10.0	9.0	11.5	12.5	14.0	18.0	19.5	17.0	15.0
18	15.0	10.5	9.0	10.0	9.0	12.0	13.0	14.5	18.0	20.0	17.0	14.0
19	14.5	10.0	9.0	10.0	9.0	12.5	12.5	14.5	17.5	20.0	17.5	13.0
20	14.0	9.0	8.0	10.5	9.0	12.5	12.0	16.0	18.0	20.0	18.0	13.5
21	14.0	9.0	8.0	10.0	9.5	13.0	12.0	16.5	19.0	20.0	18.0	14.0
22	14.0	9.0	8.0	10.0	9.5	12.5	11.5	16.0	19.0	20.0	17.0	14.0
23	14.5	9.5	8.5	9.5	9.0	13.0	11.5	15.0	19.0	20.5	17.0	14.5
24	---	10.0	9.0	9.0	9.5	12.5	12.5	14.5	18.5	20.0	18.0	15.0
25	14.5	11.0	9.5	9.0	10.0	13.0	12.0	15.0	18.0	20.0	18.0	15.0
26	14.0	11.0	9.0	8.5	10.0	14.0	13.0	15.0	17.5	20.0	18.0	15.0
27	14.0	11.0	9.0	9.0	10.0	14.0	12.5	15.0	18.0	20.5	18.0	15.5
28	14.0	11.0	9.0	9.0	10.5	14.5	13.0	15.5	19.0	20.5	18.0	16.0
29	13.0	12.0	9.0	9.0	---	15.0	12.5	15.0	18.5	21.0	18.0	16.0
30	12.5	---	9.0	9.0	---	15.0	13.0	15.0	19.0	21.0	17.5	16.0
31	12.0	---	8.5	9.5	---	15.0	---	15.0	---	21.0	16.5	---
MEAN	14.0	11.0	9.5	9.5	9.5	12.0	13.0	14.5	18.0	19.5	18.5	16.0
WTR YR 1978	MEAN	14.0	MAX	21.0	MIN	8.0						

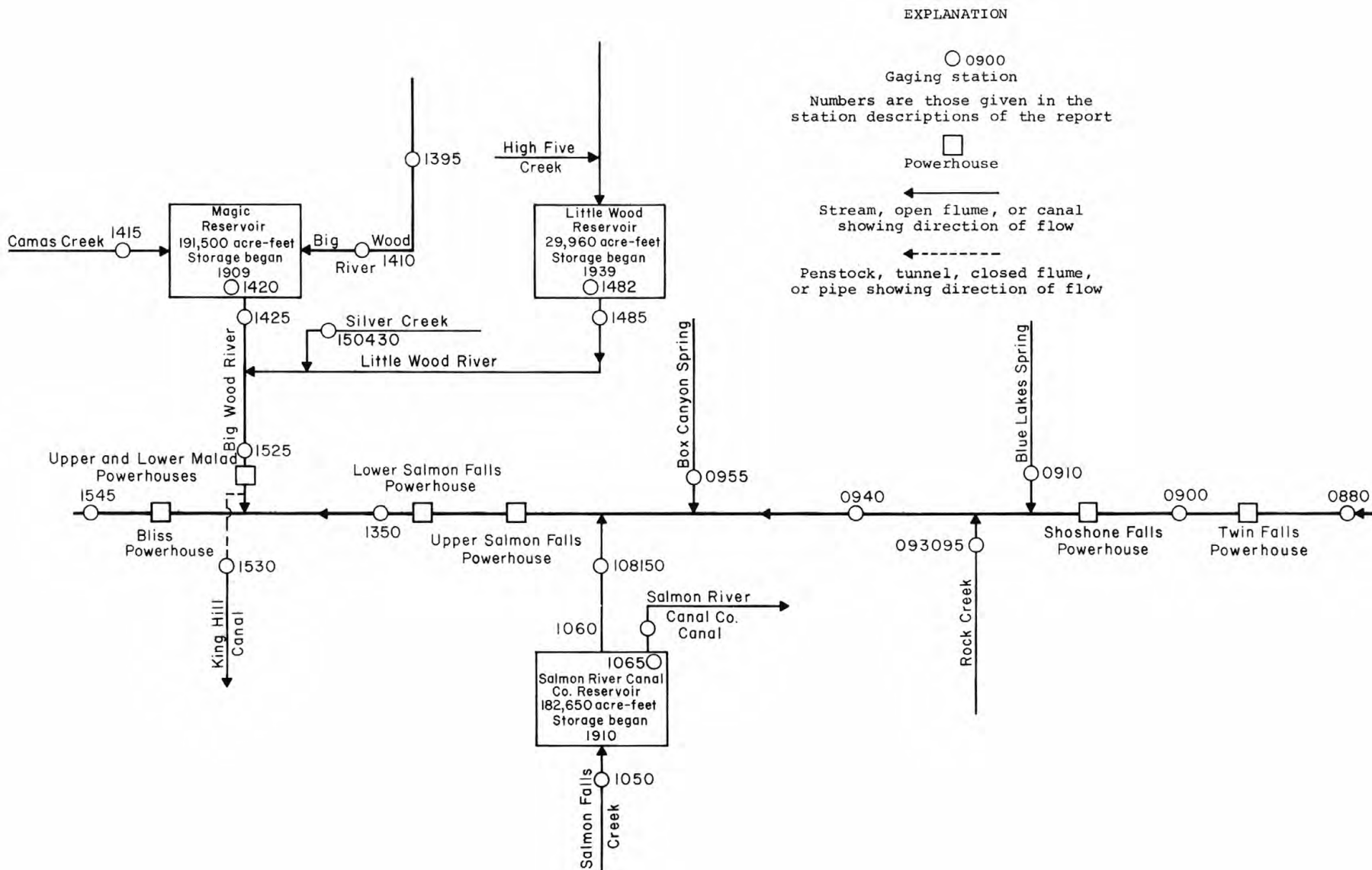


FIGURE 10.--Gaging stations in Snake River basin between Milner and Murphy.

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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 streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in a 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 high and low flow are given in a third table.

## Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

## Discharge measurements made at low-flow partial-record stations during water year 1978

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Bear River basin						
10091130	Swan Lake Creek near Swan Lake	Lat 42°20'31", long 111°59'05", in NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.35, T.12 S., R.38 E., Bannock County, at county road crossing and 2.2 mi (3.5 km) north of Swan Lake.	-	1973-78	8-23-78	1.17
Tributaries between Great Salt Lake Desert and Bear River						
10172970	Rock Creek near Holbrook	Lat 42°13'51", long 112°43'45", in NW <sup>1</sup> / <sub>4</sub> sec.9, T.14 S., R.32 E., Oneida County, at county road crossing and 6.0 mi (9.7 km) northwest of Holbrook.	a44	1962-71b, 1973-78	8-24-78	1.01
Salt River basin						
1302720	Bear Canyon Creek near Freedom, WY	Lat 42°58'38", long 111°11'44", in SW <sup>1</sup> / <sub>4</sub> sec.16, T.5 S., R.45 E., Boise meridian, Caribou County, 0.2 mi (0.3 km) upstream from confluence with Tincup River at State Highway 34 and 8 mi (13 km) west of Freedom.	a3.3	1961-71b, 1973, 1975-78	9-22-78	.70
McCoy Creek basin						
13029500	McCoy Creek above reservoir, near Alpine, WY	Lat 43°10'50", long 111°06'55", in SW <sup>1</sup> / <sub>4</sub> sec.6, T.3 S., R.46 E., Bonneville County, at mile 1.5 (2.4 km) and 5 mi (8 km) west of Alpine.	108	1917-18†, 1934†, 1953-61†, 1962-71b, 1973, 1975-78	9-22-78	26.7
Indian Creek basin						
13030000	Indian Creek above reservoir, near Alpine, WY	Lat 43°15'35", long 111°04'00", near center of sec.9, T.2 S., R.46 E., Bonneville County, 0.2 mi (0.3 km) downstream from confluence of North and South Forks, 3.0 mi (4.8 km) upstream from mouth, and 5.5 mi (8.8 km) north of Alpine, WY	36.8	1918†, 1954-61†, 1962-71b, 1975-78	9-22-78	4.54
Elk Creek basin						
13030500	Elk Creek above reservoir, near Irwin	Lat 43°19'25", long 111°06'40", in NW <sup>1</sup> / <sub>4</sub> sec.19, T.1 S., R.46 E., Bonneville County, at mile 2.5 (4.0 km) and 11 mi (18 km) southeast of Irwin.	59.2	1918†, 1934†, 1954-61†, 1962-71b, 1975-78	9-22-78	57.0
Bear Creek basin						
13032000	Bear Creek above reservoir, near Irwin	Lat 43°17'00", long 111°13'17", in SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.31, T.1 S., R.45 E., Bonneville County, Caribou National Forest, 0.5 mi (0.8 km) downstream from Elk Creek, 0.2 mi (0.3 km) upstream from maximum flow line of Palisades Reservoir, and 6.4 mi (10.3 km) south of Irwin.	77.1	1917-18†, 1934-36†, 1953-71†, 1973, 1975-78	9-22-78	40.7
Birch Creek basin						
13037600	Birch Creek near Heise	Lat 43°36'00", long 111°43'10", in SW <sup>1</sup> / <sub>4</sub> sec.11, T.3 N., R.40 E., Bonneville County, 3.5 mi (5.6 km) southwest of Heise.	21	1962,1973, 1975-78	8-30-78	0
Lyons Creek basin						
13038410	Lyons Creek near Ririe	Lat 43°40'54", long 111°44'50", in NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.16, T.4 N., R.40 E., Madison County, in flood-control channel and 0.7 mi (1.1 km) south of Byone.	-	1904, 1962-63, 1973-74b, 1976-78b	8-30-78	0

Discharge measurements made at low-flow partial-record stations during water year 1978						
Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Henry's Fork basin						
13038900	Targhee Creek near Macks Inn	Lat 44°38'50", long 111°20'30", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.11, T.15 N., R.43 E., Fremont County, at State Highway 87 crossing, 1.5 mi (2.4 km) west of State Highway 87 and U.S. Highway 191 junction, and 10.4 mi (16.7 km) north of Macks Inn.	20.8	1904,1924, 1929-34, 1962-71b, 1973-78	9-15-78	13.3
13050800	Moose Creek near Victor	Lat 43°33'48", long 111°04'00", in NE $\frac{1}{4}$ sec.30, T.3 N., R.46 E., Teton County, at old highway bridge, 3.7 mi (6.0 km) southeast of Victor.	21.4	1962-71b, 1975-78	9-26-78	36.4
13054400	Milk Creek near Tetonia	Lat 43°53'00", long 111°20'40", in NE $\frac{1}{4}$ sec.2, T.6 N., R.43 E., Teton County, at State Highway 33 and 10.5 mi (16.9 km) northwest of Tetonia.	17.9	1962-78b	9-15-78	0
13054500	Canyon Creek near Newdale	Lat 43°48'00", long 111°26'00", in NW $\frac{1}{4}$ sec.6, T.5 N., R.43 E., Madison County, above mouth of Pincock Hot Springs, 0.8 mi (1.3 km) downstream from mouth of Warm Creek, and 10.5 mi (16.9 km) southeast of Newdale.	a68	1920-25 $\frac{1}{2}$ , 1932, 1938-39 $\frac{1}{2}$ , 1973, 1975-78	8-30-78	15.2
13055320	Moody Creek near Newdale	Lat 43°49'50", long 111°38'10", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.21, T.6 N., R.41 E., Fremont County, 0.4 mi (0.6 km) south of Moody and 4 mi (6 km) southwest of Newdale.	a88	1962-63, 1973, 1975-78	8-30-78	3.60
Willow Creek basin						
13057600	Homer Creek near Herman	Lat 43°11'35", long 111°37'20", in NW $\frac{1}{4}$ sec.2, T.3 S., R.41 E., Bingham County, at road crossing, 11 mi (18 km) west of Herman, and 12 mi (19 km) southwest of Bone.	26.4	1963-71b, 1973-78	8-22-78	.41
Snake River basin						
13061100	Snake River tributary near Osgood	Lat 43°23'07", long 112°08'47", 0.2 mi (0.3 km) west of northeast corner sec.30, T.3 N., R.37 E., Bonneville County, 2.2 mi (3.5 km) west of Osgood and 9 mi (14 km) northwest of Idaho Falls.	7.64	1961-78	9-28-78	0
13062600	Snake River tributary No. 6 near Moreland	Lat 43°31'00", long 112°28'00", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.9, T.2 S., R.34 E., Bonneville County, along U.S. Highway 26 and 4 mi (6 km) northwest of Moreland.	63.5	1962,1973, 1977-78	9-18-78	0
Blackfoot River basin						
13062700	Angus Creek near Henry	Lat 42°49'43", long 111°20'15", in center of sec.8, T.7 S., R.44 E., Caribou County, at road crossing, 1.1 mi (1.8 km) northeast of Trail guard station, and 11 mi (18 km) southeast of Henry.	13.9	1962-71b, 1973-78	8-22-78	1.35
13065940	Wolverine Creek near Goshen	Lat 43°15'02", long 112°00'59", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.16, T.2 S., R.38 E., Bingham County, at county road bridge and 5.1 mi (8.2 km) southeast of Goshen.	-	1973, 1975-78	9-27-78	3.65
13066900	Cedar Creek near Goshen	Lat 43°18'30", long 112°03'20", in NW $\frac{1}{4}$ sec.30, T.1 S., R.38 E., Bingham County, 1.2 mi (1.9 km) east of Goshen.	10.5	1962,1973, 1975-78	9-27-78	0
Portneuf River basin						
13072100	Portneuf River tributary at Bancroft	Lat 42°43'30", long 111°54'25", in SE $\frac{1}{4}$ sec.16, T.8 S., R.39 E., Caribou County, at U.P. Railroad crossing and 1 mi (1.6 km) northwest of Bancroft.	a130	1962-63, 1973-74, 1976-78	9-25-78	0
13073700	Robbers Roost Creek near McCammon	Lat 42°42'30", long 112°12'10", in SE $\frac{1}{4}$ sec.23, T.8 S., R.36 E., Bannock County, at culvert on U.S. Highway 30N, 3.5 mi (5.6 km) north of McCammon, and 6.5 mi (10.5 km) south of Inkom.	a5.7	1961-71b, 1973-78	8-25-78	c.10
13075300	East Fork Mink Creek near Pocatello	Lat 42°44'20", long 112°23'30", in sec.8, T.8 S., R.35 E., Bannock County, 9 mi (14 km) southeast of Pocatello.	14.7	1912, 1963-71b, 1973-78	8-25-78	1.27
13075600	North Fork Pocatello Creek near Pocatello	Lat 42°53'10", long 112°23'45", in NW $\frac{1}{4}$ sec.20, T.6 S., R.35 E., Bannock County, 300 ft (91 m) upstream from confluence with South Fork Pocatello Creek, 2 mi (3.2 km) northeast of Idaho State University, and 3.5 mi (5.6 km) east of Pocatello.	14	1961-71b, 1973-78	8-25-78	.40
Raft River basin						
13077659	Raft River near Yost, UT	Lat 41°56'50", long 113°42'00", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.17, T.14 N., R.16 W., Box Elder County, at road crossing and 8 mi (13 km) west of Yost, UT	146	1965-67, 1973-78	9-20-78	4.45
1307980	Heglar Canyon tributary near Rockland	Lat 42°28'30", long 113°08'40", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.11, T.11 S., R.38 E., Cassia County, 600 ft (183 m) upstream from Heglar Canyon road crossing and 16 mi (26 km) southwest of Rockland.	7.72	1958, 1961-71b, 1973-78	9-20-78	0

## Discharge measurements made at low-flow partial-record stations during water year 1978

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Goose Creek basin						
13084400	Birch Creek above diversions, near Oakley	Lat 42°10'40", long 113°49'05", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T.14 S., R.22 E., Cassia County, at county road crossing, 0.3 mi (0.5 km) downstream from North Carson Creek, and 5.3 mi (8.5 km) south-east of Oakley.	-	1973-78b	9-19-78	3.34
Dry Creek basin						
13088500	Big Cottonwood Creek near Oakley	Lat 42°16'50", long 114°02'10", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.19, T.13 S., R.21 E., Cassia County, Sawtooth National Forest, 1.0 mi (1.6 km) upstream from diversion of Twin Falls-Oakley Land and Water Co. canal and 10 mi (16 km) northeast of Oakley.	a29	1909-15†, 1916,1973, 1975-78	9-19-78	3.26
Salmon Falls Creek basin						
13104800	Shoshone Creek at mouth, near San Jacinto	Lat 41°56'36", long 114°41'02", in SE $\frac{1}{4}$ sec.23, T.47 N., R.64 E., Elko County, at mouth and 5 mi (8 km) north of San Jacinto.	-	1909,1914, 1938,1942, 1969-73, 1975-78	9-23-78	17.1
Mud Lake-Lost River basins						
13108200	West Camas Creek near Kilgore	Lat 44°28'40", long 112°02'40", on SE sec. line of sec.1, T.13 N., R.37 E., Clark County, at Frazier Dam, 1.5 mi (2.4 km) downstream from Pete Creek, 9 mi (14 km) northwest of Kilgore, and 11 mi (18 km) northeast of Spencer.	-	1957-58, 1973-78	8-22-78	6.99
13112300	Beaver Creek at Humphrey	Lat 44°28'40", long 112°13'30", in SE $\frac{1}{4}$ sec.4, T.13 N., R.36 E., Clark County, at U.P. Railroad bridge, 0.3 mi (0.5 km) downstream from Humphrey, and 8.4 mi (13.5 km) north of Spencer.	-	1957-58, 1973-78	8-22-78	5.82
13112900	Huntley Canyon at Spencer	Lat 44°21'50", long 112°11'00", in SW $\frac{1}{4}$ sec.14, T.12 N., R.36 E., Clark County, at railroad crossing opposite the Spencer Mercantile Store at Spencer.	3.9	1961-71b, 1973-78	8-22-78	.40
13116000	Medicine Lodge Creek at Ellis Ranch, near Argora	Lat 44°17'30", long 112°30'05", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.7, T.11 N., R.34 E., Clark County, on left bank 4 mi (7 km) upstream from Middle Creek, 6.5 mi (10.5 km) southeast of Argora, and 16 mi (26 km) northwest of Dubois.	165	1940-69†, 1973-78	8-22-78	50.3
13117200	Main Fork near Goldburg	Lat 44°24'06", long 113°24'18", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.6, T.12 N., R.26 E., Lemhi County, Challis National Forest, at road crossing, 0.5 mi (0.8 km) upstream from confluence with Timber Creek, and 12 mi (19 km) east of Goldburg.	15.6	1960-71b, 1973-78	9-27-78	9.70
13117600	Dry Creek below Dry Creek Reservoir, near Clyde	Lat 44°09'30", long 113°31'45", in NW $\frac{1}{4}$ sec.31, T.10 N., R.25 E., Custer County, at old road crossing upstream from Taylor No. 1 diversion, 1.6 mi (2.6 km) downstream from old damsite, 14.3 mi (23.0 km) west of Clyde, and 36.5 mi (58.7 km) northwest of Howe.	42.2	1932, 1935-36, 1938, 1959-62, 1973-78	9-27-78	25.6
13118400	Wet Creek below Coal Creek, near Mackay	Lat 44°02'49", long 113°27'00", in SW $\frac{1}{4}$ sec.2, T.8 N., R.25 E., Butte County, Challis National Forest, at Pass Creek road crossing, 12.1 mi (19.5 km) northeast of Mackay, and 12.3 mi (19.8 km) southwest of Clyde.	-	1959-71b, 1973-78	9-27-78	5.65
13119800	North Fork Big Lost River near Chilly	Lat 43°55'35", long 114°11'00", in NW $\frac{1}{4}$ sec.23, T.7 N., R.19 E. (unsurveyed), Custer County, Challis National Forest, at narrows, 0.5 mi (0.8 km) downstream from Burnt Creek, 4.9 mi (7.9 km) northwest of Wild Horse guard station, and 18.7 mi (30.1 km) southwest of Chilly.	a54.6	1957-59, 1966-68, 1973, 1975-78	9-28-78	30.9
13120240	East Fork Big Lost River near Chilly	Lat 43°53'45", long 113°59'00", in NW $\frac{1}{4}$ sec.33, T.7 N., R.21 E. (unsurveyed), Custer County, Challis National Forest, 0.2 mi (0.3 km) downstream from Banana Gulch, 5.8 mi (9.3 km) east of Wild Horse guard station, and 13.8 mi (22.2 km) south of Chilly.	-	1957-59, 1973, 1975-78	9-28-78	101

## Discharge measurements made at low-flow partial-record stations during water year 1978

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Mud Lake-Lost River basins--Continued						
13129800	Alder Creek below South Fork, near Mackay	Lat 43°49'40", long 113°36'10", in NW¼NW¼ sec.27, T.6 N., R.24 E., Custer County, Challis National Forest, 20 ft (6 m) downstream from South Fork and 6 mi (9.7 km) south of Mackay.	27.6	1966-68†, 1973, 1975-78	9-27-78	8.36
13131500	Pass Creek near Leslie	Lat 43°56'05", long 113°26'50", in SW¼ sec.14, T.7 N., R.25 E., on line between Butte and Custer County, Challis National Forest, at road bridge, 0.2 mi (0.3 km) north of forest boundary, 4.8 mi (7.7 km) northwest of Leslie, and 18.3 mi (29.4 km) east of Mackay.	23.6	1920-22†, 1959, 1973, 1975-78	9-27-78	4.32
Big Wood River basin						
13135200	Prairie Creek near Ketchum	Lat 43°49'00", long 114°35'50", in NW¼ sec.31, T.6 N., R.16 E., Blaine County, Sawtooth National Forest, at U.S. Highway 93 crossing and 15 mi (24 km) northwest of Ketchum.	a18	1962-71b, 1973, 1975-78	9-26-78	16.5
13135800	Adams Gulch near Ketchum	Lat 43°42'20", long 114°23'50", in SW¼ sec.2, T.4 N., R.17 E., Blaine County, Sawtooth National Forest, 2.5 mi (4.0 km) northwest of Ketchum.	10.9	1962-71b, 1973, 1975-78	9-26-78	.84
13137000	Warm Springs Creek at Guyer Hot Springs, near Ketchum	Lat 43°40'58", long 114°24'24", at west sec. line of NW¼SW¼NW¼ sec.14, T.4 N., R.17 E., Blaine County, Sawtooth National Forest, at road crossing, 2.2 mi (3.5 km) west of U.S. Highway 93 and State Highway 75 junction in Ketchum, and about 2.3 mi (3.7 km) upstream from mouth.	a97	1920-21†, 1973, 1975-78	9-25-78	49.4
13141350	Soldier Creek near Fairfield	Lat 43°26'44", long 114°48'27", in NE¼SE¼SE¼ sec.5, T.1 N., R.14 E., Camas County, at county bridge, 0.2 mi (0.3 km) downstream from Phillips Creek, and 7 mi (11.3 km) north of Fairfield.	-	1973-74, 1976-78	9-25-78	6.84
13141400	Deer Creek near Fairfield	Lat 43°22'06", long 114°43'08", in SW¼SE¼SW¼ sec.31, T.1 N., R.15 E., Camas County, at county road crossing and 4.1 mi (6.6 km) northeast of Fairfield.	13.2	1961-71b, 1974, 1976-78	9-25-78	0
13145700	Schooler Creek near Gooding	Lat 43°11'30", long 114°39'25", in SE¼NE¼ sec.3, T.3 S., R.15 E., Gooding County, at State Highway 46 and 18 mi (29 km) north of Gooding.	2.22	1961-78b	9-25-78	0
13147300	Muldoon Creek near Garfield guard station	Lat 43°34'08", long 113°54'50", in NE¼ sec.26, T.3 N., R.21 E., Blaine County, at road crossing, 3.9 mi (4.8 km) south of Garfield guard station, and 18.5 mi (29.8 km) north of Carey.	12.2	1962-71b, 1974, 1976-78	9-26-78	7.16
13149000	Fish Creek above Fish Creek Dam, near Carey	Lat 43°26'20", long 113°50'30", in sec.2, T.1 N., R.22 E., Blaine County, at Cipolletti weir, 1.2 mi (1.9 km) upstream from West Fork Fish Creek, 1.5 mi (2.4 km) upstream from Fish Creek Dam, and about 12 mi (19 km) northeast of Carey.	a32	1904, 1920-39†, 1973-74, 1976-78	9-26-78	.26
Clover Creek basin						
13154000	Clover Creek near Bliss	Lat 43°01'30", long 115°00'20", in SE¼SE¼ sec.34, T.4 S., R.12 E., Gooding County, just downstream from Calf Creek and 6.5 mi (10.5 km) northwest of Bliss.	140	1938-43†, 1957-62†, 1963-74b, 1976-78b	9-18-78	3.46

† Operated as continuous-record gaging station.

a Approximately.

b Operated as a crest-gage station.

c Estimated.

## Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. Measurements made to rate the crest-stage stations are given in the list of miscellaneous measurements. The years given in the period of record represent water years for which the annual maximum has been determined.

## Annual maximum discharge at crest-stage partial-record stations during water year 1978

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft <sup>3</sup> /s)
Bear River basin							
10090800	Battle Creek tributary near Treasureton	Lat 42°16'40", long 111°48'50", in SW $\frac{1}{4}$ sec.20, T.13 S., R.40 E., Franklin County, at mile 1.5 (2.4 km), on side road from State Highway 34, and 2 mi (3.2 km) northeast of Treasureton.	44.5	1961-71, 1973-78	4- 8-78b	11.93	70
10091130	Swan Lake Creek near Swan Lake	Lat 42°20'31", long 111°59'05", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.35, T.12 S., R.38 E., Bannock County, at county road crossing and 2.2 mi (3.5 km) north of Swan Lake.	-	1973-78	4- 8-78b	-	3
10172970	Rock Creek near Holbrook	Lat 42°14', long 112°44', in NW $\frac{1}{4}$ sec.9, T.14 S., R.32 E., Oneida County, at county road crossing and 6.0 mi (9.7 km) northwest of Holbrook.	44	1962-71, 1973-78	3- 7-78b	-	c15
Lyons Creek basin							
13038410	Lyons Creek near Ririe	Lat 43°40'54", long 111°44'50", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.16, T.4 N., R.40 E., Madison County, in flood control channel and 0.7 mi (1.1 km) south of Byone.	-	1973-78	4- 1-78b	9.95	11
Henrys Fork basin							
13038900	Targhee Creek near Macks Inn	Lat 44°38'50", long 111°20'30", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.11, T.15 N., R.43 E., Fremont County, at State Highway 87 crossing, 1.5 mi (2.4 km) west of junction of State Highway 87 and U.S. Highway 191, and 10.4 mi (16.7 km) north of Macks Inn.	20.8	1963-78	6-10-78b	8.03	240
13054400	Milk Creek near Tetonia	Lat 43°53'00", long 111°20'40", in NE $\frac{1}{4}$ sec.2, T.6 N., R.43 E., Teton County, at State Highway 33 and 10.5 mi (16.9 km) northwest of Tetonia.	17.9	1962-78	7-20-78	5.86	115
Snake River basin							
13061100	Snow River tributary near Osgood	Lat 43°23'07", long 112°08'47", 0.2 mi (0.3 km) west of northeast corner sec.30, T.3 N., R.37 E., Bonneville County, 2.2 mi (3.5 km) west of Osgood and 9 mi (14 km) northwest of Idaho Falls.	7.64	1961-77	3-30-78b	8.93	26
13062650	Snow River tributary No. 9 near Rockford	Lat 43°12'25", long 112°34'24", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.22, T.2 S., R.33 E., Bingham County, at county road crossing and 3.2 mi (5.2 km) northwest of Rockland.	17.6	1973-78	5-18-78b	11.14	5.0
Blackfoot River basin							
13062700	Angus Creek near Henry	Lat 42°49'43", long 111°20'15", in center of sec.8, T.7 S., R.44 E., Caribou County, at road crossing, 1.1 mi (1.8 km) northeast of Trail guard station, and 11 mi (18 km) southeast of Henry.	13.9	1964-71, 1974-78	4-26-78b	11.99	270
13065950	Blackfoot River tributary near Goshen	Lat 43°15'30", long 112°02'06", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.8, T.2 S., R.38 E., Bingham County, at county road crossing and 4.2 mi (6.8 km) southeast of Goshen.	-	1973-78	2-26-78b	-	a1.0
Portneuf River basin							
13072890	Dempsey Creek near Lava Hot Springs	Lat 42°35'57", long 112°01'12", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.33, T.9 S., R.28 E., Bannock County, at road crossing and 1.0 mi (1.6 km) south of Lava Hot Springs.	-	1973-78	4- 9-78b	13.23	80
13075090	Inman Creek near Inkom	Lat 47°49'17", long 112°12'57", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.11, T.7 S., R.36 E., Bannock County, at county road crossing and 2.5 mi (4.0 km) northeast of Inkom.	-	1973-78	5-18-78b	12.06	42
13076125	Bannock Creek tributary, near Pocatello	Lat 42°44'27", long 112°36'46", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.9, T.8 S., R.33 E., Power County, at road crossing and 12.5 mi (20 km) north of Pauline.	-	1975-78	-	-	(d)
Raft River basin							
13079800	Heglar Canyon tributary near Rockland	Lat 42°28'25", long 113°08'47", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.11, T.11 S., R.28 E., Cassia County, 600 ft (183 m) upstream from Heglar Canyon road crossing and 16 mi (26 km) southwest of Rockland.	7.72	1958, 1962-71, 1973-78	9- 6-78	10.50	20

See footnotes at end of table, p. 262.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1978

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Goose Creek basin							
13084400	Birch Creek above diversions, near Oakley	Lat 42°10'40", long 113°49'05", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T.14 S., R.22 E., Cassia County, at county road crossing, 0.3 mi (0.5 km) downstream from North Carson Creek, and 5.3 mi (8.5 km) southeast of Oakley.	a5.6	1973-78	4- 7-78	9.15	65
Snake River basin							
13084850	"F" Main Drain near Rupert	Lat 42°42'14", long 113°40'45", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T.8 S., R.24 E., Minidoka County, at 600 North Road crossing, 1.5 mi (2.4 km) northwest of Rupert Cemetery, and 5.9 mi (9.5 km) north of Rupert.	-	1973-78	7- 4-78	5.41	32
Salmon Falls Creek basin							
13106535	Soldier Creek near Rogerson	Lat 42°13'20", long 114°14'45", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T.14 S., R.17 E., Twin Falls County, at county road crossing, 100 ft (30 m) upstream from unnamed tributary, and 5 mi (8 km) east of Rogerson.	5.6	1973-78	3-24-78	9.63	6
Mud Lake-Lost River basins							
13132555	Big Lost River tributary No. 2 near Idaho Falls	Lat 43°22'10", long 112°37'30", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T.3 N., R.33 E., Bingham County, at U.S. Highway 20 crossing, 24.6 mi (39.6 km) southeast of Howe, 28.5 mi (45.9 km) northwest of Blackfoot, and 30.0 mi (48.3 km) west of Idaho Falls.	-	1973-78	-	-	(d)
Big Wood River basin							
13145700	Schooler Creek near Gooding	Lat 43°11'30", long 114°39'25", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T.3 S., R.15 E., Gooding County, at State Highway 46 and 18 mi (29 km) north of Gooding.	2.22	1961-78	4- 2-78	3.57	29
Snake River basin							
13153777	Snake River tributary No. 10 near King Hill	Lat 42°53'34", long 115°08'39", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T.6 S., R.11 E., Elmore County, at Shoestring crossing, about 0.4 mi (0.6 km) above mouth, and 8.5 mi (13.7 km) southeast of King Hill.	-	1973-78	3- 7-78	5.04	4.5
Clover Creek basin							
13154000	Clover Creek near Bliss	Lat 43°01'30", long 115°00'20", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T.4 S., R.12 E., Gooding County, just downstream from Calf Creek and 6.5 mi (10.5 km) northwest of Bliss.	140	1938-43†, 1957-62‡, 1963-78	3- 7-78	13.66	1,270

† Operated as a continuous-record gaging station.

a Approximately.

b Estimated; exact date undetermined.

c Known to be less than figure shown.

d No evidence of flow during year.

## Discharge measurements made at miscellaneous sites during water year 1978

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Bear River basin						
Battle Creek tributary 10090800	Battle Creek	Operated as a crest-stage station.	a4.5	1977	3-21-78	9.37
					4-26-78	5.00
					5-31-78	1.13
					8-23-78	.48
Swan Lake Creek 10091130	Deep Creek	Operated as a crest-stage station.	-	1973-77b	3-21-78	2.68
					8-23-78	1.17
Tributary between Great Salt Lake Desert and Bear River						
Rock Creek 10172970	Deep Creek	Lat 42°14', long 112°44', in NW¼ sec.9, T.14 S., R.32 E., Oneida County, at County road crossing and 6.0 mi (9.7 km) northwest of Holbrook.	44	1962-71, 1973-77b	3-22-78	2.39
					8-24-78	1.01
Lyons Creek basin						
Lyons Creek 13038410	Snake River	Operated as a crest-stage station.	-	1904, 1962-63, 1973-74b, 1977b	3-16-78	0
					4- 5-78	0
					8-30-78	0
Snake River basin						
Snake River 13038500	Columbia River	Lat 43°44', long 111°52', in SE¼SE¼ sec. 28, T.5 N., R.39 E., 0.2 mi (0.3 km) northwest of Lorenzo, below Long Island canal.	-	1919	10-19-77	15.6
Henrys Fork basin						
Targhee Creek 13038900	Henrys Lake	Operated as a crest-stage station.	20.8	1904,1924, 1929-34, 1962-71b, 1973-77b	5-22-78	45.1
					6-27-78	89.0
					9-15-78	13.3
Big Springs 13040500	Henrys Fork	Lat 44°29'52", long 111°15'33", in NE¼ sec.33, T.14 N., R.44 E., Fremont County, 0.2 mi (0.3 km) downstream from road bridge at Big Springs.	-	1924-25, 1977	10- 5-77	188
Bitch Creek 13054300	Teton River	Lat 43°56'21", long 111°10'41", in NE¼ sec.17, T.7 N., R.45 E., at Highway bridge, 5 mi (8 km) north of Felt, and 9 mi (14 km) north of Tetonia.	-	1937,1940	9-26-78	85.4
Milk Creek 13054400	Teton River	Lat 43°53'00", long 111°20'40", in NE¼ sec. 2, T.6 N., R.43 E., Teton County, at State Highway 33 and 10.5 mi (16.9 km) north-west of Tetonia.	17.9	1962-77	3-29-78	0
					7-28-78	c2.0
					8-30-78	0
					9-15-78	0
Meadow Creek 13057946	Willow Creek	Lat 43°31'35", long 111°41'43", in SE¼SW¼ sec. 1, T.2 N., R.40 E., Bonneville County, on right bank approximately 0.11 mi (0.18 km) below confluence of Mud Creek, 4.5 mi (7.2 km) southeast of Ririe Dam, and 8 mi (12.8 km) southeast of Ririe.	-	-	4- 6-78	4.88
					5- 4-78	14.3
					6- 2-78	13.4
					7-27-78	1.76
					8-21-78	.99
Snake River basin						
Snake River tributary 13061100	Snake River	Operated as crest-stage station.	7.64	1961-77b	3- 6-78 4-20-78 9-28-78	3.3 0 0
Blackfoot River basin						
Angus Creek 13062700	Blackfoot River	Operated as a crest-stage station.	13.9	1962-71b, 1973-77b	5-31-78 8-22-78	18.9 1.35
Blackfoot River tributary 13065950	Blackfoot River	Operated as a crest-stage station.	-	1973-77b	3- 7-78 9-27-78	0 0

See footnotes at end of table, p. 268.

## Discharge measurements made at miscellaneous sites during water year 1978

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Snake River basin						
Pyle Springs 13069511	Snake River	Lat 43°03'42", long 112°34'32", in NE¼ sec.32, T.4 S., R.33 E., Bingham County, 6 mi (10 km) south of Pingree.	-	1926-29, 1932-77	4- 7-78	6.90
Hull Springs 13069520	Snake River	Lat 43°02'49", long 112°39'39", in NE¼ sec.25, T.4 S., R.32 E., Bingham County, 2.5 mi (4.0 km) southeast of Springfield.	-	1926-29, 1932-67, 1971-72, 1974-77	4- 7-78	9.14
Danielson Creek 13069540	Snake River	Lat 43°03'32", long 112°41'24", in NW¼SW¼ sec. 23, T.4 S., R.32 E., Bingham County, 2.5 mi (4.0 km) south of Springfield.	-	1926-29, 1932-77	4- 7-78	47.2
Portneuf River basin						
Portneuf River tributary 13072100	Portneuf River	Lat 42°43'30", long 111°54'25", in SE¼ sec. 16, T.8 S., R.39 E., Caribou County, at Union Pacific crossing and 1 mi (2 km) northwest of Bancroft.	a130	1962-63, 1973-74, 1976,77	9-25-78	0
Dempsey Creek 13072890	Portneuf River	Operated as a crest-stage station.	42	1975-77b	11- 9-77 3-15-78 4-25-78 6- 2-78 8-25-78	1.80 15.8 40.2 29.0 6.7
Robbers Roost Creek 13073700	Portneuf River	Lat 42°42'20", long 112°12'10", in SE¼ sec. 16, T.8 S., R.36 E., Bannock County, at culvert on U.S. Highway 30N, 3.5 mi (5.6 km) north of McCammon, and 6.5 mi (10.5 km) south of Inkom.	a5.7	1961-71b, 1973-77	8-25-78	c .1
Inman Creek 13075090	Rapid River	Operated as a crest-stage station.	-	1973-77b	3-15-78 5-30-78 8-25-78	2.94 16.6 .84
East Fork Mink Creek 13075300	Mink Creek	Lat 42°44'20", long 112°20'30", in sec.8, T.8 S., R.35 E., Bannock County, 9 mi (14 km) southeast of Pocatello.	14.7	1912, 1963-71b, 1973-77	8-25-78	1.27
N. Fk. Pocatello Creek 13075600	Pocatello Creek	Lat 42°53'10", long 112°23'45", in NW¼ sec. 20, T.6 S., R.35 E., Bannock County, 300 ft (90 m) upstream from confluence with South Fork Pocatello Creek, 2 mi (3 km) north-east of Idaho State University, and 3.5 mi (5.6 km) east of Pocatello.	14	1961-71b, 1973-77	8-25-78	.40
Portneuf River 13075910	Snake River	Lat 42°56'40", long 112°32'40", in NE¼ sec. 36, T.5 S., R.33 E., Bannock-Power County line, 4 mi (6 km) west of Tyhee.	-	1926-29, 1932-77	4-18-78	984
Wide Creek 13075920	Portneuf River	Lat 42°57'30", long 112°34'10", in NW¼ sec. 26, T.5 S., R.33 E., Power County, Fort Hall Indian Reservation, 8 mi (13 km) northwest of Pocatello.	-	1926-29, 1932-77	4- 8-78	53.7
Clear Creek 13075930	Portneuf River	Lat 42°59'40", long 112°34'15", in SW¼ sec. 11, T.5 S., R.33 E., Bannock County, just upstream from Ford Creek, and 7 mi (11 km) west of Fort Hall.	-	1926-29, 1932-77	4- 8-78	114
Ford Creek 13075940	Clear Creek	Lat 42°59'40", long 112°34'15", in SW¼ sec. 11, T.5 S., R.33 E., Bannock County, just upstream from mouth, and 7 mi (11 km) west of Fort Hall.	-	1926-29, 1932-77	4- 8-78	7.71
Ross Fork Creek 13075960	Clear Creek	Lat 42°59'10", long 112°33'50", near center of sec.14, T.5 S., R.33 E., Bannock County, 7 mi (11 km) southwest of Fort Hall.	-	1926-29, 1932-77	4- 8-78	70.7
Spring Creek 13075985	Portneuf River	Lat 42°00'09", long 112°36'01", in NE¼ sec. 9, T.5 S., R.33 E., Bannock County, at road crossing, and 8 mi (13 km) west of Fort Hall.	-	1926-29, 1932-77	4- 8-78	443
Big Jimmy Creek 13075990	Spring Creek	Lat 43°00'47", long 112°36'04", in SE¼ sec. 4, T.5 S., R.33 E., Bannock County, 8 mi (13 km) west of Fort Hall.	-	1926-29, 1932-77	4- 8-78	26.8

## Discharge measurements made at miscellaneous sites during water year 1978

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Bannock Creek basin						
Bannock Creek tributary 13076125	Bannock Creek	Operated as a crest-stage station.	-	1975-77 b	2- 8-78	0
					7-11-78	0
Portneuf River basin						
Bannock Creek 13076200	Portneuf River	Lat 42°53'10", long 112°38'30", near center of sec.20, T.6 S., R.33 E., Power County, Fort Hall Indian Reservation, at Highway 30N crossing, and 10 mi (16 km) west of Pocatello.	413	1962-63, 1965, 1968-77	4- 8-78	71.7
Snake River basin						
Ruegar Springs 13076600	Snake River	Lat 42°46'00", long 112°52'55", in SW $\frac{1}{4}$ sec. 31, T.8 S., R.31 E., Power County, at fish hatchery, and 0.9 mi (1.4 km) downstream from American Falls Dam.	-	1927-29, 1932-53, 1961-75, 1977	4- 8-78	25.9
Raft River basin						
Raft River 13077659	Snake River	Lat 41°56'50", long 113°42'00", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.17, T.14 N., R.16 W., Box Elder County, at road crossing, and 8 mi (13 km) west of Yost, Utah.	146	1965-67, 1973-77	9-20-78	4.45
Heglar Canyon tributary 13079800	Raft River	Operated as a crest-stage station.	7.72	1958, 1961-71b, 1973-77b,	1-27-78	0
					4-22-78	0
					9-20-78	0
Goose Creek basin						
Birch Creek 13084400	Goose Creek	Operated as a crest-stage station.	-	1973-77b	4-21-78	13.9
					5-23-78	21.3
					9-19-78	3.34
Snake River basin						
"F" Main Drain 13084850	Snake River	Operated as a crest-stage station.	-	1973-77b	1-26-78	0
					3-21-78	0
					6- 1-78	11.2
					6-21-78	17.1
Tributaries between Snake River at Milner and Salmon Falls Creek						
Devils Washbowl Spring 13089600	Snake River	Lat 42°35'18", long 114°20'45", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.4, T.10 S., R.18 E., Jerome County, at old abandoned powerplant, about 0.2 mi (0.3 km) upstream from mouth on right bank of Snake River, 0.5 mi (0.8 km) upstream from Twin Falls, and 3.5 mi (5.6 km) north of Kimberly.	-	1902,1917, 1923-24, 1950-59, 1963-77	11- 3-77	19.1
					3-30-78	13.1
Devils Corral Spring (upper outlet) 13090100	Snake River	Lat 42°35'38", long 114°21'55", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T.9 S., R.18 E., Jerome County, 100 ft (30 m) above point where flow cascades into right bank of Snake River at mile 617.1 (992.9 km), about 2 mi (3 km) upstream from Shoshone Falls and powerplant, and 4 mi (6 km) north of Kimberly.	-	1902, 1923-24, 1939, 1950-59, 1963-77	10-31-77	45.0
					3-27-78	42.1
Devils Corral Spring (lower outlet) 13090101	Snake River	Lat 42°36'01", long 114°22'30", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 32, T.9 S., R.18 E., Jerome County, 0.1 mi (0.2 km) upstream from mouth on right bank of Snake River, 0.7 mi (1.1 km) northwest of upper outlet, and 4.5 mi (7.2 km) north of Kimberly.	-	1902,1923, 1950-59, 1963-77	10-31-77	5.40
					3-27-78	6.03
Unnamed spring No. 1 13090300	Snake River	Lat 42°36'30", long 114°23'36", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T.9 S., R.18 E., Jerome County, near mouth on right bank of Snake River, 0.5 mi (0.8 km) upstream from Shoshone powerplant, and 4 mi (6 km) northeast of Twin Falls.	-	1950-59, 1963-77	10-31-77	1.73
					3-27-78	1.76
Unnamed spring No. 2 13090350	Snake River	Lat 42°35'52", long 114°23'55", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T.9 S., R.18 E., Jerome County, on right bank of Snake River just above Shoshone Falls, and 4 mi (6 km) northeast of Twin Falls.	-	1950-59, 1963-77	10-31-77	5.68
					3-27-78	4.77
Blue Lakes Spring 13091500	Snake River	Lat 42°36'10", long 114°28'34", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T.9 S., R.17 E., Jerome County, at point of entry to right bank of Snake River, 4 mi (6 km) north of Twin Falls, and at mile 610.3 (982.0 km).	-	1902, 1913-14, 1917-20+, 1921-47, 1950-59, 1963-71, 1973-77	10-31-77	198
					3-30-78	199

## Discharge measurements made at miscellaneous sites during water year 1978

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Tributaries between Snake River at Milner and Salmon Falls Creek--Continued						
Warm Creek 13091700	Snake River	Lat 42°37'15", long 114°29'55", in NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec. 29, T.9 S., R.17 E., Jerome County, 0.6 mi (1.0 km) upstream from point of entry to right bank of Snake River, 1.5 mi (2.4 km) northwest of Blue Lakes Spring outlet, and 4.6 mi (7.4 km) northwest of Twin Falls.	-	1903,1917, 1931, 1950-59, 1963-71, 1973-77	10-31-77	20.0
					3-30-78	13.7
Tributaries between Snake River at Milner and Salmon Falls Creek--Continued						
Crystal Springs 13093400	Snake River	Lat 42°37'36", long 114°38'32", in sec.12, T.9 S., R.15 E., Gooding County, a series of springs along a 0.6 mi (1.0 km) reach of the right bank of Snake River, 1 mi (2 km) upstream from Niagara Springs, and 6.5 mi (10.5 km) north of Filer.	-	1902,1917, 1919, 1924-25, 1931, 1950-59, 1963-77	11- 2-77	498
					3-29-78	459
Ellisons Springs 13093300	SNAKE RIVER	Lat 42°38'13", long 114°33'40", in NE <sup>1</sup> / <sub>4</sub> sec.22, T.9 S., R.16 E., Jerome County, near entry to right bank of Snake River, 1.3 mi (2.1 km) downstream from Rock Creek, and 6.5 mi (10.5 km) south of Jerome.	-	1950-59, 1963-74, 1977	11- 1-77	1.47
Niagara Springs 13093700	Snake River	Lat 42°39'46", long 114°40'24", in NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.11, T.9 S., R.15 E., Gooding County, in spring outlet channel 120 ft (40 m) upstream from mouth, 880 ft (270 m) downstream from source, 6 mi (10 km) northeast of Buhl, and 599.1 mi (964.0 km) upstream from mouth of Snake River.	-	1958-72 <sup>+</sup> , 1973-77	11- 2-77	276
					2- 8-78 3-29-78	271 240
Clear Lakes 13094500	Snake River	Lat 42°40'01", long 114°46'45", in SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec. 2, T.9 S., R.14 E., Gooding County, at Clear Lakes powerplant of Idaho Power Company, and 4.5 mi (7.2 km) north of Buhl.	-	1902, 1913-14, 1917-21 <sup>+</sup> , 1924,1926, 1937, 1950-59, 1963-77	11- 3-77	511
					3-30-78	478
Briggs Creek 13095200	Snake River	Lat 42°40'20", long 114°49'00", in NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec. 4, T.9 S., R.14 E., Gooding County, 500 ft (150 m) upstream from mouth on right bank of Snake River, 2 mi (3 km) downstream from Clear Lakes Spring outlet, and 6 mi (10 km) northwest of Buhl.	-	1902,1913, 1917-20, 1924-25, 1931, 1950-59, 1963-77	11- 3-77	109
					3-30-78	102
Banbury Springs 13095300	Snake River	Lat 42°41'31", long 114°49'11", in SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec. 33, T.8 S., R.14 E., Gooding County, at outlet on right bank of Snake River, and 7 mi (11 km) northwest of Buhl.	-	1902,1913, 1917, 1919-20, 1924-25, 1950-59, 1963-71, 1973-77	11- 1-77	130
					3-28-78	106
Unnamed spring 13095350	Snake River	Lat 42°41'51", long 114°49'21", in SE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.28, T.8 S., R.14 E., Gooding County, on right bank of Snake River, 0.4 mi (0.6 km) south of Blind Canyon Spring, and 7.5 mi (12.1 km) northwest of Buhl.	-	1950-59, 1963-71, 1973-77	11- 1-77	5.56
					3-28-78	3.09
Blind Canyon 13095400	Snake River	Lat 42°42'12", long 114°49'20", in SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec. 28, T.8 S., R.14 E., Gooding County, at outlet on right bank of Snake River, 0.2 mi (0.3 km) upstream from Box Canyon Springs outlet, and 8 mi (13 km) northwest of Buhl.	-	1902,1917, 1919, 1950-59, 1963-77	11- 1-77	22.3
					3-28-78	9.98
Box Canyon Spring diversion 13095550	SNAKE RIVER	Lat 42°42'24", long 114°48'56", in NE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.28,T.8 S., R.14 E., Gooding County, 0.4 mi (0.6 km) upstream from mouth, 1.3 mi (2.1 km) north of Banbury Natatorium, and 9.3 mi (14.9 km) south of Wendell.	-	1974-75	3-31-78	360
Box Canyon Spring 13095600	Snake River	Lat 42°42'20", long 114°49'20", in NE <sup>1</sup> / <sub>4</sub> sec.28, T.8 S., R.14 E., Gooding County, at mouth on right bank of Snake River, 1.2 mi (1.9 km) downstream from source, and 7.8 mi (12.6 km) southwest of Wendell.	-	1902,1911, 1941,1956, 1975.	3-31-78	369

## Discharge measurements made at miscellaneous sites during water year 1978

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Salmon Falls Creek basin						
Salmon Falls Creek 13106510	Snake River	Lat 42°14'30", long 114°44'40", in NW <sup>1</sup> / <sub>4</sub> sec. 6, T.14 S., R.15 E., 2 mi (3 km) downstream from dam of Salmon River Canal Co., and 8 mi (13 km) northwest of Rogerson.	-	1912,1946, 1953-58	3-29-78	12.3
Soldier Creek 13106535	Salmon Falls Creek	Operated as a crest-stage station.	-	1973-77b	3- 4-78 3-31-78 5-20-78 9-22-78	3.32 3.76 c1.0 0
Snake River basin						
Snake River 13108160	Columbia River	Lat 42°43'27", long 114°50'48", in NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec. 20, T.8 S., R.14 E., Twin Falls-Gooding County line, 0.6 mi (1.0 km) below mouth of Salmon Falls Creek, 1.4 mi (2.3 km) above Thousand Springs powerhouse, 7 mi (11 km) southeast of Hagerman, and at mi 586.1 (943.0 km).	-	1950-59, 1963-71, 1973-77	11- 1-77 3-28-78	3,840 5,620
Mud Lake-Lost River basins						
West Camas Creek 13108200	Camas Creek	Lat 44°28'40", long 112°02'40", on SE sec. line of sec. 1, T.13 N., R.37 E., Clark County, at Frazier Dam, 1.5 mi (2.4 km) downstream from Pete Creek, 9 mi (14 km) northwest of Kilgore, and 11 mi (18 km) northeast of Spencer.	-	1957-58, 1973-77	8-22-78	6.99
Beaver Creek 13112300	Camas Creek	Lat 44°28'40", long 112°13'30", in SE <sup>1</sup> / <sub>4</sub> sec. 4, T.13 N., R.36 E., Clark County, at Union Pacific Railroad bridge, 0.3 mi (0.5 km) downstream from Humphrey, and 8.4 mi (13.5 km) north of Spencer.	-	1957-58, 1973-77	8-22-78	5.82
Huntley Canyon 13112900	Beaver Creek	Lat 44°21'50", long 112°11'00", in SW <sup>1</sup> / <sub>4</sub> sec. 14, T.12 N., R.36 E., at railroad crossing opposite the Spencer Mercantile store at Spencer.	3.91	1961-67	8-22-78	.40
Hamilton Springs 13124030	Warm Spring Creek	Lat 43°59'28", long 113°51'53", in NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec. 29, T.8 N., R.22 E., at springs 5.7 mi (9.2 km) south of Chilly, and 13.7 mi (22.0 km) northwest of Mackay.	-	1968	2-15-78 4-24-78 6- 8-78 6-28-78 8- 8-78 9-20-78	22.6 24.6 31.8 27.6 38.2 37.0
Big Lost River 13132555	Snake River	Operated as a crest-stage station.	8.7	1962, 1973-77b	3- 8-78 9-28-78	0 0
Tributaries to Snake River from Thousand Springs to Big Wood River						
Sand Springs Creek 13132600	Snake River	Lat 42°43'36", long 114°50'00", in SE <sup>1</sup> / <sub>4</sub> sec. 17, T.8 S., R.14 E., Gooding County, on right bank of Snake River, 0.5 mi (0.8 km) upstream from mouth, and 7 mi (11 km) southeast of Hagerman.	-	1902, 1912-13, 1917-21, 1924-25, 1932, 1954-59, 1963-77	1- 9-78 3- 6-78 4-23-78 5-24-78 6-28-78 8-19-78 9-24-78	81.2 83.8 73.0 77.6 74.8 104 102
Thousand Springs 13132800	Snake River	Lat 42°45', long 114°51', where springs enter right bank of Snake River between mile 585.5 (942.6 km) near line between secs. 17 & 20, T.8 S., R.14 E., and mile 583.0 (938.0 km), about 200 ft (60 m) upstream from line between sec. 1, T.8 S., R.13 E., and sec. 6, T.8 S., R.18 E., km), Gooding County, 6 mi (10 km) southwest of Hagerman.	-	1950-59, 1963-71, 1973-77	11- 1-77 3-28-78	1,240 1,110
Snake River basin						
Snake River 13132801	Columbia River	Lat 42°45'26", long 114°52'01", in NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec. 6, T.8 S., R.14 E., Twin Falls-Gooding County line, 0.2 mi (0.3 km) upstream from mouth of Riley Creek, 0.8 mi (1.3 km) below Thousand Springs powerplant, 4.2 mi (6.8 km) southeast of Hagerman, and at mile 583.6 (939.0 km).	-	1950-59, 1963-71, 1973-77	11- 1-77 3-28-78	5,080 6,730
Tributaries to Snake River from Thousand Springs to Big Wood River--Continued						
Riley Creek 13133800	Snake River	Lat 42°45'46", long 114°51'31", in SE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec. 6, T.8 S., R.14 E., Gooding County, at Hagerman Hatchery of U.S. Fish and Wildlife Service, 100 ft (30 m) downstream from small unnamed spring entering from right, 260 ft (80 m) upstream from discontinued station below Lewis Spring, 300 ft (90 m) downstream from mouth of Lewis Creek, about 2 mi (3 km) upstream from mouth, and 4.2 mi (6.8 km) southeast of Hagerman.	-	1950-59, 1963-77	11- 2-77 3-28-78 8-29-78	73.6 74.0 55.4

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1978

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Tributaries to Snake River from Thousand Springs to Big Wood River--Continued						
Billingsley Creek 13134600	Snake River	Lat 42°46'35", long 114°50'55", in SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.32, T.7 S., R.14 E., Gooding County, 0.1 mi (0.2 km) downstream from head of creek, 3.8 mi (6.1 km) southeast of Hagerman, and about 7.5 mi (12.1 km) upstream from mouth.	-	1902, 1917,1931, 1950-59, 1963-77	11- 3-77 3-28-78	40.6 25.5
Billingsley Creek 13134800	Snake River	Lat 42°50'10", long 114°53'40", in SW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec. 11, T.7 S., R.13 E., Gooding County, 700 ft (213 m) northwest of U.S. Highway 30 bridge, and 1.4 mi (2.3 km) north of Hagerman.	-	1902,1917, 1919, 1924-25, 1932, 1956-59, 1963-77	11- 3-77 3-27-78	187 177
Birch Creek 13135100	Snake River	Lat 42°51'10", long 114°53'30", in SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec. 34, T.6 S., R.13 E., Gooding County, just downstream from left bank tributary, 0.5 mi (0.8 km) upstream from entry to right bank of Snake River, 0.8 mi (1.3 km) south of Big Wood River, and 2.5 mi (4.0 km) south of Hagerman.	-	1917,1919, 1950-59, 1963-71, 1973-77	11- 4-77 3-27-78	8.77 7.93
Big Wood River basin						
Schooler Creek 13145700	Thorn Creek	Operated as a crest-stage station.	2.22	1961-77b	4-30-78 6- 6-78 9-25-78	1.13 0 0
Little Wood River 13147900	Big Wood River	Lat 43°29'30", long 114°03'15", about center of sec.22, T.2 N., R.20 E., Blaine County, 0.4 mi (0.6 km) downstream from Cooper Creek, 0.6 mi (1.0 km) above High Five Creek, and 13.5 mi (21.7 km) northwest of Carey.	248	1958-1974†, 1977	4-26-78	813
Malad Springs 13153400	Big Wood River	Lat 42°52'00", 114°51'54", Springs head in SE <sup>1</sup> / <sub>4</sub> sec.24, T.6 S., R.13 E., Gooding County, and continue to accumulate to the Big Wood River until it enters the right bank of the Snake River at mile 571.2 (919.1 km) in NW <sup>1</sup> / <sub>4</sub> sec.34, T.6 S., R.13 E., and 3.0 mi (4.8 km) north of Hagerman.	-	1902, 1910-11, 1913,1917, 1919-21, 1924-25, 1946, 1950-59, 1963-64, 1966-69, 1971, 1973-77	11- 4-77	1,285
Clover Creek basin						
Clover Creek 13154000	Snake River	Operated as a crest-stage station.	140	1938-43†, 1957-62†, 1963-77b	3-16-78 4-23-78 9-18-78	61.7 40.9 3.46

† Operated as a continuous-record gaging station.

a Approximately.

b Operated as a crest-stage station.

c Estimated.

## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

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## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, SATURATION (PER CENT)	COLIFORM, TOTAL (COLS./100 ML)	COLIFORM, FECAL (COLS./100 ML)	STREPTOCOCCI, FECAL (COLS./100 ML)	HARDNESS (MG/L AS CaCO3)
PORTNEUF RIVER BASIN												
13075810 - BATISF SPRINGS NEAR POCATELLO, IDAHO (LAT 42 54 55 LONG 112 31 19)												
APR , 1978	07...	0820	--	1287	6.9	--	13.5	--	--	--	--	480
RAFT RIVER BASIN												
13074205 - RAFT RIVER BL ONE MILE CREEK NR MALTA ID (LAT 42 04 13 LONG 113 26 37)												
NOV , 1977	04...	0905	8.2	1100	--	9.0	7.5	--	--	--	--	--
DEC	17...	0900	16	960	--	-4.0	4.0	--	--	--	--	--
JAN , 1978	26...	1510	17	982	--	2.0	4.5	--	--	--	--	--
MAR	08...	0910	26	993	--	5.0	7.0	--	--	--	--	--
APR	22...	1120	35	840	--	10.0	9.0	--	--	--	--	--
MAY	23...	1445	43	846	--	16.0	14.5	--	--	--	--	--
JUN	27...	1145	17	1070	--	24.0	17.0	--	--	--	--	--
AUG	15...	1550	7.1	1300	8.2	18.5	20.5	--	--	--	--	360
SEP	20...	1315	8.5	1180	--	9.5	11.5	--	--	--	--	--
SNAKE RIVER BASIN												
13089600 - 10S 18E 04ADD1S DEVILS WASHBOWL SP NR KIMBERLY (LAT 42 35 18 LONG 114 20 45.01)												
NOV , 1977	03...	1445	19	616	8.3	17.5	14.0	--	--	--	--	250
MAR , 1978	30...	0915	13	558	8.0	18.5	14.5	--	--	--	--	240
13090100 - 09S 18E 32DD 1S DEVILS CORRAL SPR UPPER OUTLET (LAT 42 35 38 LONG 114 21 55)												
OCT , 1977	31...	1445	45	610	8.1	8.5	15.5	--	--	--	--	--
MAR , 1978	27...	1415	42	577	7.6	20.0	16.5	--	--	--	--	--
13090101 - 09S 18E 32BD 1S DEVILS CORRAL SPR L. OUTLET (LAT 42 36 01 LONG 114 22 30)												
OCT , 1977	31...	1620	5.4	607	8.2	10.0	14.0	--	--	--	--	230
MAR , 1978	27...	1530	6.0	519	8.0	27.5	15.5	--	--	--	--	220
13090300 - 09S 18E 31AC 1S UNNAMED SPR NO.1 NR TWIN FALLS (LAT 42 36 03 LONG 114 23 36)												
OCT , 1977	31...	1655	1.7	597	8.2	7.0	15.0	--	--	--	--	--
MAR , 1978	27...	1640	1.8	572	7.8	23.0	16.0	--	--	--	--	--
13090350 - 09S 18E 31AC 2S UNNAMED SPR NO.2 NR TWIN FALLS (LAT 42 35 52 LONG 114 23 55)												
OCT , 1977	31...	1720	5.6	613	8.1	9.0	13.0	--	--	--	--	--
MAR , 1978	27...	1715	4.8	557	8.1	19.5	17.5	--	--	--	--	--



## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

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## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE, DIS-SOLVED (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE, DIS-SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUMINUM, DIS-SOLVED (UG/L AS AL)
PORTNEUF RIVER BASIN--Continued												
13075810 - BATISE SPRINGS NEAR POCATFLO, IDAHO (LAT 42 54 55 LONG 112 31 19)												
APR , 1978 07...	60		.4 55	854	1.16	--	9.1	4.5	--	--	--	--
RAFT RIVER BASIN--Continued												
13078205 - RAFT RIVER BL ONE MILE CREEK NR MALTA ID (LAT 42 04 13 LONG 113 26 37)												
NOV , 1977 04...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 17...	--	--	--	--	--	--	--	--	--	--	--	--
JAN , 1978 26...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 08...	--	--	--	--	--	--	--	--	--	--	--	--
APR 22...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 23...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 15...	240	1.0	35	698	.95	13.4	.05	.02	--	--	--	--
SEP 20...	--	--	--	--	--	--	--	--	--	--	--	--
SNAKE RIVER BASIN--Continued												
13089600 - 10S 18E 04ADD1S DEVILS WASHBOWL SP NR KIMBERLY (LAT 42 35 18 LONG 114 20 45.01)												
NOV , 1977 03...	44	.4	41	431	.59	21.2	2.3	.02	--	--	--	--
MAR , 1978 30...	40	.4	40	419	.57	14.8	2.3	.01	--	--	--	--
13090100 - 09S 18E 32DD 1S DEVILS CORRAL SPR UPPER OUTLET (LAT 42 35 38 LONG 114 21 55)												
OCT , 1977 31...	44	--	--	--	--	--	2.4	.04	--	--	--	--
MAR , 1978 27...	39	--	--	--	--	--	2.1	.01	--	--	--	--
13090101 - 09S 18E 32RD 1S DEVILS CORRAL SPR L. OUTLET (LAT 42 36 01 LONG 114 22 30)												
OCT , 1977 31...	44	.4	40	394	.54	5.74	1.9	.01	--	--	--	--
MAR , 1978 27...	41	.4	39	380	.52	6.19	2.0	.01	--	--	--	--
13090300 - 09S 18E 31AC 1S UNNAMED SPR NO.1 NR TWIN FALLS (LAT 42 36 03 LONG 114 23 36)												
OCT , 1977 31...	44	--	--	--	--	--	2.1	.01	--	--	--	--
MAR , 1978 27...	40	--	--	--	--	--	1.9	.01	--	--	--	--
13090350 - 09S 18E 31AC 2S UNNAMED SPR NO.2 NR TWIN FALLS (LAT 42 35 52 LONG 114 23 55)												
OCT , 1977 31...	45	--	--	--	--	--	1.8	.01	--	--	--	--
MAR , 1978 27...	42	--	--	--	--	--	1.8	.01	--	--	--	--





## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE SURF (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, TOTAL, IMMED. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
SNAKE RIVER BASIN--Continued												
13091200 - PERRINE DITCH OUTLET TO BLUE LAKES SPR NR T FALL (LAT 42 36 34 LONG 114 28 40)												
NOV , 1977												
01...	0845	203	536	8.1	4.5	14.5	--	--	--	--	--	240
MAR , 1978												
30...	1120	205	520	8.2	--	--	--	--	--	--	--	230
13091700 - WARM CH NR TWIN FALLS ID (LAT 42 37 15 LONG 114 29 55)												
NOV , 1977												
01...	1000	20	570	7.8	14.0	15.5	--	--	--	--	--	--
MAR , 1978												
30...	1420	14	520	7.6	23.0	15.0	--	--	--	--	--	--
13093300 - 09S 16E 15DDC1S ELLISON SPR UPPER OUTLET (LAT 42 38 17 LONG 114 33 40)												
NOV , 1977												
01...	1115	1.5	596	8.0	18.0	11.0	--	--	--	--	--	--
29...	1230	F1.5	609	8.0	--	14.0	--	--	--	<1	76	270
MAR , 1978												
29...	1340	1.1	500	8.4	24.0	16.0	--	--	--	--	--	--
APR												
06...	1440	--	630	8.1	--	15.0	--	--	--	K4	31	270
JUL												
25...	1330	--	677	8.1	--	15.0	--	--	--	K6	--	260
13093391 - 09S 15E 12DAB2S CRYSTAL SPR TRIB 1 (LAT 42 39 29 LONG 114 38 18.01)												
NOV , 1977												
02...	1100	20	685	7.6	17.0	15.0	--	--	--	--	--	--
MAR , 1978												
29...	0915	19	542	8.5	13.5	15.0	--	--	--	--	--	--
13093396 - CRYSTAL SPRINGS OUTLET NO. 11 NEAR BUHL IDAHO (LAT 42 39 39 LONG 114 38 50)												
NOV , 1977												
02...	0900	293	610	8.1	10.0	14.0	--	--	--	--	--	--
MAR , 1978												
24...	1100	271	543	7.4	19.5	14.5	--	--	--	--	--	--
13093398 - 09S 15E 12BCA1S CRYSTAL SPR TRIB 8 (LAT 42 39 42 LONG 114 38 59)												
NOV , 1977												
02...	1300	15	617	8.0	14.0	14.5	--	--	--	--	--	260
MAR , 1978												
29...	1445	13	575	8.2	19.0	14.5	--	--	--	--	--	250
13093700 - 09S 15E 10AA1S NIAGARA SP NR BUHL ID (LAT 42 39 48 LONG 114 40 25.01)												
NOV , 1977												
01...	1220	276	508	8.0	23.5	14.0	--	--	--	--	--	230
29...	1510	E280	526	7.9	--	14.0	--	--	--	<1	23	220
FEB , 1978												
08...	1000	271	543	--	5.0	13.0	--	--	--	--	--	--
MAR												
29...	1340	118	545	8.2	25.0	14.0	--	--	--	--	--	220
APR												
04...	1545	E250	506	7.9	--	14.0	--	--	--	K4	31	220
JUL												
26...	1700	--	574	8.1	--	15.0	--	--	--	<1	15	220

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
SNAKE RIVER BASIN--Continued												
13091200 - PERRINE DITCH OUTLET TO BLUE LAKES SPR NR T FALL (LAT 42 36 34 LONG 114 28 40)												
NOV , 1977 01...	52	60	22	38	25	1.1	6.5	230	0	190	2.9	61
MAR , 1978 30...	39	55	22	44	29	1.3	6.7	230	0	190	2.3	58
13091700 - WARM CR NR TWIN FALLS ID (LAT 42 37 15 LONG 114 29 55)												
NOV , 1977 01...	--	--	--	--	--	--	--	--	--	--	--	61
MAR , 1978 30...	--	--	--	--	--	--	--	--	--	--	--	60
13093300 - 09S 16E 1500C1S ELLISON SPR UPPER OUTLET (LAT 42 38 17 LONG 114 33 40)												
NOV , 1977 01...	--	--	--	--	--	--	--	--	--	--	--	65
29...	38	66	25	43	25	1.1	5.6	280	0	230	4.5	61
MAR , 1978 29...	--	--	--	--	--	--	--	--	--	--	--	63
APR 06...	41	69	24	45	26	1.2	5.5	280	0	230	3.6	65
JUL 25...	40	65	24	41	25	1.1	4.4	270	0	221	3.4	62
13093391 - 09S 15E 12DAR2S CRYSTAL SPR TRIB 1 (LAT 42 39 29 LONG 114 38 18.01)												
NOV , 1977 02...	--	--	--	--	--	--	--	--	--	--	--	68
MAR , 1978 29...	--	--	--	--	--	--	--	--	--	--	--	63
13093396 - CRYSTAL SPRINGS OUTLET NO. 11 NEAR BUHL IDAHO (LAT 42 39 39 LONG 114 38 50)												
NOV , 1977 02...	--	--	--	--	--	--	--	--	--	--	--	64
MAR , 1978 29...	--	--	--	--	--	--	--	--	--	--	--	63
13093398 - 09S 15E 12BCA1S CRYSTAL SPR TRIB 8 (LAT 42 39 42 LONG 114 38 59)												
NOV , 1977 02...	59	58	27	34	22	.9	4.6	240	0	200	3.8	60
MAR , 1978 29...	65	57	25	32	22	.9	4.7	220	0	180	2.2	60
13093700 - 09S 15E 104A1S NIAGARA SP NR BUHL ID (LAT 42 39 43 LONG 114 40 25.01)												
NOV , 1977 01...	61	54	22	29	21	.8	4.4	200	0	160	3.2	56
29...	67	53	22	29	22	.8	5.0	190	0	160	3.8	55
FEB , 1978 08...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 29...	63	53	21	27	21	.8	4.5	190	0	160	1.9	55
APR 04...	56	55	20	30	22	.9	4.3	200	0	160	4.0	55
JUL 26...	47	53	21	28	21	.8	4.0	210	0	172	2.7	55

## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUMINUM, DIS-SOLVED (UG/L AS AL)
SNAKE RIVER BASIN--Continued												
13091200 - PEKRRINE DITCH OUTLET TO BLUE LAKES SPR NR T FALL (LAT 42 36 34 LONG 114 28 40)												
NOV , 1977 01...	50	.4	39	400	.54	219	2.1	.02	--	--	--	--
MAR , 1978 30...	49	.5	38	395	.54	219	1.9	.00	--	--	--	--
13091700 - WARM CR NR TWIN FALLS ID (LAT 42 37 15 LONG 114 29 55)												
NOV , 1977 01...	51	--	--	--	--	--	2.0	.02	--	--	--	--
MAR , 1978 30...	49	--	--	--	--	--	1.9	.00	--	--	--	--
13093300 - 09S 16E 15DDC1S ELLISON SPR UPPER OUTLET (LAT 42 38 17 LONG 114 33 40)												
NOV , 1977 01...	47	--	--	--	--	--	2.2	.02	--	--	--	--
29...	39	.6	41	419	.56	1.68	--	.00	--	--	--	--
MAR , 1978 29...	46	--	--	--	--	--	1.8	.00	--	--	--	--
APR 06...	44	.6	41	432	.57	--	--	.02	--	--	--	--
JUL 25...	46	.6	39	415	.56	--	--	.01	--	--	--	--
13093391 - 09S 15E 12DAB2S CRYSTAL SPR TRIB 1 (LAT 42 39 29 LONG 114 38 18.01)												
NOV , 1977 02...	44	--	--	--	--	--	2.6	.02	--	--	--	--
MAR , 1978 29...	41	--	--	--	--	--	2.4	.02	--	--	--	--
13093396 - CRYSTAL SPRINGS OUTLET NO. 11 NFAK BUHL IDAHO (LAT 42 39 39 LONG 114 38 50)												
NOV , 1977 02...	47	--	--	--	--	--	2.1	.07	--	--	--	--
MAR , 1978 29...	47	--	--	--	--	--	2.0	.04	--	--	--	--
13093398 - 09S 15E 12BCA1S CRYSTAL SPR TRIB 6 (LAT 42 39 42 LONG 114 38 59)												
NOV , 1977 02...	46	.6	35	391	.53	15.8	1.0	.02	--	--	--	--
MAR , 1978 29...	42	.6	36	372	.51	12.9	1.5	.02	--	--	--	--
13093700 - 09S 15E 10AA1S NIAGARA SP NR BUHL ID (LAT 42 39 48 LONG 114 40 25.01)												
NOV , 1977 01...	42	.6	34	347	.47	259	1.5	.02	--	--	--	--
29...	43	.6	34	335	.46	256	--	.01	--	--	--	--
FEB , 1978 03...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 29...	43	.6	33	336	.46	107	1.2	.01	--	--	--	--
APR 04...	39	.6	33	336	.45	--	--	.03	--	--	--	--
JUL 26...	45	.6	32	342	.45	--	--	.02	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

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## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, TOTAL, IMMED. (COLS./ 100 ML)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS./ 100 ML)	HARD- NESS (MG/L AS CAC03)
SNAKE RIVER BASIN--Continued												
13094500 - 09S 14E 020CC1S CLEAR LKS SP NR BUHL ID (LAT 42 40 01 LONG 114 46 45)												
NOV , 1977												
03...	0845	510	406	7.9	10.0	13.5	--	--	--	--	--	--
MAR , 1978												
30...	1330	479	466	7.4	20.5	14.5	--	--	--	--	--	--
13095175 - 09S 14F 03CBA1S BRIGGS CR AT HEAD NR BUHL, IDAHO (LAT 42 40 26 LONG 114 48 30)												
NOV , 1977												
03...	1245	109	440	7.8	11.5	14.5	--	--	--	--	--	--
30...	1050	E110	423	7.5	--	14.0	--	--	--	<1	K7	180
MAR , 1978												
30...	1550	102	437	7.5	23.0	13.5	--	--	--	--	--	--
APR												
05...	1145	--	404	7.4	--	14.5	--	--	--	<1	--	170
JUL												
26...	1400	--	461	7.7	--	14.5	--	--	--	<1	K10	180
AUG												
15...	1700	--	471	7.8	24.5	14.5	--	--	--	--	--	170
13095300 - 09S 14E 33DAB1S BANBURY SPR NR BUHL (LAT 42 41 31 LONG 114 49 21)												
NOV , 1977												
01...	1620	130	383	8.5	13.0	14.0	--	--	--	--	--	--
30...	1200	E130	379	7.8	--	13.5	--	--	--	<1	K7	170
MAR , 1978												
28...	1605	106	368	8.0	22.0	15.0	--	--	--	--	--	--
APR												
05...	1300	--	375	8.1	--	15.0	--	--	--	<1	K4	160
JUL												
26...	1330	--	421	8.3	--	15.0	--	--	--	<15	43	160
AUG												
15...	1400	--	452	8.5	26.5	16.0	--	--	--	--	--	160
13095350 - 08S 14E 28CD 1S UNNAMED SPR NR BUHL (LAT 42 41 51 LONG 114 49 21)												
NOV , 1977												
01...	1600	5.6	389	8.4	15.5	14.0	--	--	--	--	--	--
MAR , 1978												
28...	1705	3.1	384	7.7	23.0	14.0	--	--	--	--	--	--
13095400 - 08S 14E 28RDD1S BLIND CANYON SPR NR BUHL, IDAHO (LAT 42 42 12 LONG 114 49 20)												
NOV , 1977												
01...	1520	22	447	8.2	16.5	11.0	--	--	--	--	--	--
MAR , 1978												
28...	1740	10	386	7.7	24.5	16.5	--	--	--	--	--	--
13095600 - BOX CANYON SPRINGS AT MOUTH NR WENDELL, IDAHO (LAT 42 42 20 LONG 114 49 20)												
MAR , 1978												
31...	1145	369	366	7.1	21.5	14.5	--	--	--	--	--	--
13108160 - SNAKE RIVER ABOVE 1000 SPRINGS NR HAGERMAN IDAHO (LAT 42 43 27 LONG 114 50 48)												
NOV , 1977												
01...	1300	3844	575	8.4	--	12.5	--	--	--	--	--	--
MAR , 1978												
28...	1100	5620	513	8.6	18.5	13.0	--	--	--	--	--	--



## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

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## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTI- TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE, DIS-SOLVED (MG/L AS P)	PHOS- PHATE, ORTHOPHOS- PHATE, DIS-SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM- INUM, DIS-SOLVED (UG/L AS AL)
SNAKE RIVER BASIN--Continued												
13094500 - 09S 14E 02DCC1S CLEAR LKS SP NR BUHL ID (LAT 42 40 01 LONG 114 46 45)												
NOV , 1977												
03...	35	--	--	--	--	--	1.3	.09	--	--	--	--
MAR , 1978												
30...	32	--	--	--	--	--	1.4	.10	--	--	--	--
13095175 - 09S 14E 03CBA1S BRIGGS CR AT HEAD NR BUHL, IDAHO (LAT 42 40 26 LONG 114 48 30)												
NOV , 1977												
03...	23	--	--	--	--	--	1.1	.01	--	--	--	--
30...	23	.7	34	272	.37	79.9	--	.00	--	--	--	--
MAR , 1978												
30...	24	--	--	--	--	--	1.1	.01	--	--	--	--
APR												
05...	24	.7	34	268	.35	--	--	.01	--	--	--	--
JUL												
26...	26	.7	33	280	.37	--	--	.02	--	--	--	--
AUG												
15...	31	.7	34	270	.37	--	1.3	.01	--	--	--	--
13095300 - 08S 14E 33DAB1S BANBURY SPR NR BUHL (LAT 42 41 31 LONG 114 49 21)												
NOV , 1977												
01...	21	--	--	--	--	--	.84	.01	--	--	--	--
30...	19	.7	33	252	.33	85.6	--	.00	--	--	--	--
MAR , 1978												
28...	21	--	--	--	--	--	.83	.01	--	--	--	--
APR												
05...	16	.6	33	249	.32	--	--	.01	--	--	--	--
JUL												
26...	21	.7	32	254	.33	--	--	.02	--	--	--	--
AUG												
15...	--	--	--	--	--	--	--	.01	--	--	--	--
13095350 - 08S 14E 28CU 1S UNNAMED SPR NR BUHL (LAT 42 41 31 LONG 114 49 21)												
NOV , 1977												
01...	21	--	--	--	--	--	.90	.02	--	--	--	--
MAR , 1978												
28...	19	--	--	--	--	--	.90	.01	--	--	--	--
13095400 - 08S 14E 28RDD1S BLIND CANYON SPR NR BUHL, IDAHO (LAT 42 42 12 LONG 114 49 20)												
NOV , 1977												
01...	26	--	--	--	--	--	.53	.15	--	--	--	--
MAR , 1978												
28...	20	--	--	--	--	--	1.2	.11	--	--	--	--
13095600 - BOX CANYON SPRINGS AT MOUTH NR WENDELL, IDAHO (LAT 42 42 20 LONG 114 49 20)												
MAR , 1978												
31...	17	--	--	--	--	--	.77	.02	--	--	--	--
13108160 - SNAKE RIVER ABOVE 1000 SPRINGS NR HAGERMAN IDAHO (LAT 42 43 27 LONG 114 50 48)												
NOV , 1977												
01...	36	--	--	--	--	--	1.8	.08	--	--	--	--
MAR , 1978												
28...	32	--	--	--	--	--	1.1	.07	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS  
WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, TOTAL, (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)
SNAKE RIVER BASIN--Continued												
13132700 - 08S 14E 080BA1S THOUSAND SPR AT N TUNNEL (LAT 42 44 44 LONG 114 50 25)												
NOV , 1977												
01...	1200	--	391	8.2	--	13.0	--	--	--	--	--	--
MAR , 1978												
28...	1430	1110	335	8.6	24.0	16.0	--	--	--	--	--	--
13132790 - 08S 14E 060AC1S BICKEL SP NR HAGERMAN ID (LAT 42 45 29 LONG 114 51 19.01)												
NOV , 1977												
03...	0815	16	277	8.2	7.5	14.5	--	--	--	--	--	140
MAR , 1978												
28...	1210	19	270	8.1	22.0	16.0	--	--	--	--	--	140
13132800 - THOUSAND SPRINGS AT MOUTH, NR HAGERMAN, ID (LAT 42 44 23 LONG 114 50 27)												
NOV , 1977												
30...	1510	E1200	350	7.6	--	14.0	--	--	--	<1	<1	160
APR , 1978												
05...	1515	E1110	356	7.2	--	14.5	--	--	--	<1	<1	150
JUL												
26...	1200	--	385	7.7	--	15.0	--	--	--	<1	<1	160
13132801 - SNAKE RIVER BELOW 1000 SPRINGS NR HAGERMAN IDAHO (LAT 42 45 26 LONG 114 52 01)												
NOV , 1977												
01...	1100	5080	482	8.1	13.0	13.0	--	--	--	--	--	--
MAR , 1978												
28...	1315	6730	451	8.4	22.0	14.0	--	--	--	--	--	--
13133300 - LEWIS SPRING AT HFAD (LAT 42 45 41 LONG 114 51 18.01)												
AUG , 1978												
15...	1400	24	399	8.3	28.5	15.5	--	--	--	--	--	130
13133800 - 08S 14E 06AC 1S RILEY CR BFLOW LEWIS CR (LAT 42 45 50 LONG 114 51 40)												
NOV , 1977												
02...	1520	70	288	6.7	20.0	15.0	--	--	--	--	--	--
MAR , 1978												
28...	1335	74	262	8.0	22.0	15.5	--	--	--	--	--	--
13134600 - 07S 14E 32BC01S BILLINGSLEY CR AT HEAD (LAT 42 46 35 LONG 114 50 55)												
NOV , 1977												
03...	0945	41	305	8.4	14.0	14.5	--	--	--	--	--	--
DEC												
01...	0920	E40	323	7.6	--	14.5	--	--	--	<1	<1	150
MAR , 1978												
28...	1010	22	265	8.3	13.0	14.0	--	--	--	--	--	--
APR												
06...	1120	--	315	8.0	--	14.5	--	--	--	<1	<1	140
JUL												
27...	1145	--	367	7.9	--	16.0	--	--	--	<1	<1	150

## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

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## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HARD- NESS, NONCAL- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LILITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
SNAKE RIVER BASIN--Continued												
13132700 - 08S 14E 08DBA1S THOUSAND SPR AT N TUNNEL (LAT 42 44 44 LONG 114 50 25)												
NOV , 1977 01...	--	--	--	--	--	--	--	--	--	--	--	30
MAR , 1978 28...	--	--	--	--	--	--	--	--	--	--	--	29
13132790 - 08S 14E 06DAC1S BICKEL SP NR HAGERMAN ID (LAT 42 45 29 LONG 114 51 19.01)												
NOV , 1977 03...	1	30	16	17	20	.6	3.4	170	0	140	1.7	25
MAR , 1978 28...	5	30	15	17	21	.6	3.4	160	0	130	2.0	24
13132800 - THOUSAND SPRINGS AT MOUTH, NR HAGERMAN, ID (LAT 42 44 23 LONG 114 50 27)												
NOV , 1977 30...	15	34	17	20	21	.7	3.8	170	0	140	6.8	32
APR , 1978 05...	0	34	16	28	28	1.0	3.7	200	0	160	20	32
JUL 26...	18	35	17	20	21	.7	3.8	170	0	139	5.4	32
13132801 - SNAKE RIVER BELOW 1000 SPRINGS NR HAGERMAN IDAHO (LAT 42 45 26 LONG 114 52 01)												
NOV , 1977 01...	--	--	--	--	--	--	--	--	--	--	--	55
MAR , 1978 28...	--	--	--	--	--	--	--	--	--	--	--	51
13133300 - LEWIS SPRING AT HEAD (LAT 42 45 41 LONG 114 51 18.01)												
AUG , 1978 15...	0	28	14	16	21	.6	3.4	160	0	130	1.3	24
13133800 - 08S 14E 06AC 1S RILEY CR BFLOW LEWIS CR (LAT 42 45 50 LONG 114 51 40)												
NOV , 1977 02...	--	--	--	--	--	--	--	--	--	--	--	26
MAR , 1978 28...	--	--	--	--	--	--	--	--	--	--	--	23
13134600 - 07S 14E 32BCD1S BILLINGSLEY CR AT HEAD (LAT 42 46 35 LONG 114 50 55)												
NOV , 1977 03...	--	--	--	--	--	--	--	--	--	--	--	26
DEC 01...	16	31	17	17	20	.6	3.7	160	0	130	6.4	26
MAR , 1978 28...	--	--	--	--	--	--	--	--	--	--	--	25
APR 06...	0	30	15	16	20	.6	3.4	170	0	140	2.7	24
JUL 27...	2	32	17	18	20	.6	3.8	180	0	148	3.6	26

## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
SNAKE RIVER BASIN--Continued												
13132700 - 08S 14E 080BA15 THOUSAND SPR AT N TUNNEL (LAT 42 44 44 LONG 114 50 25)												
NOV , 1977 01...	13	--	--	--	--	--	.93	.01	--	--	--	--
MAR , 1978 28...	13	--	--	--	--	--	.85	.01	--	--	--	--
13132790 - 08S 14E 06DAC1S BICKEL SP NR HAGERMAN ID (LAT 42 45 29 LONG 114 51 19.01)												
NOV , 1977 03...	9.9	.5	33	223	.30	9.51	.88	.02	--	--	--	--
MAR , 1978 28...	9.9	.5	32	214	.29	10.9	.70	.00	--	--	--	--
13132800 - THOUSAND SPRINGS AT MOUTH, NR HAGERMAN, ID (LAT 42 44 23 LONG 114 50 27)												
NOV , 1977 30...	15	.6	34	240	.31	748	--	.01	--	--	--	--
APR , 1978 05...	10	.6	34	257	.31	--	--	.01	--	--	--	--
JUL 26...	15	.6	33	240	.31	--	--	.02	--	--	--	--
13132801 - SNAKE RIVER BELOW 1000 SPRINGS NR HAGERMAN IDAHO (LAT 42 45 26 LONG 114 52 01)												
NOV , 1977 01...	30	--	--	--	--	--	1.5	.05	--	--	--	--
MAR , 1978 28...	29	--	--	--	--	--	1.0	.06	--	--	--	--
13133300 - LEWIS SPRING AT HEAD (LAT 42 45 41 LONG 114 51 18.01)												
AUG , 1978 15...	12	.5	31	211	.29	13.7	.78	.01	--	--	--	--
13133800 - 08S 14E 06AC 1S RILEY CR BELOW LEWIS CR (LAT 42 45 50 LONG 114 51 40)												
NOV , 1977 02...	13	--	--	--	--	--	.84	.02	--	--	--	--
MAR , 1978 28...	9.8	--	--	--	--	--	.71	.03	--	--	--	--
13134600 - 07S 14E 32BC01S BILLINGSLEY CR AT HEAD (LAT 42 46 35 LONG 114 50 55)												
NOV , 1977 03...	13	--	--	--	--	--	.88	.02	--	--	--	--
DEC 01...	11	.5	34	219	.28	22.2	--	.00	--	--	--	--
MAR , 1978 28...	11	--	--	--	--	--	.88	.01	--	--	--	--
APR 06...	9.7	.5	33	215	.28	--	--	.02	--	--	--	--
JUL 27...	10	.5	33	229	.29	--	--	.01	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

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## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, SATURATION (%)	COLIFORM, TOTAL (COLS./100 ML)	COLIFORM, IMMEDIATE (COLS./100 ML)	STREPTOCOCCI, FECAL (COLS./100 ML)	HARDNESS (MG/L AS CaCO3)
SNAKE RIVER BASIN--Continued												
13134800 - 07S 13E 11AC 1S BILLINGSLEY CR AT MOUTH (LAT 42 50 10 LONG 114 53 40)												
NOV , 1977												
03...	1415	186	354	8.0	11.5	13.0	--	--	--	--	--	--
MAR , 1978												
27...	1350	176	275	8.3	21.5	16.5	--	--	--	--	--	--
13135100 - 06S 13E 34DD 1S BIRCH CREEK NEAR HAGEMAN, IDAHO (LAT 42 51 10 LONG 114 53 30)												
NOV , 1977												
04...	1015	8.8	415	8.0	6.0	12.0	--	--	--	--	--	--
MAR , 1978												
27...	1300	7.8	320	8.5	27.0	16.5	--	--	--	--	--	--
423104113410700 - SPRING CR NR SPRINGDALE ID (LAT 42 31 04 LONG 113 41 07)												
OCT , 1977												
18...	1415	F10	835	7.6	--	13.0	--	--	110	K100	K160	--
423105113415500 - DUCK CR AT MOUTH NR SPRINGDALE ID (LAT 42 31 05 LONG 113 41 55)												
OCT , 1977												
20...	1300	F6.0	883	8.0	18.5	12.0	--	--	250	210	400	--
423126113400000 - MARSH CR NR DELCO ID (LAT 42 31 26 LONG 113 40 00)												
OCT , 1977												
18...	1310	15	683	7.8	21.0	13.0	--	--	K280	K400	K360	--
423223113535000 - IRRIGATION DRAIN NR STARRHS FFRHY (LAT 42 32 23 LONG 113 53 50)												
OCT , 1977												
18...	1145	E1.2	490	8.4	--	11.0	7.0	--	1100	980	770	780
423315113383000 - D5 DRAIN AT MOUTH NR RUPEPT ID (LAT 42 33 15 LONG 113 38 30)												
OCT , 1977												
19...	1240	F4.5	690	8.4	19.5	12.0	--	--	40	K39	79	--
423412113375700 - D4 DRAIN AT MOUTH NR RUPEPT ID (LAT 42 34 12 LONG 113 37 57)												
OCT , 1977												
19...	1110	11	611	7.5	17.5	11.5	--	--	110	72	150	--
423601114273500 - SNAKE RIVER BL PERRINE BRIDGE NR TWIN FALLS ID (LAT 42 36 01 LONG 114 27 35)												
AUG , 1978												
09...	1700	617	548	8.5	--	23.0	--	--	--	--	--	200
423638114290500 - SNAKE R AT BLUE LAKES SPR OUTLET (LAT 42 36 38 LONG 114 29 05)												
AUG , 1978												
10...	1000	--	600	7.6	--	16.0	--	--	--	--	--	250
423638114291800 - SNAKE RIVER BL BLUE LAKES OUTLET (LAT 42 36 38 LONG 114 29 18)												
AUG , 1978												
10...	1150	1020	541	8.3	--	21.5	--	--	--	--	--	220

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS  
WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
SNAKE RIVER BASIN--Continued											
13134800 - 07S 13E 11AC 1S BILLINGSLEY CR AT MOUTH (LAT 42 50 10 LONG 114 53 40)											
NOV , 1977 03...	--	--	--	--	--	--	--	--	--	--	28
MAR , 1978 27...	--	--	--	--	--	--	--	--	--	--	25
13135100 - 06S 13F 34DD 1S BIRCH CREEK NEAR HAGERMAN, IDAHO (LAT 42 51 10 LONG 114 53 30)											
NOV , 1977 04...	--	--	--	--	--	--	--	--	--	--	34
MAR , 1978 27...	--	--	--	--	--	--	--	--	--	--	29
423104113410700 - SPRING CR NR SPRINGDALE ID (LAT 42 31 04 LONG 113 41 07)											
OCT , 1977 18...	--	--	--	--	--	--	--	--	--	--	--
423105113415500 - DUCK CR AT MOUTH NR SPRINGDALE ID (LAT 42 31 05 LONG 113 41 55)											
OCT , 1977 20...	--	--	--	--	--	--	--	--	--	--	--
423126113400000 - MARSH CR NR DELCO ID (LAT 42 31 26 LONG 113 40 00)											
OCT , 1977 18...	--	--	--	--	--	--	--	--	--	--	--
423223113535000 - IRRIGATION DRAIN NR STARRHS FERRY (LAT 42 32 23 LONG 113 53 50)											
OCT , 1977 18...	--	--	--	--	--	--	--	--	--	--	--
423315113383000 - D5 DRAIN AT MOUTH NR RUPEPT ID (LAT 42 33 15 LONG 113 38 30)											
OCT , 1977 19...	--	--	--	--	--	--	--	--	--	--	--
423412113375700 - D4 DRAIN AT MOUTH NR RUPEPT ID (LAT 42 34 12 LONG 113 37 57)											
OCT , 1977 19...	--	--	--	--	--	--	--	--	--	--	--
423601114273500 - SNAKE RIVER BL PERRINE BRIDGE NR TWIN FALLS ID (LAT 42 36 01 LONG 114 27 35)											
AUG , 1978 09...	0	45	21	40	30	1.2	5.4	220	17	209	1.3 60
423638114290500 - SNAKE R AT BLUE LAKES SPR OUTLET (LAT 42 36 38 LONG 114 29 05)											
AUG , 1978 10...	57	62	22	38	25	1.1	6.9	230	0	189	9.2 60
423638114291800 - SNAKE RIVER BL BLUE LAKES OUTLET (LAT 42 36 38 LONG 114 29 18)											
AUG , 1978 10...	24	52	22	41	28	1.2	6.1	240	0	197	1.9 62

## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

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## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLORIDE- DIS-SOLVED (MG/L AS CL)	FLUORIDE- DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS- PHORUS, DIS-SOLVED TOTAL (MG/L AS P)	PHOS- PHATE, ORTHODIS-SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM- INUM, DIS-SOLVED (UG/L AS AL)
SNAKE RIVER BASIN--Continued											
13134800 - 07S 13E 11AC 1S BILLINGSLEY CR AT MOUTH (LAT 42 50 10 LONG 114 53 40)											
NOV , 1977 03...	14	--	--	--	--	--	1.1	.13	--	--	--
MAR , 1978 27...	11	--	--	--	--	--	.89	.07	--	--	--
13135100 - 06S 13E 34DD 1S BIRCH CREEK NEAR HAGERMAN, IDAHO (LAT 42 51 10 LONG 114 53 30)											
NOV , 1977 04...	18	--	--	--	--	--	1.1	.06	--	--	--
MAR , 1978 27...	13	--	--	--	--	--	.96	.06	--	--	--
423104113410700 - SPRING CR NR SPRINGDALE ID (LAT 42 31 04 LONG 113 41 07)											
OCT , 1977 18...	--	--	--	--	--	--	--	.09	--	--	--
423105113415500 - DUCK CR AT MOUTH NR SPRINGDALE ID (LAT 42 31 05 LONG 113 41 55)											
OCT , 1977 20...	--	--	--	--	--	--	--	.08	--	4.9	--
423126113400000 - MARSH CR NR DELCO ID (LAT 42 31 26 LONG 113 40 00)											
OCT , 1977 18...	--	--	--	--	--	--	--	.09	--	--	--
423223113535000 - IRRIGATION DRAIN NR STARRHS FERRY (LAT 42 32 23 LONG 113 53 50)											
OCT , 1977 18...	--	--	--	--	--	--	--	.06	--	3.4	--
423315113383000 - D5 DRAIN AT MOUTH NR RUPERT ID (LAT 42 33 15 LONG 113 38 30)											
OCT , 1977 19...	--	--	--	--	--	--	--	.09	--	3.1	--
423412113375700 - D4 DRAIN AT MOUTH NR RUPERT ID (LAT 42 34 12 LONG 113 37 57)											
OCT , 1977 19...	--	--	--	--	--	--	--	.10	--	2.7	--
423601114273500 - SNAKE RIVER BL PERRINE BRIDGE NR TWIN FALLS ID (LAT 42 36 01 LONG 114 27 35)											
AUG , 1978 09...	33	.6	22	352	.45	546	--	.02	--	--	--
423638114290500 - SNAKE R AT BLUE LAKES SPH OUTLET (LAT 42 36 38 LONG 114 29 05)											
AUG , 1978 10...	52	.5	37	392	.52	--	--	.05	--	--	--
423638114291800 - SNAKE RIVER BL BLUE LAKES OUTLET (LAT 42 36 38 LONG 114 29 18)											
AUG , 1978 10...	38	.6	25	365	.49	991	--	.06	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, TOTAL, IMMED. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
SNAKE RIVER BASIN--Continued												
424125114491100 - BANBURY SPRING- SOUTH ORIFICE (LAT 42 41 25 LONG 114 49 11)												
AUG , 1978	15...	1400	--	374	8.4	26.5	15.0	--	--	--	--	160
424128114491100 - BANBURY SPRING - MIDDLE ORIFICE (LAT 42 41 28 LONG 114 41 25)												
AUG , 1978	15...	1400	--	402	8.4	26.5	15.0	--	--	--	--	160
424132114491100 - BANBURY SPRING - NORTH ORIFICE (LAT 42 41 32 LONG 114 49 11)												
AUG , 1978	15...	1400	--	408	8.4	26.5	15.0	--	--	--	--	170
BIG WOOD RIVER BASIN												
13153400 - 06S 13F 35BAA1S (LAT 42 51 53 LONG 114 53 12)												
NOV , 1977	04...	1350	1290	338	8.8	--	14.5	--	--	--	--	190
	16...	1200	--	577	7.5	--	14.0	--	--	--	--	260
AUG , 1978	16...	1000	--	340	7.9	16.0	15.5	--	--	--	--	140

## ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

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## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

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)	SODIUM SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
SNAKE RIVER BASIN--Continued												
424125114491100 - BANBURY SPRING- SOUTH ORIFICE (LAT 42 41 25 LONG 114 49 11)												
AUG , 1978 15...	44	36	16	21	22	.7	3.7	130	3	110	.9	34
424128114491100 - BANBURY SPRING - MIDDLE ORIFICE (LAT 42 41 28 LONG 114 41 25)												
AUG , 1978 15...	49	36	16	20	21	.7	3.7	130	0	110	.8	54
424132114491100 - BANBURY SPRING - NORTH ORIFICE (LAT 42 41 32 LONG 114 49 11)												
AUG , 1978 15...	53	41	17	21	21	.7	3.8	140	3	120	.9	54
BIG WOOD RIVER BASIN--Continued												
13153400 - 06S 13F 35BAA1S (LAT 42 51 53 LONG 114 53 12)												
NOV , 1977 04...	3	42	20	22	20	.7	3.8	210	7	180	.6	36
16...	24	62	26	38	24	1.0	4.4	290	0	240	15	63
AUG , 1978 16...	5	30	15	16	20	.6	3.5	160	0	130	3.2	20

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS  
WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
SNAKE RIVER BASIN--Continued												
424125114491100 - BANBURY SPRING- SOUTH ORIFICE (LAT 42 41 25 LONG 114 49 11)												
AUG , 1978 15...	25	.7	34	241	.33	--	.88	.01	--	--	--	--
424128114491100 - BANBURY SPRING - MIDDLE ORIFICE (LAT 42 41 28 LONG 114 41 25)												
AUG , 1978 15...	26	.7	34	258	.35	--	.90	.01	--	--	--	--
424132114491100 - BANBURY SPRING - NORTH ORIFICE (LAT 42 41 32 LONG 114 49 11)												
AUG , 1978 15...	27	.7	34	275	.37	--	.93	.02	--	--	--	--
BIG WOOD RIVER BASIN--Continued												
13153400 - 06S 13E 358AA1S (LAT 42 51 53 LONG 114 53 12)												
NOV , 1977 04...	16	.4	33	284	.39	1000	1.3	.03	--	--	--	--
16...	25	.4	37	409	.56	--	2.3	.05	--	--	--	--
AUG , 1978 16...	9.7	.5	32	209	.28	--	.87	.01	--	--	--	--





## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)
SNAKE RIVER MAIN STEM											
13011000 - SNAKE RIVER NEAR MORAN (LAT 43 51 31 LONG 110 35 09.01)											
NOV , 1977						JUN , 1978					
03...	1130	159	159	10.5	9.0	14...	1425	5590	156	28.5	12.0
MAR , 1978						JUL					
28...	1102	624	183	19.0	4.0	27...	1350	1550	90	33.5	16.0
MAY						SEP					
10...	1410	1590	169	11.5	4.5	14...	1510	577	114	16.0	14.5
PACIFIC CREEK BASIN											
13011500 - PACIFIC CREEK AT MORAN, WYO (LAT 43 51 04 LONG 110 30 59)											
JUL , 1978						SEP , 1978					
27...	1250	200	79	29.0	15.0	14...	1300	102	209	27.5	11.0
BUFFALO FORK BASIN											
13011900 - BUFFALO F AB LAVA C NR MORAN WY (LAT 43 50 14 LONG 110 26 21.01)											
NOV , 1977						JUN , 1978					
03...	0940	134	217	3.5	1.0	14...	1155	2780	117	17.5	4.5
FEH , 1978						JUL					
15...	1140	97	187	-3.0	-5	27...	1035	1540	155	32.0	12.5
MAH						SEP					
28...	0903	125	182	9.0	2.0	14...	1115	349	151	12.0	6.0
MAY											
10...	1135	437	227	10.0	6.5						
SNAKE RIVER MAIN STEM											
13018750 - SNAKE RIVER BL FLAT CREEK NR JACKSON WY (LAT 43 22 20 LONG 110 44 17)											
NOV , 1977						JUN , 1978					
02...	1630	1173	292	4.5	5.5	13...	1830	14300	180	27.5	14.0
FEH , 1978						JUL					
14...	1730	1170	212	-5.0	.0	26...	1620	6740	--	36.0	18.0
MAH						SEP					
27...	1450	1670	302	18.0	8.0	13...	1250	3080	222	15.0	9.0
MAY											
09...	1820	3140	256	26.0	12.0						
SALT RIVER BASIN											
13027200 - BEAR CANYON NEAR FREEDOM, WYOMING (LAT 42 58 38 LONG 111 11 44)											
SEP , 1978											
22...	1625	.70	437	20.5	12.0						
MCCOY CREEK BASIN											
13029500 - MCCOY CR AB RESERVOIR NR ALPINE WY (LAT 43 10 50 LONG 111 06 55)											
SEP , 1978											
22...	1515	27	383	19.5	9.0						
INDIAN CREEK BASIN											
13030000 - INDIAN CR AB RESERVOIR NR ALPINE WY (LAT 43 15 35 LONG 111 04 00)											
SEP , 1978											
22...	1750	4.5	440	22.0	10.0						
ELK CREEK BASIN											
13030500 - ELK CREEK AB RESERVOIR NR IRWIN ID (LAT 43 19 25 LONG 111 06 40)											
SEP , 1978											
22...	1840	57	395	12.0	8.5						
SNAKE RIVER MAIN STEM											
13038000 - DRY BED FEEDER CANAL NR RIRIE ID (LAT 43 38 21 LONG 112 42 55)											
OCT , 1977						NOV , 1977					
04...	1620	1260	476	30.0	12.0	21...	1505	297	423	4.0	1.0
HENRYS FORK BASIN											
13038900 - TARGHEE CR NR MACKS INN ID (LAT 44 38 50 LONG 111 20 30)											
SEP , 1978											
15...	--	133	244	6.0	4.0						
13039500 - HENRYS FORK NEAR LAKE IDAHO (LAT 44 35 42 LONG 111 20 57)											
APR , 1978						AUG , 1978					
12...	1605	4.4	246	8.0	7.0	09...	1720	40	219	30.0	23.0
JUN						SFP					
27...	1545	99	203	22.0	18.0	14...	1607	46	188	18.0	13.0

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)
HENRYS FORK BASIN--Continued											
13042500 - HENRYS FORK NEAR ISLAND PARK IDAHO (LAT 44 24 59 LONG 111 23 41)											
OCT , 1977						APR , 1978					
05...	1535	293	133	17.0	9.0	12...	1410	547	294	7.0	4.0
DEC						JUN					
05...	1300	7.9	149	-1.0	4.0	28...	0915	655	--	20.0	10.5
JAN , 1978						AUG					
31...	1440	149	--	.0	1.0	09...	1530	1240	146	23.0	17.5
MAR						SEP					
06...	1330	252	--	5.0	4.5	14...	1530	184	140	21.0	14.0
13046000 - HENRYS FORK NEAR ASHTON IDAHO (LAT 44 04 30 LONG 111 29 58)											
OCT , 1977						SEP , 1978					
04...	1330	1010	152	15.5	9.5	15...	1410	1070	128	16.5	10.0
AUG , 1978											
10...	0855	2070	142	20.0	18.0						
13047500 - FALLS RIVER NR SQUIRREL ID (LAT 44 04 07 LONG 111 14 25)											
OCT , 1977						JUL , 1978					
06...	1215	382	198	18.0	10.0	06...	1410	1360	84	27.0	13.5
DEC						AUG					
12...	1215	367	190	4.0	1.5	10...	1105	591	125	24.0	15.0
JUN , 1978						SEP					
01...	1515	1680	90	19.5	9.5	21...	0937	598	124	6.0	6.5
13049500 - FALLS RIVER NEAR CHESTER IDAHO (LAT 44 01 06 LONG 111 33 57)											
OCT , 1977						AUG , 1978					
04...	1430	380	231	15.5	10.5	10...	1355	218	154	26.0	19.0
DEC						SEP					
12...	1430	407	205	2.5	.5	21...	1330	491	162	15.0	9.0
APR , 1978											
13...	1010	975	152	7.0	5.0						
13052200 - TETON RIVER AB LEIGH CREEK NR DRIGGS ID (LAT 43 46 54 LONG 111 12 30)											
NOV , 1977						JUN , 1978					
04...	1100	171	370	13.0	4.5	15...	1020	818	298	15.5	10.5
FEB , 1978						JUL					
16...	1422	137	187	1.0	1.5	28...	1245	605	382	16.0	15.0
MAR						SEP					
29...	1002	434	376	27.5	4.5	13...	1545	576	404	9.0	7.0
MAY											
11...	1040	323	329	9.0	8.0						
13054200 - TETON RIVER BL BADGER CREEK NR NEWDALE ID (LAT 43 55 00 LONG 111 16 50)											
OCT , 1977											
19...	0920	291	335	3.0	4.0						
13054300 - BITCH CREEK NR LAMONT ID (LAT 43 56 17 LONG 111 10 43)											
NOV , 1977											
04...	1255	39	178	15.0	4.5						
13054500 - CANYON CREEK NEAR NEWDALE IDAHO (LAT 43 48 00 LONG 111 26 00)											
AUG , 1978											
30...	1455	15	322	24.0	17.0						
13054600 - CANYON CREEK AT HWY 33 NR NEWDALE ID (LAT 43 50 44 LONG 111 26 41)											
NOV , 1977											
04...	1420	8.3	429	13.0	7.0						

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)
HENRYS FORK BASIN--Continued											
13055320 - MOODY CREEK NR NEWDALE ID (LAT 43 49 50 LONG 111 38 10)											
AUG , 1978											
30...	1355	3.6	207	28.0	14.5						
SNAKE RIVER MAIN STEM											
13057150 - SNAKE R NR LEWISVILLE, ID (LAT 43 37 35 LONG 112 03 56)											
JUN , 1978						AUG , 1978					
30...	0817	12300	243	21.0	18.0	23...	1315	4380	219	25.0	16.0
WILLOW CREEK BASIN											
13057940 - WILLOW C BL TEX C NR RPIE ID (LAT 43 26 33 LONG 111 43 37)											
OCT , 1977						AUG , 1978					
05...	1045	22	380	7.0	7.5	21...	1045	41	422	24.0	15.5
JUN , 1978											
02...	1215	328	449	17.5	12.5						
19...	1130	1050	128	17.0	14.0						
BLACKFOOT RIVER BASIN											
13066000 - BLACKFOOT RIVER NEAR SHELLEY, IDAHO (LAT 43 16 00 LONG 112 03 00)											
OCT , 1977											
06...	1430	361	458	16.0	11.7						
13068495 - BLACKFOOT RIVER BY-PASS NR BLACKFOOT, IDAHO (LAT 43 10 16 LONG 112 23 13)											
OCT , 1977						SEP , 1978					
02...	1430	361	458	16.0	11.5	20...	1600	198	324	14.5	10.0
18...	1630	49	440	13.0	11.0						
AUG , 1978											
02...	1335	121	338	24.5	19.0						
RAFT RIVER BASIN											
13077659 - RAFT RIVER NEAR YOST, UTAH (LAT 41 56 50 LONG 113 42 00)											
SEP , 1978											
20...	1100	4.4	764	4.0	7.0						
GOOSE CREEK BASIN											
13084400 - BIRCH CREEK AB FEEDER CANAL NR OAKLEY ID (LAT 42 10 40 LONG 113 49 18)											
MAY , 1978						SEP , 1978					
23...	1300	21	215	11.0	12.0	19...	0925	3.3	351	.0	6.0
SNAKE RIVER BASIN											
13084850 - F MAIN DRAIN NR RUPERT, IDAHO (LAT 42 42 14 LONG 113 41 27)											
JUN , 1978											
01...	1343	11	690	23.0	14.5						
13088000 - SNAKE RIVER AT MILNEP, IDAHO (LAT 42 31 41 LONG 114 01 04)											
NOV , 1977						FEB , 1978					
30...	1030	589	609	5.0	3.0	22...	1630	1840	567	1.0	1.5
DRY CREEK BASIN											
13088500 - BIG COTTONWOOD CREEK NEAR OAKLEY, IDAHO (LAT 42 16 50 LONG 114 02 10)											
SEP , 1978											
19...	1035	3.3	104	4.0	7.0						
ROCK CREEK BASIN											
13093095 - ROCK CREEK NR MOUTH NR TWIN FALLS IDAHO (LAT 42 37 25 LONG 114 31 58)											
NOV , 1977						MAY , 1978					
01...	1030	171	860	13.0	11.0	22...	1355	244	624	21.0	15.0
DEC						JUN					
15...	1145	143	766	9.0	10.5	26...	1000	232	723	16.0	13.5
JAN , 1978						AUG					
25...	1120	107	860	4.0	5.5	16...	1200	293	726	10.5	14.5
MAR						SEP					
05...	1030	101	756	8.0	9.0	21...	0930	368	627	6.5	10.5
APR											
20...	1100	176	522	17.0	12.0						

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)
SNAKE RIVER MAIN STEM											
13094000 - SNAKE RIVER NEAR BUHL, IDAHO (LAT 42 39 58 LONG 114 42 41)											
DEC , 1977						MAY , 1978					
14...	1415	2460	680	9.5	10.0	21...	1130	7040	562	24.0	14.0
MAR , 1978						AUG					
05...	1340	3940	650	14.0	9.0	18...	1500	2580	619	13.5	15.0
BOX CANYON SPRINGS BASIN											
13095500 - BOX CANYON SPR NR WENDELL ID (LAT 42 42 25 LONG 114 48 45)											
NOV , 1977						MAY , 1978					
02...	0830	390	400	7.0	14.5	21...	1500	357	413	28.5	15.0
DEC						AUG					
15...	0830	379	381	5.0	14.0	18...	1240	378	530	12.5	14.5
MAR , 1978											
06...	0900	368	333	6.0	14.0						
SALMON FALLS CREEK BASIN											
13104800 - SHOSHONE CREEK AT MOUTH NR SAN JACINTO NV (LAT 41 56 36 LONG 114 41 02)											
SEP , 1978											
23...	1120	17	284	9.0	13.0						
13106000 - SALMON RIVER CANAL CO CANAL NR ROGERSON IDAHO (LAT 42 13 10 LONG 114 44 20)											
MAY , 1978						AUG , 1978					
20...	1010	323	198	20.0	10.5	17...	1315	290	180	10.5	16.5
JUN											
25...	1215	405	181	20.0	14.0						
13106535 - SOLDIER CR NR ROGERSON ID (LAT 42 13 20 LONG 114 14 45)											
MAR , 1978											
04...	1715	3.3	129	3.5	5.0						
MUD LAKE-LOST RIVER BASINS											
13108200 - WEST CAMAS CREEK NR KILGORE, IDAHO (LAT 44 28 40 LONG 112 02 40)											
AUG , 1978											
22...	1420	7.0	137	19.0	12.5						
13112300 - REAVER CREEK AT HUMPHREY, IDAHO (LAT 44 28 40 LONG 112 13 30)											
AUG , 1978											
22...	1535	5.8	351	18.0	15.5						
13112900 - HUNTLEY CANYON AT SPENCER, IDAHO (LAT 44 21 50 LONG 112 11 00)											
AUG , 1978											
22...	1315	.40	244	20.5	12.5						
13116000 - MEDICINE LODGE CREEK AT ELLIS RANCH NR ANGORA ID (LAT 44 17 30 LONG 112 30 05)											
AUG , 1978											
22...	1454	50	415	25.0	14.0						
13117000 - BIRCH CREEK NEAR RENO, IDAHO (LAT 42 12 00 LONG 112 57 00)											
JUN , 1978											
07...	1120	63	--	21.0	--						
13117020 - BIRCH CREEK AT BLUF DOME INN NR RENO ID (LAT 44 09 14 LONG 112 54 24)											
OCT , 1977						MAY , 1978					
27...	1100	85	353	15.5	5.0	10...	1055	86	341	15.0	10.0
JAN , 1978						JUL					
17...	1410	86	315	1.0	6.0	18...	1250	59	350	22.0	13.5
MAR						AUG					
01...	1015	73	232	-8.0	.0	29...	1400	53	322	25.0	13.0
APR											
05...	1040	87	340	5.5	6.0						

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)
MUD LAKE-LOST RIVER BASINS--Continued											
13117030 - BIRCH CREEK AT EIGHT MILE CANYON RD NR RENO ID (LAT 44 04 49 LONG 112 52 30)											
OCT , 1977						JUN , 1978					
27...	1235	71	333	22.5	7.5	07...	0935	43	298	19.0	11.0
13119500 - BLAINE COUNTY INVESTMENT CO'S CANAL NR HOWE IDA (LAT 43 52 50 LONG 113 05 40)											
MAY , 1978						AUG , 1978					
08...	1600	70	300	17.0	11.0	09...	1230	15	311	31.0	14.5
JUN						SEP					
05...	1700	67	221	27.5	15.5	22...	1445	9.0	313	19.0	9.0
13119800 - N FK BIG LOST RIVER NR CHILLY, IDAHO (LAT 43 55 35 LONG 114 11 00)											
OCT , 1977											
01...	0900	14	182	2.5	2.5						
13120000 - N FK BIG LOST RIVER AT WILD HORSE NR CHILLY ID (LAT 43 55 59 LONG 114 06 47)											
OCT , 1977						JUN , 1978					
22...	1105	29	168	7.0	3.5	08...	1200	589	139	11.0	6.5
DEC						27...	1345	320	133	25.5	9.5
07...	1045	21	145	1.0	1.0	AUG					
JAN , 1978						08...	0920	99	176	19.0	9.0
18...	1245	17	310	2.0	.5	SEP					
MAR						20...	0930	80	177	.0	3.0
08...	1500	18	204	10.0	4.5						
13120240 - E F B LOST R AT ROSENKANCE RA NR CHILLY ID (LAT 43 53 45 LONG 113 59 00)											
OCT , 1977											
01...	1040	46	143	4.0	3.5						
13120500 - BIG LOST RIVER AT HOWELL RANCH NR CHILLY ID (LAT 43 59 54 LONG 114 01 12)											
OCT , 1977						AUG , 1978					
22...	1135	82	180	3.5	3.5	08...	1130	281	142	18.0	12.0
MAR , 1978						SEP					
08...	1605	83	166	6.0	4.0	20...	1200	266	161	5.0	3.0
JUN											
08...	1445	1760	110	12.5	10.0						
27...	0955	1080	93	15.5	5.5						
SNAKE RIVER MAIN STEM											
13135000 - SNAKE R BL LOWER SALMON FALLS NR HAGERMAN ID (LAT 42 50 55 LONG 114 54 02)											
DEC , 1977						JUN , 1978					
14...	1100	6560	535	8.0	11.0	12...	1305	5190	577	24.5	16.5
MAR , 1978						SEP					
17...	1500	7800	511	4.5	10.5	14...	1400	7960	531	22.0	17.0
BIG WOOD RIVER BASIN											
13141220 - MONUMENT GULCH NR FAIRFIELD ID (LAT 43 12 36 LONG 114 45 09)											
OCT , 1977						JAN , 1978					
13...	1220	.12	63	18.0	10.0	19...	1005	.38	57	1.5	2.5
NOV						FFH					
09...	1105	.13	67	4.0	.5	14...	1135	.57	60	1.0	4.0
DEC											
13...	1440	.31	63	.5	1.0						
13141230 - COW CREEK AB RESERVOIR NR HILL CITY ID (LAT 43 21 00 LONG 115 06 02)											
OCT , 1977						JAN , 1978					
12...	1220	.01	141	15.0	8.0	19...	1145	.67	84	.0	.5
NOV						FEB					
09...	1030	.04	100	-2.0	.0	14...	1020	<.01	--	--	--
DEC											
13...	1700	.32	89	.0	1.0						

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)
BIG WOOD RIVER BASIN--Continued											
13141250 - CHIMNEY CREEK NR CORRAL ID (LAT 43 23 17 LONG 114 59 59)											
OCT . 1977						JAN . 1978					
12...	1255	1.1	156	14.0	7.0	18...	1135	1.5	124	-2.5	.5
NOV						FEB					
10...	1405	1.2	158	12.0	4.0	14...	1550	1.7	144	2.0	3.0
DEC											
15...	1510	5.7	125	1.0	2.5						
13141270 - E FK CORRAL CREEK NR CORRAL ID (LAT 43 24 20 LONG 114 55 24)											
OCT . 1977						JAN . 1978					
12...	1400	.82	107	16.5	9.0	18...	1305	3.2	91	-.5	.0
NOV						FEB					
09...	1305	2.9	109	4.0	.0	14...	1650	2.4	98	1.0	1.0
DEC											
15...	1410	11	88	.0	1.5						
13141345 - SOLDIER CREEK AB FREE GOLD CR NR FAIRFIELD ID (LAT 43 27 52 LONG 114 48 16)											
OCT . 1977						JAN . 1978					
12...	1535	2.5	88	15.0	7.5	16...	1325	4.3	96	6.0	1.5
NOV						FEB					
09...	1410	2.4	92	3.0	1.5	16...	0940	3.4	84	-4.5	-.5
DEC											
15...	1145	29	87	4.5	.5						
13141360 - DAIRY CREEK NR CORRAL ID (LAT 43 15 10 LONG 114 57 26)											
OCT . 1977						DEC . 1977					
13...	1135	<.01	--	--	--	13...	1515	<.01	--	--	--
NOV											
09...	1145	<.01	--	--	--						
13141365 - MCKINNEY CREEK NR FAIRFIELD ID (LAT 43 10 37 LONG 114 45 09)											
OCT . 1977						DEC . 1977					
13...	1645	<.01	--	--	--	14...	1430	3.9	183	4.5	.5
NOV											
10...	1035	<.01	--	--	--						
13141445 - ELK CREEK NR FAIRFIELD ID (LAT 43 24 00 LONG 114 38 06)											
OCT . 1977						JAN . 1978					
12...	1700	.20	234	14.5	11.0	19...	1350	1.2	201	2.5	4.0
NOV						FEB					
09...	1535	.24	228	3.0	.0	15...	1030	1.4	178	-3.0	1.5
DEC											
14...	1430	3.9	183	4.5	.5						
13141475 - WILLOW CREEK NR FAIRFIELD ID (LAT 43 24 44 LONG 114 34 30)											
OCT . 1977						JAN . 1978					
13...	1005	1.6	225	10.0	5.0	17...	1535	7.2	190	2.5	4.0
NOV						FEB					
09...	1605	2.9	219	1.0	4.5	15...	1200	6.0	192	-2.5	2.0
DEC											
14...	1540	15	168	3.0	3.0						
13141600 - CAMP CREEK NR FAIRFIELD ID (LAT 43 22 46 LONG 114 30 54)											
OCT . 1977						JAN . 1978					
13...	0700	<.01	--	--	--	19...	1525	1.6	143	1.0	2.5
NOV						FEB					
09...	1730	.10	177	-3.0	4.5	15...	1320	1.9	145	-2.0	1.5
DEC											
14...	1650	5.7	144	2.5	2.0						

## WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)
BIG WOOD RIVER BASIN--Continued											
13142500 - BIG WOOD R BELOW MAGIC DAM NR RICHFIELD IDAHO (LAT 43 15 00 LONG 114 21 30)											
JAN , 1978						JUL , 1978					
31...	1600	1.9	317	-3.0	6.0	26...	1330	1029	272	31.0	17.0
APR						SEP					
29...	0920	13	197	4.0	9.5	13...	1520	378	214	14.0	16.5
JUN											
11...	0915	2420	234	11.0	11.0						
13145700 - SCHOOLER CREEK NEAR GOODING, IDAHO (LAT 43 11 30 LONG 114 39 25)											
APR , 1978											
30...	1515	1.1	91	15.0	20.5						
13147900 - LITTLE WOOD RIVER AB HI FIVE CREEK NR CAREY ID (LAT 43 29 30 LONG 114 03 30)											
NOV , 1977						APR , 1978					
09...	1045	19	277	-3.5	.5	26...	0945	813	177	1.5	5.5
DEC											
15...	0945	107	229	-.5	.5						
13153000 - KING HILL CANAL NR HAGERMAN, IDAHO (LAT 42 52 05 LONG 114 54 40)											
APR , 1978						JUL , 1978					
29...	1335	299	411	12.5	13.5	26...	0910	--	356	28.0	17.0
JUN											
12...	0930	297	331	19.0	14.5						
CLOVER CREEK BASIN											
13154000 - CLOVER CREEK NEAR BLISS, IDAHO (LAT 43 01 30 LONG 115 00 20)											
MAR , 1978						SEP , 1978					
16...	1515	62	174	12.0	11.5	18...	1235	3.5	338	5.0	11.0

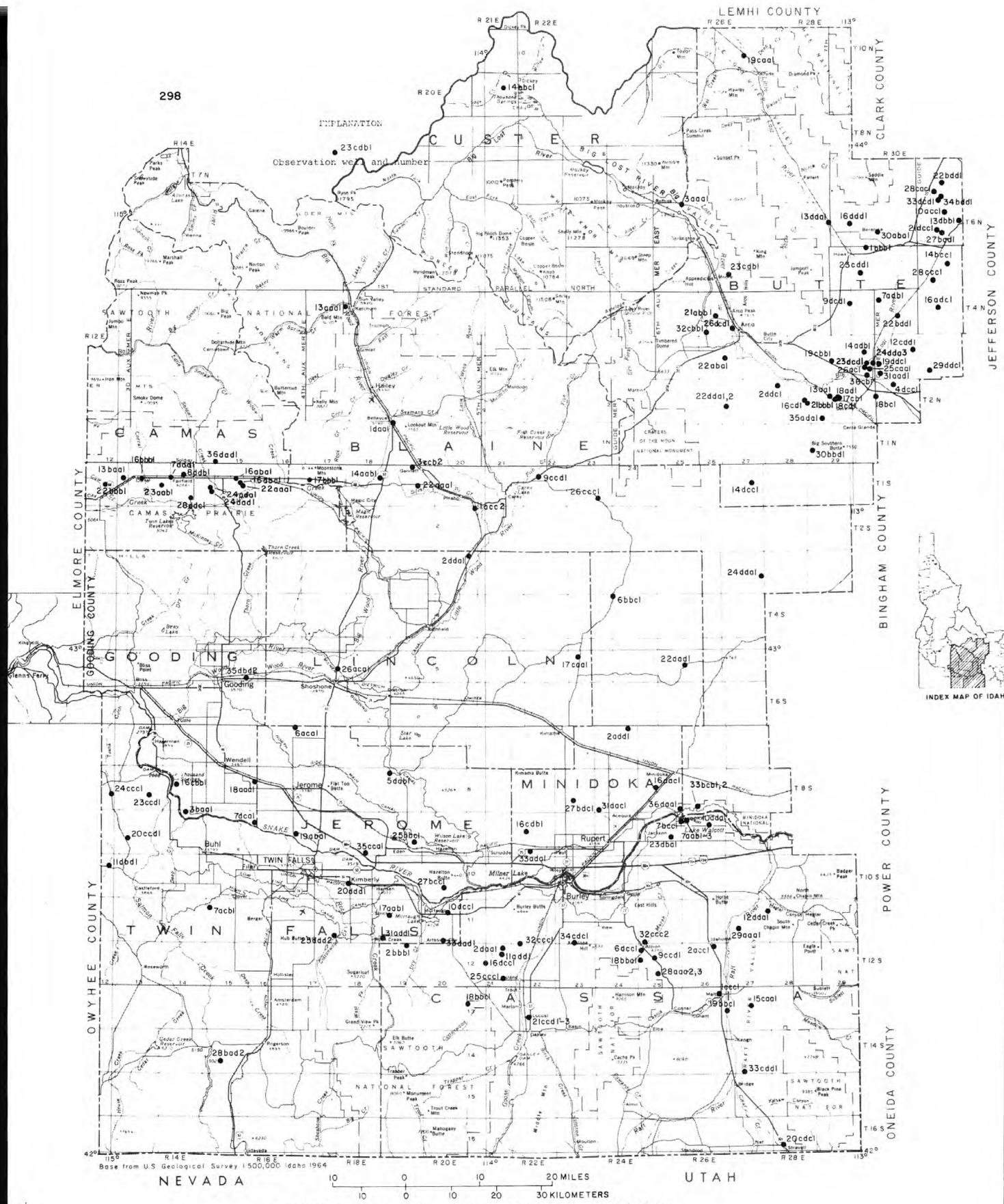
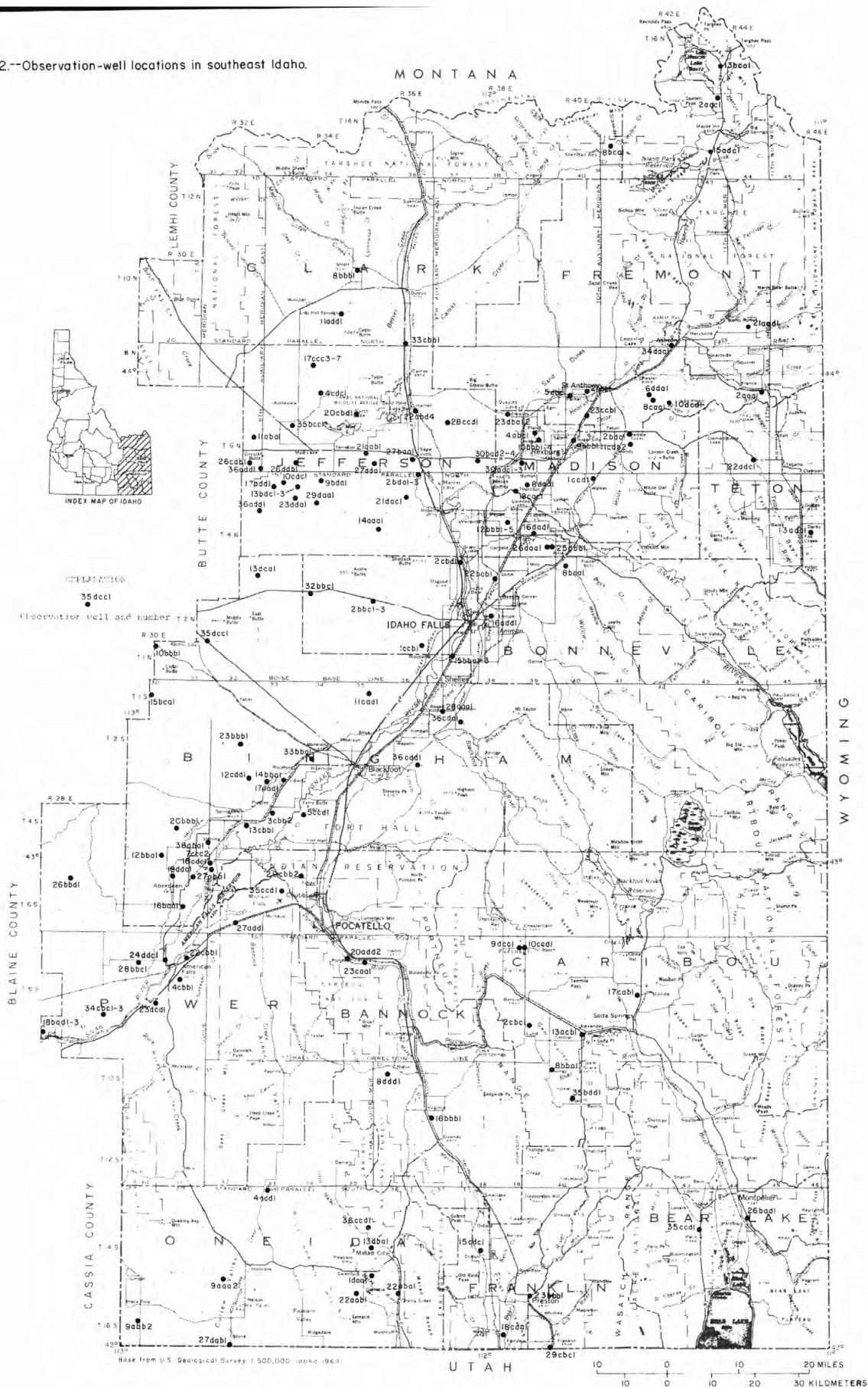


FIGURE 11.--Observation-well locations in south-central Idaho.

FIGURE 12.--Observation-well locations in southeast Idaho.



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## GROUND-WATER LEVELS

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## BANNOCK COUNTY

WELL 05S 34E 20C8R2

SITE NUMBER 425816112305102

FORMERLY SITE ID NO. 425818112305202. DRILLED DOMESTIC WATER-TABLE WELL IN SAND OF QUATERNARY AGE, DIAM 6 IN (15 CM), REPORTED DEPTH 154.7 FT (47.2 M), CASED TO 154.7 FT (47.2 M), OPEN END. LSD ABOUT 4,455 FT (1,358 M) NGVD OF 1929. MP NO. 1 TOP OF VENT HOLE IN WELL SEAL WEST SIDE, 0.60 FT (0.183 M) ABOVE LSD (SINCE SFPT. 15, 1964).

RECORDS AVAILABLE 1964 - 1971, 1973 - 1976, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 50.97 FEET BELOW LAND SURFACE DATUM SEP 17, 1976.

LOWEST WATER LEVEL 54.60 FEET BELOW LAND SURFACE DATUM JUL 14, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 12, 1976	52.06 S	MAY 26, 1977	52.21 S	SEP 14, 1977	52.22 S	APR 09, 1978	53.13 S
SEP 17	50.97 S	JUL 05	53.33 S	JAN 18, 1978	52.91 S	JUL 14	54.60 S
MAR 11, 1977	52.42 S	AUG 12	52.70 S	MAR 09	53.13 S	SEP 18	52.20 S

WELL 07S 35E 20A0D2

SITE NUMBER 42475311224901

DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 8 IN (20 CM), REPORTED DEPTH 110 FT (33.5 M), CASED TO 110 FT (33.5 M), PERFORATED 93-105 FT (28.4-32.0 M). LSD ABOUT 4,519 FT (1,377 M) NGVD OF 1929. MP NO. 2 TOP OF PIPE COUPLING IN WELL SEAL SOUTH SIDE, 1.08 FT (0.329 M) ABOVE LSD (SINCE JULY 11, 1978).

RECORDS AVAILABLE 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 34.00 FEET BELOW LAND SURFACE DATUM JUN 01, 1976.

LOWEST WATER LEVEL 55.82 FEET BELOW LAND SURFACE DATUM MAR 15, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 20, 1976	43.38 S	OCT 19, 1976	40.91 S	JUL 05, 1977	50.58 S	MAR 15, 1978	55.82 S
MAR 08	45.08 S	NOV 30	42.64 S	AUG 16	50.90 S	APR 25	54.94 S
APR 20	38.75 S	JAN 17, 1977	44.57 S	SEP 29	51.05 S	MAY 30	53.93 S
JUN 01	34.00 S	MAR 11	46.80 S	NOV 08	51.97 S	JUL 11	54.72 S
JUL 13	38.81 S	APR 19	48.42 S	DEC 19	53.39 S	AUG 25	55.61 N S
SEP 08	40.13 S	MAY 24	49.29 S	FEB 07, 1978	54.88 S		

WELL 07S 35E 23CAA1

SITE NUMBER 424748112195501

DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 6 IN (15 CM), REPORTED DEPTH 86 FT (26 M), CASING DEPTH NOT AVAILABLE. LSD ABOUT 4,504 FT (1,373 M) NGVD OF 1929. MP NO. 1 TOP OF HOLE IN WELL SEAL SOUTH SIDE, 0.43 FT (0.131 M) ABOVE LSD (SINCE NOV. 16, 1968).

RECORDS AVAILABLE 1968 TO CURRENT YEAR.

HIGHEST WATER LEVEL 14.54 FEET BELOW LAND SURFACE DATUM MAY 16, 1972.

LOWEST WATER LEVEL 45.01 FEET BELOW LAND SURFACE DATUM MAR 17, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 20, 1976	29.33 S	MAY 24, 1977	36.42 S	NOV 08, 1977	39.16 S	JUL 11, 1978	41.87 S
MAR 08	31.45 S	JUL 05	36.84 S	DEC 19	40.32 S	AUG 25	41.93 S
APR 20	21.33 S	AUG 10	35.69 S	FEB 07, 1978	42.11 S	SEP 25	42.76 S
JUN 01	16.29 S	16	36.06 S	MAR 15	43.52 S		
SEP 08	25.02 S	SEP 16	36.92 S	APR 25	42.51 S		
MAR 11, 1977	33.42 S	30	37.55 S	MAY 30	41.26 S		

See footnotes on p. 434.

WELL 10S 36E 080001

SITE NUMBER 423347112161001

DRILLED UNUSED WATER-TABLE WELL IN SALT LAKE FORMATION, DIAM 16 IN (41 CM), REPORTED DEPTH 216 FT (66 M), CASING TO 216 FT (66 M), PERFORATED 115-120 (35-37 M), 128-132 FT (39-40 M), 138-140 FT (42-43 M), 170-212 FT (52-65 M), LSD ABOUT 5,020 FT (1,530 M) NGVD OF 1929. MP NO. 2 HOLE IN CASING COVER SOUTHEAST SIDE, 1.50 FT (0.457 M) ABOVE LSD (SINCE DEC. 14, 1972).

RECORDS AVAILABLE 1968 TO CURRENT YEAR.

HIGHEST WATER LEVEL 62.78 FEET BELOW LAND SURFACE DATUM JUL 18, 1972.

LOWEST WATER LEVEL 71.20 FEET BELOW LAND SURFACE DATUM AUG 16, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 22, 1976	65.48	S	MAR 07, 1977	67.69	S	NOV 08, 1977	70.36	S	MAY 30, 1978	69.52	S
MAR 08	65.84	S	MAY 25	68.94	S	DEC 19	70.33	S	JUL 11	69.59	S
APR 22	65.11	S	JUL 05	70.20	S	FFB 07, 1978	70.12	S	AUG 24	70.03	S
JUN 01	67.16	S	AUG 16	71.20	S	MAR 15	70.24	S	SEP 25	69.89	S
SEP 08	68.27	S	SEP 29	70.70	S	APR 25	69.93	S			

WELL 11S 37E 168881

SITE NUMBER 422821112085701

DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 16 IN (41 CM), DEPTH 64.6 FT (19.7 M), CASING DEPTH NOT AVAILABLE. LSD ABOUT 4,842 FT (1,476 M) NGVD OF 1929. MP NO. 1 TOP OF CASING WEST SIDE, 0.60 FT (0.183 M) ABOVE LSD (SINCE OCT. 24, 1968).

RECORDS AVAILABLE 1968 TO CURRENT YEAR.

HIGHEST WATER LEVEL 10.12 FEET BELOW LAND SURFACE DATUM AUG 10, 1971.

LOWEST WATER LEVEL 14.82 FEET BELOW LAND SURFACE DATUM MAY 20, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 22, 1976	13.74	S	MAY 25, 1977	13.35	S	NOV 10, 1977	11.80	S	JUL 13, 1978	11.91	S
MAR 08	14.31	S	JUL 07	11.83	S	DEC 19	12.67	S	AUG 24	11.38	S
APR 22	13.08	S	AUG 11	11.78	S	FFB 10, 1978	13.35	S	SEP 28	11.63	S
JUN 01	13.75	S	18	11.65	S	MAR 22	13.85	S			
SEP 08	11.78	S	SEP 20	11.13	S	APR 28	14.25	S			
MAR 07, 1977	14.19	S	29	11.16	S	JUN 02	14.18	S			

WELL 13S 43E 35CCD1

SITE NUMBER 421433111235401

DRILLED UNUSED WATER-TABLE WELL IN SALT LAKE FORMATION, DIAM 10 IN (25 CM), REPORTED DEPTH 500 FT (152 M), CASING DEPTH NOT AVAILABLE, LSD ABOUT 5,950 FT (1,814 M) NGVD OF 1929, MP NO. 1 TOP OF 10-IN (25-CM) CASING WEST SIDE, 5.40 FT (1.646 M) BELOW LSD (SINCE SEPT. 18, 1967).

RECORDS AVAILABLE 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 12.78 FEET BELOW LAND SURFACE DATUM AUG 15, 1968.

LOWEST WATER LEVEL 19.88 FEET BELOW LAND SURFACE DATUM MAR 08, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 10, 1976	19.55	S	AUG 17, 1977	23.69	R S	DEC 21, 1977	18.04	S	MAY 31, 1978	16.99	S
SEP 09	15.90	S	SEP 20	18.12	S	FFB 08, 1978	19.09	S	JUL 12		P
MAR 08, 1977	19.88	S	29	18.35	S	MAR 17	18.94	S	AUG 23	16.47	S
AUG 16	22.06	R S	NOV 09	18.32	S	APR 26	14.50	S	SEP 26	17.29	S

WELL 13S 44E 26BAD1

SITE NUMBER 421606111164201

DRILLED IRRIGATION WATER-TABLE WELL IN SALT LAKE FORMATION, DIAM 14 IN (36 CM), REPORTED DEPTH 170 FT (52 M), CASING TO 170 FT (52 M), PERFORATED 20-170 FT (6-52 M), LSD ABOUT 5,970 FT (1,820 M) NGVD OF 1929, MP NO. 1 TOP OF HOLE IN PUMPBASE SOUTHEAST SIDE, 0.40 FT (0.123 M) ABOVE LSD (SINCE SEPT. 20, 1967).

RECORDS AVAILABLE 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 13.48 FEET BELOW LAND SURFACE DATUM JUL 12, 1978.

LOWEST WATER LEVEL 24.45 FEET BELOW LAND SURFACE DATUM APR 08, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 10, 1976	23.52	S	SEP 20, 1977	18.40	S	FFB 09, 1978	23.84	S	JUL 12, 1978	13.48	S
SEP 09	13.73	S	28	18.61	S	MAR 17	24.45	S	AUG 23	14.81	S
MAR 08, 1977	23.24	S	NOV 09	20.37	S	APR 26	23.70	S	SEP 26	16.60	S
AUG 12	20.06	S	DEC 21	21.72	S	MAY 31	22.30	S			

WELL 03N 32F 13DCA1

SITE NUMBER 433509112384801

DRILLED INDUSTRIAL WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 10 IN (25 CM), DEPTH 790 FT (241 M), CASING TO 790 (241 M), PERFORATED 680-730 FT (207-222 M), 737-787 FT (225-240 M), GRAVEL PACKED, CEMENTED BOTTOM, LSD 5,165.51 FT (1,574.447 M) NGVD OF 1929, BASED ON ELEVATION OF 1947 (PRELIMINARY), MP NO. 3 TOP OF 10-IN (25-CM) CASING SOUTHWEST SIDE, 0.16 FT (0.049 M) ABOVE LSD (SINCE AUG. 17, 1960).

RECORDS AVAILABLE 1958 TO CURRENT YEAR.

HIGHEST WATER LEVEL 672.06 FEET BELOW LAND SURFACE DATUM MAR 14, 1973.

LOWEST WATER LEVEL 679.29 FEET BELOW LAND SURFACE DATUM SEP 21, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 24, 1976	672.89 S	DEC 22, 1976	674.01 S	JUL 23, 1977	676.08 S	FEB 25, 1978	676.18 S
APR 22	673.06 S	JAN 21, 1977	673.60 S	AUG 27	676.86 S	MAR 29	676.57 S
MAY 22	673.63 S	FEB 25	673.74 S	SEP 14	676.91 S	APR 15	676.70 S
JUL 13	674.24 S	MAR 25	673.69 S	OCT 29	676.61 S	MAY 22	677.15 S
SEP 22	675.41 S	APR 16	673.99 S	NOV 25	676.49 S	JUL 19	678.52 S
OCT 22	674.93 S	MAY 24	674.53 S	DEC 27	676.11 S	AUG 25	679.21 S
NOV 22	674.49 S	JUN 27	675.39 S	JAN 31, 1978	675.93 S	SEP 21	679.29 S

WELL 02N 31F 35DCC1

SITE NUMBER 432701112471101

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 TO 5 IN (15 TO 13 CM), DEPTH 636 FT (194 M), 6-IN (15 CM) CASING 0-433 FT (0-132 M), 5-IN (13-CM) CASING 423-636 FT (129-194 M), PERFORATED 600-630 FT (183-192 M), LSD 5,023.58 FT (1,531.218 M) NGVD OF 1929, BASED ON ELEVATION OF 1947 (PRELIMINARY), RECORDER INSTALLED JAN. 3, 1950, RECORDER REMOVED MAR. 25, 1974, MP NO. 1 TOP OF CASING, 1.49 FT (0.454 M) ABOVE LSD (SINCE DEC. 5, 1949).

RECORDS AVAILABLE 1949, 1950 - 1956, 1957 - 1964, 1965 TO CURRENT YEAR.

HIGHEST WATER LEVEL 582.10 FEET BELOW LAND SURFACE DATUM NOV 12, 1951.

LOWEST WATER LEVEL 587.35 FEET BELOW LAND SURFACE DATUM AUG 25, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 21, 1976	584.07 S	OCT 22, 1976	584.09 S	JUN 21, 1977	585.24 S	FEB 21, 1978	586.23 S
MAR 24	583.71 S	NOV 22	584.10 S	JUL 23	585.61 S	MAR 28	586.44 S
APR 22	583.77 S	DEC 22	584.10 S	AUG 23	585.73 S	APR 20	586.32 S
MAY 22	583.90 S	JAN 20, 1977	584.27 S	SEP 26	585.71 S	MAY 22	586.49 S
JUN 24	583.89 S	FEB 21	583.96 S	OCT 25	585.69 S	JUN 28	586.74 S
JUL 23	584.46 S	MAR 22	584.44 S	NOV 22	585.56 S	JUL 18	587.02 S
AUG 30	584.71 S	APR 20	584.63 S	DEC 22	585.72 S	AUG 25	587.35 S
SEP 22	584.45 S	MAY 25	584.90 S	JAN 25, 1978	585.98 S	SEP 21	587.09 S

WELL 01N 30F 1088B1

SITE NUMBER 432620112561301

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 563.8 FT (171.8 M), CASING DEPTH NOT AVAILABLE. LSD 4,979.39 FT (1,517.718 M) NGVD OF 1929. ORIGINAL DEPTH 569 FT (173 M) FROM WSP 775. MP NO. 3 TOP OF PUMP COLUMN LINER NORTHEAST SIDE, 1.81 FT (0.552 M) ABOVE LSD (SINCE APR. 6, 1950).

RECORDS AVAILABLE 1922, 1949 - 1951, 1952 TO CURRENT YEAR.

HIGHEST WATER LEVEL 527.36 FEET BELOW LAND SURFACE DATUM APR 20, 1950.

LOWEST WATER LEVEL 553.12 FEET BELOW LAND SURFACE DATUM AUG 25, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 26, 1976	549.42	S	JAN 20, 1977	549.79	S	SEP 20, 1977	551.62	S	MAY 25, 1978	552.54	S
APR 15	549.16	S	FEB 22	549.85	S	OCT 25	551.56	S	JUN 28	552.83	S
MAY 25	549.62	S	MAR 22	550.18	S	NOV 22	551.50	S	JUL 18	553.06	S
JUL 23	550.30	S	APR 20	550.40	S	DEC 22	551.53	S	AUG 25	553.12	S
SEP 25	550.29	S	MAY 25	550.74	S	FEB 03, 1978	551.89	S	SEP 21	552.98	S
OCT 28	550.19	S	JUN 24	551.12	S	23	552.05	S			
NOV 24	549.72	S	JUL 25	551.55	S	APR 03	552.34	S			
DEC 23	549.51	S	AUG 23	551.59	S	20	552.22	S			

WELL 01S 30F 158CA1

SITE NUMBER 432019112565101

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 TO 5 IN (15 TO 13 CM), DEPTH 751.5 FT (229.0 M). 6-IN (15-CM) CASING 0-570 FT (0-174 M), 5-IN (13-CM) CASING 560-752 FT (171-229 M), LEAD SEAL AT 550 FT (168 M), LSD 5,133.08 FT (1,564.563 M) NGVD OF 1929, BASED ON ELEVATIONS OF 1949 (PRELIMINARY). RECORDER INSTALLED DEC. 14, 1951. RECORDER REMOVED AUG. 18, 1960. MP NO. 2 TOP OF 6 1/4-IN (16-CM) THREADED CASING, 1.36 FT (0.414 M) ABOVE LSD (SINCE JUNE 27, 1951).

RECORDS AVAILABLE 1951 - 1960, 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 709.80 FEET BELOW LAND SURFACE DATUM OCT 24, 1951.

LOWEST WATER LEVEL 715.15 FEET BELOW LAND SURFACE DATUM AUG 25, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 26, 1976	712.77	S	JAN 20, 1977	712.58	S	SEP 20, 1977	714.01	S	MAY 24, 1978	714.65	S
APR 15	712.29	S	FEB 22	712.74	S	OCT 25	713.74	S	JUN 28	714.88	S
MAY 25	712.40	S	MAR 22	712.92	S	NOV 22	713.74	S	JUL 18	715.14	S
JUL 23	713.04	S	APR 20	713.20	S	DEC 22	713.91	S	AUG 25	715.15	S
SEP 25	712.65	S	MAY 25	713.43	S	FFB 03, 1978	714.35	S	SEP 21	714.82	S
OCT 28	712.34	S	JUN 24	713.71	S	28	714.42	S			
NOV 24	712.30	S	JUL 25	714.16	S	APR 03	714.61	S			
DEC 23	712.35	S	AUG 23	714.12	S	20	714.53	S			

WELL 01S 35E 11CAD1

SITE NUMBER 432042112193201

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 18 IN (46 CM), REPORTED DEPTH 297 FT (90 M), CASED TO 15 FT (5 M), LSD ABOUT 4,662 FT (1,421 M) NGVD OF 1929. MP NO. 1 HOLE IN PUMPBASE EAST SIDE, 0.30 FT (0.091 M) ABOVE LSD (SINCE JUNE 20, 1957).

RECORDS AVAILABLE 1957, 1966 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 169.95 FEET BELOW LAND SURFACE DATUM SEP 25, 1972.

LOWEST WATER LEVEL 175.19 FEET BELOW LAND SURFACE DATUM JUN 19, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
APR 13, 1976	171.10	S	MAR 15, 1977	171.67	S	MAR 07, 1978	174.22	S	SEP 27, 1978		P
SEP 28	171.16	S	SEP 29	173.19	S	APR 12	174.70	S			

## RINGHAM COUNTY -- CONTINUED

WELL 01S 37E 28AAA1

SITE NUMBER 431840112071201

DRILLED UNUSED WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 62.2 FT (19.0 M), CASFD TO 62 FT (19.0 M). LSD ABOUT 4,600 FT (1,402 M) NGVD OF 1929. MP NO. 1 TOP OF CASING NORTH SIDE, 1.50 FT (0.457 M) BELOW LSD (SINCE SEPT. 18, 1957).

RECORDS AVAILABLE 1957 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 20.39 FEET BELOW LAND SURFACE DATUM SEP 23, 1970.

LOWEST WATER LEVEL 58.64 FEET BELOW LAND SURFACE DATUM MAY 17, 23, 1978

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 31, 1976	50.25	S	SEP 08, 1977	30.34	S	APR 03, 1978	55.29	S	JUN 21, 1978	47.70	S
SEP 17	25.44	S	15	30.32	S	MAY 08	58.16	S	26	45.97	S
MAR 10, 1977	49.80	S	OCT 20	30.35	S	16	57.90	S	JUL 06	43.30	S
MAY 30	50.47	S	NOV 28	36.80	S	17	58.64	S	14	41.44	S
JUL 06	38.29	S	JAN 13, 1978	45.50	S	23	58.64	S	AUG 11	31.08	S
AUG 04	32.69	S	FEB 23	51.20	S	31	58.61	S	SEP 27	32.02	S
09	31.05	S	MAR 07	52.63	S	JUN 14	51.96	S			

WELL 01S 37E 36CDA1

SITE NUMBER 431705112041301

DRILLED UNUSED WATER-TABLE WELL IN SALT LAKE FORMATION, DIAM 16 IN (41 CM), DEPTH 414.9 FT (126.5 M), CASFD 0-350 FT (0-107 M). LSD ABOUT 4,804 FT (1,464 M) NGVD OF 1929. MP NO. 1 TOP OF 16-IN (41-CM) CASING SOUTHWEST SIDE FLUSH WITH CONCRETE PLATFORM AT LSD (SINCE MAR. 28, 1958).

RECORDS AVAILABLE 1958 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 230.00 FEET BELOW LAND SURFACE DATUM SEP 25, 1972.

LOWEST WATER LEVEL 262.68 FEET BELOW LAND SURFACE DATUM SEP 17, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 31, 1976	244.40	S	AUG 09, 1977	246.62	S	NOV 28, 1977	238.10	S	MAY 16, 1978	253.01	S
SEP 28	234.38	S	15	242.56	S	JAN 13, 1978	242.68	S	JUN 26	257.36	S
MAR 10, 1977	244.26	S	SEP 09	238.99	S	FEB 23	246.62	S	JUL 11	255.53	S
MAY 30	257.91	S	15	237.98	S	MAR 07	247.95	S	AUG 11	250.55	S
JUL 06	252.24	S	OCT 20	236.68	S	APR 03	250.26	S	SEP 27	238.86	S

WELL 02S 32E 238BB1

SITE NUMBER 431422112411901

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 194.0 FT (59.1 M), CASFD 0-172 (0-52 M). LSD 4,583.32 FT (1,396.996 M) NGVD OF 1929. NOV. 2, 1971, WELL HAD FILLED IN TO A DEPTH OF 182.2 FT (55.5 M). RECORDER INSTALLED APR. 7, 1960. RECORDER REMOVED SEPT. 22, 1960. MP NO. 3 TOP OF CASING WEST SIDE, 2.00 FT (0.610 M) ABOVE LSD (SINCE APR. 7, 1960).

RECORDS AVAILABLE 1951 - 1959, 1960, 1961 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 162.75 FEET BELOW LAND SURFACE DATUM OCT 19, 1951.

LOWEST WATER LEVEL 168.78 FEET BELOW LAND SURFACE DATUM JUL 12, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 15, 1976	165.08	S	NOV 09, 1976	165.56	S	SEP 08, 1977	167.48	S	APR 05, 1978	168.22	S
APR 02	166.24	S	JAN 26, 1977	166.26	S	29	167.07	S	MAY 11	168.08	S
MAY 06	166.18	S	MAR 15	166.73	S	NOV 18	166.99	S	JUN 16	168.38	S
JUN 04	166.04	S	APR 22	167.14	S	DEC 15	167.23	S	JUL 12	168.78	S
JUL 09	166.70	S	MAY 30	167.01	S	JAN 19, 1978	167.67	S	AUG 08	168.69	S
AUG 05	166.88	S	JUL 11	167.76	S	FEB 09	167.77	S	SEP 13	167.94	S
SEP 17	165.84	S	AUG 09	167.70	S	MAR 07	168.15	S			

WELL 025 34E 33BBA1

SITE NUMBER 431242112292801

DRILLED STOCK WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 40 FT (12 M), CASIED TO 5 FT (1.5 M). LSD 4,456.89 FT (1,358.460 M) NGVD OF 1929. MP NO. 1 BOTTOM EDGE OF 1/4-IN (0.635-CM) HOLE IN PUMPBASE NORTHWEST SIDE, 1.50 FT (0.457 M) ABOVE LSD (SINCE MAY 23, 1952).

RECORDS AVAILABLE 1952 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 23.80 FEET BELOW LAND SURFACE DATUM AUG 30, 1952.

LOWEST WATER LEVEL 32.87 FEET BELOW LAND SURFACE DATUM APR 23, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 31, 1976	30.63	S	MAY 30, 1977	29.79	S	NOV 18, 1977	31.14	S	MAY 11, 1978	31.57	S
JUN 12	27.63	S	JUL 06	27.81	S	DEC 15	31.61	S	JUN 16	29.92	S
15	26.82	S	AUG 09	28.31	S	FEB 09, 1978	32.21	S	JUL 12	29.68	S
SEP 17	25.93	S	SEP 07	29.49	S	MAR 07	32.73	S	AUG 08	28.75	S
MAR 15, 1977	31.43	S	29	28.79	S	APR 05	32.75	S	SEP 13	28.84	S

WELL 025 36E 36CDD1

SITE NUMBER 43114811211801

DRILLED STOCK WATER-TABLE WELL IN SALT LAKE FORMATION, DIAM 6 IN (15 CM), DEPTH 98.0 FT (29.9 M), CASIED TO 97 FT (29.5 M). LSD ABOUT 4,636 FT (1,413 M) NGVD OF 1929. MP NO. 1 TOP OF CASING SOUTH SIDE, 2.00 FT (0.610 M) ABOVE LSD (SINCE APR.7, 1955).

RECORDS AVAILABLE 1955, 1958 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 74.57 FEET BELOW LAND SURFACE DATUM OCT 25, 1959.

LOWEST WATER LEVEL 77.45 FEET BELOW LAND SURFACE DATUM JUN 14, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 31, 1976	76.32	S	JUL 06, 1977	76.26	S	NOV 10, 1977	76.48	S	APR 21, 1978	76.93	S
SEP 17	75.74	S	AUG 10	76.10	S	FFB 08, 1978	76.49	S	JUL 11	76.75	S
MAR 10, 1977	76.37	S	SEP 08	76.17	S	MAR 07	76.78	S			

WELL 035 32E 12CDD1

SITE NUMBER 431028112394101

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 IN (20 CM), DEPTH 94.5 FT (28.80 M), CASING DEPTH NOT AVAILABLE. LSD ABOUT 4,497 FT (1,370.7 M) NGVD OF 1929. MP NO. 1 TOP OF 3/4-IN (1.9-CM) HOLE IN CASING WEST SIDE, AT LSD (SINCE OCT. 4, 1974).

RECORDS AVAILABLE 1974 TO CURRENT YEAR.

HIGHEST WATER LEVEL 71.48 FEET BELOW LAND SURFACE DATUM NOV 21, 1974.

LOWEST WATER LEVEL 73.30 FEET BELOW LAND SURFACE DATUM JUL 09, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAY 06, 1976	71.92	S	JUL 09, 1976	73.30	S					

WELL 03S 33E 14BBA1

SITE NUMBER 431006112340901

DRILLED DOMESTIC WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 44 FT (13 M), CASED TO 3 FT (1 M), LSD 4,461.55 FT (1,359.880 M) NGVD OF 1929, MP NO. 1 LOWER EDGE OF HOLE IN PUMP STAND NORTH SIDE, 1.60 FT (0.488 M) ABOVE LSD (SINCE MAY 23, 1952).

RECORDS AVAILABLE 1952 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 34.89 FEET BELOW LAND SURFACE DATUM AUG 30, 1952.

LOWEST WATER LEVEL 44.13 FEET BELOW LAND SURFACE DATUM APR 27, 1960.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
APR 02, 1976	40.18	S	JUL 11, 1977	40.06	S	JAN 19, 1978	41.46	S	JUL 12, 1978	41.10	S
JUN 12	39.78	S	AUG 09	40.11	S	FFB 09	41.51	S	AUG 08	40.86	S
15	39.62	S	SEP 08	40.35	S	MAR 07	42.46	S	SEP 13	40.26	S
SEP 17	38.38	S	29	38.41	S	APR 05	41.99	S			
MAR 15, 1977	40.74	S	NOV 18	40.62	S	MAY 11	41.11	S			
MAY 30	39.19	S	DEC 15	40.96	S	JUN 16	40.79	S			

WELL 03S 33E 17AAD1

SITE NUMBER 430955112365001

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 18 IN (46 CM), DEPTH 185 FT (56.4 M), CASING DEPTH NOT AVAILABLE, LSD 4,512.75 FT (1,375.486 M) NGVD OF 1929, MP NO. 2 TOP OF 18-IN (46-CM) CASING NORTH SIDE, 0.80 FT (0.244 M) ABOVE LSD (SINCE SEPT. 17, 1976).

RECORDS AVAILABLE 1951 - 1956, 1958 - 1969, 1972, 1974 TO CURRENT YEAR.

HIGHEST WATER LEVEL 89.57 FEET BELOW LAND SURFACE DATUM OCT 02, 1952.

LOWEST WATER LEVEL 96.05 FEET BELOW LAND SURFACE DATUM JUL 12, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
APR 02, 1976	93.70	S	AUG 09, 1977	94.47	S	FEB 09, 1978	95.14	S	JUL 12, 1978	96.05	S
SEP 17	92.83	S	SEP 08	94.47	S	MAR 07	95.60	S	AUG 08	95.49	S
MAR 15, 1977	94.36	S	29	94.09	S	APR 05	95.65	S	SEP 13	94.72	S
MAY 30	93.84	S	DEC 15	94.63	S	MAY 11	95.66	S			
JUL 11	94.92	S	JAN 19, 1978	95.13	S	JUN 16	95.60	S			

WELL 04S 31E 20HBB1

SITE NUMBER 430402112520301

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 16 IN (41 CM), REPORTED DEPTH 201 FT (61.3 M), CASED TO 5 FT (1.5 M), LSD 4,523.34 FT (1,378.714 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 3 TOP OF 3/4-IN (1.9-CM) HOLE IN PUMPBASE NORTH SIDE, 0.29 FT (0.088 M) ABOVE LSD (SINCE JAN. 19, 1978).

RECORDS AVAILABLE 1953, 1962 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 115.09 FEET BELOW LAND SURFACE DATUM OCT 02, 1953.

LOWEST WATER LEVEL 121.16 FEET BELOW LAND SURFACE DATUM SEP 13, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 31, 1976	117.75	S	JUL 11, 1977	123.95	P S	JAN 19, 1978	120.12	S	SEP 13, 1978	121.16	S
SEP 17	116.53	S	AUG 10	125.30	P S	MAR 08	120.36	S			
MAR 09, 1977	116.76	S	SEP 07	120.68	S	MAY 11		P			
MAY 30	120.90	S	NOV 11	119.33	S	JUL 12	120.34	S			

WELL 04S 31E 36AB1

SITE NUMBER 430216112464001

DRIVEN OBSERVATION WATER-TABLE WELL IN AMERICAN FALLS LAKE BEDS, DIAM 1 1/4 IN (3.2 CM), DEPTH 17.1 FT (5.2 M), CASED TO 17 FT (5.2 M), WELL POINT 15.9-18.4 FT (4.80-5.61 M). LSD 4,401.78 FT (1,341.662 M) NGVD OF 1929. MP NO. 1 TOP OF 1 1/4-IN (3.2-CM) CASING NORTH SIDE, 1.50 FT (0.457 M) ABOVE LSD (SINCE JULY 26, 1959).

RECORDS AVAILABLE 1959 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 0.26 FEET ABOVE LAND SURFACE DATUM SEP 19, 1973.

LOWEST WATER LEVEL -6.92 FEET BELOW LAND SURFACE DATUM APR 05, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 31, 1976	5.62 S	AUG 10, 1977	2.97 S	DEC 15, 1977	5.44 S	MAY 11, 1978	6.84 S
SEP 17	1.30 S	SEP 07	3.13 S	JAN 19, 1978	6.23 S	JUN 16	3.93 S
MAR 09, 1977	6.91 S	15	3.33 S	FEB 08	6.33 S	JUL 12	4.00 S
MAY 30	4.67 S	29	3.21 S	MAR 08	6.50 S	AUG 08	3.59 S
JUL 11	3.23 S	NOV 11	3.93 S	APR 05	6.92 S	SEP 13	2.92 S

WELL 04S 32E 13CB1

SITE NUMBER 420425112401101

DRILLED DOMESTIC AND STOCK WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), REPORTED DEPTH 60 FT (18.3 M), CASED TO 60 FT (18.3 M). LSD 4,410.86 FT (1,344.430 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1962. MP NO. 1 TOP OF INNER EDGE OF STEEL TIRE RIM SOUTHEAST SIDE, 0.10 FT (0.030 M) BELOW LSD (SINCE SEPT. 13, 1978).

RECORDS AVAILABLE 1961 - 1962, 1963 - 1969, 1972, 1974 TO CURRENT YEAR.

HIGHEST WATER LEVEL 11.49 FEET BELOW LAND SURFACE DATUM AUG 11, 1965.

LOWEST WATER LEVEL 18.24 FEET BELOW LAND SURFACE DATUM APR 05, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 31, 1976	17.28 S	AUG 09, 1977	15.36 S	JAN 19, 1978	17.68 S	JUN 16, 1978	16.59 S
SEP 17	13.74 S	SEP 07	15.28 S	FEB 09	17.77 S	JUL 12	17.41 S
MAR 12, 1977	17.73 S	29	16.14 S	MAR 08	18.08 S	AUG 08	16.92 S
MAY 30	15.72 S	NOV 18	17.06 S	APR 05	18.24 S	SEP 13	15.63 S
JUL 11	16.35 S	DEC 15	17.42 S	MAY 11	17.49 S		

WELL 045 33E 03CBB2

SITE NUMBER 430610112353301

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 53.3 FT (16.2 M), CASED TO 12 FT (3.6 M). LSD 4,447.94 FT (1,355.732 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED JULY 23, 1959. RECORDER REMOVED MAY 25, 1969. DIGITAL RECORDER INSTALLED JAN. 12, 1978. MP NO. 1 TOP OF CASING SOUTH SIDE, 1.10 FT (0.335 M) ABOVE LSD (SINCE MAR. 25, 1959).

RECORDS AVAILABLE 1959 - 1969, 1970 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 31.37 FEET BELOW LAND SURFACE DATUM AUG 19, 1969.

LOWEST WATER LEVEL 40.27 FEET BELOW LAND SURFACE DATUM JAN 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAR 31, 1976	37.84	S	JAN 25, 1978	39.16		APR 05, 1978	39.36		JUL 05, 1978	36.79
MAY 06	38.00	S	31	39.15		10	39.45		10	37.02
JUN 12	35.45	S	FEB 04	39.29		15	39.37		15	37.26
15	36.01	S	05	39.24		19	39.49		20	37.37
JUL 09	35.36	S	08	38.98		20	39.42		25	37.25
SEP 17	35.13	S	10	38.94		25	39.46		31	37.44
NOV 09	36.31	S	11	38.85		30	39.29		AUG 05	37.41
MAR 15, 1977	38.48	S	15	39.07		MAY 05	39.06		10	37.17
MAY 30	36.74	S	20	39.28		10	38.85		15	37.11
JUL 11	37.00	S	23	39.38		11	38.76		20	36.90
AUG 09	36.02	S	25	39.23		15	38.48		25	36.87
SEP 08	36.51	S	28	39.13		20	38.16		31	36.96
29	37.15	S	MAR 05	39.07		25	37.56		SEP 05	37.05
NOV 18	38.04	S	10	39.27		31	37.58		10	36.93
DEC 15	38.61	S	12	39.17		JUN 05	37.40		15	36.67
JAN 12, 1978	39.10	S	15	39.36		10	36.87		18	36.46
15	39.07		17	39.50		15	36.93		20	36.75
17	39.01		20	39.39		20	36.99		25	36.99
19	40.27		25	39.43		25	36.82		30	36.99
20	39.04		31	39.37		30	36.70			

WELL 045 34E 05CCD1

SITE NUMBER 430547112304101

DRILLED OBSERVATION WATER-TABLE WELL IN GRAVEL OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 31.0 FT (9.4 M). CASED TO 31 FT (9.4 M), OPEN FND. LSD 4,405.19 FT (1,342.702 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 2 TOP OF CASING COUPLING, 2.20 FT (0.67 M) ABOVE LSD (SINCE MAR. 22, 1955).

RECORDS AVAILABLE 1955 - 1968, 1969 - 1971, 1974 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.77 FEET BELOW LAND SURFACE DATUM MAY 21, 1957.

LOWEST WATER LEVEL 5.28 FEET BELOW LAND SURFACE DATUM JUL 21, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 31, 1976	4.02	S	MAR 10, 1977	3.80	S	NOV 10, 1977	4.07	S	MAR 08, 1978	4.21	S
JUN 12	4.14	S	JUL 13	5.18	S	DEC 15	3.84	S	APR 05	4.35	S
15	4.30	S	AUG 12	4.98	S	JAN 18, 1978	3.54	S	MAY 09	4.39	N S
SEP 28	4.25	S	SEP 14	4.60	S	FEB 08	3.60	S			

WELL 05S 30E 1288A1

SITE NUMBER 430030112541301

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 12 IN (30 CM), REPORTED DEPTH 200 FT (61.0 M), CASIED TO 6 FT (1.8 M), LSD 4,501.51 FT (1,372.060 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 3 BOTTOM EDGE OF PUMPHASE NORTHWEST SIVE, 0.43 FT (0.131 M) ABOVE LSD (SINCE MAY 24, 1968).

RECORDS AVAILABLE 1951 - 1956, 1958 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 104.22 FEET BELOW LAND SURFACE DATUM AUG 29, 1951.

LOWEST WATER LEVEL 111.17 FEET BELOW LAND SURFACE DATUM SEP 13, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 31, 1976	107.79	S	MAR 09, 1977	108.28	S	MAR 10, 1978	110.15	S
SEP 17		P	SEP 29	110.52	S	SEP 13	111.17	S

WELL 05S 31E 190DC1

SITE NUMBER 425803112521301

DRILLED DOMESTIC AND STOCK WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 61.3 FT (18.7 M), CASIED TO 70 FT (21.3 M), OPEN END, LSD 4,427.04 FT (1,349.361 M) NGVD OF 1929, ORIGINAL REPORTED DEPTH 70 FT (21.3 M), MEASUREMENTS PRIOR TO 1952 MADE BY ABERDEEN-SPRINGFIELD CANAL CO, MP NO. 4 TOP OF 3/8-IN (0.32-CM) COUPLING IN WOODEN COVER NORTH SIVE, 0.30 FT (0.091 M) ABOVE LSD (SINCE AUG. 22, 1964).

RECORDS AVAILABLE 1944 - 1947, 1952 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 37.69 FEET BELOW LAND SURFACE DATUM AUG 30, 1952.

LOWEST WATER LEVEL 46.32 FEET BELOW LAND SURFACE DATUM AUG 08, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 31, 1976	42.23	S	JUL 11, 1977	44.91	S	NOV 11, 1977	44.88	S
SEP 17	43.70	S	AUG 10	45.60	S	FEB 08, 1978	44.28	S
MAR 09, 1977	42.85	S	SEP 07	45.78	S	APR 05	44.25	S
MAY 30	42.66	S	29	45.45	S	MAY 11	44.39	S
						JUN 16, 1978	44.43	S
						JUL 12	45.75	S
						AUG 08	46.32	S
						SEP 12	45.42	S

WELL 055 31E 27ABA1

SITE NUMBER 425757112485201

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 16 TO 12 IN (41 TO 30 CM), DEPTH 48.9 FT (14.9 M), CASSED TO 16 FT (4.9 M), LSD 4,399.83 FT (1,341.068 M) NGVD OF 1929. MEASUREMENTS PRIOR TO 1952 MADE BY ABERDEEN-SPRINGFIELD CANAL CO. RECORDER INSTALLED JULY 16, 1952. RECORDER CHANGED TO DIGITAL MAY 30, 1973. MP NO. 2 TOP INSIDE EDGE OF CASING, 0.50 FT (0.152 M) ABOVE LSD (SINCE MAY 24, 1952).

RECORDS AVAILABLE 1945 - 1947, 1948 - 1949, 1952 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.97 FEET BELOW LAND SURFACE DATUM AUG 16, 1968.

LOWEST WATER LEVEL 25.84 FEET BELOW LAND SURFACE DATUM APR 28, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	19.94	OCT 31, 1976	16.24	JUL 20, 1977	15.76	MAR 10, 1978	22.46
10	20.51	NOV 05	16.89	25	15.38	12	22.29
15	20.79	09	16.98	31	15.15	15	22.74
20	21.12	10	17.07	AUG 05	14.99	20	22.68
25	21.22	15	17.54	07	14.74	25	22.86
31	21.67	20	17.93	10	14.89	31	22.77
FEB 05	21.74	25	18.01	15	15.15	APR 05	22.98
10	22.06	30	18.68	20	15.53	06	22.80
15	22.11	DEC 05	19.00	25	15.34	10	23.10
20	22.49	10	19.47	31	15.20	15	23.09
25	22.59	15	19.79	SEP 05	15.01	20	23.10
29	22.37	20	20.07	10	15.55	25	23.28
MAR 05	22.65	25	20.38	13	15.95	30	23.28
10	22.51	31	20.57	15	15.80	MAY 05	23.31
12	22.74	JAN 01, 1977	20.56	20	15.39	08	23.48
15	22.66	05	20.82	25	15.08	10	23.28
20	22.48	10	21.24	29	15.20	15	22.98
25	22.25	15	21.55	30	15.51	20	22.88
31	22.41	20	21.84	OCT 01	15.52	25	22.44
APR 05	22.20	24	22.13	05	15.67	31	21.86
10	22.47	25	22.12	10	16.51	JUN 05	20.92
15	22.24	26	22.08	15	16.84	10	20.11
20	22.69	MAR 09	23.30	20	17.38	15	19.76
25	22.76	10	23.52	25	17.70	20	18.74
30	23.13	15	23.59	31	17.86	25	18.38
MAY 05	22.91	20	23.61	NOV 05	17.98	30	18.40
10	23.10	25	23.43	10	18.63	JUL 05	18.24
12	23.23	31	23.52	11	18.48	10	17.24
JUN 04	21.31	APR 05	23.78	15	18.69	15	16.99
JUL 09	17.65	10	23.79	20	19.10	18	17.02
AUG 05	14.91	15	23.93	23	19.31	20	16.74
25	14.46	20	24.01	JAN 20, 1978	21.82	25	16.10
31	14.70	22	24.13	25	21.93	31	15.85
SEP 05	13.73	MAY 26	21.10	31	21.90	AUG 05	14.81
06	13.57	31	20.96	FEB 04	22.24	10	14.96
10	13.86	JUN 05	20.62	05	21.97	15	14.83
15	13.96	10	19.94	07	21.60	20	14.72
20	14.39	15	19.28	10	21.90	25	14.89
25	14.41	20	18.48	11	21.85	31	14.51
30	14.42	25	18.10	15	22.17	SEP 05	14.43
OCT 05	14.55	30	17.83	20	22.43	07	14.29
10	14.88	JUL 05	17.74	25	22.29	10	14.49
15	15.18	10	17.74	28	22.29	15	14.60
20	15.67	12	17.71	MAR 05	22.29	16	14.47
25	15.92	13	17.73	07	22.64	19	15.07

WELL 055 32E 07CCC2

SITE NUMBER 425940112461302

DRIVEN OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF AMERICAN FALLS LAKE BEDS, DIAM 1 1/4 IN (3.2 CM), DEPTH 15.4 FT (4.7 M), CASIED TO 15.4 FT (4.7 M), WELL POINT 12.3-14.8 FT (0.7-4.5 M), LSD 4,374.6R FT (1,333.402 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1962, MP NO. 1 TOP OF 1 1/4-IN (3.2-CM) PIPE WEST SIDE, 3.00 FT (0.914 M) ABOVE LSD (SINCE JULY 21, 1959).

RECORDS AVAILABLE 1959 - 1969, 1974 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.37 FEET BELOW LAND SURFACE DATUM APR 23, 1964.

LOWEST WATER LEVEL 7.62 FEET BELOW LAND SURFACE DATUM JUL 22, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 02, 1976	2.07 S	MAY 30, 1977	2.96 S	SEP 07, 1977	4.24 S	MAR 09, 1978	2.09 S
SEP 17	2.45 S	JUL 13	4.58 S	NOV 11	2.24 S	MAY 11	3.14 S
MAR 09, 1977	2.47 S	AUG 10	4.45 S	JAN 19, 1978	1.38 S	JUL 12	3.87 S

WELL 055 32E 18CDC1

SITE NUMBER 425849112454801

DRILLED DOMESTIC AND STOCK ARTESIAN WELL IN GRAVEL OF QUATERNARY AGE, DIAM 8 IN (20 CM), REPORTED DEPTH 240 FT (73.2 M), CASIED TO 240 FT (73.2 M), LSD 4,373.82 FT (1,333.140 M) NGVD OF 1929, MP NO. 1 TOP OF 6-IN (15-CM) COUPLING ON DISCHARGE PIPE 22.00 FT (6.706 M) EAST OF WELL, 3.00 FT (0.914 M) ABOVE LSD (SINCE OCT. 15, 1961).

RECORDS AVAILABLE 1961 - 1968, 1969 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 16.11 FEET ABOVE LAND SURFACE DATUM MAR 23, 1972.

LOWEST WATER LEVEL 2.24 FEET ABOVE LAND SURFACE DATUM AUG 08, 1978.

WATER LEVELS IN FEET ABOVE LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 02, 1976	10.25 E M	MAR 12, 1977	8.25 E Z	NOV 18, 1977	4.72 E Z	APR 05, 1978	8.36 E M
JUN 04	9.01 E M	JUL 11	3.46 E Z	DEC 15	4.30 E M	MAY 11	10.27 E M
JUL 09	5.74 E M	AUG 11	3.80 E Z	JAN 19, 1978	6.44 E Z	JUN 16	6.90 E M
SEP 17	5.31 E M	SEP 09	3.72 E Z	FEB 08	6.91 E Z	AUG 08	2.24 S
NOV 09	6.38 E Z	29	4.60 E Z	MAR 09	7.54 E Z	SEP 18	4.17 E M

WELL 065 31E 16BAA1

SITE NUMBER 425427112503801

DRILLED IRRIGATION WATER-TABLE WELL, IN UNKNOWN AQUIFER, DIAM 12 IN (30 CM), DEPTH 134 FT (40.8 M), CASING DEPTH NOT AVAILABLE, LSD 4,392.21 FT (1,338.746 M) NGVD OF 1929, MEASUREMENTS PRIOR TO 1952 MADE BY ABERDEEN-SPRINGFIELD CANAL CO, RECORDER INSTALLED OCT. 4, 1952, RECORDER REMOVED MAY 18, 1955, MP NO. 3 TOP OF 7/8-IN (2.2-CM) HOLE INNORTHWEST CORNER OF STEEL PUMPBASE, 0.25 FT (0.076 M) ABOVE LSD (SINCE JUNE 24, 1958).

RECORDS AVAILABLE 1944 - 1949, 1952 - 1955, 1956 - 1968, 1969 - 1972, 1974 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.90 FEET BELOW LAND SURFACE DATUM AUG 28, 1944.

LOWEST WATER LEVEL 17.46 FEET BELOW LAND SURFACE DATUM MAR 09, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 31, 1976	16.17 S	SEP 07, 1977	15.69 S	MAR 09, 1978	17.46 S	SEP 13, 1978	15.32 S
SEP 17	15.09 S	NOV 11	16.39 S	MAY 11	17.38 S		
MAR 09, 1977	16.98 S	JAN 19, 1978	17.33 S	JUL 12			

WELL 01N 18E 01DAA1

SITE NUMBER 432657114144801

DRILLED OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 84.8 FT (25.8 M), CASED TO 85 FT (26 M), PERFORATED 78-84 FT (23.8-25.6 M). LSD 5,136.59 FT (1,565.633 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED JULY 22, 1954. RECORDER REMOVED OCT. 4, 1955. RECORDER INSTALLED MAY 21, 1975. RECORDER REMOVED DEC. 10, 1976. RECORDER INSTALLED AUG. 24, 1978. MP NO. 1 TOP OF CASING WEST SIDE, 0.90 FT (0.274 M) ABOVE LSD (SINCE JULY 22, 1954).

RECORDS AVAILABLE 1954 - 1955, 1956 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 33.05 FEET BELOW LAND SURFACE DATUM JUN 26, 1975.

LOWEST WATER LEVEL 50.23 FEET BELOW LAND SURFACE DATUM MAR 27, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 25, 1976	47.92 S	NOV 18, 1977	46.31 S	AUG 25, 1978	40.79	SEP 21, 1978	42.59
SEP 27	41.89 S	JAN 28, 1978	48.90 S	31	41.09	25	42.86
MAR 12, 1977	48.35 S	MAR 30	48.49 S	SEP 05	41.50	30	43.09
MAY 20	45.61 S	MAY 22	43.20 S	10	41.69		
JUL 17	41.22 S	JUL 13	37.57 S	15	42.60		
SEP 18	45.09 S	AUG 24	40.74 S	20	42.50		

WELL 01S 17E 17B8B1

SITE NUMBER 432028114282401

DRILLED UNUSED WATER-TABLE WELL IN BRUNEAU FORMATION, DIAM 18 IN (46 CM), REPORTED DEPTH 154 FT (46.9 M), CASED TO 28 FT (8.5 M). LSD ABOUT 4,938 FT (1,505 M) NGVD OF 1929. MP NO. 1 TOP OF 18-IN (46-CM) CASING SOUTH SIDE, 0.50 FT (0.152 M) ABOVE LSD (SINCE MAR. 11, 1977).

RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 35.56 FEET BELOW LAND SURFACE DATUM MAR 11, 1977.

LOWEST WATER LEVEL 40.04 FEET BELOW LAND SURFACE DATUM MAR 16, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 11, 1977	35.56 S	SEP 09, 1977	38.26 S	JAN 16, 1978	39.39 S	JUL 13, 1978	38.28 S
APR 15	36.00 S	20	38.32 S	FEB 13	39.56 S	AUG 14	38.56 S
MAY 10	36.20 S	29	38.39 S	MAR 16	40.04 S	SEP 21	38.99 S
JUN 16	36.90 S	OCT 14	38.81 S	APR 17	38.83 S		
JUL 12	37.27 S	NOV 10	39.12 S	MAY 22	38.27 S		
AUG 16	37.89 S	DEC 14	39.30 S	JUN 12	38.22 S		

WELL 01S 18E 14AAB1

SITE NUMBER 432042114163801

DRILLED IRRIGATION ARTESIAN WELL IN GRAVEL OF QUATERNARY AGE, DIAM 6 IN (15 CM), REPORTED DEPTH 120 FT (37 M), CASING DEPTH NOT AVAILABLE. LSD 4,903.22 FT (1,494.502 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 1 TOP OF CONCRETE ON SOUTH SIDE OF STILLING POOL, 1.00 FT (0.305 M) ABOVE LSD (SINCE JULY 12, 1954).

RECORDS AVAILABLE 1954 - 1957, 1958 - 1968, 1969 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 46.47 FEET ABOVE LAND SURFACE DATUM JUN 27, 1958.

LOWEST WATER LEVEL 18.57 FEET ABOVE LAND SURFACE DATUM MAY 20, 1961.

WATER LEVELS IN FEET ABOVE LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 24, 1976	29.84 E M	OCT 08, 1976	35.10 E M	JUN 22, 1977	18.89 E M	OCT 18, 1977	19.31 E M
FEB 23	27.20 E M	NOV 08	34.26 E M	JUL 06	19.39 E M	NOV 18	21.07 E M
MAR 22	28.36 E M	18	34.26 E M	17	17.64 E M	25	20.07 E M
APR 26	27.36 E M	MAR 13, 1977	28.22 E M	20	16.72 E M	JAN 09, 1978	17.99 E M
MAY 25	27.46 E M	APR 08	20.86 E M	AUG 17	15.72 E M	28	21.80 E M
JUN 21	30.11 E M	MAY 05	16.76 E M	24	13.34 E M	MAR 30	20.51 E M
AUG 13	27.41 E M	16	19.08 E M	SEP 07	12.69 E M	MAY 22	23.65 E M
SEP 09	32.75 E M	24	17.52 E M	12	14.96 E M	JUL 13	33.82 E M
27	34.77 E M	JUN 08	14.86 E M	19	13.54 E M		

WELL 01S 19E 03CCB2

SITE NUMBER 432143114114301

DRILLED OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 51.1 FT (15.6 M), CASED TO 51 FT (15.5 M), PERFORATED 25-35 FT (7.6-10.7 M). LSD 4,933.70 FT (1,503.792 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. WATER LEVEL INFLUENCED BY NEARBY WELL BEING PUMPED. RECORDER INSTALLED JULY 29, 1954. MP NO. 2 TOP OF CASING EAST SIDE, 1.50 FT (0.457 M) ABOVE LSD (SINCE JUNE 9, 1964).

RECORDS AVAILABLE 1954 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.55 FEET BELOW LAND SURFACE DATUM AUG 12, 1965.

LOWEST WATER LEVEL 22.26 FEET BELOW LAND SURFACE DATUM MAR 20, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 01, 1976	14.41	SEP 15, 1976	8.60	MAY 31, 1977	21.41	FEB 10, 1978	22.02
05	14.75	20	8.42	JUN 05	21.18	15	22.03
10	15.06	25	7.96	10	20.27	20	22.06
15	15.35	28	7.85	15	18.56	25	22.10
20	15.65	30	7.90	20	17.67	28	22.12
25	15.91	OCT 05	8.06	30	17.56	MAR 05	22.16
31	16.25	10	8.35	JUL 05	18.08	10	22.20
FEB 05	16.52	15	8.59	10	18.44	15	22.22
10	16.77	20	8.72	15	18.84	20	22.26
15	17.01	25	8.78	20	19.22	25	22.05
20	17.24	31	8.96	25	19.63	30	21.27
25	17.46	NOV 05	9.41	31	19.94	APR 05	21.10
29	17.63	10	9.62	AUG 05	20.31	10	21.08
MAR 05	17.81	15	9.91	10	20.51	15	21.07
10	18.00	20	10.21	17	20.77	20	21.07
15	18.21	25	10.55	20	20.27	25	21.06
20	18.39	30	11.44	25	20.56	30	20.98
25	18.61	DEC 05	12.30	31	20.71	MAY 05	20.69
31	18.78	10	12.95	SEP 05	20.98	10	20.35
APR 05	18.34	15	13.54	10	21.32	15	20.22
10	17.35	20	14.07	15	21.48	20	19.06
15	17.58	25	14.54	20	21.58	22	18.67
20	17.86	31	15.02	25	21.63	25	17.46
25	18.08	JAN 05, 1977	15.39	30	21.67	31	15.65
30	18.18	10	15.69	OCT 05	21.68	JUN 05	14.62
MAY 05	18.26	15	16.00	08	21.79	10	13.42
10	18.52	20	16.28	10	21.74	15	12.55
15	18.02	25	16.51	15	21.66	20	11.40
20	16.62	31	16.79	20	21.60	25	11.37
25	15.00	FEB 05	17.00	25	21.49	30	9.58
31	12.93	10	17.20	31	21.31	JUL 05	7.91
JUN 05	11.69	15	17.38	NOV 05	21.13	09	7.83
10	10.25	20	17.53	10	20.99	10	7.85
15	7.64	25	17.66	15	20.86	15	8.92
20	8.31	28	17.73	20	20.83	20	8.44
25	6.89	MAR 05	17.89	20	20.82	25	8.73
30	6.83	10	17.98	25	20.89	31	8.80
JUL 05	6.35	15	18.10	30	21.01	AUG 05	7.78
07	6.07	20	18.26	DEC 05	21.15	10	8.99
10	6.90	25	18.40	10	21.28	15	9.12
15	7.75	31	18.63	15	21.29	20	9.42
20	7.52	APR 05	18.81	20	21.23	25	8.95
25	8.34	10	19.00	25	21.41	31	9.38
31	7.66	15	19.14	31	21.60	SEP 05	9.74
AUG 05	8.30	20	19.97	JAN 05, 1978	21.70	10	8.94
10	9.05	25	20.46	10	21.80	15	8.99
15	9.37	30	20.97	15	21.89	20	9.38
20	8.40	MAY 05	21.37	20	21.92	25	9.84
25	8.38	10	20.99	25	21.96	30	10.29
31	8.59	15	21.67	28	21.98		
SEP 05	8.77	20	21.79	31	21.99		
10	9.05	25	21.24	FEB 05	22.02		

WELL 01S 19E 22AAA1

SITE NUMBER 431944114103501

DRILLED OBSERVATION ARTESIAN WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 6 IN (15 CM), REPORTED DEPTH 150 FT (46 M), CASIED TO 116 FT (35 M) PERFORATED, INTERVAL NOT AVAILABLE. LSD 4,885.39 FT (1,489.067 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 2 TOP OF CASING CAP, 1.00 FT (0.305 M) ABOVE LSD (SINCE MAY 26, 1964).

RECORDS AVAILABLE 1954 - 1968, 1969 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 11.18 FEET ABOVE LAND SURFACE DATUM SEP 22, 1975.

LOWEST WATER LEVEL 2.80 FEET ABOVE LAND SURFACE DATUM JUL 17, 1977.

WATER LEVELS IN FEET ABOVE LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 25, 1976	5.72 E M	MAY 20, 1977	4.69 E M	NOV 18, 1977	5.48 E M	MAY 21, 1978	4.70 M
SEP 27	7.33 E M	JUL 17	2.80 S	JAN 28, 1978	4.51 E M	JUL 13	5.94 M
MAR 12, 1977	6.58 E M	SEP 18	2.44 E M	MAR 30	6.31 E M	SEP 21	8.77 M

WELL 01S 22E 09CCD1

SITE NUMBER 432046113512501

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 98.1 FT (29.9 M), CASIED TO 21 FT (6.4 M), LSD NOT AVAILABLE. MP NO. 2 TOP OF CASING, 1.50 FT (0.457 M) ABOVE LSD (SINCE FEB. 19, 1962).

RECORDS AVAILABLE 1960 - 1968, 1969 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 45.00 FEET BELOW LAND SURFACE DATUM MAY 25, 1965.

LOWEST WATER LEVEL 77.28 FEET BELOW LAND SURFACE DATUM JAN 24, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 26, 1976	72.96 S	MAY 20, 1977	77.16 S	NOV 18, 1977	66.41 S	MAY 21, 1978	60.27 S
SEP 27	65.44 S	JUL 17	75.54 S	JAN 27, 1978	72.90 S	JUL 13	61.65 S
MAR 15, 1977	76.97 S	SEP 18	65.54 S	MAR 30	66.49 S	SEP 20	65.89 S

WELL 01S 23E 26CCC1

SITE NUMBER 431803113433001

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 4 IN (10 CM), REPORTED DEPTH 1,030.7 FT (314.2 M), CASIED TO 1,030.7 FT (314.2 M), PERFORATED 1,000.7-1,025.7 FT (305.0-312.6 M), LSD NOT AVAILABLE. MP NO. 2 TOP OF 2-IN (5-CM) PIPE COUPLING SOUTHWEST SIDE, 2.12 FT (0.645 M) ABOVE LSD (SINCE SEPT. 19, 1972).

RECORDS AVAILABLE 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 946.97 FEET BELOW LAND SURFACE DATUM FEB 27, 1974.

LOWEST WATER LEVEL 953.60 FEET BELOW LAND SURFACE DATUM SEP 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 17, 1976	947.91 S	JAN 20, 1977	948.92 S	OCT 12, 1977	951.22 S	JUN 12, 1978	951.77 S
MAR 26	947.60 S	MAR 15	948.81 S	NOV 18	951.38 S	JUL 13	952.36 S
MAY 06	947.32 S	MAY 20	948.78 S	DEC 15	951.20 S	AUG 15	952.98 S
JUN 23	947.48 S	JUN 22	949.07 S	FEB 02, 1978	951.70 S	SEP 27	953.60 S
JUL 15	947.78 S	JUL 17	949.55 S	MAR 30	951.27 S		
SEP 27	949.03 S	AUG 17	950.30 S	APR 17	951.60 S		
NOV 19	949.23 S	SEP 18	951.04 S	MAY 21	950.51 V		

WELL 025 20E 01ACC2

SITE NUMBER 431642114013002

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 10 IN (25 CM), DEPTH 208.6 FT (63.6 M), CASIED TO 208 FT (63 M), PERFORATED 185-194 FT (56.4-59.1 M), 197-206 FT (60.0-62.8 M). LSD 4,790.07 FT (1,460.013 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED AUG. 17, 1955. RECORDER REMOVED AUG. 20, 1971. MP NO. 1 TOP OF CASING NORTHEAST SIDE, 1.20 FT (0.366 M) ABOVE LSD (SINCE OCT. 18, 1954).

RECORDS AVAILABLE 1954, 1955 - 1971, 1972 - 1974, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 125.04 FEET BELOW LAND SURFACE DATUM SEP 25, 1965.

LOWEST WATER LEVEL 152.54 FEET BELOW LAND SURFACE DATUM FEB 26, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 25, 1976	151.35	S	MAY 27, 1976	149.30	S	SEP 18, 1977	147.49	S	MAY 21, 1978	149.32	S
FEB 26	152.54	S	JUN 22	146.20	S	NOV 18	147.44	S	JUL 13	145.32	S
MAR 25	152.42	S	SEP 27	140.14	S	DEC 22	149.81	S	SEP 20	138.91	S
30	152.31	S	MAR 12, 1977	151.11	S	JAN 28, 1978	151.26	S			
APR 28	147.13	S	JUL 17	148.49	S	MAR 30	145.28	S			

WELL 03S 27E 24DDA1

SITE NUMBER 430836113143401

FORMERLY SITE ID NO. 430833113143601. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 4 IN (10 CM), DEPTH 900.7 FT (274.5 M), CASIED TO 900.7 FT (274.5 M), PERFORATED 849-898 FT (258.8-273.7 M). LSD 4,982.10 FT (1,518.544 M) NGVD OF 1929. MP NO. 1 TOP OF 2-IN (5-CM) PIPE COUPLING, 2.35 FT (0.716 M) ABOVE LSD (SINCE JULY 9, 1971).

RECORDS AVAILABLE 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 847.50 FEET BELOW LAND SURFACE DATUM JUL 15, 1976.

LOWEST WATER LEVEL 852.23 FEET BELOW LAND SURFACE DATUM SEP 20, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAY 03, 1976	847.60	S	JAN 19, 1977	848.17	S	SEP 17, 1977	849.72	S	MAY 20, 1978	850.61	S
JUL 15	847.50	S	MAR 14	848.50	S	NOV 17	850.14	S	JUL 12	851.16	S
SEP 25	848.40	S	MAY 19	848.36	S	FEB 02, 1978	850.53	S	SEP 20	852.23	S
NOV 18	848.63	S	JUL 27	848.82	S	MAR 28	850.63	S			

WELL 08S 26E 33BCB1

SITE NUMBER 424112113255401

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 TO 6 IN (20 TO 15 CM), REPORTED DEPTH 242 FT (73.8 M), 8-IN (20-CM) CASING 0-146 FT (0-44.5 M), 6-IN (15-CM) CASING 142-242 FT (43.3-73.8 M), PERFORATED 212-242 FT (64.6-73.8 M). LSD 4,212.73 FT (1,284.040 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. ALL MEASUREMENTS PRIOR TO MAR. 21, 1972, MADE BY US BUREAU OF RECLAMATION. RECORDER INSTALLED SEPT. 25, 1951. RECORDER REMOVED BY US BUREAU OF RECLAMATION AUG. 9, 1972. MP NO. 2 TOP OF HOLE IN CENTER OF CASING COVER EAST SIDE, 1.03 FT (0.314 M) ABOVE LSD (SINCE JULY 23, 1975).

RECORDS AVAILABLE 1951 - 1972, 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 97.07 FEET BELOW LAND SURFACE DATUM SEP 10, 1952.

LOWEST WATER LEVEL 109.18 FEET BELOW LAND SURFACE DATUM MAR 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 15, 1976	105.60	S	MAR 10, 1977	107.39	S	NOV 16, 1977	107.90	S	JUL 11, 1978	108.72	S
FEB 26	106.02	S	12	106.97	S	JAN 25, 1978	108.48	S	SEP 14	108.29	S
MAR 25	106.18	S	MAY 18	107.29	S	MAR 09	109.02	S			
MAY 05	105.84	S	JUL 15	107.36	S	27	109.18	S			
SEP 24	105.22	S	SEP 16	107.78	S	MAY 20	108.90	S			

WELL 08S 26E 33BCB2

SITE NUMBER 424112113255402

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 18 IN (46 CM), REPORTED DEPTH 33.0 FT (10.1 M), CASIED TO 1 FT (0.3 M), CONCRETE SEAL. LSD 4,212.73 FT (1,284.040 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MEASUREMENTS PRIOR TO MAR. 21, 1972, MADE BY US BUREAU OF RECLAMATION. MP NO. 2 TOP OF HOLE IN 18-INCH (46-CM) CASING COVER SOUTH SIDE, 0.50 FT (0.152 M) ABOVE LSD (SINCE JULY 23, 1975).

RECORDS AVAILABLE 1951 - 1957, 1958 - 1972, 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 21.03 FEET BELOW LAND SURFACE DATUM OCT 28, 1953.

LOWEST WATER LEVEL 26.58 FEET BELOW LAND SURFACE DATUM MAR 10, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 15, 1976	24.47	S	SEP 24, 1976	21.49	S	JUL 15, 1977	22.04	S
FEB 26	24.01	S	MAR 10, 1977	26.58	S	SEP 16	26.34	S
MAR 25	22.42	S	12	24.16	S	NOV 16	23.13	S
MAY 05	21.52	S	MAY 18	22.33	S	JAN 25, 1978	23.89	S
						MAR 27, 1978	23.81	S
						MAY 20	21.86	S
						JUL 11	21.68	S
						SEP 14	21.48	S

WELL 04N 17E 13AAB1

SITE NUMBER 434108114221001

DRILLED INDUSTRIAL WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 12 TO 10 IN (30 TO 25 CM), DEPTH 187 FT (57.0 M), 12-IN (30-CM) CASING 0-32 FT (0-9.8 M), 10-IN (25-CM) CASING 0-54 FT (0-16.5 M), LSD 5,813.08 FT (1,771.827 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED APR. 4, 1977. MP NO. 1 TOP OF 10-IN (25-CM) CASING SOUTH SIDE, 1.97 FT (0.600 M) ABOVE LSD (SINCE APR. 4, 1977).

RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 13.74 FEET BELOW LAND SURFACE DATUM APR 02, 1978.

LOWEST WATER LEVEL 17.26 FEET BELOW LAND SURFACE DATUM NOV 22, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
APR 04, 1977	16.75	S	AUG 31, 1977	15.63	S	JAN 15, 1978	16.91	
10	16.74		SEP 05	16.13		20	16.96	
15	16.81		10	16.19		25	17.06	
20	16.84		15	16.51		31	17.07	
22	16.88		20	16.53		FEB 05	17.08	
25	16.84		25	16.54		10	17.11	
30	16.76		30	16.60		15	17.16	
MAY 04	16.80		OCT 05	16.70		18	17.21	
05	16.78		10	16.80		20	17.17	
10	16.61		15	16.85		25	17.12	
15	16.43		20	16.92		28	17.09	
20	16.42		25	16.97		MAR 05	17.13	
31	16.02	S	31	16.96		10	16.97	
JUN 08	15.14	S	NOV 05	16.99		15	16.92	
22	15.57	S	10	17.06		20	16.59	
29	15.73	S	15	16.90		25	15.83	
30	15.78		22	17.26		30	14.62	
JUL 06	15.27	S	25	17.07		31	14.31	
20	15.84	S	30	16.76		APR 02	13.74	
AUG 02	15.75	S	DEC 05	16.73		05	14.07	
05	15.78		10	16.98		10	14.39	
10	15.55		15	16.73		15	14.07	
15	15.82		20	16.87		20	14.31	
20	15.99		25	16.89		25	14.86	
24	16.16		31	17.01		29	14.61	
25	16.04		JAN 05, 1978	16.87		MAY 05	14.55	
30	15.64		10	16.95		10	14.95	
						MAY 15, 1978	14.61	
						20	14.58	
						25	14.43	
						30	14.69	
						31	14.71	
						JUN 05	14.72	
						10	13.94	
						15	13.99	
						20	14.06	
						25	14.05	
						30	14.24	
						JUL 05	14.29	
						10	14.41	
						14	14.57	
						26	14.91	S
						AUG 23	15.57	S
						25	15.57	
						31	15.64	
						SEP 05	15.56	
						06	15.03	
						10	15.54	
						15	15.93	
						20	16.18	
						21	16.20	
						25	16.28	
						30	16.34	

RONNEVILLE COUNTY

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WELL 03N 34E 328BC1

SITE NUMBER 433307112300001

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 IN (20 CM), DEPTH 786.0 FT (239.6 M), CASED TO 786 FT (239.6 M). PERFORATED 741-786 FT (225.9-239.6 M), GRAVEL PACKED BACKFILL AROUND CASING. LSD 5,216.55 FT (1,590.004 M) NGVD OF 1929. JULY 26, 1957, WELL HAD FILLED IN TO A DEPTH OF 20.6 FT (219.6 M). MAY 27, 1964, WELL WAS CLEANED TO A DEPTH OF 786.0 FT (239.6 M), MP NO. 3 TOP OF 8-IN (20-CM) CASING NORTHEAST SIDE, 1.46 FT (0.445 M) ABOVE LSD (SINCE MAY 27, 1964).

RECORDS AVAILABLE 1950 - 1951, 1952 - 1964, 1965 TO CURRENT YEAR.

HIGHEST WATER LEVEL 716.67 FEET BELOW LAND SURFACE DATUM JAN 17, 1973.

LOWEST WATER LEVEL 724.76 FEET BELOW LAND SURFACE DATUM AUG 25, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 24, 1976	717.72 S	JAN 21, 1977	718.32 S	SEP 14, 1977	722.18 S	MAY 22, 1978	722.69 S
APR 22	718.22 S	FEB 25	718.57 S	OCT 29	721.42 S	JUN 30	723.80 S
MAY 22	718.81 S	APR 01	718.77 S	NOV 25	721.12 S	JUL 19	724.49 S
JUN 16	719.24 S	25	719.44 S	DEC 29	720.84 S	AUG 25	724.76 S
SEP 13	720.47 S	MAY 24	719.98 S	FEB 01, 1978	721.08 S	SEP 21	724.35 S
OCT 22	719.49 S	JUN 27	721.11 S	25	721.33 S		
NOV 22	718.89 S	JUL 23	721.95 S	MAR 29	721.86 S		
DEC 22	718.47 S	AUG 27	722.38 S	APR 28	722.32 S		

WELL 03N 37E 02CBD1

SITE NUMBER 433656112043901

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 20 TO 18 IN (51 TO 46 CM), REPORTED DEPTH 508 FT (155 M), 20-IN (51-CM) CASING 0-18 FT (0-5.5 M), 18-IN (46-CM) CASING 217-270 FT (66-82 M), LSD 4,815.97 FT (1,467.907 M) NGVD OF 1929. MP NO. 1 TOP OF CASING, 0.50 FT (0.152 M) ABOVE LSD (SINCE MAY 20, 1957).

RECORDS AVAILABLE 1957 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 145.47 FEET BELOW LAND SURFACE DATUM SEP 17, 1973.

LOWEST WATER LEVEL 176.90 FEET BELOW LAND SURFACE DATUM MAY 20, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 10, 1976	169.97 S	SEP 09, 1976	147.96 S	SEP 15, 1977	153.28 S	MAR 06, 1978	173.07 S
JUN 08	165.73 S	MAR 15, 1977	170.66 S	OCT 14	154.60 S	APR 18	175.62 S
09	164.44 S	JUL 25	156.62 S	26	155.30 S	JUN 19	166.60 S
12	163.41 S	26	156.51 S	DEC 28	164.80 S	JUL 21	157.39 S
15	163.20 S	SEP 09	153.41 S	FEB 23, 1978	172.55 S	SEP 19	147.48 S

WELL 03N 38E 228AB1

SITE NUMBER 433457111583701

DRILLED DOMESTIC WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 IN (20 CM), REPORTED DEPTH 155 FT (47.2 M), CASED TO 66 FT (20.1 M). LSD ABOUT 4,790 FT (1,459.992 M) NGVD OF 1929. MP NO. 1 TOP OF 3/4-IN (1.9-CM) HOLE IN WELL SEAL SOUTH SIDE, 1.90 FT (0.579 M) ABOVE LSD (SINCE SEPT. 19, 1973).

RECORDS AVAILABLE 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 89.52 FEET BELOW LAND SURFACE DATUM SEP 19, 1973.

LOWEST WATER LEVEL 129.01 FEET BELOW LAND SURFACE DATUM MAY 22, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 18, 1976	119.25 S	NOV 18, 1976	102.18 S	JUL 21, 1977	108.08 S	MAR 06, 1978	122.20 S
MAR 16	122.22 R S	DEC 23	110.29 S	SEP 09	99.73 S	APR 10	126.12 S
JUN 02	128.24 P S	JAN 31, 1977	117.25 S	OCT 14	102.37 S	MAY 22	129.01 S
13	121.11 S	MAR 15	122.08 S	NOV 28	111.55 S	AUG 14	92.64 S
JUL 13	104.85 S	APR 27	125.90 S	JAN 16, 1978	119.22 S	SEP 30	92.38 S
SEP 30	90.95 S	JUN 13	118.69 S	FEB 17	122.54 S		

WFL 03N 40E 08BAA1

SITE NUMBER 433638111462901

DRILLED UNUSED WATER-TABLE WELL IN SALT LAKE FORMATION, DIAM 18 TO 8 IN (46 TO 20 CM), DEPTH 425.0 FT (129.5 M), 18-IN (16-CM) CASING 0-380 FT (0-116 M), 8-IN (20-CM) CASING 380-435 FT (116-133 M), LSD 5,042.60 FT (1,536.984 M) NGVD OF 1929, MP NO. 3 TOP OF 3/4-IN (1.9-CM) HOLE IN WELL SEAL SOUTH SIDE OF CAP, 2.53 FT (0.771 M) ABOVE LSD (SINCE OCT. 27, 1969).

RECORDS AVAILABLE 1957 - 1966, 1967 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 125.12 FEET BELOW LAND SURFACE DATUM OCT 08, 1974.

LOWEST WATER LEVEL 184.29 FEET BELOW LAND SURFACE DATUM APR 27, 1960.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 06, 1976	150.23	S	JUN 09, 1977	165.28	S	OCT 04, 1977	135.50	S
FFR 18	162.77	S	JUL 12	153.31	S	NOV 23	147.07	S
MAY 20	179.13	S	21	143.02	S	JAN 09, 1978	161.85	S
SEP 29	127.90	S	SEP 09	133.97	S	FFR 21	172.49	S
MAR 12, 1977	169.29	S	13	133.45	S	MAR 06	174.92	S
						APR 05, 1978	179.90	S
						MAY 22	183.30	S
						AUG 14	129.66	S
						SEP 30	133.47	S

WFL 02N 35E 02B8C1

SITE NUMBER 433218112191601

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 10 IN (25 CM), DEPTH 682.5 FT (208.0 M), CASING TO 104 FT (33 M), LSD 5,089.83 FT (1,551.380 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, JULY 1969 WELL WAS DEEPENED TO A DEPTH OF 1,302.0 FT (396.8 M), CONCRETE SEAL 800-843 FT (244-269 M), GRAVEL PACKED 651-800 FT (198-244 M), 3/4-IN (1.9-CM) PIEZOMETER 0-651 FT (0-198 M), PERFORATED 643.5-648.5 FT (196.1-197.7 M), MP NO. 2 TOP OF 10-IN (25-CM) CASING NORTHWEST SIDE, 1.18 FT (0.360 M) ABOVE LSD (SINCE JULY 26, 1957).

RECORDS AVAILABLE 1950 - 1953, 1954 - 1959, 1960 - 1962, 1963 TO CURRENT YEAR.

HIGHEST WATER LEVEL 573.37 FEET BELOW LAND SURFACE DATUM DEC 28, 1974.

LOWEST WATER LEVEL 585.39 FEET BELOW LAND SURFACE DATUM JUL 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FFR 24, 1976	574.92	S	JAN 21, 1977	575.25	S	SEP 28, 1977	580.32	S
APR 22	576.27	S	FEB 25	575.95	S	OCT 29	579.11	S
MAY 22	577.09	S	APR 01	576.62	S	NOV 25	578.49	S
JUL 26	580.57	S	25	577.65	S	DEC 29	578.26	S
SEP 22	578.20	S	MAY 24	578.62	S	FFR 01, 1978	578.87	S
OCT 22	576.47	S	JUN 27	581.05	S	25	579.39	S
NOV 22	575.55	S	JUL 23	582.48	S	MAR 29	580.37	S
DEC 22	575.16	S	AUG 27	581.65	S	APR 28	581.14	S
						MAY 22, 1978	581.74	S
						JUL 01	584.35	S
						19	585.39	S
						AUG 25	584.74	S
						SEP 21	582.82	S

WFL 02N 35E 02B8C2

SITE NUMBER 433218112191602

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DEPTH 982 FT (299 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-982 FT (0-299 M), PERFORATED 909.5-914.5 FT (277.2-278.7 M), GRAVEL PACKED, CONCRETE SEAL, LSD 5,089.83 FT (1,551.380 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 2 TOP OF 10-IN (25-CM) CASING NORTHWEST SIDE, 1.18 FT (0.360 M) ABOVE LSD (SINCE JULY 23, 1969).

RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 573.26 FEET BELOW LAND SURFACE DATUM NOV 24, 1973.

LOWEST WATER LEVEL 584.13 FEET BELOW LAND SURFACE DATUM JUL 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 24, 1976	575.07	S	JAN 21, 1977	575.31	S	SEP 28, 1977	579.49	S
APR 22	576.26	S	FEB 25	576.11	S	OCT 29	578.46	S
MAY 22	577.20	S	APR 01	576.77	S	NOV 25	578.09	S
JUL 26	579.45	S	25	577.83	S	DEC 29	578.12	S
SEP 22	577.47	S	MAY 24	578.69	S	FEB 01, 1978	578.82	S
OCT 22	575.88	S	JUN 27	580.34	S	25	579.42	S
NOV 22	575.21	S	JUL 23	581.18	S	MAR 29	580.32	S
DEC 22	575.03	S	AUG 27	580.69	S	APR 28	581.11	S
						MAY 22, 1978	581.70	S
						JUL 01	583.50	S
						19	584.13	S
						AUG 25	583.38	S
						SEP 21	581.83	S

WELL 02N 35E 02RBC3

SITE NUMBER 433218112191603

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DEPTH 1,147 FT (350 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-1,147 FT (0-350 M), PERFORATED 1,117.5-1,122.5 FT (340.6-342.1 M), GRAVEL PACKED, CONCRETE SEAL, LSD 5,089.83 FT (1,551.380 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 2 TOP OF 10-IN (25-CM) CASING NORTHWEST SIDE, 1.18 FT (0.360 M) ABOVE LSD (SINCE JULY 23, 1969).

RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 573.51 FEET BELOW LAND SURFACE DATUM JAN 17, 1973.

LOWEST WATER LEVEL 584.26 FEET BELOW LAND SURFACE DATUM JUL 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 24, 1976	575.24	S	JAN 21, 1977	575.51	S	SEP 28, 1977	579.58	S	MAY 22, 1978	581.84	S
APR 22	576.47	S	FEB 25	576.30	S	OCT 29	578.65	S	JUL 01	583.63	S
MAY 22	577.35	S	APR 01	576.99	S	NOV 25	578.33	S	19	584.26	S
JUL 26	579.58	S	25	577.93	S	DEC 29	578.30	S	AUG 25	583.52	S
SEP 22	577.67	S	MAY 24	578.90	S	FEB 01, 1978	578.98	S	SEP 21	582.04	S
OCT 22	576.08	S	JUN 27	580.48	S	25	579.56	S			
NOV 22	575.46	S	JUL 23	581.32	S	MAR 29	580.51	S			
DEC 22	575.25	S	AUG 27	580.81	S	APR 28	581.28	S			

WELL 02N 38E 16ADD1

SITE NUMBER 433029111590201

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 4 IN (10 CM), DEPTH 225.0 FT (68.6 M), 6-IN (15-CM) CASING 0-36 FT (0-11 M), 4-IN (10-CM) CASING 0-185 FT (0-56 M), LSD ABOUT 4,738 FT (1,444 M) NGVD OF 1929, MP NO. 1 TOP OF 6-IN (15-CM) CASING NORTH SIDE, 0.70 FT (0.213 M) ABOVE LSD (SINCE FEB. 9, 1970).

RECORDS AVAILABLE 1970 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 95.88 FEET BELOW LAND SURFACE DATUM AUG 14, 1978.

LOWEST WATER LEVEL 129.11 FEET BELOW LAND SURFACE DATUM MAY 22, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 16, 1976	117.63	S	JUL 26, 1977	100.10	S	NOV 28, 1977	106.49	S	MAY 22, 1978	129.11	S
SEP 30	98.19	S	SEP 13	100.42	S	JAN 16, 1978	113.93	S	AUG 14	95.88	S
MAR 15, 1977	118.08	S	15	99.61	S	FEB 17	118.10	S	SEP 30	99.11	S
JUN 09	112.70	S	OCT 05	100.28	S	MAR 06	120.08	S			
JUL 21	101.65	S	14	102.09	S	APR 18	124.74	S			

WELL 01N 36E 01CCB1

SITE NUMBER 432633112105301

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 16 IN (41 CM), DEPTH 217.0 FT (66.1 M), CASED TO 185 FT (56 M), PERFORATED 150-182 FT (46-55 M), LSD 4,674.05 FT (1,424.650 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, RECORDER INSTALLED APR. 6, 1960, RECORDER REMOVED NOV. 11, 1971, MP NO. 4 TOP OF 16-IN (41-CM) CASING NORTHEAST SIDE, 1.40 FT (0.427 M) ABOVE LSD (SINCE JUNE 15, 1964).

RECORDS AVAILABLE 1958, 1960 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 142.95 FEET BELOW LAND SURFACE DATUM OCT 16, 1971.

LOWEST WATER LEVEL 158.00 FEET BELOW LAND SURFACE DATUM MAY 25, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 16, 1976	150.86	S	DEC 29, 1976	147.38	S	AUG 03, 1977	152.54	S	MAR 07, 1978	155.38	S
JUN 12	152.31	S	MAR 15, 1977	151.73	S	SEP 23	150.26	S	APR 18	157.14	S
JUL 23	151.23	S	MAY 03	154.13	S	OCT 14	149.70	S	MAY 25	158.00	S
SEP 28	145.73	S	JUN 08	154.47	S	NOV 30	150.18	S	AUG 14	154.40	S
NOV 19	145.96	S	JUL 20	153.20	S	FEB 17, 1978	154.43	S	SEP 28	150.58	S

WELL 01N 37E 1588A1

SITE NUMBER 432528112055701

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, REPORTED DEPTH 140 FT (42.7 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-118 FT (0-36.0 M), PERFORATED 111-116 FT (33.8-35.4 M), GRAVEL PACKED 0-140 FT (0-42.7 M), CONCRETE SEAL 140-167 FT (42.7-50.9 M), LSD 4,645.70 FT (1,416.009 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1962, MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE NORTH SIDE, 0.88 FT (0.268 M) ABOVE LSD (SINCE SEPT. 20, 1973).

RECORDS AVAILABLE 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 83.15 FEET BELOW LAND SURFACE DATUM SEP 20, 1973.

LOWEST WATER LEVEL 108.30 FEET BELOW LAND SURFACE DATUM APR 12, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 07, 1976	94.53	S	JUN 17, 1976	101.41	S	JAN 31, 1977	98.67	S	JAN 16, 1978	101.08	S
FEB 19	99.06	S	20	100.93	S	MAR 17	102.77	S	FEB 17	103.37	S
MAR 15	101.60	S	JUL 23	94.12	S	APR 25	106.00	S	MAR 07	105.99	S
MAY 19	104.34	S	26	93.39	S	JUN 08	103.27	S	APR 12	108.30	S
JUN 08	101.87	S	AUG 16	89.52	S	JUL 20	96.51	S	MAY 25	109.60	S
10	102.01	S	SEP 30	86.48	S	SEP 23	91.45	S	AUG 14	93.87	S
12	102.02	S	NOV 10	89.78	S	OCT 14	91.95	S	SEP 28	90.54	S
15	101.88	S	DEC 29	95.06	S	NOV 28	95.52	S			

WELL 01N 37E 1588A2

SITE NUMBER 432528112055702

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, REPORTED DEPTH 255 FT (77.7 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-187.8 FT (0-57.2 M), PERFORATED 180.8-185.8 FT (55.1-56.6 M), GRAVEL PACKED 167-255 FT (50.9-77.7 M), CONCRETE SEAL 140-167 FT (42.7-50.9 M), 255-280 FT (77.7-85.3 M), LSD 4,645.70 FT (1,416.009 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1962, MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE NORTH SIDE, 0.65 FT (0.198 M) ABOVE LSD (SINCE SEPT. 20, 1973).

RECORDS AVAILABLE 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 83.04 FEET BELOW LAND SURFACE DATUM SEP 20, 1973.

LOWEST WATER LEVEL 109.46 FEET BELOW LAND SURFACE DATUM MAY 25, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 07, 1976	94.17	S	JUN 17, 1976	101.49	S	JAN 31, 1977	98.37	S	JAN 16, 1978	100.77	S
FEB 19	94.83	S	20	101.03	S	MAR 17	102.43	S	FEB 17	104.00	S
MAR 15	101.15	S	JUL 23	94.10	S	APR 25	105.75	S	MAR 07	105.63	S
MAY 19	104.25	S	26	93.62	S	JUN 08	103.42	S	APR 12	108.04	S
JUN 08	102.05	S	AUG 16	89.43	S	JUL 20	96.50	S	MAY 25	109.46	S
10	101.93	S	SEP 30	86.24	S	SEP 23	91.45	S	AUG 14	93.93	S
12	101.89	S	NOV 10	89.51	S	OCT 14	91.65	S	SEP 28	90.38	S
15	101.93	S	DEC 29	94.81	S	NOV 28	95.18	S			

WELL 01N 37E 1588A3

SITE NUMBER 432528112055703

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, REPORTED DEPTH 356 FT (108.5 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-318.0 FT (0-96.9 M), SAND POINT 315.5-318.0 FT (96.2-96.9 M), GRAVEL PACKED 280-356 FT (85.3-108.5 M), CONCRETE SEAL 255-280 FT (77.7-85.3 M), LSD 4,645.70 FT (1,416.009 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1962, MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE NORTH SIDE, 0.50 FT (0.152 M) ABOVE LSD (SINCE SEPT. 20, 1973).

RECORDS AVAILABLE 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 78.29 FEET BELOW LAND SURFACE DATUM SEP 20, 1973.

LOWEST WATER LEVEL 108.56 FEET BELOW LAND SURFACE DATUM MAY 25, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 07, 1976	91.84	S	JUN 17, 1976	100.42	S	JAN 31, 1977	96.59	S	JAN 16, 1978	98.53	S
FEB 19	96.96	S	20	99.72	S	MAR 17	101.16	S	FFB 17	102.23	S
MAR 15	99.72	S	JUL 23	91.28	S	APR 25	104.50	S	MAR 07	104.04	S
MAY 19	103.29	S	26	90.34	S	JUN 08	102.77	S	APR 12	106.69	S
JUN 08	101.94	S	AUG 16	85.30	S	JUL 20	93.32	S	MAY 25	108.56	S
10	101.72	S	SEP 30	82.49	S	SEP 23	86.85	S	AUG 14	89.88	S
12	101.43	S	NOV 10	86.25	S	OCT 14	87.36	S	SEP 28	86.62	S
15	100.91	S	DEC 29	92.50	S	NOV 28	91.89	S			

WELL 10N 27E 19CAA1

SITE NUMBER 441052113171001

DRILLED IRRIGATION WATER-TABLE WELL IN GRAVEL OF QUATERNARY AGE, DIAM 16 IN (41 CM), DEPTH 127.5 FT (38.9 M), CASED TO 128 FT (39 M), PERFORATED 54-128 FT (16.4-39 M), LSD ABOUT 6,037 FT (1,840 M) NGVD OF 1929, MP NO. 1 TOP OF 3/4-IN (1.9-CM) HOLE INSIDE PUMPBASE SOUTHWEST SIDE, 1.30 FT (0.396 M) ABOVE LSD (SINCE SEPT. 24, 1963).

RECORDS AVAILABLE 1963 TO CURRENT YEAR.

HIGHEST WATER LEVEL 35.48 FEET BELOW LAND SURFACE DATUM SEP 20, 1965.

LOWEST WATER LEVEL 39.78 FEET BELOW LAND SURFACE DATUM APR 24, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 03, 1976	37.24	S	JUL 17, 1977	43.81	P T	MAR 29, 1978	37.13	S	SEP 22, 1978	37.09	S
SEP 26	36.69	S	SEP 27	36.31	S	MAY 21	36.75	S			
MAR 12, 1977	36.94	S	NOV 18	36.60	S	JUL 13	45.01	P V			
MAY 18	45.86	P S	JAN 27, 1978	37.17	S	AUG 09	38.06	S			

WELL 07N 31E 22R001

SITE NUMBER 435522112444201

DRILLED INDUSTRIAL WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 IN (20 CM), DEPTH 433.2 FT (132.04 M), CASED TO 436.2 FT (132.95 M), PERFORATED 353.8-431.2 FT (107.84-131.43 M), CONCRETE SEAL 321-327 FT (97.8-99.7 M), GRAVEL PACKED 327-434.8 FT (99.7-132.53 M), CONCRETE SEAL IN BOTTOM, LSD 4,935.01 FT (1,504.191 M) NGVD OF 1929, MP NO. 3 TOP OF 8-IN (20-CM) CASING NORTHEAST SIDE, 2.00 FT (0.610 M) ABOVE LSD (SINCE APR. 30, 1957).

RECORDS AVAILABLE 1956, 1957, 1965 - 1968, 1969 - 1970, 1971 - 1977.

HIGHEST WATER LEVEL 349.37 FEET BELOW LAND SURFACE DATUM JUL 15, 1975.

LOWEST WATER LEVEL 353.45 FEET BELOW LAND SURFACE DATUM OCT 09, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JUL 17, 1978	351.24	S									

WELL 07N 31E 22CAC1

SITE NUMBER 435416112460401

DRILLED INDUSTRIAL WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 10 IN (25 CM), DEPTH 432.4 FT (131.80 M), CASED TO 432.9 FT (131.95 M), PERFORATED 321.9-371.9 FT (98.12-113.36 M), CONCRETE SEAL 262-300 FT (79.8-91.4 M), GRAVEL PACKED 300-429.8 FT (91.4-131.00 M), CONCRETE SEAL IN BOTTOM, LSD 4,896.09 FT (1,492.328 M) NGVD OF 1929, MP NO. 2 TOP OF 10-IN (25-CM) CASING, 1.53 FT (0.466 M) ABOVE LSD (SINCE MAR. 15, 1965).

RECORDS AVAILABLE 1957 - 1959, 1965 - 1966, 1969 - 1973, 1974 TO CURRENT YEAR.

HIGHEST WATER LEVEL 311.67 FEET BELOW LAND SURFACE DATUM JUL 15, 1975.

LOWEST WATER LEVEL 315.67 FEET BELOW LAND SURFACE DATUM OCT 27, 1958.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JUL 22, 1976	312.47	Z S	JUL 21, 1977	313.09	S	JUL 17, 1978	313.40	S			

DRILLED INDUSTRIAL WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 10 IN (25 CM), DEPTH 395.5 FT (120.55 M), CASED TO 394.9 FT (120.36 M), PERFORATED 296.2-316.4 FT (90.28-96.44 M), 332.1-389.9 FT (101.22-118.84 M), GRAVEL PACKED, CONCRETE SEAL ABOVE GRAVEL PACK, CONCRETE SEAL IN BOTTOM, LSD 4,872.51 FT (1,485.141 M) NGVD OF 1929, MP NO. 3 TOP OF 1 1/4-IN (3.2-CM) PIPE COUPLING, 2.64 FT (0.805 M) ABOVE LSD (SINCE JULY 16, 1968).

RECORDS AVAILABLE 1956 - 1957, 1958 - 1959, 1965 TO CURRENT YEAR.

HIGHEST WATER LEVEL 288.65 FEET BELOW LAND SURFACE DATUM JUL 15, 1975.

LOWEST WATER LEVEL 292.95 FEET BELOW LAND SURFACE DATUM OCT 11, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 22, 1976	289.42 Z S	JUL 21, 1977	290.06 S	JUL 17, 1978	290.49 S		

FORMERLY SITE ID NO. 435340112444901. WELL NO. 07N 31E 34R0D1. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 320 FT (97.5 M), CASED TO 320 FT (97.5 M), PERFORATED 285-320 FT (87-97.5 M), CEMENTED BOTTOM, LSD 4,848.8 FT (1,477.91 M) NGVD OF 1929. RECORDER INSTALLED OCT. 15, 1952. RECORDER REMOVED OCT. 13, 1954. RECORDER INSTALLED MAY 12, 1961. MP NO. 2 TOP OF 6 1/4-IN (16-CM) CASING NORTHEAST SIDE, 2.40 FT (0.732 M) ABOVE LSD (SINCE OCT. 15, 1952).

RECORDS AVAILABLE 1952 - 1954, 1955 - 1960, 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 263.62 FEET BELOW LAND SURFACE DATUM MAY 12, 1974.

LOWEST WATER LEVEL 268.75 FEET BELOW LAND SURFACE DATUM OCT 01, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	265.33	AUG 25, 1976	266.41	APR 30, 1977	264.75	MAR 05, 1978	265.81
10	265.50	31	266.60	MAY 05	264.60	10	265.92
15	265.50	SEP 05	266.52	06	264.50	15	266.07
20	265.56	09	266.73	10	264.70	20	265.96
25	265.32	10	266.59	15	264.75	25	266.00
31	265.50	15	266.56	20	264.90	29	265.88
FEB 05	265.18	20	266.64	25	264.91	31	265.73
10	265.71	25	266.54	31	265.22	APR 05	265.74
15	265.00	30	266.58	JUN 05	265.28	10	265.78
20	265.10	UCT 05	266.58	10	265.25	15	265.61
25	264.97	10	266.52	15	265.30	20	265.44
29	264.72	15	266.48	20	265.38	25	265.53
MAR 05	265.00	20	266.56	25	265.55	30	265.44
10	264.82	25	266.38	30	265.70	MAY 05	265.37
15	264.93	31	266.47	JUL 05	265.81	10	265.32
20	264.78	NOV 05	266.42	10	265.94	15	265.18
25	264.67	10	266.32	15	266.09	20	265.37
31	264.66	15	266.31	20	266.22	24	265.09
APR 05	264.53	20	266.28	21	266.28	25	265.29
10	264.65	25	265.98	25	266.41	31	265.42
15	264.27	30	266.23	31	266.55	JUN 05	265.50
20	264.42	DEC 05	266.07	AUG 05	266.57	10	265.42
25	264.38	10	266.13	10	266.71	15	265.65
30	264.63	15	266.10	15	266.80	20	265.82
MAY 05	264.35	20	266.03	20	266.93	25	265.90
10	264.38	25	265.93	25	266.88	30	266.05
15	264.40	31	265.68	31	267.07	JUL 05	266.23
19	264.15	JAN 05, 1977	265.71	SEP 05	267.13	10	266.34
20	264.31	06	265.85	10	267.17	15	266.57
25	264.24	10	265.70	15	267.07	17	266.59
31	264.30	15	265.66	20	267.16	19	266.50
JUN 05	264.46	17	265.85	25	267.14	20	266.62
10	264.38	20	265.69	30	267.17	25	266.81
15	264.68	25	265.66	OCT 05	267.20	31	266.98
20	264.67	FEB 28	265.32	10	267.31	AUG 05	267.19
25	264.75	MAR 05	265.37	11	267.30	10	267.26
30	264.96	10	265.23	15	267.34	15	267.42
JUL 05	265.19	15	265.18	20	267.13	20	267.52
10	265.28	20	265.06	25	267.17	25	267.61
15	265.46	25	264.91	JAN 25, 1978	266.34	31	267.62
20	265.60	27	264.70	31	266.19	SEP 05	267.70
25	265.78	31	264.90	FFB 05	266.17	10	267.66
31	265.90	APR 05	265.09	10	265.89	15	267.76
AUG 05	266.05	10	264.95	15	266.05	20	267.86
10	266.15	15	264.91	20	266.24	24	267.90
15	266.11	20	264.79	25	266.00	25	267.85
20	266.30	25	264.80	28	265.97	30	267.82

WELL 06N 25E 03AAA1

SITE NUMBER 435313113272301

DRILLED UNUSED WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 4 IN (10 CM), DEPTH 91.7 FT (28.0 M), CASIED TO 110 FT (33.5 M). LSD ABOUT 5,760 FT (1,756 M) NGVD OF 1929. RECORDER INSTALLED OCT. 1, 1966. RECORDER REMOVED SEPT. 27, 1971. MP NO. 1 TOP OF 4-IN (10-CM) CASING NORTHEAST SIDE, 0.80 FT (0.244 M) ABOVE LSD (SINCE SEPT. 9, 1966).

RECORDS AVAILABLE 1966 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 63.97 FEET BELOW LAND SURFACE DATUM SEP 01, 1974.

LOWEST WATER LEVEL 78.70 FEET BELOW LAND SURFACE DATUM MAR 07, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 31, 1976	72.52	S	JUL 22, 1977	76.13	S	DEC 07, 1977	77.16	T	AUG 08, 1978	71.03	S
SEP 15	67.19	S	AUG 03	76.55	Z S	JAN 17, 1978	77.91	T	SEP 23	70.40	S
MAR 11, 1977	73.04	S	08	75.80	S	MAR 07	78.70	S			
MAY 17	75.45	S	SEP 08	75.44	S	JUN 08	75.44	S			
JUN 22	75.64	S	17	75.70	S	28	75.00	S			

WELL 06N 28E 13DDA1

SITE NUMBER 435045113031701

DRILLED IRRIGATION WATER-TABLE WELL IN GRAVEL OF QUATERNARY AGE, DIAM 16 IN (41 CM), REPORTED DEPTH 201 FT (61.3 M), CASIED TO 201 FT (61.3 M), PERFORATED 100-201 FT (30.5-61.3 M). LSD ABOUT 4,945 FT (1,507 M) NGVD OF 1929. MP NO. 2 TOP OF 5/8-IN (1.6-CM) HOLE INSIDE PUMPBASE NORTHEAST SIDE, 0.80 FT (0.244 M) ABOVE LSD (SINCE MAY 5, 1965).

RECORDS AVAILABLE 1964 - 1968, 1969 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 95.08 FEET BELOW LAND SURFACE DATUM APR 11, 1973.

LOWEST WATER LEVEL 111.08 FEET BELOW LAND SURFACE DATUM SEP 20, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 03, 1976	98.54	S	JUL 17, 1977	105.99	S	JAN 27, 1978	101.71	S	AUG 09, 1978	107.47	S
SEP 26	102.81	S	SEP 08	108.15	S	MAR 29	101.18	S	SEP 22	108.16	S
MAR 12, 1977	97.46	S	27	107.64	S	MAY 21	100.80	S			
MAY 19	102.23	S	NOV 18	103.55	S	JUL 13	105.53	S			

WELL 06N 29E 16DDD1

SITE NUMBER 435033112593701

FORMERLY SITE ID NO. 435032112594001. DRILLED DOMESTIC WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 99.8 FT (30.4 M), CASIED TO 101 FT (30.8 M), PERFORATED 94-99 FT (28.6-30.2 M), OPEN BOTTOM. LSD ABOUT 4,865 FT (1,483 M) NGVD OF 1929. MP NO. 2 TOP OF CASING EAST SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE NOV. 19, 1963).

RECORDS AVAILABLE 1959 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 54.33 FEET BELOW LAND SURFACE DATUM MAY 10, 1973.

LOWEST WATER LEVEL 81.76 FEET BELOW LAND SURFACE DATUM AUG 15, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 21, 1976	58.29	S	SEP 26, 1976	67.70	S	SEP 27, 1977	73.64	S S	MAY 21, 1978	58.47	S
MAR 03	57.30	S	MAR 12, 1977	57.04	S	NOV 18	65.55	S	JUL 13	70.12	S
APR 16	56.84	S	MAY 19	64.14	S	JAN 27, 1978	61.13	S	AUG 09	75.69	S S
MAY 25	60.34	S	JUL 19	74.94	S	MAR 29	59.65	S	SEP 22	79.44	S



BUTTE COUNTY -- CONTINUED

329

WELL 06N 31E 21DCC1

SITE NUMBER 434941112454201

DRILLED INDUSTRIAL DISPOSAL WELL IN SNAKE RIVER GROUP, DIAM 10 IN (25 CM), DEPTH 320.2 FT (97.60 M), CASIED TO 320.2 FT (97.60 M), PERFORATED 189.8-315.8 FT (57.85-96.26 M), GRAVEL PACKED, CONCRETE SEAL IN BOTTOM. LSD 4,787.24 FT (1,459.151 M) NGVD OF 1929. MP NO. 2 TOP OF 10-IN (25-CM) CASING, 1.65 FT (0.503 M) ABOVE LSD (SINCE MAR. 16, 1965).

RECORDS AVAILABLE 1957 - 1960, 1965 TO CURRENT YEAR.

HIGHEST WATER LEVEL 204.20 FEET BELOW LAND SURFACE DATUM JUL 15, 1975.

LOWEST WATER LEVEL 208.00 FEET BELOW LAND SURFACE DATUM JAN 20, 1958.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 22, 1976	204.80 Z S	JUL 21, 1977	205.43 S	JUL 17, 1978	205.89 S

WELL 06N 31E 27HAD1

SITE NUMBER 434930112443901

FORMERLY SITE ID NO. 434926112444201. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 775.0 FT (236.22 M), CASIED TO 760 FT (232 M), PERFORATED 241-261 FT (73.4-79.6 M), LSD 4,790.17 FT (1,460.044 M) NGVD OF 1929. AUG. 1952 WELL WAS DEEPEINED TO A DEPTH OF 1,200 FT (366 M), LATER CAVED TO 903.0 FT (275.2 M). RECORDER INSTALLED MAY 13, 1950. RECORDER REMOVED MAY 2, 1956. MP NO. 3 TOP OF 6 1/4-IN (16-CM) CASING NORTHEAST SIDE, 1.45 FT (0.442 M) ABOVE LSD (SINCE AUG. 26, 1952).

RECORDS AVAILABLE 1950 - 1956, 1957 TO CURRENT YEAR.

HIGHEST WATER LEVEL 207.29 FEET BELOW LAND SURFACE DATUM APR 24, 1974.

LOWEST WATER LEVEL 215.93 FEET BELOW LAND SURFACE DATUM APR 04, 1950.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 23, 1976	208.07 S	DEC 20, 1976	209.16 S	AUG 19, 1977	210.08 S	APR 22, 1978	208.93 S
APR 21	207.59 S	FEB 24, 1977	208.42 S	OCT 21	210.39 S	MAY 23	208.57 S
MAY 21	207.48 S	MAR 24	208.14 S	NOV 21	210.02 S	JUN 27	209.35 S
JUL 22	208.74 S	APR 25	208.01 S	DEC 16	209.84 S	JUL 17	209.97 S
SEP 20	209.72 S	MAY 23	208.11 S	FEB 01, 1978	209.55 S	AUG 23	210.84 S
OCT 25	209.51 S	JUN 23	208.71 S	24	209.36 S	SEP 19	211.20 S
NOV 26	209.39 S	JUL 21	209.39 S	MAR 27	209.23 S		

WELL 05N 26E 23CDA1

SITE NUMBER 434436113193901

FORMERLY SITE ID NO. 434442113195101. WELL NO. 05N 26E 23CDB1. DRILLED IRRIGATION WATER-TABLE WELL IN GRAVEL OF QUATERNARY AGE, DIAM 20 TO 16 IN (51 TO 41 CM), DEPTH 197.6 FT (60.2 M), CASING DEPTH NOT AVAILABLE, PERFORATED IN GRAVEL. LSD 5,488.02 FT (1,672.748 M) NGVD OF 1929. MP NO. 2 TOP OF CASING, 0.45 FT (0.137 M) BELOW LSD (SINCE OCT. 7, 1959).

RECORDS AVAILABLE 1950 - 1951, 1952 - 1953, 1954 - 1960, 1961 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 14.13 FEET BELOW LAND SURFACE DATUM SEP 24, 1971.

LOWEST WATER LEVEL 50.87 FEET BELOW LAND SURFACE DATUM MAR 17, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 31, 1976	25.95 S	JUL 16, 1977	33.94 S	MAR 29, 1978	37.90 S	SEP 21, 1978	22.98 S
SEP 26	21.18 S	SEP 18	36.10 S	MAY 21	30.95 S		
MAR 14, 1977	27.35 S	NOV 18	38.70 S	JUL 12	24.08 S		
MAY 19	31.32 S	JAN 27, 1978	40.88 S	AUG 08	23.51 S		

WELL 05N 29E 0188B1

SITE NUMBER 43475112571801

FORMERLY SITE ID NO. 434745112571501. DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP. DIAM 16 IN (41 CM). DEPTH 154 FT (47 M), CASING DEPTH NOT AVAILABLE. LSD ABOUT 4,808 FT (1,465 M) NGVD OF 1929. APR. 4, 1966, WELL HAD FILLED IN TO A DEPTH OF 148.8 FT (45.4 M). MP NO. 2 TOP OF CASING WEST SIDE, 1.20 FT (0.366 M) ABOVE LSD (SINCE APR. 4, 1966).

RECORDS AVAILABLE 1959, 1965 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 115.38 FEET BELOW LAND SURFACE DATUM NOV 12, 1971.

LOWEST WATER LEVEL 124.53 FEET BELOW LAND SURFACE DATUM JUN 18, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 21, 1976	119.63	S	SEP 26, 1976	118.63	S	SEP 27, 1977	121.34	S	MAY 21, 1978	123.29	S
MAR 03	119.81	S	MAR 12, 1977	121.09	S	NOV 18	121.59	S	JUL 13	124.46	S
APR 16	120.64	S	MAY 19	121.73	S	JAN 27, 1978	122.35	S	AUG 09	123.55	S
MAY 25	121.74	S	JUL 17	122.30	S	MAR 29	122.88	S	SEP 22	122.17	S

WELL 05N 29E 23CDD1

SITE NUMBER 434430112575901

FORMERLY WELL NO. 05N 29E 23CDA1. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 M), DEPTH 399.2 FT (121.7 M), CASED TO 399 FT (121.6 M), PERFORATED 285-306 FT (86.9-93.3 M), CEMENTED BOTTOM. LSD 4+800.30 FT (1,463.131 M) NGVD OF 1929. RECORDER INSTALLED OCT. 15, 1952. RECORDER REMOVED NOV. 2, 1970. RECORDER INSTALLED SEPT. 11, 1975. MP NO. 1 TOP OF 6 1/4-IN (16-CM) CASING NORTHEAST SIDE, 1.83 FT (0.558 M) ABOVE LSU (SINCE SEPT. 24, 1951).

RECORDS AVAILABLE 1951, 1952 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 264.15 FEET BELOW LAND SURFACE DATUM APR 20, 1978.

LOWEST WATER LEVEL 274.18 FEET BELOW LAND SURFACE DATUM JUL 20, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	265.52	AUG 31, 1976	270.72	APR 15, 1977	269.70	FEB 10, 1978	270.26
10	265.87	SEP 05	270.26	20	269.60	15	270.13
15	266.21	10	269.95	25	269.90	20	270.24
20	266.76	15	269.70	30	270.44	25	270.40
25	267.10	20	269.50	MAY 05	271.02	28	270.44
31	267.57	25	269.27	10	271.44	MAR 05	270.37
FEB 05	267.62	30	269.08	15	271.86	10	270.35
10	267.65	OCT 05	268.93	20	272.15	15	270.29
15	267.64	10	268.93	25	272.23	20	270.28
20	267.85	15	268.94	31	272.41	25	270.28
25	268.05	20	268.97	JUN 05	272.75	31	269.94
29	268.02	25	268.93	10	273.07	APR 05	268.76
MAR 05	268.05	31	269.02	15	273.08	06	268.34
10	268.05	NOV 05	269.13	20	273.10	10	266.79
15	268.17	10	269.22	25	273.24	15	264.79
20	268.10	15	269.28	28	273.32	20	264.15
25	267.92	20	269.44	30	273.27	25	264.36
31	267.61	25	269.50	JUL 05	273.18	30	264.96
APR 05	267.50	30	269.52	10	273.03	MAY 25	270.08
10	267.35	DEC 05	269.21	15	272.98	31	271.27
15	266.70	10	268.81	20	273.03	JUN 05	271.94
20	265.87	15	268.44	25	273.15	10	272.43
25	265.65	20	268.02	31	273.20	15	272.86
30	266.12	25	267.65	AUG 05	273.30	20	273.20
MAY 05	266.62	31	267.40	08	273.35	25	273.55
10	267.20	JAN 03, 1977	267.25	10	273.23	30	273.75
15	267.87	05	267.36	15	273.07	JUL 05	273.86
20	268.34	10	267.58	20	272.96	10	273.94
25	268.74	15	267.98	25	272.56	15	274.07
31	269.15	20	268.50	31	272.06	17	274.14
JUN 05	269.42	25	269.00	SEP 05	271.82	20	274.18
10	270.04	31	269.52	06	271.23	25	274.12
15	270.59	FEB 05	270.00	10	271.71	31	274.01
20	271.08	10	270.38	15	271.58	AUG 05	273.93
25	271.42	15	270.71	20	271.46	10	273.85
30	271.70	20	270.96	25	271.43	15	273.71
JUL 05	271.83	25	271.07	30	271.76	20	273.44
06	271.90	28	271.10	OCT 05	272.07	25	273.15
10	271.84	MAR 05	271.22	10	272.46	31	272.90
15	271.76	10	271.39	15	272.59	SEP 05	272.78
20	271.73	15	271.43	20	272.74	10	272.70
25	271.78	20	271.54	25	272.66	15	272.54
31	271.75	25	271.44	JAN 25, 1978	270.57	20	272.38
AUG 05	271.70	31	271.07	26	270.60	25	272.30
10	271.67	APR 05	270.72	31	270.48	30	272.23
27	271.19	10	270.21	FEB 05	270.43		

WELL 05N 31E 14BCC1

SITE NUMBER 434540112440901

FORMERLY SITE ID NO. 434538112442901. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 TO 4 IN (15 TO 10 CM), DEPTH 329.0 FT (100.3 M), 6-IN (15-CM) CASING 0-255 FT (0-77.7 M), 4-IN (10-CM) CASING 251-329 FT (76.5-100.3 M), PERFORATED 298-322 FT (90.8-98.1 M), OAKUM SEAL 251-255 FT (76.5-77.7 M), LSD ABOUT 4,806 FT (1,465 M) NGVD OF 1929. RECORDER INSTALLED OCT. 16, 1952. RECORDER REMOVED OCT. 20, 1953. MP NO. 2 TOP OF THREADED 6-IN (15-CM) CASING SOUTHWEST SIDE, 1.55 FT (0.472 M) ABOVE LSD (SINCE SEPT. 22, 1951).

RECORDS AVAILABLE 1951, 1952 - 1953, 1954 - 1959, 1960 TO CURRENT YEAR.

HIGHEST WATER LEVEL 259.90 FEET BELOW LAND SURFACE DATUM FEB 14, 1972.

LOWEST WATER LEVEL 270.07 FEET BELOW LAND SURFACE DATUM SEP 29, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 25, 1976	260.80	S	DEC 20, 1976	265.92	S	AUG 22, 1977	267.75	S	APR 22, 1978	266.92	S
APR 21	261.08	S	JAN 25, 1977	265.44	S	SEP 26	268.15	S	MAY 23	266.58	S
MAY 24	261.71	S	FEB 24	264.85	S	OCT 21	268.77	S	JUN 26	267.73	S
JUL 24	264.02	S	MAR 24	264.58	S	NOV 21	268.32	S	JUL 17	268.33	S
AUG 26	265.09	S	APR 25	264.77	S	DEC 23	267.70	S	AUG 22	269.25	S
SEP 16	265.56	S	MAY 24	265.17	S	FEB 01, 1978	267.51	S	SEP 29	270.07	N S
OCT 25	266.08	S	JUN 22	266.07	S	24	267.25	S			
NOV 26	266.02	S	JUL 22	267.15	S	MAR 27	267.09	S			

WELL 05N 31E 28CCC1

SITE NUMBER 434334112463101

DRILLED INDUSTRIAL WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 12-10-8 IN (30-25-20 CM), DEPTH 716.7 FT (218.4 M), 12-IN (30-CM) CASING 0-339.7 FT (0-103.5 M), 10-IN (25-CM) CASING 320-376.6 FT (97.5-114.8 M), 8-IN (20-CM) CASING 313.1-535 FT (95.4-163.1 M), LSD 4,795.03 FT (1,461.525 M) NGVD OF 1929. RECORDER INSTALLED JAN. 13, 1965. RECORDER REMOVED SEPT. 11, 1975. MP NO. 1 TOP OF 12-IN (30-CM) CASING, 2.00 FT (0.610 M) ABOVE LSD (SINCE OCT. 4, 1956).

RECORDS AVAILABLE 1956 - 1964, 1965 TO CURRENT YEAR.

HIGHEST WATER LEVEL 256.57 FEET BELOW LAND SURFACE DATUM FEB 01, 1972.

LOWEST WATER LEVEL 269.31 FEET BELOW LAND SURFACE DATUM AUG 22, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 25, 1976	258.64	S	DEC 20, 1976	264.05	S	AUG 22, 1977	267.63	S	APR 22, 1978	265.38	S
APR 21	259.04	S	JAN 28, 1977	263.48	S	SEP 26	267.92	S	MAY 23	265.56	S
MAY 24	260.42	S	FEB 24	262.98	S	OCT 21	267.95	S	JUN 26	267.55	S
JUL 24	263.59	S	MAR 24	262.73	S	NOV 21	267.00	S	JUL 17	268.24	S
AUG 26	264.59	S	APR 25	263.24	S	DEC 23	266.21	S	AUG 22	269.31	S
SEP 20	265.10	S	MAY 24	264.43	S	FEB 01, 1978	265.97	S	SEP 29	269.29	S
OCT 25	264.84	S	JUN 23	265.82	S	24	265.68	S			
NOV 26	264.27	S	JUL 22	267.04	S	MAR 28	265.52	S			

WELL 04N 26E 21ABB1

SITE NUMBER 434004113220101

DRILLED OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 8-6-4 IN (20-15-10 CM), REPORTED DEPTH 760 FT (231.6 M), 8-IN (20-CM) CASING 0-431 FT (0-131.4 M), 6-IN (15-CM) CASING 0-650 FT (0-198.1 M), 4-IN (10-CM) CASING 633-760 FT (192.9-231.6 M), PERFORATED 656-661 FT (199.9-201.5 M), 685-690 FT (208.8-210.3 M), JOHNSON NEOPRENE PACKER SET AT 633.50 FT (193.09 M). LSD ABOUT 5.390 FT (1.643 M) NGVD OF 1929. MP NO. 2 TOP OF 8-IN (20-CM) CASING NORTH SIDE, 2.30 FT (0.701 M) ABOVE LSD (SINCE DEC. 6, 1977).

RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 582.28 FEET BELOW LAND SURFACE DATUM APR 21, 1972.

LOWEST WATER LEVEL 590.71 FEET BELOW LAND SURFACE DATUM MAR 02, 1975.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 31, 1976	587.25	S	MAR 14, 1977	582.97	S	JAN 27, 1978	587.05	S	SEP 20, 1978	589.97	V
MAY 19	582.46	S	MAY 19	583.47	S	MAR 30	587.18	V			
SEP 26	583.50	S	DEC 06	586.26	S	JUL 12	588.88	S			

WELL 04N 26E 26DCD1

SITE NUMBER 433819113191601

FORMERLY SITE TO NO. 433825113192301. DRILLED UNUSED WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 8 IN (20 CM), DEPTH 143.0 FT (43.6 M), CASED TO 143 FT (43.6 M). LSD 5,332.25 FT (1,625.270 M) NGVD OF 1929. MAY 22, 1974, WELL HAD FILLED IN TO A DEPTH OF 136.5 FT (41.6 M). MP NO. 1 TOP OF CASING, 1.10 FT (0.335 M) ABOVE LSD (SINCE AUG. 24, 1949).

RECORDS AVAILABLE 1949 - 1953, 1954 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 36.90 FEET BELOW LAND SURFACE DATUM SEP 19, 1969.

LOWEST WATER LEVEL 47.30 FEET BELOW LAND SURFACE DATUM MAY 28, 1963.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 31, 1976	39.12	S	JUL 16, 1977	47.02	S	NOV 18, 1977	42.72	S	JUL 13, 1978	45.48	S
SEP 26	37.77	S	AUG 03	46.45	S	JAN 27, 1978	43.90	S	SEP 20	40.40	S
MAR 14, 1977	39.25	S	SEP 08	44.98	S	MAR 30	44.57	S			
MAY 19	41.33	S	17	44.98	S	MAY 21	44.86	S			

WELL 04N 26E 32C8B1

SITE NUMBER 433748113234001

FORMERLY SITE ID NO. 433750113234501. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 16 IN (41 CM), DEPTH 253.0 FT (77.1 M), CASED TO 207 FT (63.1 M). LSD 5,371.22 FT (1,637.148 M) NGVD OF 1929. PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED APR. 30, 1965. RECORDER REMOVED SFPT. 27, 1971. RECORDER INSTALLED JULY 21, 1977. MP NO. 1 TOP OF CASING NORTH SIDE, 1.50 FT (0.457 M) ABOVE LSD (SINCE APR. 30, 1965).

RECORDS AVAILABLE 1958, 1960 - 1964, 1965 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 195.12 FEET BELOW LAND SURFACE DATUM OCT 02, 1969.

LOWEST WATER LEVEL 208.72 FEET BELOW LAND SURFACE DATUM APR 17, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 31, 1976	198.20	S	OCT 31, 1977	202.88	FEB 25, 1978	204.43	JUN 10, 1978	203.97
SEP 26	198.02	S	NOV 05	202.82		28	15	203.45
MAR 14, 1977	199.89	S	10	203.35	MAR 05	204.17	20	203.40
MAY 19	201.24	S	15	203.11	10	204.52	25	203.68
JUL 21	202.10	S	19	202.80	15	204.86	30	203.51
25	202.16	S	25	203.38	16	204.96	JUL 05	203.35
31	202.16		30	203.41	20	204.79	10	203.13
AUG 05	202.02		DEC 05	203.40	25	204.89	11	203.01
10	202.13		10	203.51	31	204.57	15	203.09
15	202.17		15	203.03	APR 05	204.59	20	202.83
20	202.30		20	204.08	10	204.71	25	202.80
25	202.13		25	203.82	15	204.55	31	202.52
31	202.35		31	203.75	16	204.28	AUG 05	202.45
SEP 05	202.40		JAN 05, 1978	203.63	20	204.45	10	202.18
10	202.43		10	203.65	25	204.60	15	202.07
15	202.37		15	203.44	30	204.50	20	201.90
18	202.54		20	203.92	MAY 05	204.52	25	201.84
20	202.44		25	204.12	10	204.55	30	201.58
25	202.49		27	204.26	12	204.91	SEP 05	201.55
30	202.64		31	204.00	15	204.35	10	201.32
OCT 05	202.74		FEB 05	204.09	20	204.62	15	201.50
10	202.98		10	203.75	25	204.40	20	201.67
15	203.12		11	203.63	28	204.55	25	201.53
20	202.85		15	204.13	31	204.41	30	201.40
25	202.99		20	204.60	JUN 05	204.33		

WELL 04N 29E 090CD1

SITE NUMBER 434056113000101

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 TO 5 IN (15 TO 13 CM), DEPTH 463 FT (141.1 M), 6-IN (15-CM) CASING 0-440 FT (0-134.1 M), 5-IN (13-CM) CASING 430-463 FT (131.1-141.1 M), PERFORATED 410-130 FT (125.0-131.1 M), OPEN BOTTOM. LSD 4,884.25 FT (1,488.719 M) NGVD OF 1929. RECORDER INSTALLED OCT. 16, 1952. RECORDER REMOVED NOV. 16, 1954. MP NO. 3 TOP OF 6 1/4-IN (16-CM) CASING NORTHEAST SIDE, 1.17 FT (0.357 M) ABOVE LSD (SINCE JUNE 9, 1952).

RECORDS AVAILABLE 1952 - 1954, 1955 - 1959, 1960 TO CURRENT YEAR.

HIGHEST WATER LEVEL 382.76 FEET BELOW LAND SURFACE DATUM FEB 10, 1972.

LOWEST WATER LEVEL 401.06 FEET BELOW LAND SURFACE DATUM OCT 01, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL		
FEB 23, 1976	389.25	S	JAN 29, 1977	390.49	SFP 20, 1977	392.82	S	MAY 22, 1978	393.56	S
APR 23	389.17	S	FEB 22	390.54	OCT 25	393.07	S	JUN 27	393.96	S
MAY 21	389.00	S	MAR 22	390.71	NOV 23	393.38	S	JUL 17	394.39	S
JUL 22	389.61	S	APR 19	390.92	DEC 22	393.43	S	AUG 23	395.07	S
SEP 21	390.37	S	MAY 25	391.10	FEB 03, 1978	393.68	S	SFP 19	395.53	S
OCT 28	390.49	S	JUN 24	391.52	22	393.87	S			
NOV 26	390.60	S	JUL 21	391.94	APR 03	393.78	S			
DEC 21	390.61	S	AUG 23	392.43	20	393.73	S			

WELL 04N 30E 07ADB1

SITE NUMBER 434126112550701

FORMERLY SITE ID NO. 434128112551201. DRILLED OBSERVATION WATER-TABLE IN SNAKE RIVER GROUP, DIAM 12 TO 10 IN (30 TO 25 CM), DEPTH 692 FT (210.9 M), 12-IN (30-CM) CASING 0-388 FT (0-118.3 M), 10-IN (25-CM) CASING 335-587 FT (102.1-178.9 M), CONCRETE SEAL 385-387 FT (117.3-117.9 M), LSD 4,820.50 FT (1,469.288 M) NGVD OF 1929. WELL CAVED TO A DEPTH OF 563 FT (171.6 M). RECORDER INSTALLED MAR, 17, 1951. RECORDER REMOVED JULY 23, 1956. RECORDER INSTALLED JULY 10, 1969. MP NO. 6 TOP OF 12-IN (30-CM) CASING NORTHEAST SIDE, 1.78 FT (0.542M) ABOVE LSD (SINCE JUNE 5, 1952).

RECORDS AVAILABLE 1950, 1951 - 1956, 1957 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 308.24 FEET BELOW LAND SURFACE DATUM JAN 11, 1972.

LOWEST WATER LEVEL 330.27 FEET BELOW LAND SURFACE DATUM JUL 24, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	316.99	AUG 20, 1976	318.57	APR 20, 1977	319.43	FFB 25, 1978	322.02
10	317.16	25	318.63	23	319.56	28	321.99
15	317.11	31	318.79	25	319.45	MAR 05	321.94
20	317.15	SEP 05	318.74	30	319.40	10	322.04
25	316.99	08	318.91	MAY 05	319.35	15	322.17
31	317.14	10	318.80	10	319.45	16	322.21
FEB 05	316.99	15	318.79	15	319.51	20	322.14
10	317.07	20	318.85	20	319.66	25	322.19
15	316.90	25	318.77	25	319.66	31	322.06
16	316.69	30	318.81	31	319.88	APR 05	322.12
20	317.07	OCT 05	318.81	JUN 05	319.96	10	322.13
25	317.00	10	318.75	10	319.99	15	322.00
29	316.81	15	318.75	15	320.12	20	321.77
MAR 05	317.09	20	318.80	20	320.17	25	321.72
10	316.95	25	318.71	25	320.32	30	321.59
15	317.12	31	318.79	30	320.45	MAY 05	321.51
20	317.07	NOV 05	318.78	JUL 05	320.54	10	321.45
25	317.06	10	318.76	10	320.65	15	321.33
31	317.05	13	318.71	15	320.73	20	321.53
APR 05	316.98	26	318.82	20	320.82	25	321.54
10	317.12	29	318.82	22	320.89	31	321.70
15	316.84	DEC 21	318.82	25	320.93	JUN 05	321.83
20	316.95	25	318.80	31	321.03	15	322.10
25	316.90	31	318.63	AUG 05	321.08	20	322.27
30	317.06	JAN 03, 1977	318.44	10	321.15	25	322.41
MAY 05	316.85	05	318.68	15	321.24	30	322.53
10	316.89	10	318.63	20	321.32	JUL 05	322.68
15	316.94	15	318.63	25	321.30	10	322.79
20	316.92	20	318.65	31	321.42	15	322.99
25	316.87	25	318.65	SFP 05	321.46	20	323.09
31	316.96	31	318.65	10	321.47	25	323.27
JUN 05	317.10	FEB 05	318.73	15	321.40	29	323.42
10	317.00	10	318.82	20	321.49	31	323.32
15	317.2	15	318.89	25	321.49	AUG 05	323.55
20	317.22	20	318.90	30	321.55	10	323.64
25	317.29	25	318.96	OCT 05	321.54	15	323.75
30	317.47	28	318.96	10	321.69	20	323.86
JUL 05	317.66	MAR 05	319.12	15	321.71	25	323.99
10	317.75	10	319.16	20	321.68	31	324.04
15	317.92	15	319.17	21	321.76	SFP 05	324.11
20	318.02	20	319.20	JAN 25, 1978	321.95	10	324.14
25	318.17	25	319.18	31	321.89	15	324.19
31	318.27	31	319.23	FEB 05	321.91	20	324.29
AUG 05	318.38	APR 05	319.44	10	321.77	25	324.21
10	318.47	10	319.45	15	321.93	29	324.38
15	318.46	15	319.48	20	322.09	30	324.24

WELL 04N 30E 228DD1

SITE NUMBER 433937112515401

FORMERLY SITE ID NO. 433938112520001. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 TO 5 IN (15 TO 13 CM), DEPTH 498.0 FT (151.8 M), 6-IN (15-CM) CASING 0-405.9 FT (0-123.7 M), 5-IN (13-CM) CASING 365.2-495.8 FT (111.3-151.1 M), PERFORATED 437.8-444.8 FT (133.4-135.6 M). LSD 4,834.73 FT (1,473.626 M) NGVD OF 1929. RECORDER INSTALLED JUNE 6, 1952. RECORDER REMOVED SEPT. 30, 1954. MP NO. 4 TOP OF 6 1/4-IN (16-CM) CASING WITH FLANGE NORTHEAST SIDE, 2.31 FT (0.704 M) ABOVE LSD (SINCE JUNE 5, 1952).

RECORDS AVAILABLE 1951, 1952 - 1954, 1955 - 1959, 1960 TO CURRENT YEAR.

HIGHEST WATER LEVEL 342.25 FEET BELOW LAND SURFACE DATUM APR 24, 1972.

LOWEST WATER LEVEL 355.23 FEET BELOW LAND SURFACE DATUM SEP 13, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 1976	346.04 S	DEC 21, 1976	347.37 S	AUG 22, 1977	348.24 S	APR 24, 1978	350.31 S
APR 20	345.95 S	JAN 28, 1977	347.34 S	SEP 13	348.61 S	MAY 23	350.03 S
MAY 24	345.90 S	FEB 24	347.06 S	OCT 21	349.20 S	JUL 17	350.79 S
JUL 24	346.35 S	MAR 24	346.84 S	NOV 21	349.29 S	AUG 22	351.04 S
AUG 26	346.46 S	APR 25	347.26 S	DEC 23	349.25 S	SEP 29	351.77 S
SEP 20	346.96 S	MAY 24	347.22 S	FFB 01, 1978	349.84 S		
OCT 25	346.94 S	JUN 23	347.71 S	24	349.90 S		
NOV 26	347.23 S	JUL 22	348.14 S	MAR 28	350.06 S		

WELL 04N 31E 16ADC1

SITE NUMBER 434031112453701

FORMERLY SITE ID NO. 434031112452701, WELL NO. 04N 31E 16ADD1. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 TO 5 IN (15 TO 13 CM), DEPTH 475.0 FT (144.8 M), 6-IN (15-CM) CASING 0-403.7 FT (0-123.0 M), 5-IN (13-CM) CASING 395-487 FT (120.4-148.4 M), PERFORATED 452-487.1 FT (137.8-148.4 M). LSD 4,899.89 FT (1,493.486 M) NGVD OF 1929. SEPT. 12, 1952, WELL WAS DEEPENED AND RECASED, DEPTH 620.0 FT (189.0 M), 4-IN (10-CM) CASING 0-532.0 FT (0-162.2 M). RECORDER INSTALLED MAR. 17, 1953. RECORDER REMOVED APR. 7, 1953. MP NO. 2 CHISELED X IN TOP OF 4-IN (10-CM) CASING NORTHEAST SIDE, 1.94 FT (0.561 M) ABOVE LSD (SINCE SEPT. 18, 1952).

RECORDS AVAILABLE 1950 - 1952, 1953, 1954 - 1959, 1960 TO CURRENT YEAR.

HIGHEST WATER LEVEL 406.61 FEET BELOW LAND SURFACE DATUM FEB 27, 1973.

LOWEST WATER LEVEL 414.24 FEET BELOW LAND SURFACE DATUM MAY 11, 1950.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 1976	407.86 S	JAN 28, 1977	408.72 S	SEP 13, 1977	411.25 S	MAY 25, 1978	411.85 S
APR 21	407.79 S	FEB 24	408.52 S	OCT 21	411.43 S	JUL 03	412.33 S
MAY 24	408.11 S	MAR 24	408.45 S	NOV 21	411.09 S	31	412.93 S
JUL 24	409.16 S	APR 25	408.78 S	DEC 23	410.71 S	AUG 22	413.35 S
SEP 20	409.96 S	MAY 24	409.14 S	FEB 01, 1978	410.92 S	SEP 29	413.71 S
OCT 25	409.58 S	JUN 23	409.78 S	24	410.93 S		
NOV 26	409.34 S	JUL 22	410.21 S	MAR 28	411.16 S		
DEC 21	409.00 S	AUG 22	410.93 S	APR 22	411.44 S		

WELL 03N 26E 22ABA1

SITE NUMBER 433445113202801

FORMERLY SITE ID NO. 433445113203401. DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 20 IN (51 CM), REPORTED DEPTH 819 FT (249.6 M), 20-IN (51-CM) CASING TO 387 FT (118.0 M). MAY 5, 1970, WELL WAS DEEPENED TO A DEPTH OF 1,075 FT (327.7 M), CAVED IN TO 1,025 FT (312.4 M), 4-IN (10-CM) CASING 0-969.5 FT (0-295.5 M). LSD 5,311.63 FT (1,618.985 M) NGVD OF 1929. MP NO. 1 TOP OF 2-IN (5-CM) PIPE COUPLING SOUTH SIDE, 0.65 FT (0.198 M) ABOVE LSD (SINCE SEPT. 17, 1970).

RECORDS AVAILABLE 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 790.10 FEET BELOW LAND SURFACE DATUM APR 21, 1972.

LOWEST WATER LEVEL 798.08 FEET BELOW LAND SURFACE DATUM SEP 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAY 03, 1976	790.49	S	JUL 16, 1977	792.22	S	APR 18, 1978	795.68	S	SEP 27, 1978	798.08	S
SEP 26	791.47	S	SEP 17	792.93	S	MAY 21	795.29	V			
MAR 14, 1977	790.92	S	NOV 17	794.15	S	JUL 12	796.82	S			

WELL 03N 29E 14ADD1

SITE NUMBER 433520112572601

FORMERLY SITE ID NO. 433523112572601, WELL NO. 03N 29E 14ADB1, DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 IN (20 CM), DEPTH 588.0 FT (179.2 M), CASED TO 590 FT (179.8 M), PERFORATED 447-588 FT (136.2-179.2 M) LSD 4+917.64 FT (1,498.897 M) NGVD OF 1929. RECORDER INSTALLED JAN. 7, 1950. RECORDER REMOVED JULY 7, 1960. RECORDER INSTALLED JULY 11, 1963. MP NO. 2 TOP OF CASING AT PAINTED SPOT NORTH SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE DEC. 18, 1949).

RECORDS AVAILABLE 1949, 1950 - 1960, 1962, 1963 TO CURRENT YEAR.

HIGHEST WATER LEVEL 447.52 FEET BELOW LAND SURFACE DATUM MAR 01, 1953.

LOWEST WATER LEVEL 458.28 FEET BELOW LAND SURFACE DATUM SEP 23, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	451.33	SEP 05, 1976	452.15	APR 20, 1977	452.15	FEB 28, 1978	454.97
10	451.61	10	452.15	25	452.19	MAR 01	454.60
15	451.67	15	452.55	30	452.14	05	454.90
20	451.80	20	452.44	MAY 05	452.00	10	455.06
25	451.54	25	452.42	10	452.07	15	455.32
31	451.83	30	452.65	15	452.13	20	455.25
FEB 05	451.50	OCT 05	452.52	20	452.32	25	455.37
10	451.63	10	452.75	25	452.17	31	455.14
15	451.40	15	452.92	31	452.47	APR 01	454.97
20	451.88	20	453.12	JUN 05	452.52	05	455.21
25	452.06	25	452.90	10	452.44	10	455.30
29	451.53	27	453.16	15	452.57	15	455.22
MAR 05	451.70	31	453.11	20	452.51	20	455.15
10	451.50	NOV 05	452.64	25	452.67	24	455.46
15	451.70	10	452.86	30	452.75	25	455.31
20	451.60	15	452.67	JUL 05	452.80	30	455.32
25	451.47	20	452.95	10	452.85	MAY 05	455.38
31	451.51	25	452.58	15	452.94	10	455.41
APR 05	451.41	30	452.96	20	452.98	15	455.38
10	451.60	DEC 05	452.85	25	453.14	20	455.64
15	451.19	10	452.60	26	453.16	25	455.62
20	451.45	15	452.40	29	453.06	31	455.72
25	451.35	20	452.28	31	453.19	JUN 05	455.76
30	451.67	25	452.17	AUG 05	453.23	10	455.73
MAY 05	451.35	31	451.89	10	453.34	15	455.78
10	451.42	JAN 03, 1977	451.59	15	453.37	20	455.88
15	451.46	05	451.95	20	453.53	25	455.89
20	451.33	10	451.98	25	453.45	30	456.01
25	451.19	15	451.99	31	453.65	JUL 02	455.81
31	451.19	20	452.08	SEP 05	453.86	05	455.97
JUN 05	451.28	25	452.22	10	454.26	10	455.98
10	451.01	31	452.09	15	454.00	15	456.13
15	451.26	FEB 05	452.12	20	453.97	20	456.14
20	451.14	10	452.16	25	453.96	25	456.32
25	451.07	15	452.17	30	454.14	31	456.27
30	451.39	20	452.12	OCT 05	454.22	AUG 05	456.54
JUL 05	451.80	25	452.47	10	454.40	10	456.45
10	451.83	28	452.17	15	454.44	15	456.48
15	451.65	MAR 05	452.22	20	454.28	20	456.53
20	451.99	10	452.12	23	454.52	25	456.56
25	452.11	15	452.12	25	454.41	31	456.58
31	452.13	20	452.05	31	454.36	SEP 05	456.66
AUG 05	452.22	25	451.90	JAN 31, 1978	454.84	10	456.63
10	452.02	31	451.99	FEB 05	454.87	15	456.78
15	451.68	APR 04	452.63	10	454.73	20	456.92
20	452.25	05	452.42	15	454.92	24	457.01
25	452.41	10	452.22	20	455.17	25	456.95
31	452.28	15	452.24	25	455.01	30	456.91

WELL 03N 29E 19CB81

SITE NUMBER 433422113031701

FORMERLY SITE ID NO. 433423113031901. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 657 FT (200.2 M), CASED TO 657 FT (200.2 M), PERFORATED 619-633 FT (188.7-192.9 M), 644-657 FT (196.3-200.2 M). LSD 5,049.20 FT (1,538.996 M) NGVD OF 1929. RECORDER INSTALLED AUG. 18, 1955. RECORDER REMOVED MAR. 13, 1956. RECORDER INSTALLED JAN. 31, 1961. RECORDER REMOVED JAN. 2, 1962. MP NO. 2 TOP OF 6-IN (15-CM) CASING NORTHEAST SIDE, 1.69 FT (0.515 M) ABOVE LSD (SINCE JUNE 21, 1952).

RECORDS AVAILABLE 1951 - 1954, 1955 - 1956, 1957 - 1960, 1961, 1962 TO CURRENT YEAR.

HIGHEST WATER LEVEL 510.64 FEET BELOW LAND SURFACE DATUM MAR 22, 1965.

LOWEST WATER LEVEL 609.14 FEET BELOW LAND SURFACE DATUM DEC 31, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 21, 1976	604.60	S	DEC 22, 1976	604.88	S	AUG 23, 1977	605.46	S	APR 15, 1978	607.14	S
APR 15	603.29	S	FEB 21, 1977	604.04	S	OCT 28	606.21	S	MAY 22	607.47	S
MAY 25	603.71	S	MAR 22	604.44	S	NOV 23	606.61	S	JUN 30	607.87	S
JUL 26	604.20	S	APR 16	604.31	S	DEC 22	606.46	S	JUL 18	607.95	S
SEP 27	604.68	S	MAY 25	604.40	S	FEB 02, 1978	607.03	S	AUG 23	608.26	S
OCT 28	604.98	S	JUN 27	604.96	S	27	606.84	S	SEP 19	608.80	S
NOV 29	605.16	S	JUL 23	605.35	S	MAR 28	607.31	S			

WELL 03N 29E 23DCD1

SITE NUMBER 433356112574201

FORMERLY WELL NO. 03N 29E 26AC 1. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 505 FT (153.9 M), CASED TO 324 FT (98.8 M). LSD 4,938.80 FT (1,505.346 M) NGVD OF 1929. OCT. 29, 1965, A LINES INFLATABLE PACKER WAS INSTALLED AT ABOUT 365 FT (111 M). MP NO. 2 TOP OF 4-IN (10-CM) COLLAR, 1.92 FT (0.585 M) ABOVE LSD (SINCE NOV. 3, 1965).

RECORDS AVAILABLE 1962 - 1965, 1966 TO CURRENT YEAR.

HIGHEST WATER LEVEL 472.56 FEET BELOW LAND SURFACE DATUM DEC 21, 1972.

LOWEST WATER LEVEL 480.26 FEET BELOW LAND SURFACE DATUM APR 08, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 21, 1976	474.69	S	DEC 22, 1976	475.21	S	AUG 23, 1977	476.45	S	MAR 28, 1978	478.06	S
APR 27	474.47	S	FEB 21, 1977	474.64	S	SEP 28	476.90	S	APR 27	478.21	S
MAY 26	474.28	S	MAR 28	474.88	S	OCT 28	477.27	S	MAY 25	478.47	S
JUL 27	474.49	S	APR 28	475.13	S	NOV 28	477.61	S	JUL 14	478.93	S
SEP 28	475.39	S	MAY 27	475.24	S	DEC 23	477.39	S	AUG 30	479.43	S
OCT 30	475.62	S	JUN 25	475.60	S	FEB 01, 1978	477.90	S	SEP 30	479.74	S
NOV 23	475.47	S	JUL 27	476.08	S	25	477.86	S			

WELL 03N 29E 24DDA3

SITE NUMBER 433407112561501

FORMERLY WELL NO. 03N 29E 24DD 5. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 650.9 FT (198.4 M), CASED TO 461 FT (140.5 M), CONCRETE SEAL. LSD 4,917.33 FT (1,498.802 M) NGVD OF 1929. MP NO. 2 TOP OF 6-IN (15-CM) CASING, 1.63 FT (0.497 M) ABOVE LSD (SINCE NOV. 30, 1964).

RECORDS AVAILABLE 1958 - 1960, 1964 TO CURRENT YEAR.

HIGHEST WATER LEVEL 448.50 FEET BELOW LAND SURFACE DATUM APR 13, 1959.

LOWEST WATER LEVEL 457.64 FEET BELOW LAND SURFACE DATUM NOV 30, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 27, 1976	451.95 S	DEC 27, 1976	452.34 S	AUG 22, 1977	453.65 S	MAR 31, 1978	455.36 S
APR 16	451.60 S	FEB 21, 1977	452.12 S	OCT 05	454.34 S	APR 25	455.50 S
MAY 26	451.57 S	MAR 28	456.13 S	31	454.61 S	MAY 31	455.89 S
JUL 27	452.01 S	APR 16	452.24 S	NOV 28	454.90 S	JUL 14	456.35 S
SEP 28	452.69 S	MAY 27	452.35 S	DEC 27	454.97 S	AUG 30	456.74 S
OCT 20	453.10 S	JUN 25	452.90 S	FEB 02, 1978	455.22 S	SEP 30	457.06 N S
NOV 23	453.04 S	JUL 27	453.37 S	25	455.18 S		

WELL 03N 29E 25CAA1

SITE NUMBER 433326112564801

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 571.5 FT (174.2 M), CASED TO 507 FT (154.5 M). LSD 4,929.63 FT (1,502.551 M) NGVD OF 1929. MP NO. 2 TOP OF 6 1/4-IN (16-CM) CASING NORTHEAST SIDE, 1.85 FT (0.564 M) ABOVE LSD (SINCE APR. 4, 1956).

RECORDS AVAILABLE 1956 - 1960, 1966 TO CURRENT YEAR.

HIGHEST WATER LEVEL 462.93 FEET BELOW LAND SURFACE DATUM APR 13, 1959.

LOWEST WATER LEVEL 470.68 FEET BELOW LAND SURFACE DATUM SEP 30, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 21, 1976	465.59 S	DEC 22, 1976	466.14 S	JUL 27, 1977	466.96 S	FEB 25, 1978	468.78 S
APR 17	465.33 S	JAN 27, 1977	465.79 S	AUG 22	467.22 S	MAR 28	468.98 S
MAY 26	465.25 S	FEB 21	465.51 S	SEP 28	467.87 S	APR 26	469.07 S
JUL 14	465.30 S	MAR 28	465.78 S	OCT 28	468.13 S	JUL 11	469.78 S
SEP 28	466.30 S	APR 15	466.01 S	NOV 28	468.52 S	AUG 30	470.29 S
OCT 21	466.45 S	MAY 27	466.11 S	DEC 27	468.49 S	SEP 30	470.68 S
NOV 23	466.40 S	JUN 25	466.52 S	JAN 17, 1978	468.55 S		

WELL 03N 29E 36HCB1

SITE NUMBER 433246112571201

FORMERLY WELL NO. 03N 29E 36CB 1. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 637 FT (194.2 M), CASED TO 522 FT (159.1 M). LSD 4,940.15 FT (1,505.757 M) NGVD OF 1929. MP NO. 1 TOP OF 6-IN (15-CM) CASING, 2.30 FT (0.701 M) ABOVE LSD (SINCE OCT. 25, 1962).

RECORDS AVAILABLE 1962 - 1964, 1965 TO CURRENT YEAR.

HIGHEST WATER LEVEL 474.20 FEET BELOW LAND SURFACE DATUM DEC 21, 1972.

LOWEST WATER LEVEL 482.06 FEET BELOW LAND SURFACE DATUM SEP 23, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 27, 1976	476.03 S	DEC 22, 1976	476.86 S	AUG 23, 1977	478.06 S	MAR 28, 1978	479.69 S
APR 17	476.07 S	FEB 21, 1977	476.22 S	SEP 28	478.55 S	APR 26	479.77 S
MAY 26	475.95 S	MAR 28	476.50 S	OCT 28	478.86 S	MAY 25	480.07 S
JUL 27	476.12 S	APR 15	476.71 S	NOV 28	479.21 S	JUL 14	480.66 S
SEP 28	477.02 S	MAY 27	476.81 S	DEC 23	479.00 S	AUG 30	481.02 S
OCT 30	477.25 S	JUN 25	477.19 S	FEB 01, 1978	479.48 S	SEP 30	481.40 S
NOV 23	477.12 S	JUL 27	477.65 S	25	479.49 S		

WELL 03N 30E 12CDD1

SITE NUMBER 433543112493801

FORMERLY SITE ID NO. 433542112494101. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 500 FT (152.4 M), CASED TO 500 FT (152.4 M), PERFORATED 475-497 FT (144.7-151.5 M), LSD 4,938.73 FT (1,505.325 M) NGVD OF 1929. APR. 29, 1969, SURFACE WATER ENTERED WELL AT LSD AND PLUGGED WELL TO AQUIFER. JAN. 22, 1973, WELL HAD FILLED IN TO A DEPTH OF 452.8 FT (138.0 M). JULY 31, 1975, WELL WAS CLEANED AND SURGED TO A DEPTH OF 500 FT (152.4 M). DEC. 1, 1975, WELL HAD FILLED IN TO A DEPTH OF 494 FT (150.6 M). RECORDER INSTALLED OCT. 24, 1951. RECORDER REMOVED NOV. 29, 1951. MP NO. 3 TOP OF CASING, 1.37 FT (0.418 M) ABOVE LSD (SINCE OCT. 29, 1952).

RECORDS AVAILABLE 1950, 1951, 1952 - 1953, 1954 - 1959, 1960 TO CURRENT YEAR.

HIGHEST WATER LEVEL 460.77 FEET BELOW LAND SURFACE DATUM APR 22, 1976.

LOWEST WATER LEVEL 467.22 FEET BELOW LAND SURFACE DATUM SEP 13, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 25, 1976	461.15	S	DEC 22, 1976	461.73	S	JUL 26, 1977	462.28	S	MAR 28, 1978	463.71	S
APR 22	460.77	S	JAN 28, 1977	461.73	S	SEP 27	462.55	S	APR 24	463.82	S
MAY 24	460.81	S	FEB 21	461.46	S	OCT 28	462.91	S	MAY 25	464.02	S
JUL 27	461.12	S	MAR 24	461.37	S	NOV 25	463.35	S	JUL 03	464.15	S
SEP 28	461.43	S	APR 15	461.66	S	DEC 27	463.40	S	25	464.46	S
OCT 26	461.75	S	MAY 24	461.57	S	FEB 01, 1978	463.51	S	AUG 30	464.79	S
NOV 23	461.86	S	JUN 25	461.93	S	25	463.59	S	SEP 29	465.18	S

WELL 03N 30E 19DDC1

SITE NUMBER 433401112551001

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 8 TO 6 IN (20 TO 15 CM), DEPTH 700 FT (213.4 M), CASED TO 593 FT (180.7 M), 8-IN(20-CM) CASING 0-460 FT (0-140.2 M), 6-IN (15-CM) CASING 445-593 FT (135.6-180.7 M), PERFORATED 470-570 FT (143.2-173.7 M), LSD 4,908.23 FT (1,496.028 M) NGVD OF 1929. MP NO. 1 TOP OF 8-IN (20-CM) CASING, 1.52 FT (0.463 M) ABOVE LSD (SINCE OCT. 22, 1962).

RECORDS AVAILABLE 1962 TO CURRENT YEAR.

HIGHEST WATER LEVEL 440.37 FEET BELOW LAND SURFACE DATUM DEC 21, 1972.

LOWEST WATER LEVEL 448.83 FEET BELOW LAND SURFACE DATUM SEP 16, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 25, 1976	442.82	S	DEC 22, 1976	443.17	S	AUG 23, 1977	444.44	S	APR 24, 1978	446.32	S
APR 22	442.34	S	FEB 21, 1977	442.87	S	OCT 28	445.32	S	MAY 25	446.55	S
MAY 25	442.16	S	MAR 24	442.87	S	NOV 25	445.71	S	JUL 25	447.19	S
JUL 27	442.83	S	APR 15	443.21	S	DEC 27	445.73	S	AUG 30	447.52	S
SEP 28	443.44	S	MAY 24	443.12	S	FEB 01, 1978	445.89	S	SEP 29	447.83	S
OCT 26	443.92	S	JUN 25	443.61	S	25	445.95	S			
NOV 23	443.78	S	JUL 26	444.17	S	MAR 28	446.14	S			

WELL 03N 30E 31AADI

SITE NUMBER 433253112545901

FORMERLY SITE ID NO. 433253112550301. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 TO 6 IN (20 TO 15 CM), DEPTH 676 FT (206.0 M), 8-IN (20-CM) CASING 0-406 FT (0-123.8 M), 6-IN (15-CM) CASING 399-676 FT (121.6-206.0 M), PERFORATED 471-481 FT (143.6-146.6 M), 512-553 FT (156.0-168.6 M). LSD 4,915.85 FT (1,498.351 M) NGVD OF 1929. RECORDER INSTALLED OCT. 17, 1952. RECORDER REMOVED AUG. 4, 1955. RECORDER INSTALLED JUNE 30, 1960. RECORDER REMOVED OCT. 10, 1961. MP NO. 2 TOP OF 8-IN (20-CM) CASING NORTHEAST SIDE, 1.73 FT (0.527 M) ABOVE LSD (SINCE DEC. 27, 1951).

RECORDS AVAILABLE 1951, 1952 - 1955, 1956 - 1959, 1960 - 1961, 1962 TO CURRENT YEAR.

HIGHEST WATER LEVEL 453.14 FEET BELOW LAND SURFACE DATUM APR 27, 1953.

LOWEST WATER LEVEL 460.32 FEET BELOW LAND SURFACE DATUM SEP 16, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 1976	455.54 S	DEC 22, 1976	456.14 S	AUG 23, 1977	456.74 S	APR 24, 1978	458.29 S
APR 22	455.22 S	FEB 21, 1977	455.72 S	OCT 28	457.22 S	MAY 25	458.46 S
MAY 25	455.29 S	MAR 24	455.64 S	NOV 25	457.72 S	JUL 25	458.99 S
JUL 27	455.52 S	APR 15	456.15 S	DEC 27	457.75 S	AUG 30	459.24 S
SEP 28	455.91 S	MAY 24	455.88 S	FEB 01, 1978	457.95 S	SEP 29	459.62 S
OCT 26	456.27 S	JUN 25	456.30 S	25	457.95 S		
NOV 23	456.37 S	JUL 26	456.71 S	MAR 28	458.12 S		

WELL 03N 32E 29DDC1

SITE NUMBER 433320112432301

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 TO 5 IN (15 TO 13 CM), DEPTH 704 FT (214.6 M), 6-IN (15-CM) CASING 0-434 FT (0-132.3 M), 5-IN (13-CM) CASING 427-704 FT (130.2-214.6 M), PERFORATED 675-696 FT (205.7-212.1 M). LSD 5,125.82 FT (1,562.350 M) NGVD OF 1929. RECORDER INSTALLED MAY 14, 1950. RECORDER REMOVED OCT. 4, 1954. RECORDER INSTALLED MAY 24, 1961. RECORDER REMOVED JAN. 4, 1962. MP NO. 2 PAINTED CROSS TOP OF 6-IN (15-CM) CASING NORTH SIDE, 1.90 FT (0.579 M) ABOVE LSD (SINCE MAY 10, 1950).

RECORDS AVAILABLE 1950 - 1954, 1955 - 1960, 1961 - 1962, 1963 TO CURRENT YEAR.

HIGHEST WATER LEVEL 651.10 FEET BELOW LAND SURFACE DATUM JAN 07, 1950.

LOWEST WATER LEVEL 658.29 FEET BELOW LAND SURFACE DATUM SEP 21, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 24, 1976	652.92 S	JAN 21, 1977	653.66 S	SEP 14, 1977	655.90 S	MAY 22, 1978	656.57 S
APR 22	652.82 S	FEB 25	653.58 S	OCT 29	655.98 S	JUL 01	656.90 S
MAY 22	653.15 S	MAR 25	653.44 S	NOV 25	656.08 S	19	657.34 S
JUL 26	653.75 S	APR 25	653.80 S	DEC 29	655.83 S	AUG 25	657.98 S
SEP 22	654.66 S	MAY 25	653.99 S	JAN 31, 1978	655.70 S	SEP 21	658.29 S
OCT 22	654.46 S	JUN 27	654.30 S	FEB 25	655.85 S		
NOV 22	654.24 S	JUL 23	655.00 S	MAR 29	656.08 S		
DEC 22	653.94 S	AUG 27	655.74 S	APR 28	656.30 S		

WELL 02N 26E 22DDA1

SITE NUMBER 432854113201001

FORMERLY SITE ID NO. 432853113201201. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 719.4 FT (219.3 M), CASED TO 719.4 FT (219.3 M), PERFORATED 670-675 FT (204.2-205.7 M), 712-717 FT (217.0-218.5 M). ORIGINAL WELL WAS DRILLED TO A DEPTH OF 1,053 FT (321.0 M), CASED TO 728 FT (221.9 M). SEPT. 10, 1971, INSTALLED A 6-IN (15-CM) INFLATABLE PACKER 719.4-721.8 FT (219.3-220.0 M) WELDED TO A 2-IN (5-CM) PIPE, INSTALLED A 1-IN (2.5-CM) MEASURING PIPE 0-719.4 FT (0-219.3 M), PERFORATED 698.4-719.4 FT (212.9-219.3 M). LSD 5,361.81 FT (1,634.279 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1961. MP NO. 1 TOP OF 1-IN (2.5-CM) PIPE COUPLING, 2.09 FT (0.637 M) ABOVE LSD (SINCE SEPT. 10, 1971).

RECORDS AVAILABLE 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 660.66 FEET BELOW LAND SURFACE DATUM JUL 24, 1972.

LOWEST WATER LEVEL 663.36 FEET BELOW LAND SURFACE DATUM SEP 26, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAY 03, 1976	661.42	S	JAN 20, 1977	662.66	S	SEP 17, 1977	662.62	S	MAY 20, 1978	663.10	S
JUL 16	661.52	S	MAR 14	662.41	S	NOV 17	662.42	S	JUL 12	663.30	S
SEP 25	661.80	S	MAY 19	662.53	S	FEB 02, 1978	662.66	S	SEP 26	663.36	S
NOV 18	662.31	S	JUL 16	662.78	S	APR 18	663.25	S			

WELL 02N 26E 22DDA2

SITE NUMBER 432854113201002

FORMERLY SITE ID NO. 432853113201202. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 1,053 FT (321.0 M), CASED TO 728 FT (221.9 M). SEPT. 10, 1971, INSTALLED A 6-IN (15-CM) INFLATABLE PACKER 719.4-721.8 FT (219.3-220.0 M) WELDED TO A 2-IN (5-CM) PIPE TO SEAL OFF THE PERCHED WATER ZONE. 2-IN (5-CM) PIPE PERFORATED 1,030-1,051 FT (313.9-320.3 M). LSD 5,361.81 FT (1,634.279 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1961. MP NO. 2 TOP OF 2-IN (5-CM) PIPE COUPLING, 2.12 FT (0.646 M) ABOVE LSD (SINCE SEPT. 10, 1971).

RECORDS AVAILABLE 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 979.07 FEET BELOW LAND SURFACE DATUM MAY 24, 1972.

LOWEST WATER LEVEL 982.32 FEET BELOW LAND SURFACE DATUM SEP 26, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAY 03, 1976	980.53	S	JAN 20, 1977	980.93	S	SEP 17, 1977	981.32	S	MAY 20, 1978	981.46	S
JUL 16	980.56	S	MAR 14	980.98	S	NOV 17	981.52	S	JUL 12	981.88	S
SEP 25	980.71	S	MAY 19	980.91	S	FEB 02, 1978	981.63	S	SEP 26	982.32	S
NOV 18	980.90	S	JUL 16	981.08	S	APR 18	981.65	S			

WELL 02N 27E 02DDC1

SITE NUMBER 433121113115801

FORMERLY SITE ID NO. 433122113120301. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 812 FT (247.5 M), CASED TO 812 FT (247.5 M), PERFORATED 782-812 FT (238.4-247.5 M), OPEN BOTTOM. LSD 5,195.44 FT (1,583.570 M) NGVD OF 1929. RECORDER INSTALLED JULY 18, 1951. RECORDER REMOVED OCT. 21, 1953. RECORDER INSTALLED APR. 6, 1966. RECORDER REMOVED SEPT. 14, 1966. RECORDER INSTALLED JULY 14, 1967. RECORDER REMOVED DEC. 13, 1967. MP NO. 2 TOP OF 6-IN (15-CM) CASING, 1.88 FT (0.573 M) ABOVE LSD (SINCE MAY 10, 1951).

RECORDS AVAILABLE 1950, 1951 - 1953, 1954 - 1960, 1964 - 1965, 1966 - 1967, 1968 TO CURRENT YEAR.

HIGHEST WATER LEVEL 750.70 FEET BELOW LAND SURFACE DATUM DEC 27, 1950.

LOWEST WATER LEVEL 764.91 FEET BELOW LAND SURFACE DATUM SEP 21, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 27, 1976	760.22	S	JAN 20, 1977	760.61	S	SEP 20, 1977	763.15	S	MAY 24, 1978	764.34	S
APR 15	759.78	S	FEB 22	760.70	S	OCT 25	763.27	S	JUN 28	764.49	S
MAY 25	760.45	S	MAR 22	760.95	S	NOV 22	763.23	S	JUL 18	764.53	S
JUL 23	761.16	S	APR 20	761.17	S	DEC 22	763.24	S	AUG 25	764.90	S
SEP 23	761.80	S	MAY 25	761.61	S	JAN 25, 1978	763.60	S	SEP 21	764.91	S
OCT 28	761.68	S	JUN 24	762.07	S	FEB 23	763.84	S			
NOV 24	760.98	S	JUL 25	762.52	S	APR 03	764.06	S			
DEC 23	760.44	S	AUG 23	762.84	S	20	763.92	S			

WELL 02N 28E 13ADD1

SITE NUMBER 433005113032801

FORMERLY SITE ID NO. 433006113032801, WELL NO. 02N 28E 13AD 1. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 646 FT (196.9 M), CASED TO 576 FT (175.6 M). LSD 5,028.91 FT (1,532.812 M) NGVD OF 1929. MP NO. 2 TOP OF 1 1/2-IN (3.8-CM) PIPE COUPLING, 1.84 FT (0.561 M) ABOVE LSD (SINCE AUG. 28, 1975).

RECORDS AVAILABLE 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 585.27 FEET BELOW LAND SURFACE DATUM JUN 25, 1975.

LOWEST WATER LEVEL 599.97 FEET BELOW LAND SURFACE DATUM AUG 31, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 01, 1976	589.19	S	OCT 30, 1976	590.46	S	JUN 27, 1977	589.15	S	FEB 23, 1978	596.68	S
30	588.09	S	NOV 29	591.53	S	AUG 01	589.66	S	MAR 29	597.10	S
APR 27	586.00	S	DEC 27	591.44	S	27	590.76	S	APR 26	597.84	S
MAY 26	585.40	S	JAN 26, 1977	591.12	S	SEP 14	592.11	S	MAY 30	597.47	S
JUN 24	585.51	S	FEB 24	589.38	S	OCT 28	593.72	S	JUN 30	598.09	S
JUL 13	586.14	S	MAR 28	588.45	S	NOV 28	595.07	S	JUL 26	599.06	S
AUG 31	588.65	S	APR 18	588.02	S	JAN 03, 1978	595.40	S	AUG 31	599.97	S
SEP 24	588.46	S	MAY 27	588.16	S	31	595.55	S	SEP 20	599.89	S

WFL 02N 28E 218881

SITE NUMBER 432935113080001

FORMERLY SITE ID NO. 432920113074501, WELL NO. 02N 28E 16CD 1, DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 IN (20 CM), DEPTH 691 FT (210.6 M), CASSED TO 48 FT (14.6 M). LSD 5,081.02 FT (1,548.695 M) NGVD OF 1929. RECORDER INSTALLED JULY 14, 1967. RECORDER REMOVED SEPT. 10, 1967. MP NO. 2 TOP OF 8-IN (20-CM) CASING NORTH SIDE, 2.00 FT (0.610 M) ABOVE LSD (SINCE NOV. 21, 1966).

RECORDS AVAILABLE 1966 TO CURRENT YEAR.

HIGHEST WATER LEVEL 639.24 FEET BELOW LAND SURFACE DATUM APR 23, 1969.

LOWEST WATER LEVEL 648.14 FEET BELOW LAND SURFACE DATUM SEP 21, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 27, 1976	643.11	S	JAN 20, 1977	643.63	S	SEP 20, 1977	646.35	S	MAY 24, 1978	647.45	S
APR 15	642.50	S	FEB 22	643.67	S	OCT 25	646.52	S	JUN 28	647.69	S
MAY 25	643.53	S	MAR 22	644.16	S	NOV 22	646.31	S	JUL 18	647.75	S
JUL 23	644.47	S	APR 20	644.34	S	DEC 22	646.29	S	AUG 25	648.09	S
SEP 23	645.02	S	MAY 25	644.79	S	JAN 25, 1978	646.83	S	SEP 21	648.14	S
OCT 28	644.88	S	JUN 24	645.40	S	FEB 23	647.09	S			
NOV 24	643.84	S	JUL 25	645.86	S	APR 03	647.28	S			
DEC 23	643.30	S	AUG 23	646.07	S	20	647.05	S			

WELL 02N 28E 35ADA1

SITE NUMBER 432740113044501

FORMERLY SITE ID NO. 432733113043901. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 TO 6 IN (20 TO 15 CM); DEPTH 654.1 FT (199.4 M), 8-IN (20-CM) CASING 0-241 FT (0-73.5 M), 6-IN (15-CM) CASING 235-652 FT (71.6-198.7 M), PERFORATED 618-648 FT (188.4-197.5 M), LEAD SEAL. LSD 5,037.87 FT (1,535.543 M) NGVD OF 1929. RECORDER INSTALLED NOV. 26, 1952. RECORDER REMOVED AUG. 2, 1956. RECORDER INSTALLED JUNE 29, 1965. RECORDER REMOVED MAY 15, 1968. RECORDER INSTALLED JUNE 2, 1971. MP NO. 6 TOP OF 8-IN (20-CM) CASING, 2.31 FT (0.704 M) ABOVE LSD (SINCE JUNE 2, 1971).

RECORDS AVAILABLE 1951, 1952 - 1956, 1957 - 1964, 1965 - 1968, 1969 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 599.78 FEET BELOW LAND SURFACE DATUM MAR 01, 1955.

LOWEST WATER LEVEL 606.74 FEET BELOW LAND SURFACE DATUM AUG 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
JAN 05, 1976	602.57	SEP 10, 1976	603.76	S	APR 28, 1977	603.76	MAR 25, 1978	605.85
10	602.95	15	603.84		MAY 26	604.02	31	605.65
15	602.90	20	603.90		31	604.24	APR 05	605.82
20	603.02	25	603.77		JUN 05	604.26	10	605.83
25	602.88	30	603.84		10	604.20	15	605.78
31	603.05	OCT 05	603.81		15	604.31	18	605.99
FEB 05	602.90	10	603.67		20	604.27	20	605.62
10	603.03	15	603.66		25	604.38	25	605.78
15	602.73	20	603.72		30	604.46	30	605.80
20	602.99	25	603.55		JUL 05	604.53	MAY 05	605.88
25	602.84	31	603.63		10	604.60	10	605.88
29	602.58	NOV 05	603.52		15	604.65	15	605.80
MAR 05	602.97	10	603.42		20	604.75	20	605.99
10	602.72	15	603.42		25	604.85	25	605.98
15	602.99	20	603.29		26	604.67	31	606.03
20	602.90	25	602.83		31	604.91	JUN 05	606.03
25	602.81	30	603.07		AUG 05	604.89	10	605.95
31	602.69	DEC 05	603.01		10	604.97	15	606.06
APR 05	602.58	10	603.10		15	605.04	20	606.08
15	602.39	15	603.05		20	605.08	25	606.13
20	602.64	20	603.00		25	605.00	30	606.12
25	602.63	25	603.04		31	605.10	JUL 05	606.20
30	602.97	31	602.82		SEP 05	605.09	10	606.17
MAY 03	602.77	JAN 03, 1977	602.57		10	605.08	15	606.34
25	602.96	05	602.95		15	604.97	17	606.41
31	603.03	10	602.93		20	605.09	18	606.25
JUN 05	603.10	15	602.99		25	605.06	20	606.35
10	602.92	20	603.05		30	605.13	25	606.48
15	603.10	25	603.14		OCT 05	605.08	31	606.45
20	603.03	31	603.15		10	605.28	AUG 05	606.61
25	603.05	FEB 05	603.23		15	605.20	10	606.59
30	603.16	10	603.32		20	605.05	15	606.64
JUL 05	603.32	15	603.31		25	605.09	18	606.74
10	603.37	20	603.3		JAN 25, 1978	605.34	20	606.63
15	603.51	25	603.38		31	605.30	25	606.67
17	603.49	28	603.31		FEB 05	605.27	31	606.60
25	603.57	MAR 05	603.47		07	605.12	SEP 05	606.58
31	603.61	10	603.49		10	605.19	10	606.54
AUG 05	603.70	15	603.47		15	605.38	15	606.60
10	603.80	20	603.46		20	605.63	19	606.74
15	603.71	25	603.35		25	605.52	20	606.65
19	603.84	31	603.40		28	605.51	23	606.30
25	603.74	S	603.67		MAR 05	605.45	25	606.56
27	603.99	APR 05	603.65		10	605.58	30	606.53
31	603.95	20	603.65	S	15	605.84		
SEP 03	603.93	25	603.70		20	605.75		

WELL 02N 29E 13AAA1

SITE NUMBER 433023112561501

FORMERLY WELL NO. 02N 30E 18BC 1. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 752 FT (229.2 M), CASED TO 516 FT (157.3 M). LSD 4,942.69 FT (1,506.532 M) NGVD OF 1929. MP NO. 1 TOP OF 6-IN (15-CM) CASING, 2.41 FT (0.735 M) ABOVE LSD (SINCE AUG. 22, 1962).

RECORDS AVAILABLE 1962 TO CURRENT YEAR.

HIGHEST WATER LEVEL 493.09 FEET BELOW LAND SURFACE DATUM JUL 20, 1973.

LOWEST WATER LEVEL 497.13 FEET BELOW LAND SURFACE DATUM SEP 16, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 21, 1976	494.41	S	DEC 22, 1976	494.36	S	AUG 23, 1977	494.42	S	MAR 28, 1978	495.54	S
APR 22	493.55	S	FEB 21, 1977	493.77	S	OCT 28	494.84	S	APR 15	495.40	S
MAY 25	493.70	S	MAR 22	494.30	S	NOV 28	495.16	S	MAY 22	495.57	S
JUL 26	493.90	S	APR 16	494.14	S	DEC 23	494.77	S	JUN 30	495.90	S
SEP 27	494.03	S	MAY 27	494.13	S	JAN 26, 1978	496.75	S	JUL 19	496.08	S
OCT 21	494.05	S	JUN 25	494.33	S	FFB 02	495.33	S	AUG 25	496.17	S
NOV 29	494.47	S	JUL 23	494.48	S	27	495.10	S	SEP 20	496.65	S

WELL 02N 29E 17CBC1

SITE NUMBER 432954113020501

FORMERLY WELL NO. 02N 29E 17CB 1. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 626 FT (190.8 M), CASED TO 580 FT (176.8 M). LSD 5,010.21 FT (1,527.112 M) NGVD OF 1929. MP NO. 2 TOP OF 1-IN (2.5-CM) COUPLING, 2.43 FT (0.741 M) ABOVE LSD (SINCE DEC. 16, 1974).

RECORDS AVAILABLE 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 574.48 FEET BELOW LAND SURFACE DATUM APR 12, 1972.

LOWEST WATER LEVEL 581.79 FEET BELOW LAND SURFACE DATUM AUG 31, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 01, 1976	575.85	S	OCT 29, 1976	577.89	S	JUN 27, 1977	578.45	S	FFB 23, 1978	581.17	S
30	576.24	S	NOV 29	577.32	S	AUG 01	579.11	S	MAR 29	581.18	S
APR 27	576.18	S	DEC 27	576.62	S	26	579.17	S	APR 26	581.37	S
MAY 26	576.81	S	JAN 26, 1977	576.72	S	SEP 14	579.27	S	MAY 30	581.22	S
JUN 24	576.90	S	FEB 24	576.86	S	OCT 28	579.69	S	JUN 30	580.94	S
JUL 13	577.31	S	MAR 28	576.97	S	NOV 28	579.88	S	JUL 26	581.31	S
AUG 31	578.09	S	APR 18	577.38	S	JAN 03, 1978	579.81	S	AUG 31	581.79	S
SEP 27	578.12	S	MAY 27	577.89	S	31	580.50	S	SEP 20	581.71	S

WELL 02N 29E 18BDA1

SITE NUMBER 433013113024201

FORMERLY SITE ID NO. 403013113024301, WELL NO. 02N 29E 18AD 1. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 640 FT (195.1 M), CASED TO 585 FT (178.3 M). LSD 5,015.88 FT (1,528.840 M) NGVD OF 1929. MP NO. 4 TOP OF 1-IN (2.5-CM) PIPE, 2.27 FT (0.619 M) ABOVE LSD (SINCE OCT. 17, 1974).

RECORDS AVAILABLE 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 580.48 FEET BELOW LAND SURFACE DATUM MAR 18, 1972.

LOWEST WATER LEVEL 588.14 FEET BELOW LAND SURFACE DATUM SEP 20, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 01, 1976	581.76	S	OCT 27, 1976	584.00	S	JUN 27, 1977	584.34	S	FEB 23, 1978	586.06	S
30	582.04	S	NOV 29	583.06	S	AUG 01	584.97	S	MAR 29	586.29	S
APR 27	582.08	S	DEC 27	582.45	S	26	585.31	S	APR 26	586.39	S
MAY 26	582.71	S	JAN 26, 1977	582.56	S	SEP 13	585.23	S	MAY 30	586.68	S
JUN 24	582.81	S	FEB 24	582.72	S	OCT 28	585.59	S	JUN 30	586.87	S
JUL 13	583.79	S	MAR 28	582.87	S	NOV 28	585.75	S	JUL 26	587.11	S
AUG 31	583.99	S	APR 18	583.28	S	JAN 03, 1978	585.71	S	AUG 31	587.21	S
SEP 27	583.92	S	MAY 27	583.82	S	31	586.38	S	SEP 20	588.14	S

## RUTTE COUNTY -- CONTINUED

WELL 02N 29E 18CCD1

SITE NUMBER 432940113030201

FORMERLY SITE ID NO. 43294113030101. WELL NO. 02N 29E 18CD 1. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 635 FT (193.6 M), CASED TO 587 FT (178.9 M). LSD 5,020.42 FT (1,530.224 M) NGVD OF 1929. MP NO. 4 TOP OF 1-IN (2.5-CM) PIPE COUPLING, 2.89 FT (0.881 M) ABOVE LSD (SINCE MAR. 1, 1976).

RECORDS AVAILABLE 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 583.65 FEET BELOW LAND SURFACE DATUM SEP 15, 1971.

LOWEST WATER LEVEL 591.23 FEET BELOW LAND SURFACE DATUM SEP 20, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 01, 1976	586.40	S	OCT 30, 1976	587.37	S	JUN 27, 1977	588.16	S	FFB 23, 1978	589.57	S
30	587.16	S	NOV 29	587.70	S	AUG 01	587.82	S	MAR 29	589.74	S
APR 27	586.62	S	DEC 27	587.17	S	27	588.66	S	APR 26	589.98	S
MAY 26	586.90	S	JAN 26, 1977	587.14	S	SEP 14	588.36	S	MAY 30	590.56	S
JUN 24	586.81	S	FFB 24	586.91	S	OCT 28	589.01	S	JUN 30	589.97	S
JUL 13	586.54	S	MAR 28	586.74	S	NOV 28	589.71	S	JUL 26	590.70	S
AUG 31	587.19	S	APR 18	587.10	S	JAN 03, 1978	589.51	S	AUG 31	591.04	S
SEP 27	587.44	S	MAY 27	587.81	S	31	588.80	S	SEP 20	591.23	S

WELL 02N 30E 04DCC1

SITE NUMBER 433123112530101

DRILLED OBSERVATION WATER-TABLE WFL IN SNAKERIVER GROUP, DIAM 10 IN (25 CM), DEPTH 1,057 FT (322.2 M). CASED TO 681 FT (207.6 M). MP NO. 1 TOP OF 10-IN (25-CM) CASING NORTHEAST SIDE, 1.77 FT (0.540 M) ABOVE LSD (SINCE OCT. 22, 1962).

RECORDS AVAILABLE 1962 TO CURRENT YEAR.

HIGHEST WATER LEVEL 466.09 FEET BELOW LAND SURFACE DATUM MAR 12, 1973.

LOWEST WATER LEVEL 471.88 FEET BELOW LAND SURFACE DATUM SEP 20, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 21, 1976	467.55	S	DEC 22, 1976	467.93	S	AUG 27, 1977	469.76	S	MAY 22, 1978	470.62	S
APR 23	467.48	S	FEB 21, 1977	467.48	S	OCT 28	469.87	S	JUL 18	471.28	S
MAY 25	467.33	S	MAR 22	467.93	S	DFC 27	469.85	S	AUG 30	471.74	S
JUL 26	467.94	S	APR 16	467.95	S	FFB 02, 1978	470.00	S	SEP 20	471.88	S
SEP 27	468.37	S	MAY 27	468.40	S	28	470.06	S			
OCT 21	468.20	S	JUN 21	468.73	S	MAR 28	470.25	S			
NOV 22	468.10	S	JUL 23	469.19	S	APR 15	470.31	S			

## BUTTE COUNTY -- CONTINUED

WELL 01N 29E 30BBD1

SITE NUMBER 432336113064201

FORMERLY SITE ID NO. 432339113064501. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 704 FT (214.6 M), CASED TO 704 FT (214.6 M), PERFORATED 673-704 FT (205.1-214.6 M), OPEN BOTTOM, LSD 5,066.89 FT (1,544.388 M) NGVD OF 1929, RECORDER INSTALLED JULY 30, 1965. RECORDER REMOVED JULY 22, 1966, MP NO. 2 TOP OF CASING NORTHEAST SIDE, 2.11 FT (0.643 M) ABOVE LSD (SINCE OCT. 15, 1950).

RECORDS AVAILABLE 1950 - 1951, 1952 - 1964, 1965 - 1966, 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 646.52 FEET BELOW LAND SURFACE DATUM NOV 14, 1952.

LOWEST WATER LEVEL 651.56 FEET BELOW LAND SURFACE DATUM MAY 26, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 26, 1976	648.50	S	JAN 20, 1977	648.75	S	SEP 20, 1977	650.40	S	MAY 24, 1978	651.10	S
APR 15	648.38	S	FEB 22	648.85	S	OCT 25	650.30	S	JUN 28	651.18	S
MAY 25	648.64	S	MAR 22	649.07	S	NOV 22	650.22	S	JUL 18	651.34	S
JUL 23	649.08	S	APR 20	649.26	S	DEC 22	650.26	S	AUG 25	651.50	S
SEP 25	649.23	S	MAY 25	649.55	S	FEB 03, 1978	650.65	S	SEP 21	651.49	S
OCT 28	649.04	S	JUN 24	649.83	S	23	650.70	S			
NOV 24	648.74	S	JUL 25	650.19	S	APR 03	650.92	S			
DEC 23	648.60	S	AUG 23	650.29	S	20	650.77	S			

WELL 01S 27E 14DCC1

SITE NUMBER 431946113161401

FORMERLY SITE ID NO. 431948113161801. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 4 IN (10 CM), DEPTH 1,041 FT (317.3 M), CASED TO 1,031 FT (314.2 M), PERFORATED 1,011-1,031 FT (308.2-314.2 M), LSD 5,158.86 FT (1,572.420 M) NGVD OF 1929, RECORDER INSTALLED JULY 23, 1971. RECORDER REMOVED MAY 4, 1972, MP NO. 3 TOP OF 2-IN (5.1-CM) NIPPLE NORTHEAST SIDE, 1.59 FT (0.485 M) ABOVE LSD (SINCE MAY 4, 1972).

RECORDS AVAILABLE 1970, 1971 - 1972, 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 990.00 FEET BELOW LAND SURFACE DATUM APR 27, 1973.

LOWEST WATER LEVEL 996.26 FEET BELOW LAND SURFACE DATUM SEP 20, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAY 03, 1976	991.26	S	JAN 20, 1977	994.04	S	SEP 17, 1977	993.05	S	MAY 20, 1978	994.85	S
JUL 15	992.07	S	MAR 14	992.21	S	NOV 17	993.60	S	JUL 12	995.39	S
SEP 25	991.43	S	MAY 19	992.32	S	FEB 02, 1978	994.38	S	SEP 20	996.26	S
NOV 18	991.89	S	JUL 16	992.54	S	APR 18	994.91	S	26	996.18	S

WELL 01N 14E 36DAD1

SITE NUMBER 432228114421601

DRILLED UNUSED WATER-TABLE WELL IN SEDIMENTS OF QUATERNARY AGE, DIAM 12 IN (30 CM), REPORTED DEPTH 188 FT (57 M), CASING DEPTH NOT AVAILABLE, LSD ABOUT 5,106 FT (1,556 M) NGVD OF 1929, MP NO. 1 TOP OF CASING SOUTH SIDE, 0.70 FT (0.213 M) ABOVE LSD (SINCE MAR. 24, 1977).

RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 16.79 FEET BELOW LAND SURFACE DATUM MAY 22, 1978.

LOWEST WATER LEVEL 29.53 FEET BELOW LAND SURFACE DATUM AUG 16, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 24, 1977	17.47	S	AUG 16, 1977	29.53	S	NOV 10, 1977	25.02	S	APR 17, 1978	18.35	S
APR 15	17.05	S	SEP 10	25.43	S	DEC 15	21.90	S	MAY 22	16.79	S
MAY 12	23.56	S S	20	24.45	S	JAN 16, 1978	20.47	S	JUN 12	20.55	S
JUN 16	27.78	S S	30	26.36	S S	FEB 16	20.15	S	JUL 14	24.98	S
JUL 14	27.15	S	OCT 14	27.68	S	MAR 15	19.90	S	SEP 21	26.47	S

WELL 01S 12E 13HAA1

SITE NUMBER 432033114584701

DRILLED UNUSED ARTESIAN WELL IN SAND OF QUATERNARY AGE, DIAM 3 IN (7.6 CM), REPORTED DEPTH 435 FT (132.6 M), CASING TO 135 FT (41.2 M), LSD 5,090.70 FT (1,551.645 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MAR. 20, 1972, WELL HAD FILLED IN TO A DEPTH OF 218.2 FT (66.5 M), MP NO. 1 TOP OF CASING EAST SIDE, 2.30 FT (0.701 M) ABOVE LSD (SINCE SEPT. 12, 1957).

RECORDS AVAILABLE 1957 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.60 FEET BELOW LAND SURFACE DATUM APR 26, 1965.

LOWEST WATER LEVEL 11.29 FEET BELOW LAND SURFACE DATUM OCT 11, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 23, 1976	6.77	S	MAY 11, 1977	7.72	S	OCT 11, 1977	11.29	S	APR 17, 1978	8.38	S
SEP 27	8.10	S	JUN 16	8.82	S	13	11.25	S	MAY 22	6.86	S
DEC 15	7.91	S	JUL 14	9.55	S	NOV 10	10.97	S	JUN 12	6.73	S
JAN 20, 1977	7.71	S	AUG 16	10.50	S	DEC 13	10.41	S	JUL 14	7.27	S
FEB 18	7.72	S	SEP 09	11.02	S	JAN 16, 1978	9.79	S	AUG 14	8.48	S
MAR 10	7.62	S	19	11.15	S	FEB 13	9.35	S	SEP 21	9.68	S
APR 14	7.58	S	30	11.26	S	MAR 15	9.10	S			

WELL 01S 12E 22HBB1

SITE NUMBER 431940115013301

DUG UNUSED WATER-TABLE WELL IN SEDIMENTS OF QUATERNARY AGE, DIAM 8 IN (20 CM), DEPTH 30 FT (8.5 M), CASING TO 30 FT (8.5 M), LSD ABOUT 5,103 FT (1,555 M) NGVD OF 1929, MAR. 16, 1977, WELL HAD FILLED IN TO A DEPTH OF 13.9 FT (4.2 M), MP NO. 1 TOP OF 8-IN (20-CM) CASING EAST SIDE, 2.00 FT (0.609 M) ABOVE LSD (SINCE SEPT. 15, 1957).

RECORDS AVAILABLE 1957, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.81 FEET BELOW LAND SURFACE DATUM APR 17, 1978.

LOWEST WATER LEVEL 7.82 FEET BELOW LAND SURFACE DATUM NOV 11, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
SEP 16, 1957	5.83	S	AUG 16, 1977	7.45	S	DEC 16, 1977	7.27	S	JUN 12, 1978	3.97	S
MAR 16, 1977	7.22	S	SEP 09	7.61	S	JAN 16, 1978	6.94	S	JUL 14	4.95	S
APR 14	7.25	S	19	7.65	S	FEB 13	6.60	S	AUG 14	6.41	S
MAY 11	7.08	S	30	7.74	S	MAR 15	5.71	S	SEP 21	7.29	S
JUN 16	6.94	S	OCT 13	7.73	S	APR 17	1.81	S			
JUL 14	7.01	S S	NOV 11	7.82	S	MAY 22	3.38	S			

WELL 01S 13E 1688B1

SITE NUMBER 432032114554201

DRIVEN OBSERVATION WATER-TABLE WELL IN SEDIMENTS OF QUATERNARY AGE, DIAM 1 1/4 IN (3.2 CM), DEPTH 13.0 FT (4.0 M), CASED TO 13.0 FT (4.0 M), WELL POINT 10.5-13.0 FT (3.2-4.0 M), LSD ABOUT 5.085 FT (1.550 M) NGVD OF 1929. MP NO. 1 TOP OF 1 1/4-IN (3.2-CM) CASING 2.30 FT (0.701 M) ABOVE LSD (SINCE MAR. 16, 1978).

RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.30 FEET BELOW LAND SURFACE DATUM JUL 14, 1978.

LOWEST WATER LEVEL 5.37 FEET BELOW LAND SURFACE DATUM APR 17, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17, 1978	5.37 S	JUL 14, 1978	4.30 S	AUG 14, 1978	4.56 S	SEP 21, 1978	5.18 S

WELL 01S 13E 23AAB1

SITE NUMBER 431934114522501

DRILLED STOCK ARTESIAN WELL IN SEDIMENTS OF QUATERNARY AGE, DIAM 6 IN (15 CM), REPORTED DEPTH 195 FT (59.4 M), CASED TO 125 FT (38.1 M), LSD ABOUT 5.060 FT (1.542 M) NGVD OF 1929. MP NO. 1 TOP OF WELL SEAL WEST SIDE, 2.30 FT (0.701 M) ABOVE LSD (SINCE DEC. 10, 1976).

RECORDS AVAILABLE 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 5.40 FEET ABOVE LAND SURFACE DATUM MAR 10, 1977.

LOWEST WATER LEVEL -17.30 FEET BELOW LAND SURFACE DATUM SEP 09, 1977.

WATER LEVELS IN FEET ABOVE OR BELOW(-) LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 15, 1976	3.15 E M	JUL 14, 1977	-11.13 S S	NOV 10, 1977	-10.25 S	JUN 12, 1978	0.38 S
JAN 20, 1977	4.06 E	AUG 16	-16.24 S	DEC 16	-6.49 S	JUL 14	-5.90 S
FEB 18	3.75 E	SEP 09	-17.30 S	JAN 17, 1978	-3.93 S	AUG 14	-13.90 S
MAR 10	5.40 E S	19	-17.43 S S	FEB 14	-2.22 S	SEP 21	-14.39 S
APR 14	4.40 E S	30	-15.54 S	MAR 16	-1.04 S		
MAY 11	-0.66 S S	OCT 11	-14.03 S	APR 17	-0.10 S		
JUN 16	-6.02 S S	13	-13.38 S	MAY 22	0.72 S		

WELL 01S 14E 07DDD1

SITE NUMBER 432035114495101

DUG UNUSED WATER-TABLE WELL IN SEDIMENTS OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 10.1 FT (3.1 M), CASING DEPTH NOT AVAILABLE, LSD ABOUT 5.057 FT (1.541 M) NGVD OF 1929. MAR. 15, 1978, INSTALLED WELL POINT, DIAM 1 1/4 IN (3.2 CM), DEPTH 14.2 FT (4.3 M), CASED TO 11.7 FT (3.6 M), WELL POINT 11.7-14.2 FT (3.6-4.3 M), SCREEN 40 (0.030 CM) MESH. MP NO. 3 TOP OF 1 1/4-IN (3.2-CM) CASING, 4.30 FT (1.3 M) ABOVE LSD (SINCE MAR. 15, 1978).

RECORDS AVAILABLE 1957, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.99 FEET BELOW LAND SURFACE DATUM APR 17, 1978.

LOWEST WATER LEVEL WELL DRY JUL 14, 1977; SEP 09, 1977; SEP 20, 1977; SEP 30, 1977; OCT 14, 1977; NOV 10, 1977; DEC 16, 1977; JAN 16, 1978; FEB 13, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 22, 1957	5.51 S	AUG 16, 1977	DRY	DEC 16, 1977	DRY	JUN 12, 1978	4.15 S
MAR 11, 1977	8.12 S	SEP 09	DRY	JAN 16, 1978	DRY	JUL 14	5.76 S
APR 14	8.08 S	20	DRY	FEB 13	8.91 S	AUG 14	7.00 S
MAY 11	8.09 S	30	DRY	MAR 15	8.59 S	SEP 21	7.81 S
JUN 16	8.08 S	OCT 14	DRY	APR 17	1.99 S		
JUL 14	DRY	NOV 10	DRY	MAY 22	2.94 S		

WELL 01S 14E 080DB1

SITE NUMBER 432043114485001

DRILLED STOCK ARTESIAN WELL IN SAND OF QUATERNARY AGE, DIAM 3 TO 2 IN (8 TO 5 CM), REPORTED DEPTH 320 FT (97.5 M), CASSED TO 140 FT (42.7 M). LSD ABOUT 5,060 FT (1,542 M) NGVD OF 1929. MP NO. 2 TOP OF 2-IN (5-CM) INNER CASING NORTH SIDE AT LSD (SINCE JULY 14, 1977).

RECORDS AVAILABLE 1957 - 1958, 1959 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 18.72 FEET ABOVE LAND SURFACE DATUM MAY 15, 1958.

LOWEST WATER LEVEL -12.53 FEET BELOW LAND SURFACE DATUM AUG 14, 1978.

WATER LEVELS IN FEET ABOVE OR BELOW(-) LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 23, 1976	14.22 E M	MAY 11, 1977	8.59 E M	SEP 30, 1977	-4.10 S	MAR 15, 1978	4.78 E
SEP 27	8.33 E M	JUN 16	4.15 E M	OCT 11	-3.00	APR 17	5.12 E M
DEC 15	10.00 E M	JUL 14	-1.77 S	14	-2.78 S	MAY 22	6.10 E M
JAN 20, 1977	10.51 E M	AUG 16	-9.30	NOV 11	-0.45 S	JUN 12	4.27 E M
FEB 18	10.85 E M	SEP 09	-6.69 S	DEC 16	1.61 E M	JUL 14	-3.01 S
MAR 10	11.36 E M	19	-5.43 S	JAN 17, 1978	3.63 E S	AUG 14	-12.53 S
APR 14	10.58 E M	20	-5.24 S	FEB 16	4.28 E S	SEP 21	-5.70 S

WELL 01S 14E 240AD1

SITE NUMBER 431924114435501

DRIVEN OBSERVATION WATER-TABLE WELL IN SEDIMENTS OF QUATERNARY AGE, DIAM 1 1/4 IN (3.2 CM), DEPTH 12.2 FT (3.7 M), CASSED TO 12.2 FT (3.7 M), WELL POINT 9.0-12.0 FT (2.7-3.7 M). LSD ABOUT 5,030 FT (1,533 M) NGVD OF 1929. MP NO. 1 TOP OF 1 1/4-IN (3.2-CM) PIPE, 3.10 FT (0.944 M) ABOVE LSD (SINCE MAR. 15, 1978).

RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 6.95 FEET BELOW LAND SURFACE DATUM JUL 14, 1978.

LOWEST WATER LEVEL 7.97 FEET BELOW LAND SURFACE DATUM SEP 21, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 14, 1978	6.95 S	AUG 14, 1978	7.60 S	SEP 21, 1978	7.97 S		

WELL 01S 14E 240AD1

SITE NUMBER 431908114435801

DRILLED DOMESTIC ARTESIAN WELL IN BRUNEAU FORMATION, DIAM 6 IN (15 CM), REPORTED DEPTH 187 FT (57.0 M), CASSED TO 169 FT (51.5 M). LSD ABOUT 5,028 FT (1,533 M) NGVD OF 1929. MP NO. 1 TOP OF CASING SOUTH SIDE, 0.90 FT (0.274 M) ABOVE LSD (SINCE DEC. 7, 1976).

RECORDS AVAILABLE 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 30.15 FEET BELOW LAND SURFACE DATUM APR 15, 1977.

LOWEST WATER LEVEL 54.32 FEET BELOW LAND SURFACE DATUM JUN 16, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 10, 1976	46.00 R	DEC 15, 1976	30.93 S	SEP 10, 1977	38.29 S	FEB 13, 1978	32.22 S
17	48.00 R	JAN 20, 1977	30.48	19	36.96 S	MAR 15	31.97 S
27	42.00 R	FEB 18	30.39	20	36.84	APR 17	30.28 S
AUG 11	38.50 R	MAR 10	30.24 S	30	37.62 S	MAY 22	30.50 S
20	37.00 R	APR 15	30.15 S	OCT 11	40.23 S	JUN 12	32.22 T
29	34.00 R	MAY 12	41.45 S	14	38.37 S	JUL 14	49.33 V
SEP 22	32.00 R	JUN 16	54.32 S	NOV 10	34.98 S	AUG 14	42.44 V
NOV 02	31.00 R	JUL 14	54.76 R S	DEC 15	33.46 S	SEP 21	35.16 V
DEC 07	31.00 S	AUG 16	52.32 R S	JAN 16, 1978	32.63 S		

WELL 01S 14E 280DC1

SITE NUMBER 431756114473801

DRILLED IRRIGATION ARTESIAN WELL IN BRUNEAU FORMATION, DIAM 20 IN (51 CM), DEPTH 212.1 FT (64.1 M), CASIED TO 20 FT (6.1 M). LSD ABOUT 5,040 FT (1,536 M) NGVD OF 1929. RECORDER INSTALLED DEC. 10, 1976. RECORDER CHANGED TO ADR DIGITAL AUG. 26, 1977. RECORDER REMOVED APR. 17, 1978. MP NO. 2 TOP OF 20-IN (51-CM) CASING EAST SIDE, 1.20 FT (0.366 M) ABOVE LSD (SINCE DEC. 10, 1976).

RECORDS AVAILABLE 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 21.18 FEET RELOW LAND SURFACE DATUM APR 16, 1978.

LOWEST WATER LEVEL 59.08 FEET RELOW LAND SURFACE DATUM AUG 21, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 06, 1976	25.29 S	APR 05, 1977	24.13	SFP 15, 1977	52.95	FEB 05, 1978	28.27
10	25.37	10	23.92	19	52.32	10	27.51
15	25.21	14	24.94	20	52.24	15	27.39
20	25.03	15	23.97	25	51.34	23	26.92
25	24.95	20	23.91	30	50.52	25	26.64
31	24.53	25	23.90	OCT 05	49.35	MAR 05	26.05
JAN 05, 1977	24.73	30	25.91	09	48.82	07	26.44
20	24.31	MAY 05	28.33	10	48.96	10	25.89
25	24.20	10	29.42	11	49.07	15	25.92
31	24.16	15	28.19	15	48.85	20	25.56
FEB 10	24.17	20	26.19	20	48.63	25	25.56
15	24.05	25	25.32	25	48.52	30	24.90
16	23.96	31	25.31	31	47.33	31	24.42
20	23.88	JUN 05	28.06	NOV 05	46.26	APR 05	23.35
21	23.52	17	37.19	10	45.63	10	22.28
25	24.07	20	39.15	15	44.66	15	21.44
28	23.83	25	42.33	18	44.00	16	21.18
MAR 05	24.13	30	45.66	20	43.85	17	21.74 S
10	24.12	JUL 05	47.83	25	43.20	MAY 22	22.12 S
15	24.04	10	49.26	30	42.53	JUN 12	29.24 S
20	24.06	17	51.22	DFC 05	41.66	JUL 14	35.16 S
21	24.17	AUG 26	58.29	10	40.19	AUG 14	58.36 S
25	23.85	31	56.65	14	38.98 S	21	59.08 S
27	23.62	SEP 05	55.05	JAN 28, 1978	29.30 S	SFP 21	48.04 S
31	23.92	10	53.84	31	28.84		

WELL 01S 15E 168BA1

SITE NUMBER 432029114404001

DRILLED STOCK ARTESIAN WELL IN SEDIMENTS OF QUATERNARY AGE, DIAM 2 IN (5 CM), REPORTED DEPTH 316 FT (96.3 M), CASIED TO 316 FT (96.3 M). LSD ABOUT 5,019 FT (1,530 M) NGVD OF 1929. MP NO. 1 TOP OF 2-IN (5-CM) GALVANIZED TEF WEST SIDE, 3.40 FT (1.036 M) ABOVE LSD (SINCE DEC. 10, 1976).

RECORDS AVAILABLE 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 8.11 FEET ABOVE LAND SURFACE DATUM MAR 10, 1977.

LOWEST WATER LEVEL 0.43 FEET ABOVE LAND SURFACE DATUM AUG 16, 1977.

WATER LEVELS IN FEET ABOVE LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 15, 1976	6.75 E M	JUL 12, 1977	3.20 E S	OCT 14, 1977	2.07 E S	MAY 22, 1978	5.50 M
JAN 21, 1977	7.81 E	AUG 16	0.43 E S	NOV 10	2.50 E S	JUN 12	6.13 E M
FEB 18	7.19	SEP 10	0.94 E S	DEC 14	4.35 E S	JUL 14	4.39 S
MAR 10	8.11 E M	19	1.30 E S	JAN 16, 1978	4.43 E S	AUG 14	1.08 S
APR 15	8.03 E M	20	1.03 E S	FEB 13	4.90 E S	SFP 21	1.60 E S
MAY 13	8.09 E M	30	1.10 E S	MAR 15	5.20 E S		
JUN 16	6.19 E M	OCT 11	1.41 E S	APR 17	5.42 E M		

WELL 01S 15E 16DHC1

SITE NUMBER 431958114405601

DRILLED IRRIGATION ARTESIAN WELL IN BRUNEAU FORMATION, DIAM 18 IN (46 CM), DEPTH 120.9 (36.8 M), CASED TO 120 FT (36.6 M), PERFORATED 80-120 FT (24.4-36.6 M). LSD ABOUT 5,019 FT (1,530 M) NGVD OF 1929. RECORDER INSTALLED DEC. 10, 1976. RECORDER CHANGED TO DIGITAL AUG. 26, 1977. RECORDER REMOVED APR. 28, 1978. MP NO. 2 TOP OF CASING EAST SIDE, 1.20 FT (0.366 M) ABOVE LSD (SINCE DEC. 7, 1976).

RECORDS AVAILABLE 1957, 1976 - 1978.

HIGHEST WATER LEVEL 22.50 FEET BELOW LAND SURFACE DATUM MAR 27, 1977.

LOWEST WATER LEVEL 58.43 FEET BELOW LAND SURFACE DATUM JUL 31, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
JUL 24, 1957	32.31	S	MAR 31, 1977	22.57		AUG 10, 1977	48.60		DEC 25, 1977	25.79
DEC 07, 1976	23.42	S	APR 05	22.64		15	47.51	S	31	25.62
10	23.47		10	22.58		17	44.40		JAN 05, 1978	25.48
15	23.43		15	22.64		20	39.77		10	25.37
20	23.29		20	37.25		25	35.62		15	25.18
25	23.23		25	43.80		26	35.01		20	25.18
31	23.09		30	44.70		31	32.99		25	25.16
JAN 03, 1977	22.01		MAY 03	47.63		SFP 05	31.67		31	25.03
05	23.02		05	44.10		10	30.70		FEB 05	24.95
10	22.97		10	36.34		15	29.87		10	24.71
15	22.05		15	31.49		19	29.38		15	24.72
20	22.93		20	33.37		20	29.30		23	24.72
25	22.94		25	33.87		25	28.84		25	24.67
31	22.94		31	39.06		30	31.04		28	24.61
FEB 05	22.97		JUN 05	42.25		OCT 05	31.81		MAR 05	24.49
10	22.94		10	46.53		10	33.39		10	24.50
13	22.92		15	49.35		15	30.30		15	24.50
15	22.94		17	51.72		20	29.11		20	24.41
20	22.77		20	46.11		25	28.49		25	24.30
25	22.70		25	43.95		31	27.90		31	23.79
28	22.67		27	41.28		NOV 05	27.61		APR 05	23.39
MAR 05	22.68		30	43.42		10	27.44		10	23.09
09	22.54		JUL 05	44.96		15	27.14		15	22.90
10	22.64		10	44.18		20	26.90		16	22.83
11	23.35		15	51.45		25	26.70		20	22.86
14	22.74		17	54.26		30	26.58		25	22.93
15	22.73		20	53.52		DEC 05	26.43		28	22.91 N S
20	22.64		25	54.91		10	26.31			
25	22.57		31	58.43		15	25.94			
27	22.50		AUG 05	55.54		20	25.94			

WELL 01S 15E 22AAA1

SITE NUMBER 431938114390901

DUG UNUSED WATER-TABLE WELL IN SAND OF QUATERNARY AGE, DIAM 8 IN (20 CM), DEPTH 39.0 FT (11.9 M), CASING DEPTH NOT AVAILABLE. LSD ABOUT 4,994 FT (1,522 M) NGVD OF 1929. MP NO. 1 TOP OF CASING EAST SIDE, 1.40 FT (0.427 M) ABOVE LSD (SINCE SEPT. 13, 1957).

RECORDS AVAILABLE 1957, 1961 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 0.20 FEET ABOVE LAND SURFACE DATUM APR 04, 1974.

LOWEST WATER LEVEL WELL DRY JUL 14, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAY 04, 1976	0.94	S	MAY 13, 1977	11.44	S	OCT 11, 1977	11.36	S	APR 17, 1978	2.16	S
SFP 27	3.81	S	JUN 16	27.48	S	14	9.37	S	MAY 22	2.47	S
DEC 15	2.75	S	JUL 12	26.30	S	NOV 10	6.17	S	JUN 12	16.42	S
JAN 20, 1977	2.46	S	AUG 16	23.40	S	DEC 14	4.98	S	JUL 14	DRY	
FEB 18	2.43	S	SFP 10	9.37		JAN 16, 1978	4.18	S	AUG 14	12.87	S
MAR 10	2.35	S	19	8.07	S	FEB 13	3.80	S	SFP 21	6.40	S
APR 15	2.35	S	30	9.46	S	MAR 15	3.60	S			

WELL 075 39E 09DCC1

SITE NUMBER 424927111541801

DRILLED IRRIGATION WATER-TABLE WELL IN BASALT OF QUATERNARY AGE, DIAM 16 IN (41 CM), DEPTH 130 FT (39.6 M), CASIED TO 35 FT (10.7 M). LSD 5,336.64 FT (1,626.608 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 1 HOLE INSIDE PUMPBASE WEST SIDE, 0.35 FT (0.107 M) ABOVE LSD (SINCE SEPT. 25, 1968).

RECORDS AVAILABLE 1968 TO CURRENT YEAR.

HIGHEST WATER LEVEL 19.22 FEET BELOW LAND SURFACE DATUM MAY 04, 1971.

LOWEST WATER LEVEL 29.35 FEET BELOW LAND SURFACE DATUM AUG 01, 1973.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 21, 1976	23.42	S	MAR 07, 1977	23.42	S	NOV 09, 1977	25.55	V S	MAY 30, 1978	22.64	V S
MAR 08	23.33	S	MAY 24	30.82	P S	DEC 20	25.32	V S	JUL 11	27.98	P S
APR 21	20.85	S	JUL 05	31.96	P S	FEB 07, 1978	25.08	V S	AUG 22	25.80	V S
JUN 02	28.62	P S	AUG 17	32.98	P S	MAR 16	24.70	V S	SEPT 25	25.62	S
SEP 08	23.23	S	SEP 27	25.59	V S	APR 26	22.72	V S			

WELL 075 39E 10CCD1

SITE NUMBER 424926111532601

DRILLED UNUSED WATER-TABLE WELL IN BASALT OF QUATERNARY AGE, DIAM 15 IN (38 CM), DEPTH 68.2 FT (20.8 M), CASIED TO 6 FT (1.8 M). LSD 5,353.71 FT (1,631.812 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED OCT. 20, 1968. RECORDER REMOVED SEPT. 1, 1971. DIGITAL RECORDER INSTALLED JULY 12, 1977. MP NO. 1 TOP OF CASING NORTHEAST SIDE, 1.20 FT (0.366 M) ABOVE LSD (SINCE OCT. 3, 1968).

RECORDS AVAILABLE 1968 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 10.52 FEET BELOW LAND SURFACE DATUM MAY 08, 1971.

LOWEST WATER LEVEL 40.43 FEET BELOW LAND SURFACE DATUM AUG 20, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
JAN 21, 1976	34.45	S	SEP 20, 1977	40.21		JAN 15, 1978	34.88		MAY 15, 1978	23.31
MAR 08	35.28	S	25	40.21		20	30.89		20	24.51
APR 21	19.58	S	30	40.22		25	32.79		25	26.25
JUN 02	27.86	S	OCT 05	40.26		31	33.34		30	25.65
SEP 08	33.60	S	10	40.27		FEB 05	32.49		31	25.65
MAR 07, 1977	35.22	S	15	40.33		07	30.47		JUN 05	24.25
MAY 24	37.64	S	20	40.25		10	30.24		10	25.07
JUL 05	39.21	S	25	40.15		15	30.70		15	27.53
12	39.42	S	31	39.63		20	30.72		20	29.99
15	39.54		NOV 05	38.86		25	31.43		25	30.84
20	39.69		09	38.43		28	31.20		30	30.90
25	39.90		10	38.49		MAR 05	31.30		JUL 05	31.42
31	40.10		15	37.26		10	27.88		10	32.23
AUG 05	40.23		20	37.50		15	27.59		15	33.34
10	40.34		25	37.56		20	27.33		20	34.62
15	40.40		30	34.56		25	20.92		25	35.75
16	40.42		DEC 05	33.21		28	19.52		AUG 25	37.35
17	40.42		10	33.58		31	21.44		31	37.45
20	40.43		15	33.04		APR 05	23.11		SEP 05	37.55
25	40.36		19	32.53		10	23.09		10	37.60
31	40.31		20	32.85		15	23.96		15	37.77
SEP 05	40.29		25	34.01		20	23.77		20	37.90
10	40.26		31	34.75		25	24.72		25	38.04
15	40.21		JAN 05, 1978	35.11		30	22.48		30	38.15
16	40.19		10	35.32		MAY 05	21.90			
17	40.19		13	35.51		10	22.60			

WELL 08S 42E 17CAB1

SITE NUMBER 424340111344101

DRILLED UNUSED WATER-TABLE WELL IN FRACTURED BASALT OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 119.4 FT (36.4 M), CASING TO 16 FT (4.9 M), LSD 6,095.6 FT (1,857.94 M) NGVD OF 1929, RECORDER INSTALLED NOV. 5, 1967, RECORDER REMOVED MAY 31, 1978, MP NO. 1 TOP OF 6-IN (15-CM) CASING, 0.40 FT (0.122 M) ABOVE LSD (SINCE NOV. 5, 1967).

RECORDS AVAILABLE 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 92.19 FEET BELOW LAND SURFACE DATUM MAY 06, 1976.

LOWEST WATER LEVEL 103.75 FEET BELOW LAND SURFACE DATUM NOV 25, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 01, 1976	100.24		JUN 15, 1976	94.10		NOV 30, 1976	99.05		DEC 25, 1977	102.94	
21	100.57	S	20	94.30		DEC 05	99.04		31	102.83	
25	100.45		25	94.67		10	98.98		FEB 08, 1978	102.87	S
31	100.62		30	94.90		15	99.00		10	102.87	
FEB 05	100.49		JUL 05	95.16		20	99.10		15	102.93	
10	100.68		10	95.29		25	99.20		20	103.06	
11	100.74		15	95.58		31	99.25		25	103.06	
15	100.50		20	95.87		JAN 05, 1977	99.15		28	103.04	
20	100.55		25	96.28		10	99.18		MAR 05	103.04	
25	100.51		31	96.82		15	99.18		10	103.26	
29	100.33		AUG 05	97.19		20	99.27		15	103.26	
MAR 05	100.29		10	97.38		25	99.23		16	103.28	
10	99.86		15	97.45		31	99.22		17	103.29	
15	100.06		20	97.75		FEB 05	99.24		20	103.22	
20	100.13		25	97.93		10	99.27		25	102.87	
25	100.13		31	98.10		15	99.41		31	101.18	
29	100.27		SEP 05	98.15		20	99.50		APR 05	100.27	
APR 22	93.13	S	10	98.23		25	99.49		10	99.87	
25	92.62		12	98.14		28	99.54		15	99.62	
30	92.54		OCT 07	98.56		MAR 05	99.74		20	99.71	
MAY 05	92.23		10	98.55		NOV 10	103.62		25	99.88	
06	92.19		20	98.82	S	15	103.63		26	98.65	
10	92.32		25	98.87		20	103.66		29	98.62	
15	92.47		31	99.06		25	103.75		MAY 31	100.81	S
20	92.61		NOV 05	99.06		30	103.75		AUG 22	102.73	S
25	92.80		10	99.05		DFC 05	103.57		SEP 26	102.90	S
31	93.21		15	99.05		10	103.43				
JUN 05	93.56		20	99.06		15	103.05				
10	93.73		25	99.05		20	103.01				

WELL 09S 39E 02CBC1

SITE NUMBER 423956111515801

DRILLED UNUSED WATER-TABLE WELL IN FRACTURED BASALT OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 96.2 FT (29.3 M), CASING DEPTH NOT AVAILABLE, LSD 5,480.28 FT (1,670.389 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, RECORDER INSTALLED NOV. 5, 1967, RECORDER REMOVED SEPT. 2, 1971, MP NO. 1 TOP OF 6-IN (15-CM) CASING, 0.70 FT (0.213 M) ABOVE LSD (SINCE AUG. 29, 1967).

RECORDS AVAILABLE 1967 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 61.56 FEET BELOW LAND SURFACE DATUM APR 21, 1976.

LOWEST WATER LEVEL WELL DRY SEP 25, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 21, 1976	80.21	S	MAR 07, 1977	79.41	S	SEP 21, 1977	86.40	S	APR 26, 1978	85.75	S
MAR 09	80.85	S	MAY 24	82.62	S	27	86.30	S	MAY 30	86.78	S
APR 21	61.56	S	JUL 05	84.97	S	NOV 09	85.77	S	JUL 11	89.30	S
JUN 02	78.67	S	AUG 12	86.58	S	DEC 20	85.40	S	AUG 22		0
SEP 08	81.36	S	17	86.64	S	MAR 16, 1978	86.32	S	SEP 25	DRY	

WFL 09S 40E 13ACB1

SITE NUMBER 423843111433901

DRILLED UNUSED WATER-TABLE WELL IN FRACTURED BASALT OF QUATERNARY AGE, DIAM 8 IN (20 CM), REPORTED DEPTH 303 FT (92.4 M), CASING DEPTH NOT AVAILABLE, LSD 5,710,989 FT (1,740,679 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 HOLE IN CASING COVER SOUTHWEST SIDE, 0.40 FT (0.122 M) ABOVE LSD (SINCE AUG. 29, 1967).

RECORDS AVAILABLE 1967 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 264.79 FEET BELOW LAND SURFACE DATUM SEP 24, 1970.

LOWEST WATER LEVEL 269.83 FEET BELOW LAND SURFACE DATUM OCT 07, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 09, 1976	269.27	S	AUG 17, 1977	265.10	S	FEB 08, 1978	266.24	S	JUL 11, 1978	265.04	S
SEP 08	265.04	S	SEP 20	266.30	S	MAR 16	268.12	S	AUG 22	265.04	O
MAR 07, 1977	267.20	S	NOV 09	267.66	S	APR 26	268.02	S	SEP 25	266.70	S
AUG 12	264.93	S	DEC 20	266.88	S	MAY 30	268.60	S			

WFL 10S 40E 08BB1

SITE NUMBER 423433111484701

DRILLED IRRIGATION WATER-TABLE WELL IN INTERBEDDED BASALT OF QUATERNARY AGE, DIAM 16 TO 14 IN (41 TO 36 CM), REPORTED DEPTH 300 FT (91.4 M), 16-IN (41-CM) CASING 0-205 FT (0-62.5 M), 14-IN (36-CM) CASING 190-280 FT (57.9-85.3 M), PERFORATED 70-83 FT (21.3-25.3 M), 270-280 FT (82.3-85.3 M), LSD 5,477.15 FT (1,669.435 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 2 TOP OF HOLE INSIDE PUMPBASE SOUTH SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE SEPT. 24, 1969).

RECORDS AVAILABLE 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 46.15 FEET BELOW LAND SURFACE DATUM SEP 27, 1972.

LOWEST WATER LEVEL 55.41 FEET BELOW LAND SURFACE DATUM MAR 16, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 09, 1976	52.25	S	SEP 25, 1976	76.96	P S	SEP 27, 1977	52.19	S	MAR 16, 1978	55.41	S
SEP 08	49.02	S	MAR 07, 1977	51.91	S	FEB 07, 1978	54.25	S	SEP 25	53.22	S

WFL 10S 40E 35BD1

SITE NUMBER 423045111450001

DRILLED IRRIGATION WATER-TABLE WELL IN FRACTURED BASALT OF QUATERNARY AGE, DIAM 18 IN (46 CM), REPORTED DEPTH 90 FT (27.4 M), CASING DEPTH NOT AVAILABLE, LSD ABOUT 5,390 FT (1,643 M) NGVD OF 1929, MP NO. 1 HOLE IN PUMPBASE WEST SIDE, 1.30 FT (0.396 M) ABOVE LSD (SINCE AUG. 16, 1967).

RECORDS AVAILABLE 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 61.93 FEET BELOW LAND SURFACE DATUM SEP 14, 1971.

LOWEST WATER LEVEL 66.20 FEET BELOW LAND SURFACE DATUM MAY 30, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 09, 1976	65.39	S	AUG 17, 1977	64.32	S	DEC 20, 1977	66.06	S	MAY 30, 1978	66.20	
SEP 08	63.17	S	SEP 21	64.34	S	FEB 08, 1978	65.63	S	JUL 11	66.17	P S
MAR 07, 1977	65.85	S	27	64.31	S	MAR 16	65.15	S	AUG 22	63.89	S
AUG 12	65.24	P S	NOV 09	65.48	S	APR 26	65.90	S	SEP 25	63.69	S

WFL 095 25E 23DBA1

SITE NUMBER 423732113295801

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 8 TO 6 IN (20 TO 15 CM), DEPTH 174.0 FT (53.0 M), 8-IN (20-CM) CASING 0-11 FT (0-3.4 M), 6-IN (15-CM) CASING 11-172 FT (3.4-52.4 M), 30 FT (9.1 M) SLOTTED PERFORATIONS BELOW WATER LEVEL, LSD 4,266.97 FT (1,300,572 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MEASUREMENTS PRIOR TO MAR. 21, 1972, MADE BY US BUREAU OF RECLAMATION, PERIODIC MEASUREMENTS PUBLISHED SINCE MAR. 21, 1972, MADE BY US GEOL SURVEY, RECORDER INSTALLED JUNE 20, 1951, CONTINUOUS RECORDER MAINTAINED, AND ITS RECORD FURNISHED BY US BUREAU OF RECLAMATION, MP NO. 1 TOP OF CASING, 1.00 FT (0.305 M) ABOVE LSD (SINCE MAY 25, 1951).

RECORDS AVAILABLE 1951 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.56 FEET BELOW LAND SURFACE DATUM MAY 01, 1912.

LOWEST WATER LEVEL 134.76 FEET BELOW LAND SURFACE DATUM APR 10, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
JAN 01, 1976	126.20		JUL 01, 1976	127.85		NOV 10, 1976	125.71		APR 10, 1978	134.76
27	127.44	S	05	127.74		15	125.96		13	134.76
31	127.68		10	127.54		20	126.18		15	134.72
FEB 01	127.64		15	127.37		25	126.20		19	134.76
05	127.69		22	127.04	S	30	126.65		20	134.70
10	128.00		25	126.95		DEC 01	126.76		25	134.54
15	128.12		31	126.63		05	126.80		30	134.30
20	128.45		AUG 01	126.60		10	127.15		MAY 04	134.02
25	128.58	S	05	126.27		15	127.43		11	133.82
29	128.50		10	126.15		20	127.67		15	133.57
MAR 01	128.50		15	125.79		25	127.93		20	133.50
05	128.89		20	125.74		28	128.07		25	133.20
10	128.94		25	125.55	S	MAR 10, 1977	131.50	S	31	133.08
15	129.30	S	31	125.48		12	131.46	S	JUN 05	132.84
20	129.33		SEP 01	125.42		16	128.75	S	10	132.66
25	129.40	S	05	125.10		SEP 05, 1978	132.06		22	132.27
31	129.38		10	124.99		10	132.18		25	132.20
APR 05	129.45		15	124.81		14	132.25		30	132.03
10	129.63		20	124.84		FEB 06	132.99		JUL 05	131.94
15	129.49		24	124.89	S	10	133.00		10	131.65
28	129.62	S	25	124.81		15	133.26		15	131.41
30	129.66		30	124.81		20	133.58		20	131.22
MAY 05	129.36		OCT 01	124.75		25	133.68		24	131.04
10	129.25		02	124.70		28	133.71		AUG 29	129.31
15	129.15		05	124.80		MAR 05	133.99		31	129.14
20	128.95		10	124.77		10	134.21		SEP 05	128.90
25	128.73		15	124.79		15	134.42		10	128.56
30	128.47		20	124.98		20	134.53		14	128.47
JUN 16	128.02	S	25	125.09		25	134.68		15	128.53
20	128.04		31	125.38		27	134.60	S	20	128.42
25	127.97		NOV 01	125.44		31	134.69		25	128.40
30	127.80		05	125.53		APR 05	134.69		29	128.37

WFL 095 26F 07AAH1

SITE NUMBER 423943113272001

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DEPTH 152.5 FT (46.5 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-152.5 FT (0-46.5 M), PERFORATED 145-150 FT (44.2-45.7 M), GRAVEL PACKED, CONCRETE SEAL, LSD 4,199.95 FT (1,280,145 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE, 1.80 FT (0.549 M) ABOVE LSD (SINCE NOV. 18, 1970).

RECORDS AVAILABLE 1970 - 1972, 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 54.75 FEET BELOW LAND SURFACE DATUM AUG 25, 1972.

LOWEST WATER LEVEL 69.44 FEET BELOW LAND SURFACE DATUM MAR 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAR 26, 1976	64.24	S	MAR 12, 1977	66.74	S	MAR 27, 1978	69.44	S		
SEP 24	59.41	S	SEP 16	64.83	S	SEP 19	62.80	S		

WELL 09S 26E 07AAB2

SITE NUMBER 423943113272002

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DEPTH 550 FT (167.6 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-227 FT (0-69.2 M), PERFORATED 219.5-224.5 FT (66.9-68.4 M), GRAVEL PACKED, CONCRETE SEAL. LSD 4,199.95 FT (1,280.145 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY

RECORDS AVAILABLE 1970 - 1972, 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 55.42 FEET BELOW LAND SURFACE DATUM AUG 25, 1972.

LOWEST WATER LEVEL 70.04 FEET BELOW LAND SURFACE DATUM MAR 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAR 26, 1976	64.70	S	MAR 12, 1977	67.32	S	MAR 27, 1978	70.04	S		
SEP 24	59.97	S	SEP 16	65.36	S					

WELL 09S 26E 07AAB3

SITE NUMBER 423943113272003

DRILLED OBSERVATION ARTESIAN WELL IN SNAKE RIVER GROUP, DEPTH 804.5 FT (245.2 M), 1-IN (2.5-CM) PIEZOMETER TUBE 0-861 FT (0-262.4 M), PERFORATED 777.7-782.7 FT (237.1-238.6 M), GRAVEL PACKED, CONCRETE SEAL. LSD 4,199.95 FT (1,280.145 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 1 TOP OF 1-IN (2.5-CM) PIPE, 0.31 FT (0.094 M) ABOVE LSD (SINCE NOV. 18, 1970).

RECORDS AVAILABLE 1970 - 1972, 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 6.09 FEET BELOW LAND SURFACE DATUM JUL 27, 1972.

LOWEST WATER LEVEL 23.05 FEET BELOW LAND SURFACE DATUM SEP 16, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAR 26, 1976	14.76	S	MAR 12, 1977	17.27	S	MAR 28, 1978	19.60	S		
SEP 24	19.17	S	SEP 16	23.05	S					

WELL 09S 26E 07BCC1

SITE NUMBER 423922113281201

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 5 IN (13 CM), DEPTH 88.0 FT (26.8 M), 8-IN (20-CM) CASING 0-7.2 FT (0-2.2M), 5-IN (13-CM) CASING 0-88.5 FT (0-27.0 M), PERFORATED 58.5-88.5 FT (17.8-27.0 M), LSD 4,207.84 FT (1,282.550 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MEASUREMENTS PRIOR TO MAR. 21, 1972, MADE BY US BUREAU OF RECLAMATION. RECORDER INSTALLED AUG. 22, 1951. RECORDER REMOVED SEPT. 12, 1962. MP NO. 1 TOP OF 5-IN (13-CM) CASING, 0.70 FT (0.213 M) ABOVE LSD (SINCE AUG. 17, 1951).

RECORDS AVAILABLE 1951 - 1962, 1963 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 58.33 FEET BELOW LAND SURFACE DATUM OCT 02, 1951.

LOWEST WATER LEVEL 76.48 FEET BELOW LAND SURFACE DATUM MAR 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAR 26, 1976	71.36	S	MAR 10, 1977	73.59	S	SEP 16, 1977	71.17	S	MAR 27, 1978	76.48
SEP 24	66.69	S	12	73.52	S	MAR 09, 1978	76.19	S	SEP 19	70.06

WELL 09S 26E 100DD1

SITE NUMBER 423A55113233901

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 8 TO 6 IN (20 TO 15 CM), DEPTH 128.0 FT (39.0 M), 8-IN (20-CM) CASING 0-15 FT (0-4.6 M), 6-IN (15-CM) CASING 15-118 FT (4.6-36.0 M), LSD 4,217.18 FT (1,285.396 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MEASUREMENTS PRIOR TO MAR. 21, 1972, MADE BY US BUREAU OF RECLAMATION. RECORDER INSTALLED JUNE 21, 1951. RECORDER REMOVED SEPT. 12, 1962. MAR. 21, 1979, WELL HAD FILLED IN TO A DEPTH OF 83.0 FT (25.3 M). MP NO. 1 TOP OF CASING, 0.75 FT (0.229 M) ABOVE LSD (SINCE JUNE 4, 1951).

RECORDS AVAILABLE 1951 - 1962, 1963 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 67.30 FEET BELOW LAND SURFACE DATUM OCT 20, 1951.

LOWEST WATER LEVEL 85.26 FEET BELOW LAND SURFACE DATUM MAR 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 26, 1976	80.07	S	MAR 10, 1977	82.16	S	SEP 16, 1977	80.05	S	MAR 27, 1978	85.26	S
SEP 24	75.98		11	82.15	S	MAR 09, 1978	84.78	S			

WELL 11S 22E 32CCC1

SITE NUMBER 42250113564801

DRILLED OBSERVATION WATER-TABLE WELL IN IDAVADA VOLCANICS, DIAM 6 IN (15 CM), REPORTED DEPTH 635.0 FT (193.6 M), CASED TO 605 FT (184.4 M), CASING SEALED AT 605 FT (184.4 M), LSD 4,309.70 FT (1,313.597 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968. RECORDER INSTALLED JUNE 2, 1972, AND OPERATED BY US BUREAU OF RECLAMATION. RECORDER REMOVED DEC. 17, 1974. MP NO. 2 TOP OF 1-IN (2.5-CM) HOLE IN CASING COVER, 2.61 FT (0.796 M) ABOVE LSD (SINCE SEPT. 11, 1975).

RECORDS AVAILABLE 1972 - 1974, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 368.21 FEET BELOW LAND SURFACE DATUM MAY 04, 1976.

LOWEST WATER LEVEL 405.21 FEET BELOW LAND SURFACE DATUM AUG 31, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 14, 1976	375.07	S	SEP 23, 1976	387.90	S	JUL 13, 1977	392.67	S	MAY 18, 1978	378.59	S
FEB 25	371.99	S	NOV 17	380.86	S	SEP 14	394.82	S	JUL 10	394.17	S
MAR 23	370.32	S	JAN 08, 1977	374.88	S	NOV 15	385.39	S	SEP 15	396.53	S
MAY 04	368.21	S	MAR 11	371.64	S	JAN 26, 1978	378.46	S			
JUL 13	388.38	S	MAY 17	376.56	S	MAR 26	374.81	S			

WELL 11S 23E 34COC1

SITE NUMBER 422458113452701

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 16 IN (41 CM), DEPTH 346.4 FT (105.6 M), CASED TO 282.3 FT (86.0 M), LSD 4,271.11 FT (1,301.834 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. JULY 1, 1971, GEOPHYSICAL LOG SHOWED WELL HAD FILLED IN TO A DEPTH OF 340.5 FT (103.8 M). MP NO. 2 TOP OF 1 1/4-IN (3.2-CM) PIPE COUPLING, 2.25 FT (0.686 M) ABOVE LSD (SINCE MAY 18, 1972).

RECORDS AVAILABLE 1952, 1962 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 249.97 FEET BELOW LAND SURFACE DATUM JUN 05, 1952.

LOWEST WATER LEVEL 342.43 FEET BELOW LAND SURFACE DATUM JUL 10, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 14, 1976	320.89	S	SEP 23, 1976	328.33	S	JUL 14, 1977	335.23	S	MAY 18, 1978	323.95	S
FEB 25	319.03	S	NOV 17	324.44	S	NOV 15	329.70	S	JUL 10	342.43	S
MAR 23	317.90	S	JAN 18, 1977	321.87	S	DEC 15	331.47	V	SEP 15	340.69	S
MAY 04	316.52	S	MAR 10	319.96	S	JAN 26, 1978	326.60	S			
JUL 13	335.57	S	MAY 18	325.08	S	MAR 26	324.44	S			

WELL 11S 25E 32CCC2

SITE NUMBER 422458113340201

DRILLED IRRIGATION WATER-TABLE WELL IN IDAVADA VOLCANICS, DIAM 14 IN (36 CM), REPORTED DEPTH 500 FT (152.4 M), 16-IN (41-CM) CASING 0-60 FT (0-18.3 M), 14-IN (36-CM) CASING 0-239 FT (0-72.8 M), PERFORATED 0-239 FT (0-72.8 M). LSD ABOUT 4,680 FT (1,426 M) NGVD OF 1929. MP NO. 1 BOTTOM EDGE OF 1-IN (2.5-CM) PIPE NORTHEAST SIDE, 1.40 FT (0.427 M) ABOVE LSD (SINCE JULY 11, 1978).

RECORDS AVAILABLE 1966 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 14.79 FEET BELOW LAND SURFACE DATUM NOV 08, 1966.

LOWEST WATER LEVEL 36.79 FEET BELOW LAND SURFACE DATUM OCT 03, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
JAN 13, 1976	21.53	S	SEP 23, 1976	25.08	S	NOV 16, 1977	30.28	S	JUL 11, 1978	29.27 P S
FEB 27	21.66	S	MAR 11, 1977	23.45	S	JAN 25, 1978	28.09	S	SEP 13	28.99 S
MAR 10	21.49	S	MAY 18	22.89	S	MAR 27	26.45	S		
MAY 06	20.97	S	JUL 14	29.47	S	MAY 19	25.42	S		

WELL 11S 27E 12DDA1

SITE NUMBER 422835113140701

DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 20 IN (51 CM), REPORTED DEPTH 376 FT (114.6 M), CASING 0-245 FT (0-74.7 M), 297-330 FT (90.5-100.6 M), PERFORATED 167-245 FT (50.9-74.7 M), 297-330 FT (90.5-100.6 M). LSD 4,480.50 FT (1,365.656 M) NGVD OF 1929. SUPPLEMENTARY ADJUSTMENT OF 1962. MP NO. 5 TOP OF ACCESS HOLE INSIDE PUMPBASE NORTHWEST SIDE, 1.41 FT (0.430 M) ABOVE LSD (SINCE SEPT. 20, 1974).

RECORDS AVAILABLE 1963 - 1965, 1971 - 1972, 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 180.25 FEET BELOW LAND SURFACE DATUM APR 15, 1964.

LOWEST WATER LEVEL 257.05 FEET BELOW LAND SURFACE DATUM SEP 15, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAR 22, 1976	218.72	S	MAR 12, 1977	220.84	S	MAR 27, 1978	224.74	S		
SEP 24	232.19	S	SEP 15	257.05	S	SEP 13	244.81	S		

WELL 11S 27E 29AAA1

SITE NUMBER 422639113260101

DRILLED UNUSED WATER-TABLE WELL IN RAFT FORMATION, DIAM 8 IN (20 CM), DEPTH 247.4 FT (75.4 M), CASED TO 237 FT (72.2 M). LSD 4,394.72 FT (1,339.511 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED MAY 19, 1961. MP NO. 1 TOP OF 8-IN (20-CM) CASING NORTHEAST SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE AUG.11, 1950).

RECORDS AVAILABLE 1950 - 1952, 1960, 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 32.75 FEET BELOW LAND SURFACE DATUM NOV 05, 1952.

LOWEST WATER LEVEL 102.65 FEET BELOW LAND SURFACE DATUM SEP 30, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVFL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 01, 1976	93.80	SEP 10, 1976	96.70	MAY 31, 1977	94.37	FEB 20, 1978	96.49
05	93.70	15	97.06	JUN 04	94.35	25	96.39
10	93.60	20	97.41	10	94.49	28	96.32
15	93.47	25	97.73	15	94.68	MAR 05	96.21
20	93.36	30	97.99	20	94.87	10	96.10
25	93.25	OCT 05	98.24	25	94.49	15	95.99
31	93.10	10	98.39	30	95.08	20	95.87
FEB 05	92.97	15	98.41	JUL 05	95.32	25	95.75
10	92.85	20	98.42	10	95.61	27	95.70
15	92.73	25	98.42	14	95.89	31	95.60
20	92.61	31	98.37	20	96.27	APR 05	95.48
25	92.45	NOV 05	98.32	25	96.60	10	95.37
29	92.34	10	98.26	31	96.96	15	95.26
MAR 05	92.21	15	98.19	AUG 05	97.20	20	95.14
10	92.09	20	98.12	10	97.33	25	95.05
15	91.94	25	98.04	15	97.42	30	94.97
20	91.81	30	97.94	20	97.55	MAY 05	94.88
25	91.67	DEC 05	97.84	25	97.67	10	94.80
31	91.50	10	97.75	31	97.82	15	94.87
APR 05	91.35	15	97.65	SEP 05	97.95	18	94.96
10	91.20	20	97.52	10	98.03	20	94.99
15	91.04	25	97.41	15	98.07	25	95.01
20	90.87	31	97.28	20	98.09	31	95.16
25	90.69	JAN 05, 1977	97.15	25	98.12	JUN 05	95.36
30	90.53	10	97.03	30	98.15	10	95.53
MAY 05	90.36	15	96.90	OCT 05	98.17	15	95.76
10	90.20	20	96.79	10	98.18	20	95.97
15	90.05	25	96.66	15	98.19	25	96.17
20	89.95	31	96.55	20	98.19	30	96.42
21	89.94	FEB 05	96.46	25	98.19	JUL 05	96.70
25	90.01	10	96.39	31	98.18	10	97.05
31	90.22	15	96.30	NOV 05	98.16	11	97.15
JUN 05	90.45	20	96.18	10	98.14	15	97.47
10	90.73	25	96.06	15	98.12	20	97.45
15	90.99	28	95.97	20	98.10	25	98.25
20	91.17	MAR 05	95.84	25	98.05	31	98.75
25	91.36	10	95.69	30	97.98	AUG 05	99.09
30	91.64	15	95.58	DEC 05	97.92	10	99.35
JUL 05	91.95	20	95.43	10	97.85	15	99.62
10	92.29	25	95.28	15	97.77	20	99.97
14	92.61	31	95.10	20	97.69	25	100.27
15	92.69	APR 05	94.96	25	97.61	31	100.68
20	93.13	10	94.84	31	97.51	SEP 05	101.13
25	93.54	15	94.71	JAN 05, 1978	97.42	10	101.59
31	93.99	20	94.61	10	97.33	13	101.80
AUG 05	94.37	25	94.53	15	97.23	15	101.80
10	94.72	30	94.44	20	97.12	20	102.22
15	95.04	MAY 05	94.37	25	97.03	25	102.42
20	95.33	10	94.32	31	96.90	30	102.65
25	95.63	13	94.28	FEB 05	96.81		
31	95.98	20	94.34	10	96.70		
SEP 05	96.33	25	94.38	15	96.60		

WELL 125 19F 028881

SITE NUMBER 422452114123201

DRILLED IRRIGATION WATER-TABLE WELL IN IDAVADA VOLCANICS, REPORTED DEPTH 750 FT (228.6 M), UNCASED OPEN HOLE. LSD 4,268.27 FT (1,300.969 M) NGVD0F 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. IN 1953 WELL WAS DEEPENED TO ABOUT 900 FT (274.3 M). MP NO. 1 TOP OF CONCRETE WEST SIDE OF HOLE BENEATH PUMP, 1.00 FT (0.305 M) ABOVE LSD (SINCE OCT. 17, 1951).

RECORDS AVAILABLE 1951 - 1959, 1960 TO CURRENT YEAR.

HIGHEST WATER LEVEL 100.98 FEET BELOW LAND SURFACE DATUM MAY 03, 1952.

LOWEST WATER LEVEL 411.20 FEET BELOW LAND SURFACE DATUM SEP 24, 1975.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAR 25, 1976	290.81	S	MAR 10, 1977	299.40	S	MAR 26, 1978	307.75	V		
OCT 27	361.31	S	SEP 14	370.18	S					

WELL 12S 21E 02DAA1

SITE NUMBER 422434113570201

DRILLED OBSERVATION WATER-TABLE WELL IN IDAVADA VOLCANICS, DIAM 6 IN (15 CM), REPORTED DEPTH 936.0 FT (285.3 M), CASED TO 907 FT (276.4 M), CASING SEALED AT 907 FT (276.4 M), LSD 4,361.25 FT (1,329.309 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968, AUG. 1, 1972, WELL HAD FILLED IN TO A DEPTH OF 918.0 FT (279.8 M), DIGITAL RECORDER INSTALLED AUG. 1, 1972, MP NO. 1 TOP OF 6-IN (15-CM) CASING NORTHEAST SIDE, 0.47 (0.143 M) ABOVE LSD (SINCE FEB. 3, 1972).

RECORDS AVAILABLE 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 373.12 FEET BELOW LAND SURFACE DATUM APR 26, 1976.

LOWEST WATER LEVEL 435.68 FEET BELOW LAND SURFACE DATUM SEP 05, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
JAN 05, 1976	380.66	AUG 10, 1976	405.64	MAR 31, 1977	375.78	FEB 25, 1978	384.96	
10	380.43	15	409.02	APR 05	376.00	28	384.63	
15	380.04	20	404.46	10	377.60	MAR 05	384.17	
20	379.70	25	397.61	15	380.27	10	384.03	
25	379.05	31	402.71	20	382.62	15	383.93	
31	378.77	SEP 05	407.36	25	386.85	20	383.53	
FEB 05	378.06	10	401.00	30	391.02	25	383.32	
10	377.85	15	397.67	MAY 05	391.20	31	382.70	
15	377.25	20	399.47	10	392.94	APR 05	382.58	
20	377.04	25	399.66	15	395.03	10	382.36	
25	376.63	30	400.47	17	395.78	15	381.91	
29	376.26	OCT 05	397.92	JUL 13	416.65	S	20	381.68
MAR 05	376.31	10	393.68	SEP 14	423.38	S	25	381.51
10	375.77	15	391.59	15	421.81	30	381.27	
15	375.70	20	390.33	20	419.68	MAY 05	381.05	
20	375.30	25	389.13	25	412.69	10	381.22	
25	374.82	31	388.04	30	410.15	15	381.96	
31	374.44	NOV 05	387.30	OCT 05	406.15	20	386.49	
APR 05	374.00	10	386.63	10	408.33	25	393.59	
10	373.93	15	386.03	15	407.45	31	397.55	
15	373.34	20	389.24	20	407.15	JUN 05	396.87	
20	373.41	25	388.35	25	403.87	10	401.86	
25	373.22	30	385.88	31	401.13	15	405.67	
26	373.12	DEC 05	384.28	NOV 05	398.63	20	409.61	
30	373.44	10	383.60	10	397.37	25	411.10	
MAY 05	373.51	15	382.92	15	396.05	30	413.77	
10	376.85	20	382.31	20	395.14	JUL 05	416.43	
15	377.30	25	381.82	25	394.28	10	418.88	
20	376.95	31	380.97	30	393.47	15	422.28	
25	379.04	JAN 05, 1977	380.57	DEC 05	392.74	20	425.51	
31	385.97	10	380.21	10	392.08	25	428.50	
JUN 05	390.59	15	379.84	15	391.06	31	430.90	
10	393.64	20	379.56	20	391.16	AUG 05	431.14	
15	390.09	25	379.14	25	390.37	10	432.31	
20	393.54	31	378.62	31	389.61	15	433.97	
25	392.61	FEB 10	377.99	JAN 05, 1978	388.90	20	434.62	
30	395.70	15	377.68	10	388.36	25	434.62	
JUL 05	397.87	20	377.31	15	387.70	31	435.05	
10	401.71	25	377.05	20	387.57	SEP 05	435.68	
15	403.42	28	376.79	25	387.27	10	435.56	
20	405.11	MAR 05	376.66	31	386.73	15	426.63	
25	406.93	10	376.36	FEB 05	386.36	20	421.69	
31	409.13	15	376.18	10	385.69	25	417.77	
AUG 03	409.87	20	375.93	15	385.54	30	421.17	
05	406.20	25	375.74	20	385.47			

WELL 12S 21F 11ADD1

SITE NUMBER 422347113570301

DRILLED IRRIGATION WATER-TABLE WELL IN IDAVADA VOLCANICS, DIAM 24 TO 12 IN (61 TO 30 CM), DEPTH 957.7 FT (291.9 M), 24-IN (61-CM) CASING 0-13FT (0-4.0 M), 12-IN (30-CM) CASING 842-881 FT (256.6-268.5 M). LSD ABOUT 4,350 FT (1,326 M) NGVD OF 1929, MP NO. 3 BOTTOM EDGE OF 1 1/4-IN (3.2-CM) SLOPING PIPE NORTH SIDE, 2.77 FT (0.844 M) ABOVE LSD (SINCE JUNE 19, 1972).

RECORDS AVAILABLE 1957, 1960 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 337.10 FEET BELOW LAND SURFACE DATUM MAR 22, 1972.

LOWEST WATER LEVEL 381.75 FEET BELOW LAND SURFACE DATUM SEP 18, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
SEP 23, 1976	352.15	S	MAR 11, 1977	337.45	S	SEP 14, 1977	358.61	S	MAR 26, 1978	343.67	S

WFLL 12S 21E 16DCC1

SITE NUMBER 422227113595901

DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 20-18-16 IN (51-46-41 CM), DEPTH 256.7 FT (78.2 M), 20-IN (51-CM) CASING 0-98.7 FT (0-30.1 M), 18-IN (46-CM) CASING 98.7-127.3 FT (30.1-38.8 M), 16-IN (41-CM) CASING 127.3-233 FT (38.8-71.0 M). LSD 4,377.99 FT (1,334.411 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 3 TOP OF CASING SOUTH SIDE, 0.90 FT (0.274 M) ABOVE LSD (SINCE SEPT. 14, 1977).

RECORDS AVAILABLE 1962 - 1968, 1969 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 101.03 FEET BELOW LAND SURFACE DATUM MAR 12, 1975.

LOWEST WATER LEVEL 126.75 FEET BELOW LAND SURFACE DATUM SEP 12, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 23, 1976	107.21	S	MAR 11, 1977	108.12	S	SEP 14, 1977	115.89	S	SEP 12, 1978	126.75	S
SEP 23	110.76	S	MAY 17	111.53	S	MAR 26, 1978	111.41	S			

WFLL 12S 21F 25CCCI

SITE NUMBER 422047113570101

DRILLED IRRIGATION WATER-TABLE WELL IN IDAVADA VOLCANICS, DIAM 20 TO 12 IN (51 TO 30 CM), REPORTED DEPTH 1,196 FT (364.5 M), 20-IN (51-CM) CASING 0-188 FT (0-57.3 M), 12-IN (30-CM) CASING 948-1,029 FT (289.0-313.6 M). LSD 4,409.64 FT (1,344.058 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 TOP OF 1/2-IN (1.3-CM) HOLE IN CASING COVER, 0.80 FT (0.244 M) ABOVE LSD (SINCE NOV. 7, 1962).

RECORDS AVAILABLE 1962 - 1967, 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 315.54 FEET BELOW LAND SURFACE DATUM MAR 23, 1976.

LOWEST WATER LEVEL 368.04 FEET BELOW LAND SURFACE DATUM SEP 14, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 23, 1976	315.54	S	MAR 11, 1977	316.71	S	MAR 26, 1978	326.55	V			
OCT 27	330.48	S	SEP 14	368.04	S						

WFL 125 25E 06DCC1

SITE NUMBER 422405113343801

DRILLED DOMESTIC AND STOCK WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 102.3 FT (31.2 M), CASED TO 120 FT (36.6 M). ORIGINAL REPORTED DEPTH 120 FT (36.6 M). LSD ABOUT 4,755 FT (1,449 M) NGVD OF 1929. MP NO. 1 TOPOF HOLE IN WELL SEAL NORTH SIDE, 1.40 FT (0.427 M) BELOW LSD (SINCE SFPT. 22, 1966).

RECORDS AVAILABLE 1966 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.20 FEET BELOW LAND SURFACE DATUM MAR 23, 1971.

LOWEST WATER LEVEL 26.63 FEET BFLOW LAND SURFACE DATUM OCT 15, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 13, 1976	6.37	S	SEP 23, 1976	22.28	S	SEP 15, 1977	5.95	S
FEB 27	4.82	S	MAR 11, 1977	6.80	S	NOV 16	5.62	P S
MAR 10	4.29	S	MAY 18	6.38	S	MAR 27, 1978	6.70	P S
MAY 06	4.19	S	JUL 14	18.97	P T	MAY 19	8.86	R S
						JUL 11, 1978	4.32	S
						SEP 13	38.09	R V

WFL 125 25E 04CCD1

SITE NUMBER 422313113324701

DRILLED UNUSED WATER-TABLE WELL IN UNKNOWN AQUIFER, DIAM 10 IN (25 CM), DEPTH 378.9 FT (115.5 M), CASED TO 250 FT (76.2 M). LSD ABOUT 4,831 FT (1,472 M) NGVD OF 1929. MP NO. 1 TOP OF CASING WEST SIDE, 0.70 FT (0.213 M) ABOVE LSD (SINCE SEPT. 21, 1966).

RECORDS AVAILABLE 1966 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 84.36 FEET BELOW LAND SURFACE DATUM MAY 06, 1976.

LOWEST WATER LEVEL 106.10 FEET BFLOW LAND SURFACE DATUM OCT 15, 1969.

WATER LEVELS IN FEET BFLOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 13, 1976	85.68	S	SEP 23, 1976	85.20	S	SEP 15, 1977	89.83	S
FEB 27	85.12	S	MAR 11, 1977	84.65	S	NOV 16	89.69	S
MAR 10	84.94	S	MAY 18	85.70	S	JAN 25, 1978	89.34	S
MAY 06	84.76	S	JUL 14	88.67	S	MAR 27	89.05	S
						MAY 19, 1978	88.84	S
						JUL 11	90.10	S
						SEP 13	91.30	S

WFL 125 25E 188BA1

SITE NUMBER 422310113350801

DRILLED DOMESTIC AND STOCK WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 8 IN (20 CM), DEPTH 103.8 FT (31.6 M), CASED TO 104 FT (31.7 M). LSD ABOUT 4,940 FT (1,506 M) NGVD OF 1929. MP NO. 1 TOP OF HOLE IN WELL SEAL SOUTH SIDE, 0.20 FT (0.061 M) ABOVE LSD (SINCE SEPT. 21, 1966).

RECORDS AVAILABLE 1966 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 27.43 FEET BELOW LAND SURFACE DATUM SEP 23, 1976.

LOWEST WATER LEVEL 52.27 FEET BFLOW LAND SURFACE DATUM MAR 04, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 13, 1976	32.07	S	SEP 23, 1976	27.43	S	SEP 15, 1977	35.83	S
FEB 27	31.50	S	MAR 11, 1977	31.97	S	NOV 16	37.17	S
MAR 10	31.07	S	MAY 18	33.28	S	JAN 25, 1978	38.50	S
MAY 06	27.88	S	JUL 14	34.56	S	MAR 27	38.96	S
						MAY 19, 1978	37.49	S
						JUL 11	36.35	S
						SEP 13	37.24	S

WELL 12S 25E 28AAA2

SITE NUMBER 422125113315201

DUG DOMESTIC WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 12 IN (30 CM), DEPTH 32.8 FT (10.0 M), CASED TO 36 FT (11.0 M), OPEN END. LSD ABOUT 5,354 FT (1,632 M) NGVD OF 1929. MP NO. 1 TOP OF HOLE IN WOODEN COVER NORTHEAST SIDE, 1.20 FT (0.366 M) BELOW LSD (SINCE SEPT. 20, 1966).

RECORDS AVAILABLE 1966 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.53 FEET BELOW LAND SURFACE DATUM MAY 08, 1974.

LOWEST WATER LEVEL 18.65 FEET BELOW LAND SURFACE DATUM DEC 13, 1966.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 13, 1976	7.77 S	SEP 23, 1976	9.68 S	SEP 15, 1977	17.98 P S	MAY 19, 1978	3.79 S
FEB 27	7.16 S	MAR 11, 1977	14.45 S	NOV 16	15.12 S	JUL 11	6.83 S
MAR 10	6.95 S	MAY 18	6.69 S	JAN 25, 1978	12.23 S	SEP 13	7.76 S
MAY 06	7.44 S	JUL 14	16.74 P S	MAR 27	10.66 V		

WELL 12S 25E 28AAA3

SITE NUMBER 422125113314901

DRILLED STOCK WATER-TABLE WELL IN UNKNOWN AQUIFER, DIAM 8 IN (20 CM), DEPTH 177.2 FT (54.0 M). LSD ABOUT 5,356 FT (1,632 M) NGVD OF 1929. MP NO. 1 TOP OF HOLE IN WELL SEAL NORTHWEST SIDE, 1.70 FT (0.518 M) ABOVE LSD (SINCE SEPT. 20, 1966).

RECORDS AVAILABLE 1966 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 69.50 FEET BELOW LAND SURFACE DATUM SEP 23, 1976.

LOWEST WATER LEVEL 122.07 FEET BELOW LAND SURFACE DATUM JUN 17, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 13, 1976	73.27 S	SEP 23, 1976	69.50 S	SEP 15, 1977	86.47 S	MAY 19, 1978	89.22 S
FEB 27	74.66 S	MAR 11, 1977	79.13 S	NOV 16	88.55 S	JUL 11	85.04 S
MAR 10	75.13 S	MAY 18	82.53 S	JAN 25, 1978	91.07 S	SEP 13	82.48 S
MAY 06	73.90 S	JUL 14	84.59 S	MAR 27	92.02 S		

WELL 12S 26E 02ACC1

SITE NUMBER 422438113230401

DRILLED IRRIGATION WATER-TABLE WELL IN RAFT FORMATION, DIAM 20 IN (51 CM), REPORTED DEPTH 197 FT (60.0 M), CASED TO 197 FT (60.0 M), OPEN BOTTOM. LSD 4,415.41 FT (1,345.817 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 3 TOP OF CONCRETE PLATFORM WEST SIDE, 1.50 FT (0.457 M) ABOVE LSD (SINCE NOV. 2, 1972).

RECORDS AVAILABLE 1950 - 1952, 1957 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 17.69 FEET BELOW LAND SURFACE DATUM APR 21, 1950.

LOWEST WATER LEVEL 115.74 FEET BELOW LAND SURFACE DATUM SEP 24, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 22, 1976	69.21 S	MAR 11, 1977	74.90 S	MAR 27, 1978	79.20 S		
SEP 24	115.74 S	SEP 15	109.27 S	SEP 13	109.56 S		

WELL 13S 21E 18BBC1

SITE NUMBER 421755114024401

DRILLED UNUSED WATER-TABLE WELL IN LIMESTONE OF PALEZOIC AGE, DIAM 16 TO 17 IN (41 TO 43 CM), REPORTED DEPTH 850 FT (259.1 M), 16-IN (41-CM) CASING 0-20 FT (0-6.1 M), 17-IN (43-CM) CASING 20-80 FT (6.1-24.4 M), BOTTOM OF CASING SET IN CONCRETE SEAL, LSD 4,953.63 FT (1,509.866 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1962, JULY 17, 1968, WELL HAD FILLED IN TO A DEPTH OF 820.9 FT (250.2 M), RECORDER INSTALLED AUG. 16, 1961, RECORDER REMOVED NOV. 30, 1971, RECORDER INSTALLED MAY 3, 1972, MP NO. 4 TOP OF 1-IN (2.5-CM) PIPE FLANGE NORTHWEST SIDE, 2.07 FT (0.631 M) ABOVE LSD (SINCE AUG. 2, 1972).

RECORDS AVAILABLE 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 362.14 FEET BELOW LAND SURFACE DATUM APR 19, 1961.

LOWEST WATER LEVEL 575.34 FEET BELOW LAND SURFACE DATUM NOV 30, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	563.43	AUG 05, 1976	560.43	MAR 10, 1977	562.50	DEC 05, 1977	570.32
10	563.77	10	560.75	15	562.36	10	569.71
15	563.79	15	560.70	20	562.34	15	570.15
20	563.72	20	561.19	25	562.06	20	569.28
25	563.35	25	561.34	31	562.09	25	570.38
31	563.52	31	561.78	APR 05	562.32	31	570.22
FEB 05	563.13	SEP 05	561.83	10	562.05	JAN 05, 1978	570.12
10	563.24	10	562.12	13	561.69	10	570.20
15	562.87	15	562.32	15	562.00	15	570.44
20	563.11	20	562.65	20	561.89	20	570.02
25	562.77	25	562.63	25	561.84	25	569.94
29	562.28	30	562.86	30	561.78	31	569.57
MAR 05	562.85	OCT 05	563.07	MAY 10	561.91	FEB 05	569.45
10	562.37	10	562.95	15	562.11	10	569.16
15	562.40	15	563.02	20	562.38	15	569.48
20	562.43	20	563.28	25	562.30	20	569.71
25	562.16	25	563.25	31	562.80	25	569.32
31	561.90	31	563.37	JUN 05	562.93	28	569.12
APR 05	561.65	NOV 05	563.31	10	562.92	MAR 04	568.92
10	561.82	10	563.24	15	563.27	05	569.10
15	561.23	15	563.50	20	563.30	10	569.13
20	561.58	20	563.47	25	563.57	MAY 18	567.84
25	561.20	25	563.12	30	563.75	JUN 13	567.18
30	561.45	DEC 05	563.43	JUL 05	563.90	30	567.19
MAY 05	560.85	10	563.63	10	564.21	JUL 05	567.32
10	560.90	15	563.56	15	564.45	10	567.31
15	560.66	20	563.44	20	564.60	15	567.64
20	560.40	25	563.44	SEP 15	568.42	20	567.80
25	560.13	31	563.08	20	568.93	25	568.16
31	559.85	JAN 05, 1977	563.44	30	569.50	31	568.40
JUN 05	559.82	10	563.27	OCT 05	569.54	AUG 05	568.81
10	559.49	15	563.31	10	569.92	10	568.98
15	559.66	20	563.11	15	570.	15	569.47
20	559.30	25	563.09	20	569.81	20	569.81
25	559.35	31	562.94	25	570.05	25	570.26
30	559.15	FEB 05	562.94	31	570.15	31	570.63
JUL 05	559.38	10	562.89	NOV 05	569.92	SEP 05	571.03
10	559.43	15	562.75	10	570.43	10	571.32
12	559.46	20	562.56	15	570.10	12	571.57
15	559.59	25	562.66	20	570.30	15	571.87
20	559.75	28	562.47	23	570.48	20	572.27
25	560.00	MAR 05	562.70	25	570.45	25	572.35
31	560.13	09	562.02	30	570.34	30	572.51

WELL 13S 22E 21CCD1

SITE NUMBER 421621113531601

DUG DOMESTIC WATER-TABLE WELL IN CLAY AND GRAVEL OF QUATERNARY AGE. DIAM 36 X 60 IN (91 X 152 CM), REPORTED DEPTH 80 FT (24.4 M), CASED TO 80 FT (24.4 M). LSD 4,491.80 FT (1,369.101 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968. JUNE 2, 1972, CONTINUOUS RECORDER INSTALLED AND MAINTAINED BY THE US BUREAU OF RECLAMATION. RECORDER REMOVED DEC. 17, 1974. MP NO. 2 TOP OF SOUTH 2X10-IN (5X25-CM) BOARD NORTH EDGE, 0.60 FT (0.183 M) ABOVE LSD (SINCE AUG. 1, 1975).

RECORDS AVAILABLE 1972 - 1974, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.02 FEET BELOW LAND SURFACE DATUM SEP 11, 1975.

LOWEST WATER LEVEL 44.19 FEET BELOW LAND SURFACE DATUM MAY 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 14, 1976	9.47	S	SEP 23, 1976	6.35	S	JUL 14, 1977	15.92	S
FEB 25	10.83	S	NOV 17	10.30	S	SEP 14	10.80	S
MAR 23	11.70	S	JAN 18, 1977	12.57	S	NOV 15	14.45	S
MAY 04	12.66	S	MAR 10	14.67	S	DEC 16	16.48	V
JUL 13	6.96	S	MAY 18	15.90	S	JAN 26, 1978	19.60	S
						MAR 26, 1978	35.03	S
						MAY 18	44.19	S
						JUL 10	13.80	S
						SEP 15	16.28	S

WELL 13S 22E 21CCD2

SITE NUMBER 421620113531701

DRILLED OBSERVATION WATER-TABLE WELL IN SILTYSAND AND GRAVEL OF QUATERNARY AGE. DIAM 8 TO 6 IN (20 TO 15 CM), DEPTH 1,004.0 FT (306.0 M), 8-IN (20-CM) CASING 0-543 FT (0-165.5 M), 6-IN (15-CM) CASING 536-1,000 FT (163.4-304.8 M), PERFORATED 560-606 FT (170.7-184.7 M). LSD 4,491.80 FT (1,369.101 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968. JUNE 1, 1972, CONTINUOUS RECORDER INSTALLED AND MAINTAINED BY US BUREAU OF RECLAMATION. RECORDER REMOVED DEC. 17, 1974. MP NO. 2 TOP OF HOLE IN CENTER OF CASING COVER WEST SIDE, 2.12 FT (0.646 M) ABOVE LSD (SINCE SEPT. 11, 1975).

RECORDS AVAILABLE 1972 - 1974, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 15.48 FEET BELOW LAND SURFACE DATUM SEP 11, 1975.

LOWEST WATER LEVEL 53.5 FEET BELOW LAND SURFACE DATUM MAY 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 14, 1976	18.92	S	SEP 23, 1976	20.48	S	JUL 14, 1977	36.70	S
FEB 25	20.56	S	NOV 17	20.95	S	SEP 14	30.82	S
MAR 23	21.60	S	JAN 18, 1977	23.10	S	NOV 15	29.45	S
MAY 04	23.17	S	MAR 10	25.88	S	JAN 26, 1978	34.88	S
JUL 13	22.95	S	MAY 18	34.61	S	MAR 26	44.89	S
						MAY 18, 1978	53.50	S
						JUL 10	36.88	S
						SEP 15	31.66	S

WELL 13S 22E 21CCD3

SITE NUMBER 421621113531602

DRILLED DOMESTIC WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE. DIAM 4 IN (10 CM), REPORTED DEPTH 140 FT (42.7 M), CASED TO 140 FT (42.7 M), THIS WELL WAS DRILLED INSIDE AN EXISTING DUG WELL. LSD 4,491.80 FT (1,369.101 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968. ALL MEASUREMENTS PRIOR TO AUG. 1, 1975, MADE BY US BUREAU OF RECLAMATION. MP NO. 3 TOP OF SOUTH 2X10-IN (5X25-CM) BOARD NORTH EDGE, 0.60 FT (0.183 M) ABOVE LSD (SINCE AUG. 1, 1975).

RECORDS AVAILABLE 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.73 FEET BELOW LAND SURFACE DATUM SEP 11, 1975.

LOWEST WATER LEVEL 47.18 FEET BELOW LAND SURFACE DATUM MAY 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 14, 1976	11.80	S	SEP 23, 1976	11.86	S	JUL 14, 1977	26.78	S
FEB 25	13.44	S	NOV 17	13.03	S	SEP 14	19.82	S
MAR 23	14.47	S	JAN 18, 1977	15.43	S	NOV 15	19.51	S
MAY 04	16.09	S	MAR 10	18.25	S	JAN 26, 1978	25.67	S
JUL 13	14.30	S	MAY 18	25.55	S	MAR 26	37.94	S
						MAY 18, 1978	47.18	S
						JUL 10	28.19	S
						SEP 15	22.74	S

WELL 135 26F 01CCC1

SITE NUMBER 421852113222601

DRILLED UNUSED WATER-TABLE WELL IN GRAVEL OF QUATERNARY AGE, DIAM 16 IN (41 CM), REPORTED DEPTH 69 FT (21.0 M), CASED TO 66 FT (20.1 M), PERFORATED 24-43 FT (7.3-13.1 M), 46-64 FT (14.0-19.5 M). IN 1959 WELL WAS OPENED TO A REPORTED DEPTH OF 250 FT (76.2 M). JUNE 23, 1965, WELL HAD FILLED IN TO A DEPTH OF 223.2 FT (68.0 M). LSD 4,517.63 FT (1,376.974 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 2 BOTTOM EDGE OF SLOPING PIPE EAST SIDE, 0.98 FT (0.299 M) ABOVE LSD (SINCE FEB. 9, 1966).

RECORDS AVAILABLE 1949 - 1952, 1961 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 21.60 FEET BELOW LAND SURFACE DATUM JUN 19, 1950.

LOWEST WATER LEVEL 40.46 FEET BELOW LAND SURFACE DATUM SEP 15, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 22, 1976	27.50	S	MAR 11, 1977	28.48	S	MAR 08, 1978	34.69	S
SEP 24	32.86	S	SEP 15	40.46	S			

WELL 135 27F 15CAA1

SITE NUMBER 421731113170601

DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAMETER 14 TO 12 IN (36 TO 30 CM), REPORTED DEPTH 947 FT (288.6 M), 14-IN (36-CM) CASING 0-348 FT (0-106.1 M), 12-IN (30-CM) CASING 348-428 FT (106.1-130.4 M), PERFORATED 320-348 FT (97.5-106.1 M), 355-428 FT (108.2-130.4 M). LSD 4,629.60 FT (1,411.102 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 2 TOP OF HOLE INSIDE PUMPBASE EAST SIDE, 0.50 FT (0.152 M) ABOVE LSD (SINCE OCT. 24, 1966).

RECORDS AVAILABLE 1963 TO CURRENT YEAR.

HIGHEST WATER LEVEL 128.81 FEET BELOW LAND SURFACE DATUM APR 20, 1964.

LOWEST WATER LEVEL 192.16 FEET BELOW LAND SURFACE DATUM SEP 20, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 23, 1976	151.20	S	MAR 11, 1977	154.28	S	MAR 08, 1978	154.18	S
SEP 24	222.95	P S	SEP 15	274.45	P S			

WELL 135 27F 19BHC1

SITE NUMBER 421653113211101

DUG AND DRILLED IRRIGATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 18 TO 14 IN (46 TO 36 CM), ORIGINAL DIAM 36 TO 8 IN (91 TO 20 CM), DEPTH 23.7 FT (7.2 M), REDRILLED AND DEEPEMED JAN. 1956, REPORTED DEPTH 425 FT (129.5 M), 18-IN (46-CM) CASING 0-220 FT (0-67.1 M), 14-IN (36-CM) CASING 215-425 FT (65.5-129.5 M), PERFORATED 0-425 FT (0-129.5 M). LSD 4,528.08 FT (1,380.159 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MEASUREMENTS PRIOR TO 1947 BY JOHN C. HITT. MP NO. 4 TOP OF CASING WEST SIDE FLUSH WITH CONCRETE PLATFORM, 0.40 FT (0.122 M) ABOVE LSD (SINCE JULY 12, 1956).

RECORDS AVAILABLE 1941 - 1947, 1948 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.07 FEET BELOW LAND SURFACE DATUM MAY 19, 1949.

LOWEST WATER LEVEL 45.18 FEET BELOW LAND SURFACE DATUM MAY 19, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 22, 1976	9.28	S	SEP 24, 1976	16.70	S	MAR 11, 1977	13.24	N S

WELL 145 27F 33CDD1

SITE NUMBER 420917113181501

DRILLED UNUSED WATER-TABLE WELL IN COARSE GRAINED GRAVEL OF QUATERNARY AGE, DIAM 16 TO 14 IN (41 TO 36 CM), DEPTH 199.6 FT (60.8 M), 16-IN (41-CM) CASING 0-92 FT (0-28.0 M), 14-IN (36-CM) CASING 87-225 FT (26.5-68.6 M), PERFORATED 45-50 FT (13.7-15.2 M), 105-225 FT (32.0-68.6 M), ORIGINAL DEPTH 225 FT (68.6 M), CASED TO 225 FT (68.6 M). JUNE 22, 1965, WELL HAD FILLED IN TO A DEPTH OF 199.6 FT (60.8 M). LSD ABOUT 4.715 FT (1.437 M) NGVD OF 1929. RECORDER INSTALLED JUNE 22, 1965. RECORDER REMOVED AUG. 12, 1971. DIGITAL RECORDER INSTALLED JULY 26, 1977. MP NO. 1 TOP OF 16-IN (41-CM) CASING NORTHWEST SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE AUG. 3, 1955).

RECORDS AVAILABLE 1955, 1965 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 34.44 FEET BELOW LAND SURFACE DATUM NOV 23, 1971.

LOWEST WATER LEVEL 46.64 FEET BELOW LAND SURFACE DATUM SEP 16, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVEL		DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 13, 1976	37.07	S	OCT 05, 1977	43.21	FEB 15, 1978	41.39	JUN 15, 1978	44.35
FEB 24	37.37	S	10	43.49	20	41.40	20	44.16
MAR 22	37.48	S	15	43.60	25	41.30	25	44.54
MAY 06	38.05	S	20	43.60	28	41.26	30	44.80
JUL 14	39.82	S	25	43.16	MAR 05	41.21	JUL 05	44.35
SEP 23	40.11	S	31	43.13	10	41.18	10	44.30
NOV 17	39.84	S	NOV 05	42.88	15	41.22	15	45.13
JAN 19, 1977	39.75	S	10	42.80	20	41.11	20	45.30
MAR 11	39.73	S	15	42.62	25	41.07	25	45.40
MAY 18	40.30	S	20	42.58	31	40.87	31	44.79
JUL 20	43.88	S	25	42.47	APR 05	40.79	AUG 05	44.60
26	43.20	S	30	42.36	10	40.72	10	45.76
31	44.00	S	DEC 05	42.29	15	40.62	15	46.22
AUG 05	44.15		10	42.22	20	40.53	20	46.29
10	42.67		15	42.04	25	40.55	25	46.41
13	42.52		20	42.19	30	40.46	31	45.86
15	42.87		25	42.05	MAY 04	40.41	SEP 05	46.41
20	43.21		31	41.94	05	40.45	10	46.45
25	44.18		JAN 05, 1978	41.84	10	40.67	15	46.62
31	44.32		10	41.75	15	42.18	16	46.64
SEP 05	44.01		15	41.63	18	42.92	20	45.54
10	44.31		20	41.69	20	42.79	25	45.08
15	44.39		25	41.64	25	43.16	30	44.96
20	43.33		31	41.52	30	43.38		
25	43.16		FEB 05	41.47	JUN 05	43.77		
30	43.08		10	41.37	10	44.05		

WELL 165 28E 20CDC1

SITE NUMBER 420039113122301

DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 8 IN (20 CM), DEPTH 295.0 FT (89.9 M), CASED TO 200 FT (61.0 M). LSD ABOUT 5.280 FT (1.609 M) NGVD OF 1929. MP NO. 2 TOP OF HOLE IN WELL SFAL WEST SIDE, 6.25 FT (1.905 M) BELOW LSD (SINCE SEPT. 20, 1968).

RECORDS AVAILABLE 1966 TO CURRENT YEAR.

HIGHEST WATER LEVEL 146.09 FEET BELOW LAND SURFACE DATUM MAR 22, 1976.

LOWEST WATER LEVEL 148.43 FEET BELOW LAND SURFACE DATUM FEB 18, 1966.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 22, 1976	146.09	S	SEP 15, 1977	147.47	JAN 25, 1978	146.40	SEP 13, 1978	147.15 R S
SEP 23	146.13	S	NOV 15	146.37	MAR 08	146.46		
MAR 11, 1977	146.11	S	16	146.42	MAY 18	147.13 P S		
JUL 14	146.78	S	DEC 20	146.46	JUL 11	147.22 R S		

WELL 13N 41E 08BCA1

SITE NUMBER 442808111391301

DRILLED DOMESTIC WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), REPORTED DEPTH 85 FT (25.9 M), CASING TO 56 FT (17.1 M). LSD ABOUT 6,504 FT (1,982 M) NGVD OF 1929. MP NO. 1 TOP OF HOLE IN WELL SEAL SOUTH SIDE, 1.25 FT (0.381 M) ABOVE LSD (SINCE SEPT. 24, 1970).

RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 22.83 FEET BELOW LAND SURFACE DATUM JUN 20, 1974.

LOWEST WATER LEVEL WELL DRY DEC 06, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAY 21, 1976	41.00	S	APR 27, 1977	80.85	S	OCT 06, 1977	81.98	S	SEP 15, 1978	45.81	S
JUN 21	27.12	S	JUN 02	75.08	S	DEC 06	DRY				
SEP 21	45.09	S	JUL 19	66.97	S	MAY 23, 1978	56.94	S			
NOV 03	52.56	S	AUG 26	75.45	S	JUN 28	25.75	S			

WELL 10N 35E 08RBB1

SITE NUMBER 441258112222201

DRILLED DOMESTIC WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 IN (20 CM), REPORTED DEPTH 360 FT (109.7 M). CASING DEPTH NOT AVAILABLE. LSD 5,253.91 FT (1,601.392 M) NGVD OF 1929. MP NO. 2 TOP OF 1/4-IN (0.64-CM) HOLE IN WELL SEAL, 6.50 FT (1.981 M) BELOW LSD (SINCE APR. 2, 1968).

RECORDS AVAILABLE 1957 - 1959, 1966 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 235.26 FEET BELOW LAND SURFACE DATUM SEP 12, 1975.

LOWEST WATER LEVEL 256.36 FEET BELOW LAND SURFACE DATUM JUN 08, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 04, 1976	246.35	R S	MAR 22, 1977	254.58	P S	JAN 26, 1978	251.75	S			
SEP 07	245.60	P S	SEP 07	248.40	P S	MAR 06	254.20	P S			
NOV 16	251.75	P S	08	248.81	R S	SEP 02	244.54	P S			

WELL 09N 34E 11ADD1

SITE NUMBER 440725112245301

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 4 IN (10 CM), DEPTH 192.6 FT (58.7 M), CASED TO 208 FT (63.4 M). ORIGINAL DRILLED DEPTH 208 FT (63.4 M). LSD ABOUT 4,955 FT (1,510 M) NGVD OF 1929. RECORDER INSTALLED OCT. 7, 1959. RECORDER REMOVED MAY 9, 1972. RECORDER INSTALLED JULY 9, 1977. MP NO. 2 TOP OF CASING NORTH SIDE, 2.32 FT (0.707 M) ABOVE LSD (SINCE JULY 18, 1975).

RECORDS AVAILABLE 1957 - 1958, 1959 - 1972, 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 151.30 FEET BELOW LAND SURFACE DATUM JUN 01, 1976.

LOWEST WATER LEVEL 156.94 FEET BELOW LAND SURFACE DATUM OCT 21, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVFL		DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 1976	151.94	S	NOV 15, 1977	155.78	MAR 05, 1978	155.11	JUN 25, 1978	154.56
MAR 04	151.66	S	20	155.79	10	155.09	30	154.61
APR 15	151.43	S	25	155.78	15	155.05	JUL 05	154.70
JUN 01	151.30	S	30	155.79	20	155.01	10	154.78
JUL 08	151.83	S	DEC 05	155.83	25	154.97	15	154.83
AUG 26	153.02	S	10	155.85	31	154.95	20	155.13
SEP 07	153.28	S	20	155.56	APR 05	154.92	25	155.21
OCT 06	153.66	S	25	155.53	10	154.92	31	155.38
NOV 16	153.72	S	31	155.51	15	154.89	AUG 05	155.50
DEC 27	153.22	S	JAN 05, 1978	155.41	20	154.90	10	155.63
FEB 10, 1977	152.84	S	10	155.37	25	154.87	15	155.76
MAR 22	152.67	S	15	155.33	30	154.81	20	155.88
MAY 05	152.68	S	20	155.30	MAY 05	154.76	25	155.98
JUN 17	153.18	S	25	155.24	10	154.73	31	156.12
JUL 08	153.59	S	31	155.32	15	154.66	SEP 05	156.21
09	153.59	S	FEB 05	155.32	20	154.62	10	156.28
AUG 10	154.25	S	10	155.26	25	154.56	15	156.32
15	154.14	S	15	155.22	31	154.53	20	156.37
OCT 31	155.78	S	20	155.20	JUN 05	154.51	25	156.42
NOV 05	155.77	S	25	155.16	10	154.48	30	156.46
10	155.78	S	28	155.14	20	154.50		

WELL 09N 36E 33CBB1

SITE NUMBER 440353112135701

DRILLED INDUSTRIAL WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 IN (20 CM), REPORTED DEPTH 155 FT (47.2 M), CASED TO 12 FT (3.7 M). LSD ABOUT 4,865 FT (1,483 M) NGVD OF 1929. DIGITAL RECORDER INSTALLED JULY 8, 1977. MP NO. 3 TOP OF CONCRETE PLATFORM NORTHEAST SIDE, 0.43 FT (0.131 M) ABOVE LSD (SINCE JULY 8, 1977).

RECORDS AVAILABLE 1963 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 74.43 FEET BELOW LAND SURFACE DATUM MAR 04, 1976.

LOWEST WATER LEVEL 79.51 FEET BELOW LAND SURFACE DATUM AUG 28, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVFL		DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 04, 1976	74.43	S	OCT 22, 1977	78.31	FFB 28, 1978	77.39	JUN 15, 1978	77.29
SEP 07	76.89	S	25	78.09	MAR 05	77.29	20	77.50
MAR 22, 1977	75.47	S	31	77.97	10	77.41	25	77.68
JUN 21	76.79	S	NOV 05	77.85	15	77.56	30	77.92
JUL 08	77.33	S	10	77.98	16	77.75	JUL 05	78.12
AUG 07	78.22	S	15	77.76	20	77.46	10	78.26
10	78.29	S	20	77.74	25	77.53	15	78.56
15	78.34	S	25	77.71	31	77.33	20	78.75
20	78.44	S	30	77.63	APR 05	77.31	25	78.94
25	78.38	S	DEC 05	77.54	10	77.30	31	79.05
31	78.42	S	10	77.54	15	77.17	AUG 05	79.28
SEP 02	78.56	S	15	77.21	16	77.18	10	79.38
05	78.39	S	17	77.36	20	77.06	15	79.43
08	78.58	S	20	77.64	25	77.06	20	79.42
10	78.39	S	25	77.48	30	76.98	25	79.45
15	78.30	S	31	77.43	MAY 05	76.80	28	79.51
20	78.30	S	JAN 31, 1978	77.45	10	76.77	31	79.41
25	78.24	S	FEB 04	77.80	15	76.67	SEP 05	79.40
29	78.16	S	05	77.48	20	76.76	10	79.26
30	78.23	S	10	77.29	23	76.55	15	79.22
OCT 05	78.21	S	11	77.37	25	76.71	20	79.20
10	78.28	S	15	77.42	31	76.88	25	79.07
15	78.28	S	20	77.58	JUN 05	76.97	30	79.02
20	78.10	S	25	77.45	10	77.00		

WELL 09N 21E 148BC1

SITE NUMBER 440649113565701

DRILLED IRRIGATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 16 IN (41 CM), DEPTH 253.8 FT (77.4 M), CASIED TO 267 FT (81.4 M), PERFORATED 167-267 FT (50.9-81.4 M). LSD ABOUT 6.363 FT (1.939 M) NGVD OF 1929. RECORDER INSTALLED JULY 27, 1977. MP NO. 2 TOP OF CASING NORTHEAST SIDE, 0.50 FT (0.152 M) ABOVE LSD (SINCE SEPT. 30, 1966).

RECORDS AVAILABLE 1966 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 80.24 FEET BELOW LAND SURFACE DATUM OCT 10, 1969.

LOWEST WATER LEVEL 85.72 FEET BELOW LAND SURFACE DATUM MAY 15, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 31, 1976	82.59	S	OCT 25, 1977	81.34	FFB 20, 1978	82.77	JUN 20, 1978	83.12
SEP 18	80.92	S	31	81.27	25	82.72	25	82.90
MAR 11, 1977	82.40	S	NOV 05	81.29	28	82.62	30	82.89
MAY 17	84.34	S	10	81.56	MAR 05	82.62	JUL 05	82.80
JUN 22	83.04	S	15	81.50	10	82.91	10	82.61
JUL 27	81.95	S	20	81.41	15	83.08	15	82.51
31	82.17		25	81.60	20	83.16	20	82.37
AUG 05	81.73		30	81.68	25	83.24	25	82.15
10	81.60		DEC 05	81.62	31	83.25	31	81.26
15	81.66		10	81.76	APR 05	83.20	AUG 05	81.01
20	81.53		15	81.63	10	83.35	10	81.07
25	81.52		20	82.01	15	83.23	15	81.50
31	81.33		25	81.99	20	83.21	20	81.64
SEP 05	81.25		31	81.96	25	83.74	25	81.69
10	81.18		JAN 05, 1978	81.96	30	83.59	31	81.75
13	81.14		07	81.55	MAY 05	83.48	SEP 05	81.79
15	81.69		10	82.03	10	83.42	10	80.96
20	81.66		15	82.00	15	83.25	15	80.74
25	81.62		20	82.15	20	83.27	20	80.65
30	81.34		25	82.34	25	82.93	25	80.69
OCT 05	81.37		31	82.32	31	83.70	30	80.63
10	81.32		FEB 05	82.43	JUN 05	83.81		
15	81.46		10	82.25	10	83.13		
20	81.37		15	82.45	15	83.10		

WELL 14S 38E 15CDC1

SITE NUMBER 421156112002701

FORMERLY SITE ID NO. 421155112002R01. DRILLED IRRIGATION WATER-TABLE WELL IN UNCONSOLIDATED ALLUVIUM OF QUATERNARY AGE, DIAM 12 IN (30 CM), REPORTED DEPTH 200 FT (61.0 M), CASING DEPTH NOT AVAILABLE. LSD ABOUT 4.795 FT (1.462 M) NGVD OF 1929. MP NO. 1 TOP OF HOLE IN PUMPBASE WEST SIDE, 0.70 FT (0.213 M) ABOVE LSD (SINCE APR. 3, 1967).

RECORDS AVAILABLE 1967 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 17.61 FEET BELOW LAND SURFACE DATUM APR 25, 1969.

LOWEST WATER LEVEL 43.02 FEET BELOW LAND SURFACE DATUM SEP 20, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 10, 1976	21.78	S	AUG 17, 1977	46.30	P S	FEB 09, 1978	31.32	V S
SEP 09	31.84	S	SEP 20	43.02	S	MAR 21	29.95	V S
MAR 08, 1977	22.06	S	29	41.53	V S	APR 26	25.20	S
JUL 06	46.02	P S	NOV 09	36.41	V S	MAY 31	22.60	S
AUG 12	52.58	P S	DEC 21	33.60	V S	JUL 12	44.40	V S
						AUG 23, 1978	38.43	V S
						SEP 26	33.81	V S

WELL 15S 39E 23BBB1

SITE NUMBER 420639111522901

FORMERLY SITE ID NO. 420639111523101. DUG IRRIGATION WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 42 IN (107 CM), DEPTH 11.0 FT (3.4 M), CASING DEPTH NOT AVAILABLE. LSD 4,725.40 FT (1,440.302 M) NGVD OF 1929. MP NO. 1 HASH MARK ON BENT LIP OF CASING NORTHWEST SIDE, 2.00 FT (0.610 M) ABOVE LSD (SINCE JULY 19, 1967).

RECORDS AVAILABLE 1967 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 0.74 FEET BELOW LAND SURFACE DATUM MAR 28, 1973.

LOWEST WATER LEVEL 6.18 FEET BELOW LAND SURFACE DATUM NOV 09, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 10, 1976	2.20	S	AUG 18, 1977	3.96	S	DEC 21, 1977	4.19	S
SEP 09	3.50	S	SEP 20	4.54	S	FEB 08, 1978	1.42	S
MAR 09, 1977	5.59	S	29	5.13	S	MAR 21	2.15	S
AUG 12	3.56	S	NOV 09	6.18	S	APR 26	2.13	S
						MAY 31, 1978	3.39	S
						JUL 12	2.68	S
						AUG 23	3.67	S
						SEP 26	4.45	S

WELL 165 39E 18CDA1

SITE NUMBER 420150111564701

FORMERLY SITE ID NO. 420152111564701. DRILLED IRRIGATION WATER-TABLE WELL IN UNCONSOLIDATED ALLUVIUM OF QUATERNARY AGE, DIAM 14 IN (36 CM), REPORTED DEPTH 462 FT (140.8 M), CASED TO 462 FT (140.8 M), PERFORATED 204-212 FT (62.2-64.6 M), 238-242 FT (72.5-73.8 M), 252-265 FT (76.8-80.8 M), 271-273 FT (82.6-83.2 M), LSD 4,542.7 FT (1,384.62 M) NGVD OF 1929. MP NO. 1 TOP OF 14-IN (36-CM) CASING NORTH SIDE, 0.40 FT (0.122 M) ABOVE LSD (SINCE JULY 11, 1967).

RECORDS AVAILABLE 1967 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 17.71 FEET BELOW LAND SURFACE DATUM JUL 03, 1969.

LOWEST WATER LEVEL 51.69 FEET BELOW LAND SURFACE DATUM SEP 23, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 10, 1976	30.46	S	AUG 18, 1977	47.42	S	FEB 09, 1978	33.25	V S	JUL 12, 1978	40.27	V S
SEP 09	41.01	S	SEP 29	45.95	V S	MAR 21	30.83	V S	AUG 23	48.62	V S
MAR 09, 1977	27.13	S	NOV 09	40.47	V S	APR 26	28.85	V S	SEP 26	46.02	V S
JUL 06	44.10	V S	DEC 21	37.05	S	MAY 31	27.52	S			

WELL 165 40E 29CCB1

SITE NUMBER 420011111485501

FORMERLY SITE ID NO. 420014111490001. WELL NO. 165 40E 29CRC1. DRILLED UNUSED WATER-TABLE WELL IN UNCONSOLIDATED ALLUVIUM OF QUATERNARY AGE, DIAM 10 IN (25 CM), DEPTH 81.5 FT (24.8 M), CASING DEPTH NOT AVAILABLE. LSD 4,504.9 FT (1,373.09 M) NGVD OF 1929. RECORDER INSTALLED NOV. 3, 1967. RECORDER REMOVED AUG. 31, 1971. DIGITAL RECORDER INSTALLED NOV. 21, 1978. MP NO. 1 TOP OF 10-IN (25-CM) CASING EAST SIDE, 1.90 FT (0.579 M) ABOVE LSD (SINCE JULY 10, 1967).

RECORDS AVAILABLE 1967 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.97 FEET BELOW LAND SURFACE DATUM JUN 27, 1971.

LOWEST WATER LEVEL 23.42 FEET BELOW LAND SURFACE DATUM FEB 20, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 10, 1976	15.00	S	AUG 18, 1977	6.70	S	FEB 08, 1978	13.47	S	JUL 12, 1978	2.18	S
SEP 09	7.93	S	SEP 29	10.66	S	MAR 21	9.37	S	AUG 23	3.92	S
MAR 09, 1977	23.37	S	NOV 09	16.47	S	APR 26	8.00	S	SEP 26	8.69	S
JUL 06	3.44	S	DEC 21	16.46	S	MAY 31	11.00	S			

FREMONT COUNTY

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WELL 15N 43E 13HCA1

SITE NUMBER 443745111195401

DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM OF PLIISTOCENE AGE, DIAM 6 IN (15 CM), REPORTED DEPTH 155 FT (47.2 M), CASED TO 155 FT (47.2 M), LSD ABOUT 6,620 FT (2,017 M) NGVD OF 1929. MP NO. 1 HOLE IN SEAL, 1.50 FT (0.457 M) ABOVE LSD (SINCE JUNE 12, 1974).

RECORDS AVAILABLE 1974 - 1975, 1976, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 98.78 FEET BELOW LAND SURFACE DATUM AUG 21, 1974.

LOWEST WATER LEVEL 121.74 FEET BELOW LAND SURFACE DATUM APR 12, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JUN 12, 1974	105.73	S	MAY 20, 1975	117.43	S	DEC 14, 1976	111.69	S	MAR 06, 1978	120.88	S
JUL 11	100.58	S	JUN 06	111.14	S	APR 26, 1977	118.52	S	APR 12	121.74	S
AUG 21	98.78	S	10	110.21	S	JUN 01	116.56	S	MAY 22	113.77	S
SEP 27	101.89	S	JUL 08	107.11	S	JUL 19	111.69	S	JUN 27	107.83	S
NOV 06	106.70	S	AUG 05	102.10	S	AUG 26	112.36	S	AUG 09	102.34	S
DEC 03	109.58	S	SEP 10	101.28	S	SEP 07	112.74	S	SEP 15	104.71	S
JAN 21, 1975	112.85	S	MAY 21, 1976	111.77	S	OCT 05	113.70	S			
MAR 03	115.63	S	JUN 21	106.97	S	DEC 05	116.85	S			
APR 09	117.56	S	SEP 21	103.25	S	JAN 31, 1978	119.48	S			

WELL 14N 43E 02AAC1

SITE NUMBER 443419111202401

DRILLED DOMESTIC WATER-TABLE WELL IN LAVA CREEK TUFF, DIAM 6 IN (15 CM), REPORTED DEPTH 125 FT (38.1 M), CASED TO 19 FT (5.8 M), PERFORATED 6,516 FT (1,986 M) NGVD OF 1929. MP NO. 1 TOP OF HOLE IN WELL SEAL SOUTH SIDE, 4.40 FT (1.341 M) BELOW LSD (SINCE JULY 25, 1969).

RECORDS AVAILABLE 1969 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 83.18 FEET BELOW LAND SURFACE DATUM MAY 17, 1972.

LOWEST WATER LEVEL 106.97 FEET BELOW LAND SURFACE DATUM JUN 21, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAY 21, 1976	84.38	S	JUL 19, 1977	87.57	S	FEB 01, 1978	88.44	S	AUG 09, 1978	87.55	S
JUN 21	106.97	S	AUG 26	87.66	S	MAR 06	88.49	S	SEP 15	87.37	S
SEP 21	103.25	S	SEP 07	87.85	S	APR 12	86.33	S			
APR 26, 1977	86.77	S	OCT 05	87.87	S	MAY 22	86.14	S			
JUN 02	87.10	S	DEC 05	88.37	S	JUN 28	88.67	S			

WELL 13N 43E 15AUC1

SITE NUMBER 442709111213501

DRILLED COMMERCIAL WATER-TABLE WELL IN LAVA CREEK TUFF, DIAM 6 IN (15.2 CM), REPORTED DEPTH 58 FT (17.7 M), CASED TO 38 FT (11.6 M), PERFORATED 38-58 FT (11.6-17.7 M), LSD ABOUT 6,300 FT (1,920 M) NGVD OF 1929. MP NO. 1 HOLE IN WELL SEAL, 0.30 FT (0.091 M) ABOVE LSD (SINCE JULY 10, 1974).

RECORDS AVAILABLE 1974 - 1975, 1976, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 11.28 FEET BELOW LAND SURFACE DATUM MAY 21, 1976.

LOWEST WATER LEVEL 18.35 FEET BELOW LAND SURFACE DATUM OCT 06, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JUL 10, 1974	14.89	R S	APR 08, 1975	17.01	S	SEP 21, 1976	17.05	S	DEC 06, 1977	18.23	S
21	15.62	R S	MAY 20	12.70	S	DEC 14	19.16	R S	FEB 01, 1978	17.49	S
AUG 27	15.68	S	JUN 10	11.80	S	APR 26, 1977	15.68	S	MAR 06	17.76	S
SEP 25	16.18	S	JUL 08	14.50	S	JUN 02	15.68	S	APR 12	15.22	S
NOV 06	16.41	S	AUG 05	15.27	S	JUL 14	16.89	S	MAY 23	12.36	S
DEC 03	16.52	S	SEP 11	16.14	S	AUG 26	17.93	S	JUN 28	15.19	S
JAN 21, 1975	16.65	S	MAY 21, 1976	11.28	S	SEP 07	18.22	S	AUG 09	15.99	S
MAR 03	16.64	S	JUN 21	14.25	R S	OCT 06	18.35	S	SEP 15	16.67	S

WELL 09N 42E 340DA1

SITE NUMBER 440332111283201

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 16 IN (41 CM), REPORTED DEPTH 110 FT (33.5 M), CASING TO 7 FT (2.1 M), LSD ABOUT 5,228 FT (1,594 M) NGVD OF 1929, MP NO. 2 TOP OF HOLE IN PUMPBASE SOUTH SIDE, 0.50 FT (0.152 M) ABOVE LSD (SINCE JULY 25, 1969).

RECORDS AVAILABLE 1962, 1969 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 8.30 FEET BELOW LAND SURFACE DATUM MAR 20, 1972.

LOWEST WATER LEVEL 14.76 FEET BELOW LAND SURFACE DATUM MAR 03, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
APR 05, 1976	11.70	S	APR 20, 1977	11.54	S	DEC 06, 1977	12.19	S	JUL 13, 1978	19.48	P S
MAY 14	9.28	S	JUN 13	13.02	S	JAN 19, 1978	13.62	S	AUG 10	11.37	S
JUN 22	19.07	P S	JUL 12	13.40	S	FEB 01	14.13	S	SEP 21	10.89	S
SEP 22	10.30	S	27	19.64	P S	MAR 03	14.76	S			
DEC 16	11.18	S	SEP 08	11.86	S	APR 18	10.25	S			
MAR 09, 1977	13.46	S	OCT 06	10.71	S	JUN 01	12.42	S			

WELL 09N 44E 21AADI

SITE NUMBER 440547111151601

DRILLED UNUSED WATER-TABLE WELL IN LAVA CREEKTUFF, DIAM 6 IN (15 CM), REPORTED DEPTH 132 FT (40.2 M), CASING DEPTH NOT AVAILABLE, LSD ABOUT 5,660 FT (1,725 M) NGVD OF 1929, MP NO. 1 TOP OF CASING, 0.70 FT (0.213 M) ABOVE LSD (SINCE AUG. 7, 1974).

RECORDS AVAILABLE 1974 - 1975, 1976, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 81.94 FEET BELOW LAND SURFACE DATUM JUN 22, 1976.

LOWEST WATER LEVEL 113.28 FEET BELOW LAND SURFACE DATUM DEC 06, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
AUG 07, 1974	92.81	S	JUL 09, 1975	89.73	S	DEC 15, 1976	90.23	S	DEC 06, 1977	113.28	S
SEP 17	94.00	S	AUG 06	88.65	S	APR 20, 1977	100.68	S	JUN 01, 1978	112.20	S
NOV 08	97.24	S	SEP 12	89.27	S	JUN 13	104.23	S	JUL 13	111.68	S
DEC 04	98.83	S	MAY 21, 1976	84.43	S	JUL 12	106.01	S	AUG 10	112.02	S
JUN 05, 1975	92.50	S	JUN 22	81.94	S	SEP 08	109.25	S	SEP 21	112.85	S
11	91.78	S	SEP 22	83.71	S	OCT 06	110.39	S			

WELL 07N 40E 0288B1

SITE NUMBER 43581111425901

DRILLED INSTITUTIONAL WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 10 IN (25 CM), DEPTH 224.0 FT (68.3 M), CASING TO 40 FT (12.2 M), LSD 4,948.54 FT (1,508.315 M) NGVD OF 1929, MP NO. 2 TOP OF PIPE COUPLING IN CASING COVER, 0.70 FT (0.213 M) ABOVE LSD (SINCE FEB. 22, 1961).

RECORDS AVAILABLE 1958 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 111.48 FEET BELOW LAND SURFACE DATUM SEP 14, 1972.

LOWEST WATER LEVEL 123.55 FEET BELOW LAND SURFACE DATUM SEP 27, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 24, 1976	139.09	P S	SEP 27, 1976	123.55	S	JUN 16, 1977	137.32	P S	SEP 09, 1977	136.17	P S
JUN 12	117.86	S	MAR 14, 1977	118.53	S	JUL 27	116.39	S	MAR 09, 1978	121.83	S

WELL 07N 40E 05DBC1

SITE NUMBER 435736111460201

DRIVEN OBSERVATION WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 1 1/4 IN (3.2 CM), DEPTH 39.3 FT (12.0 M), CASED TO 39.3 FT (12.0 M), SAND POINT 37.3-39.3 FT (11.4-12.0 M). LSD 4,919.86 FT (1,499.57 M) NGVD OF 1929. PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 1 TOP OF COLLAR, 0.70 FT (0.213 M) ABOVE LSD (SINCE NOV. 8, 1966).

RECORDS AVAILABLE 1966 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.75 FEET BELOW LAND SURFACE DATUM AUG 05, 1974.

LOWEST WATER LEVEL 13.53 FEET BELOW LAND SURFACE DATUM MAR 09, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 12, 1976	9.80	S	AUG 11, 1976	3.08	S	JUL 21, 1977	3.05	S	JUN 07, 1978	3.68	S
FEB 18	11.25	S	SEP 27	5.29	S	27	3.26	S	JUL 06	3.05	S
MAR 26	12.60	S	NOV 11	7.86	S	SEP 09	4.94	S	AUG 07	3.11	S
MAY 17	8.48	S	JAN 26, 1977	10.98	S	OCT 08	5.27	S	SEP 29	5.55	S
26	6.44	S	MAR 08	12.34	S	DEC 03	9.59	S			
JUN 12	3.30	S	14	12.56	S	MAR 09, 1978	13.53	S			
18	3.11	S	JUN 16	4.50	S	APR 17	10.90	S			

WELL 07N 40E 23CCB1

SITE NUMBER 435457111430001

DRIVEN OBSERVATION WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 1 1/4 IN (3.2 CM), DEPTH 50.2 FT (15.3 M), CASED TO 50.2 FT (15.3 M), SAND POINT 48.2-50.2 FT (14.7-15.3 M). LSD 4,923.83 FT (1,500.783 M) NGVD OF 1929. APR. 23, 1973, WELL HAD FILLED IN TO A DEPTH OF 49.0 FT (14.9 M). MP NO. 1 TOP OF COLLAR, 1.20 FT (0.366 M) ABOVE LSD (SINCE NOV. 8, 1966).

RECORDS AVAILABLE 1966 TO CURRENT YEAR.

HIGHEST WATER LEVEL 10.75 FEET BELOW LAND SURFACE DATUM AUG 15, 1968.

LOWEST WATER LEVEL WELL DRY MAR 20, 1967; APR 24, 1967; MAY 29, 1967; MAR 08, 1968; MAR 29, 1968; MAY 01, 1968; MAR 21, 1969; APR 25, 1969; MAY 23, 1969; MAR 24, 1970; APR 29, 1970; JUN 01, 1970; JUN 04, 1975; JAN 20, 1978; MAR 09, 1978; APR 17, 1978; JUN 07, 1978; JUL 06, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 12, 1976	36.13	S	JUN 26, 1976	47.59	S	JAN 27, 1977	48.57	S	JAN 20, 1978	DRY	
MAR 26	48.33	S	30	47.40	S	MAR 08	48.57	S	MAR 09	DRY	
JUN 12	48.66	S	JUL 07	46.99	S	18	49.01	S	APR 17	DRY	
17	48.30	S	14	46.47	S	JUL 21	46.73	S	JUN 07	DRY	
19	48.18	S	28	43.77	S	SEP 09	40.00	S	JUL 06	DRY	
21	47.99	S	SEP 29	31.07	S	OCT 08	39.64	S	AUG 07	28.78	N S
23	47.79	S	DEC 15	42.17	S	DEC 03	43.70	S			

WELL 07N 42E 06DDA1

SITE NUMBER 435727111321901

DRILLED IRRIGATION WATER-TABLE WELL IN SILICIC VOLCANIC ROCK OF TERTIARY AGE, DIAM 20 IN (51 CM), REPORTED DEPTH 910 FT (277.4 M), CASED TO 125 FT (38.1 M). LSD 5,264.46 FT (1,604.607 M) NGVD OF 1929. PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. SOME MEASUREMENTS AFTER APR. 21, 1975. MADE BY US BUREAU OF RECLAMATION. MP NO. 2 HOLE INSIDE PUMPBASE SOUTH SIDE, 0.80 FT (0.244 M) ABOVE LSD (SINCE MAY 22, 1974).

RECORDS AVAILABLE 1962, 1966 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 212.89 FEET BELOW LAND SURFACE DATUM MAY 21, 1975.

LOWEST WATER LEVEL 288.83 FEET BELOW LAND SURFACE DATUM AUG 13, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 02, 1976	261.85	T	MAR 15, 1976	268.93	S	JUN 25, 1976		P	MAR 18, 1977	281.63	S
07	262.05	T	24	268.26	S	29	266.79	S	JUN 16	267.54	S
23	257.70	S	JUN 13		P	JUL 07		P	SEP 09	254.82	T
FEB 06	265.10	T	15	311.02	R S	14		P	APR 17, 1978	271.43	S
20	268.90	T	17		P	29		P	SEP 30	252.24	S
MAR 02	268.35	T	19	269.04	R S	SEP 27	249.27	S			

WELL 07N 42F 08CAA1

SITE NUMBER 435653111314301

DRILLED IRRIGATION WATER-TABLE WELL IN SILICIC VOLCANIC ROCK OF TERTIARY AGE, DIAM 16 IN (41 CM), REPORTED DEPTH 802 FT (244.4 M), CASED TO 255FT (77.7 M), LSD 5,341.87 FT (1,628.202 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. SOME MEASUREMENTS AFTER MAR. 5, 1975, MADE BY US BUREAU OF RECLAMATION, OCT. 3, 1975, TETON RESERVOIR BEGAN FILLING. WATER LEVELS ARE RISING WITH THE FILLING OF THE POOL. MP NO. 2 TOP OF 7/8-IN (2.2-CM) HOLE INSIDE PUMPBASE SOUTHWEST SIDE, 1.30 FT (0.396 M) ABOVE LSD (SINCE JUNE 17, 1965).

RECORDS AVAILABLE 1961 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 312.97 FEET BELOW LAND SURFACE DATUM JUN 09, 1976.

LOWEST WATER LEVEL 377.79 FEET BELOW LAND SURFACE DATUM AUG 15, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 02, 1976	337.75 S	MAR 18, 1976	332.57 S	MAY 13, 1976	326.34 S	JUL 08, 1976	
07	332.60 T	23	332.37 S	18	329.21 S	12	
23	325.75 S	30	331.79 S	25	323.67 S	29	324.89 S
FEB 06	330.70 T	APR 05	331.43 S	JUN 01	321.88 S	MAR 18, 1977	324.35 S
20	329.70 T	15	332.06 S	09	312.97 S	SEP 09	344.01 S
MAR 02	330.50 T	22	328.92 S	16		APR 17, 1978	340.95 T
05	331.50 T	29	328.08 S	JUL 02			
15	333.18 S	MAY 06	328.85 S	06			

WELL 07N 42F 100CD1

SITE NUMBER 435628111290001

DRILLED OBSERVATION WATER-TABLE WELL IN TERTIARY VOLCANICS, DIAM 6 IN (15 CM), REPORTED DEPTH 650 FT (198.1 M), CASED TO 650 FT (198.1 M), PERFORATED 620 TO 650 FT (189.0-198.1 M), LSD 5,329.60 FT (1,624.462 M) NGVD OF 1929, REGRUVER INSTALLED JUNE 14, 1976. MP NO. 2 TOP OF CASING NORTHEAST SIDE, 1.08 FT (0.604 M) ABOVE LSD (SINCE JUNE 14, 1976).

RECORDS AVAILABLE 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 121.30 FEET BELOW LAND SURFACE DATUM JUN 01, 1976.

LOWEST WATER LEVEL 177.29 FEET BELOW LAND SURFACE DATUM DEC 13, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13, 1975	177.15 S	FEB 20, 1977	163.38	OCT 10, 1977	173.27	APR 20, 1978	156.91
DEC 18	171.70 S	25	163.78	15	173.66	25	156.65
FEB 20, 1976	166.70 S	28	163.91	20	174.04	30	156.34
MAR 31	157.71 S	MAR 05	164.85	25	174.54	MAY 05	155.95
APR 27	134.61 S	10	164.57	31	174.97	10	155.61
JUN 01	121.30 S	15	164.83	NOV 05	175.27	15	155.30
12	123.11 S	20	165.11	10	175.84	20	155.40
15	123.81	25	161.46	15	176.09	25	155.29
20	124.87	31	157.21	20	176.60	30	155.39
25	126.10	APR 20	159.61	DEC 13	177.29	JUN 05	155.59
30	127.40	25	160.07	15	173.83	10	155.70
JUL 05	124.81	30	160.54	20	165.78	15	156.02
10	130.10	MAY 05	160.87	25	165.46	20	156.39
15	131.49	JUN 20	164.30	31	165.71	25	156.64
20	132.67	25	164.66	JAN 05, 1978	165.91	30	157.02
25	134.15	30	165.09	10	166.32	JUL 05	157.39
31	135.81	JUL 05	165.52	15	166.64	07	157.48
AUG 05	137.06	10	165.93	20	167.36	10	157.61
10	138.28	15	166.34	25	167.85	15	158.04
15	139.46	20	166.73	31	168.35	20	158.37
20	141.36	25	167.22	FFR 05	168.90	25	158.82
25	142.34	31	167.77	10	169.09	31	159.20
31	143.78	AUG 05	168.14	15	169.61	AUG 05	159.62
SEP 05	144.64	10	168.61	20	170.19	07	159.80
10	145.50	15	168.97	25	170.55	10	159.85
15	146.22	20	169.25	28	170.80	15	160.24
20	147.06	25	169.46	MAR 05	171.18	20	160.46
25	147.67	31	170.13	10	171.01	25	160.88
30	148.44	SEP 05	170.47	15	170.83	30	161.28
OCT 02	148.53	10	170.74	20	170.81	SEP 05	161.68
JAN 18, 1977	160.65 S	15	171.08	25	170.21	10	161.97
FEB 03	161.97	20	171.68	31	162.74	15	162.45
05	162.12	25	172.00	APR 05	157.84	20	162.86
10	162.58	30	172.44	10	157.86	25	163.13
15	163.00	OCT 05	172.82	15	157.37	30	163.52

WELL 07N 44E 02AAA1

SITE NUMBER 435808111131101

DRILLED DOMESTIC WATER-TABLE WELL IN UNKNOWN AQUIFER, DIAM 6 IN (15 CM), DEPTH AND CASING NOT AVAILABLE. LSD ABOUT 6.040 FT (1.841 M) NGVD OF 1929. MP NO. 1 BOTTOM EDGE OF HOLE IN CASING EAST SIDE. 1.80 FT (0.549 M) ABOVE LSD (SINCE JULY 26, 1969).

RECORDS AVAILABLE 1969 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 97.05 FEET BELOW LAND SURFACE DATUM OCT 15, 1976.

LOWEST WATER LEVEL 124.19 FEET BELOW LAND SURFACE DATUM MAR 23, 1971.

WATER LFVFLS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
APR 15, 1976	106.39	T	MAR 10, 1977	99.49	T	AUG 11, 1977	115.34	S	SEP 15, 1978	117.06	T
OCT 15	97.05	T	18	100.57	S	SEP 19	107.41	S			
NOV 29	94.28	S	JUN 24	112.92	S	APR 17, 1978	122.01	T			

WELL 055 15E 35D8D2

SITE NUMBER 425635114382302

FORMERLY SITE ID NO. 425634114382601. WELL NO. 055-15E-35D8C2. DRILLED DOMESTIC WATER-TABLE WELL IN SNAKE RIVER GROUP. DIAM 5 IN (13 CM). DEPTH 165.1 FT (50.3 M) CASED TO 126 FT (38.4 M). LSD 3,627.31 FT (1,105.604 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1961. MP NO. 1 TOP OF 5-IN (13-CM) CASING EAST SIDE. 1.29 FT (0.393 M) ABOVE LSD (SINCE JUNE 6, 1972).

RECORDS AVAILABLE 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 129.25 FEET BELOW LAND SURFACE DATUM SEP 22, 1976.

LOWEST WATER LEVEL 146.53 FEET BELOW LAND SURFACE DATUM FEB 22, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 07, 1976	129.93	S	NOV 15, 1976	131.50	S	AUG 17, 1977	140.01	S
FEB 17	132.76	S	DEC 14	133.09	R S	SEP 13	139.15	R S
MAR 25	135.25	S	JAN 17, 1977	135.15	S	OCT 13	140.92	P S
MAY 06	136.44	R S	MAR 07	137.97	S	NOV 15	142.64	P S
JUN 24	134.56	S	APR 22	140.51	R S	DEC 17	143.88	S
JUL 12	133.79	R S	MAY 16	140.18	S	JAN 23, 1978	146.05	S
SEP 22	129.25	R S	JUN 22	140.16	S	FEB 22	146.53	S
OCT 27	130.79	R S	JUL 12	140.51	S	MAR 25	147.61	P S
						APR 19, 1978	148.17	R S
						MAY 17	147.74	P S
						JUN 14	146.40	P S
						JUL 07	145.38	S
						AUG 15	141.93	P S
						SEP 18	138.79	R S

WELL 085 14E 16C8B1

SITE NUMBER 424353114494701

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP. DIAM 6 IN (15 CM). DEPTH 53.0 FT (16.2 M). GALVANIZED IRON CASING TO HASALT REDROCK. SEPT. 1957 WELL WAS CASED TO 50 FT (15.2 M) WITH 5-IN (13-CM) ALUMINUM PIPE. LSD 3,175.27 FT (967.822 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED OCT. 6, 1954. RECORDER REMOVED AUG. 10, 1971. DIGITAL RECORDER INSTALLED JULY 19, 1977. MP NO. 3 TOP OF 5-IN (13-CM) ALUMINUM CASING FLANGE WEST SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE SEPT. 11, 1957).

RECORDS AVAILABLE 1951 - 1953, 1954 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 36.50 FEET BELOW LAND SURFACE DATUM SEP 22, 1953.

LOWEST WATER LEVEL 40.54 FEET BELOW LAND SURFACE DATUM MAY 20, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 28, 1976	39.76	S	SEP 25, 1977	38.94		JAN 31, 1978	39.75	
MAY 14	39.80	S		38.93		FEB 05	39.79	
JUN 16	39.58	S	OCT 05	38.97		10	39.76	
JUL 12	39.45	S	10	38.97		15	39.81	
SEP 22	38.15	S	15	39.01		20	39.88	
NOV 16	38.30	S	20	38.99		25	39.91	
JAN 17, 1977	37.91	S	25	39.02		28	39.89	
MAR 07	39.77	S	31	39.03		MAR 05	39.89	
MAY 16	39.72	S	NOV 05	39.04		10	39.96	
JUL 12	39.79	S	10	39.13		15	39.99	
19	39.76	S	15	39.16		20	40.02	
20	39.79		20	39.18		25	40.05	
21	39.80		25	39.24		31	40.09	
25	39.63		30	39.28		APR 05	40.10	
31	39.60		DEC 05	39.31		10	40.13	
AUG 05	39.52		10	39.36		15	40.18	
10	39.29		15	39.36		20	40.24	
15	39.72		20	39.45		25	40.33	
20	39.76		25	39.48		30	40.32	
25	39.21		31	39.52		MAY 05	40.39	
31	39.08		JAN 05, 1978	39.55		10	40.44	
SEP 04	39.06		10	39.59		11	40.37	
05	39.08		15	39.60		15	40.46	
10	39.25		20	39.65		20	40.54	
15	39.17		23	39.69		25	40.51	
20	39.06		25	39.72		30	38.64	
						JUN 05, 1978	40.37	
						10	40.47	
						15	40.29	
						20	40.20	
						25	40.29	
						30	40.41	
						JUL 05	40.11	
						10	39.98	
						15	40.00	
						20	39.85	
						25	39.87	
						31	39.78	
						AUG 05	39.62	
						10	39.48	
						15	39.49	
						20	39.27	
						25	39.31	
						31	39.11	
						SEP 05	39.03	
						10	38.77	
						15	38.68	
						18	38.59	
						20	38.65	
						25	38.64	
						30	38.64	

WELL 085 16E 18AAA1

SITE NUMBER 424414114370201

DRILLED DOMESTIC WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), REPORTED DEPTH 197 FT (60.0 M), CASED TO 6 FT (1.8 M). LSD 3,516.30 FT (1,071.768 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 2 TOP OF 7/8-IN (2.2-CM) HOLE IN WELL SEAL WEST SIDE, 0.80 FT (0.244 M) ABOVE LSD (SINCE SEPT. 23, 1971).

RECORDS AVAILABLE 1951 - 1954, 1956 - 1968, 1969 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 149.32 FEET BELOW LAND SURFACE DATUM OCT 22, 1952.

LOWEST WATER LEVEL 172.56 FEET BELOW LAND SURFACE DATUM MAR 12, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 24, 1976	168.10 S	MAR 07, 1977	168.30 S	MAR 25, 1978	168.98 S		
SEP 22	152.88 S	SEP 13	163.84 S	SEP 18	161.78 S		

WELL 095 14E 03BAA1

SITE NUMBER 424053114480301

DRILLED DOMESTIC AND STOCK WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 99.0 FT (30.2 M), CASED TO REDROCK. LSD 3,203.24 FT (976.348 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MAR. 24, 1972, WELL HAD FILLED IN TO A DEPTH OF 93.5 FT (28.8 M). MP NO. 2 TOP OF CASTING, 0.70 FT (0.213 M) ABOVE LSD (SINCE OCT. 18, 1951).

RECORDS AVAILABLE 1929, 1951 TO CURRENT YEAR.

HIGHEST WATER LEVEL 69.68 FEET BELOW LAND SURFACE DATUM OCT 16, 1956.

LOWEST WATER LEVEL 75.14 FEET BELOW LAND SURFACE DATUM MAY 17, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 18, 1976	74.90 S	SEP 22, 1976	71.58	SEP 13, 1977	73.63 S	APR 04, 1978	74.76 S
MAR 28	73.77 S	MAR 07, 1977	73.81 S	NOV 14	73.48 S	MAY 17	75.14 S
MAY 14	74.05 S	MAY 16	74.40 S	JAN 23, 1978	74.22 S	JUL 05	74.90 S
JUN 16	73.73 S	JUL 12	74.30 S	MAR 25	74.70 S	SEP 18	72.61 S

WELL 095 16E 07DCA1

SITE NUMBER 423920114371501

DRILLED DOMESTIC AND STOCK WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 128.0 FT (39.0 M), CASED TO 32 FT (9.8 M). LSD 3,447.50 FT (1,050.798 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 2 TOP OF 1/2-IN (1.3-CM) HOLE IN WELL SEAL, 4.56 FT (1.390 M) BELOW LSD (SINCE JULY 19, 1971).

RECORDS AVAILABLE 1949 TO CURRENT YEAR.

HIGHEST WATER LEVEL 91.34 FEET BELOW LAND SURFACE DATUM SEP 22, 1958.

LOWEST WATER LEVEL 114.38 FEET BELOW LAND SURFACE DATUM JAN 08, 1952.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 22, 1976	95.95 R S	SEP 10, 1977	97.86 S	MAR 25, 1978	113.40 S		
MAR 07, 1977	112.51 R S	13	97.86 S	SEP 18	97.20 S		

WELL 08N 34E 17CCC3

SITE NUMBER 440058112293601

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP. DIAM 6 IN (15 CM), DEPTH 440 FT (134.1 M). CASFD TO 510 FT (155.4 M). PERFORATED 340-350 FT (103.6-106.7 M), PLUGGED BACK WITH CONCRETE SEAL 440-462 FT (134.1-140.8 M). LSU4,808.92 FT (1,465.759 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968. MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE EAST SIDE, 3.76 FT (1.146 M) ABOVE LSD (SINCE FEB. 10, 1970).

RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 38.94 FEET BELOW LAND SURFACE DATUM APR 16, 1976.

LOWEST WATER LEVEL 60.27 FEET BELOW LAND SURFACE DATUM AUG 05, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 22, 1976	40.45	S	MAR 17, 1977	39.68	S	DEC 17, 1977	43.67	S	JUL 20, 1978	56.07	S
MAR 04	39.44	S	JUN 17	48.30	S	JAN 26, 1978	42.08	S	SEP 02	55.80	S
APR 16	38.94	S	JUL 27	55.53	S	MAR 07	41.22	S			
JUN 01	45.91	S	SEP 13	53.96	S	APR 19	40.68	S			
SEP 07	52.51	S	OCT 29	48.07	S	JUN 12	52.27	S			

WELL 08N 34E 17CCC4

SITE NUMBER 440058112293602

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP. DEPTH 545 FT (166.1 M). 1-IN (2.5-CM) PIEZOMETER TUBE 0-519 FT (0-158.2 M). PERFORATED 511.5-516.5 FT (155.9-157.4 M), 6-IN (15-CM) CASING 0-510 FT (0-155.4 M). GRAVEL PACKED 462-545 FT (140.8-166.1 M). CONCRETE SEAL 440-462 FT (134.1-140.8 M). 545-562 FT (166.1-171.3 M). LSD 4,808.92 FT (1,465.759 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968. MP NO. 1 TOP OF 1-IN (2.5-CM) PIPE EAST SIDE, 3.43 FT (1.045 M) ABOVE LSD (SINCE FEB. 10, 1970).

RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 39.60 FEET BELOW LAND SURFACE DATUM APR 24, 1973.

LOWEST WATER LEVEL 56.03 FEET BELOW LAND SURFACE DATUM SEP 25, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 22, 1976	43.77	S	MAR 17, 1977	41.91	S	DEC 17, 1977	47.26	S	JUL 20, 1978	50.77	S
MAR 04	41.93	S	JUN 17	43.89	S	JAN 26, 1978	44.77	S	SEP 02	54.33	S
APR 16	40.98	S	JUL 27	49.43	S	MAR 07	43.39	S			
JUN 01	40.65	S	SEP 13	51.01	S	APR 19	42.58	S			
SEP 07	53.75	S	OCT 29	51.39	S	JUN 12	43.15	S			

WELL 08N 34E 17CCC5

SITE NUMBER 440058112293603

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP. DEPTH 888 FT (270.7 M). 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-610 FT (0-185.9 M). PERFORATED 602.5-607.5 FT (183.6-185.2 M). GRAVEL PACKED 562-888 (171.3-270.7 M). CONCRETE SEAL 545-562 FT (166.1-171.3 M). 888-914 FT (270.7-278.6 M). LSD 4,808.92 FT (1,465.759 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968. MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE EAST SIDE, 3.27 FT (0.997 M) ABOVE LSD (SINCE FEB. 10, 1970).

RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 163.41 FEET BELOW LAND SURFACE DATUM APR 16, 1976.

LOWEST WATER LEVEL 173.36 FEET BELOW LAND SURFACE DATUM JUL 20, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 22, 1976	164.24	S	MAR 17, 1977	164.06	S	DEC 17, 1977	165.76	S	JUL 20, 1978	173.36	S
MAR 04	163.81	S	JUN 17	170.45	S	JAN 26, 1978	165.53	S	SEP 02	171.28	S
APR 16	163.41	S	JUL 27	171.27	S	MAR 07	165.30	S			
JUN 01	168.55	S	SEP 13	168.71	S	APR 19	164.78	S			
SEP 07	168.42	S	OCT 29	166.75	S	JUN 12	171.01	S			

WELL 08N 34E 17CCC6

SITE NUMBER 440058112293604

DRILLED OBSERVATION ARTESIAN WELL IN SNAKE RIVER GROUP, DEPTH 1,006.5 FT (306.8 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-930 FT (0-283.5 M), PERFORATED 922.5-927.5 FT (281.2-282.7 M), GRAVEL PACKED 914-1,006.5 FT (278.6-306.8 M), CONCRETE SEAL 888-914 FT (270.7-278.6 M), LSD 4,808.92 FT (1,465.759 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968, MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE EAST SIDE, 2.97 FT (0.905 M) ABOVE LSD (SINCE FEB. 10, 1970).

RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 220.17 FEET BELOW LAND SURFACE DATUM MAY 15, 1974.

LOWEST WATER LEVEL 224.21 FEET BELOW LAND SURFACE DATUM SEP 02, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 22, 1976	221.31	S	MAR 17, 1977	220.73	S	DEC 17, 1977	222.17	S	JUL 20, 1978	223.47	S
MAR 04	220.83	S	JUN 17	222.00	S	JAN 26, 1978	222.08	S	SEP 02	224.21	S
APR 16	220.78	S	JUL 27	222.91	S	MAR 07	221.90	S			
JUN 01	221.16	S	SEP 13	223.42	S	APR 19	221.46	S			
SEP 07	222.81	S	OCT 29	222.78	S	JUN 12	222.33	S			

WELL 08N 34E 17CCC7

SITE NUMBER 440058112293605

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 47.6 FT (14.5 M), CASED TO 47.5 FT (14.5 M), PERFORATED 40-47 FT (12.2-14.3 M), LSD 4,808.92 FT (1,465.759 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968, MP NO. 1 TOP OF 6-IN (15-CM) CASING EAST SIDE, 0.90 FT (0.274 M) ABOVE LSD (SINCE JUNE 24, 1970).

RECORDS AVAILABLE 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 21.36 FEET BELOW LAND SURFACE DATUM APR 25, 1972.

LOWEST WATER LEVEL 40.29 FEET BELOW LAND SURFACE DATUM SEP 23, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 22, 1976	24.50	S	SEP 07, 1976	30.71	P S	JUL 28, 1977	30.05	S	JAN 26, 1978	27.66	S
MAR 04	22.87	S	NOV 16	29.22	S	SEP 13	30.13	S	JUN 12	29.64	S
APR 16	21.78	S	MAR 17, 1977	22.93	S	OCT 29	30.23	S	JUL 20	30.04	S
JUN 01	27.15	R S	JUN 17	30.15	S	DEC 17	29.95	S	SEP 02	30.05	S

WELL 07N 33E 35RCC1

SITE NUMBER 435332112331801

FORMERLY SITE ID NO. 435336112331801, WELL NO. 07N 33E 35RCC1, HORED OBSERVATION WATER-TABLE WELL IN SANDY SILT OF QUATERNARY AGE, DIAM 1 1/4 IN (3.2 CM), DEPTH 54.5 FT (16.6 M), CASED TO 54.5 FT (16.6 M), SANDPOINT 52.4-54.5 FT (16.0-16.6 M), LSD ABOUT 4,784 FT (1,458 M) NGVD OF 1929, MP NO. 1 TOP OF 1 1/4-IN (3.2-CM) PIPE WEST SIDE, 1.80 FT (0.549 M) ABOVE LSD (SINCE MAY 26, 1967).

RECORDS AVAILABLE 1967 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 14.70 FEET BELOW LAND SURFACE DATUM SEP 02, 1978.

LOWEST WATER LEVEL 30.72 FEET BELOW LAND SURFACE DATUM MAY 15, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 21, 1976	23.24	S	MAR 17, 1977	28.52	S	OCT 27, 1977	15.58	S	APR 19, 1978	28.01	S
MAR 04	26.13	S	JUN 16	29.70	S	DEC 17	19.48	S	JUN 13	24.90	S
APR 16	28.68	S	JUL 25	22.21	S	FEB 04, 1978	23.64	S	JUL 20	20.14	S
SEP 08	16.51	S	SEP 12	16.17	S	MAR 07	25.70	S	SEP 02	14.70	S

WELL 07N 34E 04CDC1

SITE NUMBER 435728112281101

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 57.3 FT (17.5 M), CASED TO 41 FT (12.5 M). LSD 4,791.76 FT (1,460.528 M) NGVD OF 1929. OCT 4, 1972, WELL HAD FILLED IN TO A DEPTH OF 51.2 FT (15.6 M). RECORDER INSTALLED FEB. 13, 1957. RECORDER REMOVED AUG. 19, 1971. MP NO. 2 TOP OF HOLE IN CASING COVER, 2.02 FT (0.616 M) ABOVE LSD (SINCE SEPT. 10, 1975).

RECORDS AVAILABLE 1956, 1957 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.55 FEET BELOW LAND SURFACE DATUM MAY 02, 1956.

LOWEST WATER LEVEL 30.50 FEET BELOW LAND SURFACE DATUM AUG 13, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 22, 1976	7.07	S	MAR 17, 1977	5.50	S	DEC 17, 1977	13.64	S	JUL 20, 1978	25.67	S
MAR 04	5.14	S	JUN 17	20.28	S	FFB 04, 1978	10.22	S	SEP 02	25.52	S
APR 16	4.16	S	JUL 28	28.16	S	MAR 07	8.82	S			
JUN 01	12.14	S	SEP 13	26.26	S	APR 19	7.02	S			
SEP 08	19.77	S	OCT 29	21.43	S	JUN 13	17.65	S			

WELL 07N 35E 20CBD1

SITE NUMBER 43550411222301

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 20 IN (51 CM), DEPTH 58.1 FT (17.7 M), CASED TO 45 FT (13.7 M). LSD 4,818.15 FT (1,468.572 M) NGVD OF 1929. MAY 15, 1967, WELL DEEPEMED AND RECASED, DIAM 12 IN (30 CM), DEPTH 65.9 FT (20.1 M), CASED TO 66 FT (20.1 M). PERFORATED 55-65 FT (16.8-19.8 M). RECORDER INSTALLED SEPT. 5, 1955. RECORDER CHANGED TO DIGITAL APR. 2, 1973, MP NO. 4 TOP OF 12-IN (30-CM) CASING NORTHEAST SIDE, 2.00 FT (0.610 M) ABOVE LSD (SINCE MAY 16, 1967).

RECORDS AVAILABLE 1954, 1955 TO CURRENT YEAR.

HIGHEST WATER LEVEL 30.87 FEET BELOW LAND SURFACE DATUM MAY 04, 1972.

LOWEST WATER LEVEL 57.92 FEET BELOW LAND SURFACE DATUM SEP 05, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	36.38	SEP 15, 1976	45.84	MAY 10, 1977	40.81	FEB 05, 1978	38.97
10	36.17	20	45.24	15	41.69	10	38.54
15	35.84	25	44.63	20	42.57	15	38.28
20	35.57	30	44.12	25	43.36	20	38.06
25	35.19	OCT 05	43.66	31	44.32	25	37.69
31	34.93	10	43.21	JUN 05	44.96	28	37.50
FEB 05	34.58	15	42.79	10	45.49	MAR 05	37.16
10	34.38	20	42.41	15	46.08	07	37.22
15	33.99	25	41.88	17	46.36	10	36.93
20	33.87	31	41.33	20	46.75	15	36.75
25	33.55	NOV 05	40.84	25	47.38	20	36.43
29	33.28	10	40.36	30	48.19	25	36.21
MAR 05	33.26	15	39.94	JUL 05	49.07	31	35.82
10	32.95	20	39.50	10	49.89	APR 05	35.63
15	32.91	25	38.99	15	50.62	10	35.44
20	32.76	30	38.71	20	51.36	15	35.18
25	32.58	DEC 05	38.30	25	52.05	16	35.06
31	32.41	10	38.00	28	52.48	20	34.93
APR 05	32.26	15	37.63	31	52.86	25	34.77
10	32.26	20	37.27	AUG 05	53.53	30	36.08
15	31.97	25	36.93	10	54.05	MAY 05	37.29
20	31.95	27	36.77	15	53.34	10	37.82
25	31.80	31	36.44	20	52.90	15	36.94
30	31.83	JAN 01, 1977	36.43	25	52.60	20	36.42
MAY 05	31.62	05	36.21	31	53.77	25	35.99
10	31.56	10	35.90	SEP 05	54.55	31	36.00
15	31.54	15	35.62	06	54.66	JUN 05	36.26
18	31.37	20	35.37	10	53.48	10	37.49
19	31.37	25	35.13	15	53.17	15	39.12
20	31.49	31	34.81	20	54.28	20	40.69
25	31.51	FEB 05	34.58	25	55.11	25	42.10
31	31.91	10	34.35	30	55.86	30	43.41
JUN 05	32.31	11	34.29	OCT 05	56.21	JUL 05	44.67
10	32.64	15	34.11	10	54.48	10	45.88
15	33.86	20	33.87	15	53.14	15	47.06
20	35.25	25	33.68	20	52.07	20	48.16
25	36.68	28	33.56	25	51.18	25	49.21
30	38.16	MAR 01	33.42	29	50.49	31	50.38
JUL 05	39.44	05	34.58	31	50.14	AUG 05	51.34
10	40.52	10	36.00	NOV 05	49.31	10	52.25
15	41.58	15	37.08	10	48.59	15	53.14
20	42.76	16	37.21	15	47.73	20	54.05
25	43.97	20	37.96	20	46.99	25	54.77
31	45.40	25	38.67	25	46.27	31	55.37
AUG 05	46.55	31	39.45	30	45.57	SEP 05	55.63
10	47.52	APR 05	38.40	DEC 05	44.91	10	55.85
15	48.31	10	37.19	10	44.30	15	55.22
20	48.99	15	36.32	15	43.60	20	53.45
24	49.44	16	36.07	17	43.40	25	52.14
25	49.35	20	36.89	20	43.25	30	51.68
31	48.11	25	38.02	25	42.66		
SEP 05	47.22	30	38.89	31	42.01		
10	46.50	MAY 05	39.91	FEB 04, 1978	39.14		

WELL 07N 36E 22ABD4

SITE NUMBER 43552811212101

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 24.5 FT (7.5 M), CASED TO 18 FT (5.5 M), LSD 4,791.73 FT (1,460.519 M) NGVD OF 1929. RECORDER INSTALLED FEB. 12, 1957. RECORDER REMOVED AUG. 19, 1971. MP NO. 2 TOP OF CASING NORTHEAST SIDE, 2.00 FT (0.610 M) ABOVE LSD (SINCE JULY 22, 1965).

RECORDS AVAILABLE 1955 - 1956, 1957 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.14 FEET BELOW LAND SURFACE DATUM MAR 21, 1972.

LOWEST WATER LEVEL 8.90 FEET BELOW LAND SURFACE DATUM SEP 02, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 16, 1977	5.12	S	AUG 15, 1977	8.87		SEP 08, 1977	7.91		MAR 04, 1978	6.68	S
JUN 17	6.39	S	20	8.29		10	8.01		APR 17	6.63	S
JUL 09	7.34	S	25	8.14		15	7.96		JUN 13	7.10	S
AUG 06	8.14		31	8.05		DEC 13	6.83	S	JUL 18	8.50	S
10	8.01		SEP 05	8.03		JAN 26, 1978	6.88	S	SEP 02	8.90	S

WELL 07N 37E 28CCD1

SITE NUMBER 435402112065001

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 135.0 FT (41.2 M), CASED TO 103 FT (31.4 M), LSD 4,848.92 FT (1,477.951 M) NGVD OF 1929. MP NO. 2 TOP OF 1 1/4-IN (3.2-CM) PIPE COUPLING IN WELL SEAL, 0.70 FT (0.213 M) ABOVE LSD (SINCE MAY 24, 1965).

RECORDS AVAILABLE 1960 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 61.28 FEET BELOW LAND SURFACE DATUM APR 24, 1973.

LOWEST WATER LEVEL 65.69 FEET BELOW LAND SURFACE DATUM SEP 02, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 22, 1976		Z	MAR 16, 1977	62.55	S	DEC 24, 1977	64.12	S	JUL 18, 1978	65.22	S
MAR 10	61.80	S	JUN 17	63.68	S	JAN 26, 1978	64.21	S	SEP 02	65.69	S
APR 15	61.68	S	JUL 28	64.73	S	MAR 08	64.33	S			
JUN 01	62.10	S	SEP 07	65.53	S	APR 17	64.23	S			
SEP 07	63.48	S	OCT 19	65.03	S	JUN 13	64.24	S			

WELL 06N 32E 11AB41

SITE NUMBER 435212112394001

FORMERLY SITE ID NO. 435215112394201. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 266.5 FT (81.2 M), CASED TO 266 FT (81.1 M), PERFORATED 232-266 FT (70.7-81.1 M), CEMENTED BOTTOM, LSD 4,784.79 FT (1,459.928 M) NGVD OF 1929. RECORDER INSTALLED NOV. 22, 1952. RECORDER REMOVED OCT. 13, 1954. MP NO. 2 TOP NORTHEAST SIDE 6 1/4-IN (16-CM) CASING AT PAINTED SPOT, 1.87 FT (0.570 M) ABOVE LSD (SINCE NOV. 10, 1952).

RECORDS AVAILABLE 1952 - 1954, 1955 - 1960, 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 204.30 FEET BELOW LAND SURFACE DATUM APR 23, 1974.

LOWEST WATER LEVEL 209.09 FEET BELOW LAND SURFACE DATUM OCT 19, 1966.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 23, 1976	205.34	S	DEC 20, 1976	206.32	S	AUG 19, 1977	207.33	S	APR 22, 1978	205.96	S
APR 20	204.75	S	FEB 23, 1977	205.52	S	OCT 21	207.49	S	MAY 23	205.54	S
MAY 21	204.71	S	MAR 23	205.20	S	NOV 21	208.08	S	JUN 27	206.48	S
JUL 22	206.13	S	APR 22	205.29	S	DEC 16	207.01	S	JUL 17	207.09	S
SEP 20	206.09	S	MAY 23	205.31	S	FEB 01, 1978	206.53	S	AUG 23	207.98	S
OCT 25	206.72	S	JUN 23	205.92	S	24	206.38	S	SEP 19	208.22	S
NOV 26	206.54	S	JUL 15	206.47	S	MAR 27	206.21	S			

## JEFFERSON COUNTY -- CONTINUED

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WELL 06N 32E 26CDB1

SITE NUMBER 434856112400001

DRILLED OBSERVATION WATER-TABLE WFL IN SNAKERIVER GROUP, 8 IN (20 CM), DEPTH 321.8 FT (98.1 M), CASED TO 321.8 FT (98.1 M), PERFORATED 237-314 FT (72.2-95.7 M), GRAVEL PACKED, CEMENTED BOTTOM, LSD 4,787.92 FT (1,459.358 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 TOP OF THREADED 8-IN (20-CM) CASING NORTHEASTSIDE, 2.00 FT (0.610 M) ABOVE LSD (SINCE AUG. 1, 1956).

RECORDS AVAILABLE 1956 - 1959, 1960 - 1961, 1962 TO CURRENT YEAR.

HIGHEST WATER LEVEL 217.20 FEET BELOW LAND SURFACE DATUM APR 23, 1974.

LOWEST WATER LEVEL 222.70 FEET BELOW LAND SURFACE DATUM JUL 11, 1956.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 23, 1976	217.95	S	DEC 20, 1976	219.27	S	AUG 19, 1977	219.80	S	MAY 23, 1978	219.05	S
APR 20	217.76	S	JAN 25, 1977	218.89	S	OCT 26	220.44	S	JUN 26	219.53	S
MAY 21	217.45	S	FEB 23	218.32	S	NOV 23	220.45	S	JUL 15	219.86	S
JUL 21	218.05	S	MAR 23	217.97	S	DEC 16	220.07	S	AUG 23	220.81	S
AUG 26	218.95	S	APR 22	218.33	S	JAN 23, 1978	219.93	S	SEP 19	221.46	S
SEP 20	219.48	S	MAY 23	218.00	S	FFB 22	220.04	S			
OCT 25	219.46	S	JUN 22	218.44	S	MAR 27	219.54	S			
NOV 27	219.42	S	JUL 15	218.92	S	APR 22	219.37	S			

WELL 06N 32E 36ADD1

SITE NUMBER 434820112373001

DRILLED OBSERVATION WATER-TABLE WFL IN SNAKERIVER GROUP, DIAM 8 TO 4 IN (20 TO 10 CM), DEPTH 291.6 FT (88.9 M), 8-IN (20-CM) CAST IRON CASING 0-3 FT (0-0.91 M), 4-IN (10-CM) CASING 3 FT (0.91 M) TO UNKNOWN DEPTH, LSD 4,785.58 FT (1,458.645 M) NGVD OF 1929, OCT. 20, 1950, WELL WAS DEEPENED TO A DEPTH OF 307.8 FT (93.8 M), RECORDER INSTALLED JULY 25, 1951, RECORDER REMOVED DEC. 14, 1951, RECORDER INSTALLED SEPT. 8, 1952, RECORDER REMOVED OCT. 20, 1953, MP NO. 2 TOP OF 8-IN (20-CM) CAST IRON CASING NORTH SIDE, 2.07 FT (0.631 M) ABOVE LSD (SINCE JUNE 20, 1950).

RECORDS AVAILABLE 1949 - 1950, 1951 - 1953, 1954 - 1963, 1964 TO CURRENT YEAR.

HIGHEST WATER LEVEL 219.29 FEET BELOW LAND SURFACE DATUM JUL 15, 1975.

LOWEST WATER LEVEL 222.92 FEET BELOW LAND SURFACE DATUM APR 19, 1950.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JUL 21, 1976	219.73	S	JUL 15, 1977	220.65	S	JUL 15, 1978	221.66	S

WELL 06N 33E 26DDB1

SITE NUMBER 434851112321801

FORMERLY SITE ID NO. 434854112322101, DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 312 FT (95.1 M), CASED TO 312 FT (95.1 M), PERFORATED 250-260 FT (76.2-79.2 M), 2 1/4-IN (6.35-CM) CASING 298-308 FT (90.4-93.9 M), CEMENTED BOTTOM, LSD 4,784.32 FT (1,458.261 M) NGVD OF 1929, RECORDER INSTALLED JUNE 13, 1953, RECORDER REMOVED APR. 23, 1956, MP NO. 2 TOP OF THREADED 6 1/4-IN (16-CM) CASING NORTHEAST SIDE, 2.00 FT (0.610 M) ABOVE LSD (SINCE FEB. 12, 1953).

RECORDS AVAILABLE 1952, 1953 - 1956, 1957 TO CURRENT YEAR.

HIGHEST WATER LEVEL 220.85 FEET BELOW LAND SURFACE DATUM APR 11, 1973.

LOWEST WATER LEVEL 224.47 FEET BELOW LAND SURFACE DATUM OCT 22, 1958.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JUN 17, 1976	221.00	S	JUL 22, 1976	221.72	S	JUL 15, 1978	223.08	S

WELL 06N 35E 21AAB1

SITE NUMBER 435028112202601

DRILLED IRRIGATION ARTESIAN WELL IN SNAKE RIVER GROUP. DIAM 16 TO 14 IN (41 TO 36 CM), DEPTH 275.5 FT (84.0 M), 16-IN (41-CM) CASING 0-95 FT (0-29.0 M), 14-IN (36-CM) CASING 135-205 FT (41.2-62.5 M), LSD 4,784.50 FT (1,458.316 M) NGVD OF 1929. MAY 15, 1967, WELL WAS RECONDITIONED. MP NO. 5 TOP OF HOLE INSIDE PUMPBASE NORTH SIDE, 1.73 FT (0.527 M) ABOVE LSD (SINCE JULY 14, 1967).

RECORDS AVAILABLE 1949 - 1951, 1952 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 91.00 FEET BELOW LAND SURFACE DATUM OCT 26, 1977.

LOWEST WATER LEVEL 113.83 FEET BELOW LAND SURFACE DATUM JUL 23, 1973.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 21, 1976	96.85	S	SEP 08, 1976	100.14	S	SFP 12, 1977	93.61	V S	MAR 07, 1978	98.06	S
MAR 05	98.27	S	MAR 16, 1977	98.81	S	OCT 26	91.00	V S	APR 19	99.61	S
APR 16	99.12	S	JUN 21	116.27	P S	DEC 17	93.39	S	JUN 13	110.01	S
JUN 02	113.20	S	JUL 29	117.34	P S	FFB 04, 1978	97.22	S	JUL 19	118.70	P S

WELL 06N 35E 27DDA1

SITE NUMBER 434857112185801

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP. DIAM 20 IN (51 CM), REPORTED DEPTH 260 FT (79.2 M), CASING TO 8 FT (2.4 M), LSD 4,798.23 FT (1,462.500 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 4 TOP OF 1-IN (2.5-CM) AIRLINE HOLE IN PUMPBASE WEST SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE SEPT. 16, 1963).

RECORDS AVAILABLE 1957 - 1964, 1965 TO CURRENT YEAR.

HIGHEST WATER LEVEL 230.13 FEET BELOW LAND SURFACE DATUM MAR 21, 1973.

LOWEST WATER LEVEL 239.22 FEET BELOW LAND SURFACE DATUM SFP 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAR 05, 1976	230.60	S	MAR 16, 1977	231.56	S	MAR 04, 1978	234.27	S		
SEP 08	236.07	S	SEP 15	237.40	S	SFP 19	239.22	S		

WELL 06N 36E 27BAA1

SITE NUMBER 434933112122701

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP. DIAM 8 IN (20 CM), DEPTH 227.5 FT (69.3 M), CASING TO 8 FT (2.4 M), LSD 4,884.31 FT (1,488.738 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 1 TOP OF 8-IN (20-CM) CASING NORTH SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE JULY 19, 1968).

RECORDS AVAILABLE 1960 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 180.95 FEET BELOW LAND SURFACE DATUM MAR 18, 1974.

LOWEST WATER LEVEL 186.58 FEET BELOW LAND SURFACE DATUM SFP 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 05, 1976	181.79	S	JUN 18, 1976	182.95	S	MAR 12, 1977	181.33	S	MAR 04, 1978	183.50	S
JUN 04	182.61	S	19	182.97	S	SEP 15	184.00	S	APR 25	185.36	S
09	182.64	S	22	183.03	S	OCT 26	183.59	S	JUL 20	185.07	S
12	182.68	S	JUL 26	183.48	S	DEC 24	183.47	S	SFP 19	186.58	S
15	182.91	S	OCT 11	182.65	S	FFB 04, 1978	183.55	S			

WELL 06N 38E 30BAD2

SITE NUMBER 434924112013801

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 6 IN (15 CM), REPORTED DEPTH 308 FT (93.9 M), CASED TO 308 FT (93.9 M), PERFORATED 260-270 FT (79.2-82.3 M), CONCRETE SEAL 308-355 FT (93.9-108.2 M), LSD 4,874.35 FT (1,485.702 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968, MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE, 0.98 FT (0.299 M) ABOVE LSD (SINCE AUG. 28, 1967).

RECORDS AVAILABLE 1967 - 1969, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 88.15 FEET BELOW LAND SURFACE DATUM SEP 28, 1976.

LOWEST WATER LEVEL 91.59 FEET BELOW LAND SURFACE DATUM SEP 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 09, 1976	89.16 S	JUN 18, 1976	89.17 S	JUL 26, 1977	90.64 S	APR 20, 1978	91.50 S
FEB 25	89.41 S	19	89.17 S	29	90.65 S	JUN 05	91.27 S
MAR 10	89.41 S	22	89.12 S	SEP 09	91.01 S	JUL 07	91.15 S
MAY 18	89.25 S	24	89.13 S	12	91.04 S	AUG 08	91.32 S
JUN 08	89.15 S	JUL 26	89.34 S	OCT 26	91.16 S	SEP 19	91.59 S
09	89.14 S	SEP 28	88.15 S	DEC 07	91.14 S		
12	89.10 S	MAR 12, 1977	90.02 S	JAN 16, 1978	91.30 S		
15	89.13 S	JUN 21	90.41 S	MAR 09	91.54 S		

WELL 06N 38E 30BAD3

SITE NUMBER 434924112013802

DRILLED OBSERVATION ARTESIAN WELL IN SNAKE RIVER GROUP, REPORTED DEPTH 543.5 FT (165.7 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-450 FT (0-137.2 M), PERFORATED 442.5-447.5 FT (134.9-136.4 M), GRAVEL PACKED 430-543.5 FT (131.1-165.7 M), CONCRETE SEAL 392-430 FT (119.5-131.1 M), 543.5-575 FT (165.7-175.3 M), LSD 4,874.35 FT (1,485.702 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968, MP NO. 2 TOP OF 3/4-IN (1.9-CM) PIPE, 0.76 FT (0.232 M) ABOVE LSD (SINCE JULY 7, 1978).

RECORDS AVAILABLE 1967 - 1969, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 82.82 FEET BELOW LAND SURFACE DATUM MAY 19, 1969.

LOWEST WATER LEVEL 87.48 FEET BELOW LAND SURFACE DATUM AUG 08, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 09, 1976	83.79 S	JUN 18, 1976	84.63 S	JUL 26, 1977	86.50 S	MAR 09, 1978	86.95 S
FEB 25	84.29 S	19	84.64 S	29	86.48 S	20	86.96 S
MAR 10	84.37 S	22	84.56 S	SEP 09	86.60 S	JUN 05	86.35 S
MAY 18	84.54 S	24	84.56 S	12	86.52 S	JUL 07	86.99 S
JUN 08	84.60 S	JUL 26	85.17 S	OCT 08	86.32 S	AUG 08	87.48 S
09	84.62 S	SEP 28	84.59 S	26	86.26 S	SEP 19	86.98 S
12	84.58 S	MAR 12, 1977	85.22 S	DEC 07	86.18 S		
15	84.62 S	JUN 21	85.79 S	JAN 06, 1978	86.47 S		

WELL 06N 38E 30BAD4

SITE NUMBER 434924112013803

DRILLED OBSERVATION ARTESIAN WELL IN SNAKE RIVER GROUP, REPORTED DEPTH 638 FT (194.5 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-595 FT (0-181.4 M), PERFORATED 587.5-592.5 FT (179.1-180.6 M), GRAVEL PACKED 575-600 FT (175.3-182.9 M), SAND 600-638 FT (182.9-194.5 M), CONCRETE SEAL 543.5-575 FT (165.7-175.3 M), LSD 4,874.35 FT (1,485.702 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1968, MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE, 1.44 FT (0.439 M) ABOVE LSD (SINCE AUG. 28, 1967).

RECORDS AVAILABLE 1967 - 1969, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 65.71 FEET BELOW LAND SURFACE DATUM AUG 28, 1967.

LOWEST WATER LEVEL 90.69 FEET BELOW LAND SURFACE DATUM OCT 08, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 09, 1976	87.22 S	JUN 18, 1976	87.49 S	JUL 26, 1977	88.26 S	MAR 09, 1978	90.40 S
FEB 25	87.31 S	19	87.51 S	29	88.28 S	APR 20	89.48 S
MAR 10	87.32 S	22	87.54 S	SEP 09	89.12 S	JUN 05	89.54 S
MAY 18	87.18 S	24	87.53 S	12	89.11 S	JUL 07	89.56 S
JUN 08	87.39 S	JUL 26	87.52 S	OCT 08	90.69 S	AUG 08	89.54 S
09	87.46 S	SEP 28	89.26 S	26	90.15 S	SEP 19	89.65 S
12	87.44 S	MAR 12, 1977	87.80 S	DEC 07	89.13 S		
15	87.47 S	JUN 21	87.86 S	JAN 16, 1978	89.54 S		

WFL 05N 32E 36ADD1

SITE NUMBER 434307112382601

FORMERLY SITE ID NO. 43431112383001. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 TO 5 IN (15 TO 13 CM), DEPTH 405.5 FT (123.6 M), 6-IN (15-CM) CASING 0-357 FT (0-108.8 M), 5-IN (13-CM) CASING 351-405 FT (107.0-123.4 M), PERFORATED 360-400 FT (109.7-121.9 M), OPEN BOTTOM. LSD 4,839.44 FT (1,475.061 M) NGVD OF 1929. RECORDER INSTALLED NOV. 15, 1952. RECORDER REMOVED OCT. 14, 1954. RECORDER INSTALLED MAY 10, 1962. MPNO. 2 TOP OF 6 1/4-IN (16-CM) CASING NORTHEAST SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE JAN. 26, 1961).

RECORDS AVAILABLE 1952 - 1954, 1955 - 1961, 1962 TO CURRENT YEAR.

HIGHEST WATER LEVEL 324.56 FEET BELOW LAND SURFACE DATUM MAR 02, 1974.

LOWEST WATER LEVEL 333.04 FEET BELOW LAND SURFACE DATUM SEP 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	326.40	AUG 31, 1976	328.59	APR 15, 1977	326.83	MAR 15, 1978	329.61
10	326.74	SEP 05	328.47	20	326.72	20	329.43
15	326.75	10	328.64	24	326.99	25	329.65
20	326.87	15	328.65	MAY 25	326.96	31	329.22
25	326.35	20	328.87	31	327.52	APR 01	328.96
31	326.71	25	328.70	JUN 05	327.57	05	329.36
FEB 05	326.14	30	328.83	10	327.36	10	329.60
10	326.25	OCT 05	328.88	15	327.65	15	329.41
15	325.88	07	329.07	20	327.55	18	329.82
20	326.12	10	328.75	25	327.82	20	329.30
25	325.96	15	328.67	30	327.99	25	329.54
29	325.48	20	328.89	JUL 05	328.10	30	329.50
MAR 01	325.19	25	328.50	10	328.22	MAY 05	329.58
05	326.13	31	328.72	14	328.46	10	329.69
10	325.84	NOV 05	328.63	15	328.46	15	329.59
15	326.12	10	328.39	18	328.27	20	330.14
20	325.97	15	328.45	20	328.61	25	330.01
25	325.70	20	328.36	25	328.89	31	330.31
31	325.86	25	327.77	31	329.09	JUN 05	330.37
APR 05	325.63	30	328.28	AUG 05	329.04	10	330.11
10	326.00	DEC 05	327.94	10	329.27	15	330.40
15	325.32	10	328.11	15	329.38	17	330.75
20	325.90	15	328.03	20	329.61	20	330.62
25	325.74	20	327.88	25	329.52	25	330.62
30	326.38	25	327.72	31	329.92	30	330.75
MAY 05	325.90	31	327.16	SFP 05	330.01	JUL 02	330.60
10	326.17	JAN 05, 1977	327.31	10	330.10	05	330.92
15	326.30	10	327.25	15	329.93	10	330.94
20	326.17	15	327.18	20	330.15	15	331.25
25	325.99	20	327.23	25	330.17	20	331.27
31	326.15	25	327.21	30	330.30	25	331.54
JUN 05	326.40	31	327.04	OCT 05	330.39	31	331.60
10	326.15	FEB 05	327.04	10	330.63	AUG 05	331.90
15	326.61	10	327.00	11	330.76	10	331.89
20	326.40	15	326.94	15	330.74	15	332.10
25	326.41	20	326.82	20	330.30	20	332.19
30	326.61	25	326.68	25	330.49	25	332.33
JUL 05	326.95	28	326.70	JAN 25, 1978	329.52	31	332.35
10	326.98	MAR 05	326.83	31	329.19	SFP 05	332.51
15	327.22	10	326.60	FFB 05	329.20	10	332.47
20	327.37	15	326.70	10	328.79	15	332.81
25	327.52	20	326.57	11	328.60	19	333.04
31	327.59	25	326.28	15	329.15	20	333.10
AUG 05	327.77	27	325.99	20	329.56	25	333.06
10	327.92	31	326.50	25	329.21	30	333.03
15	327.75	APR 05	326.93	28	329.08		
20	328.14	06	326.96	MAR 05	328.86		
25	328.28	10	326.72	10	329.19		

WELL 05N 33E 10CDC1

SITE NUMBER 434605112342101

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 8 IN (20 CM), DEPTH 428 FT (130.4 M), CASIED TO 306 FT (93.3 M), PERFORATED 285-305 FT (86.9-93.0 M), LSD 4,786.19 FT (1,458.831 M) NGVD OF 1929. MP NO. 2 TOP OF 8-IN (20-CM) THREADED CASING NORTHEAST SIDE, 1.47 FT (0.448 M) ABOVE LSD (SINCE JUNE 24, 1953).

RECORDS AVAILABLE 1953, 1954 - 1959, 1963 TO CURRENT YEAR.

HIGHEST WATER LEVEL 250.13 FEET BELOW LAND SURFACE DATUM JAN 14, 1954.

LOWEST WATER LEVEL 255.60 FEET BELOW LAND SURFACE DATUM JUL 15, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 17, 1976	251.71 S	JUL 21, 1976	252.72 S	JUL 15, 1977	253.66 S	JUL 15, 1978	255.60 S

WELL 05N 33E 13BDC1

SITE NUMBER 434604112315701

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 8 IN (20 CM), DEPTH 359.4 FT (109.5 M), CASIED TO 360 FT (109.7 M), PERFORATED 276-290 FT (84.1-88.4 M), 300-317 FT (91.4-96.6 M), LSD 4,794.58 FT (1,458.950 M) NGVD OF 1929. MAY 1953 WELL WAS DEEPENED TO A DEPTH OF 405 FT (123.4 M). DEC. 5, 1969, WELL WAS PLUGGED BACK WITH CONCRETE SEAL TO 326.0 FT (99.4 M). MP NO. 3 TOP OF 8-IN (20-CM) THREADED CASING, 1.80 FT (0.549 M) ABOVE LSD (SINCE MAY 14, 1953).

RECORDS AVAILABLE 1953, 1954 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 260.82 FEET BELOW LAND SURFACE DATUM FEB 19, 1974.

LOWEST WATER LEVEL 267.57 FEET BELOW LAND SURFACE DATUM SEP 15, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 1976	261.81 S	NOV 27, 1976	264.26 S	JUN 22, 1977	265.28 S	FEB 24, 1978	265.50 S
APR 20	262.08 S	DEC 20	263.57 S	JUL 15	266.64 S	MAR 27	265.91 S
MAY 21	262.85 S	JAN 29, 1977	262.75 S	AUG 19	267.15 S	APR 22	266.33 S
JUN 17	263.66 S	FEB 23	262.56 S	OCT 26	267.41 S	MAY 23	266.85 S
JUL 21	265.24 S	MAR 23	262.58 S	NOV 23	266.62 S		
SEP 21	266.59 S	APR 22	263.34 S	DEC 16	265.95 S		
OCT 25	265.39 S	MAY 23	263.94 S	JAN 23, 1978	265.52 S		

WELL 05N 33E 13BDC2

SITE NUMBER 434604112315702

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DEPTH 493 FT (150.3 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-400.0 FT (0-121.9 M), PERFORATED 392.5-397.5 FT (119.6-121.2 M), GRAVEL PACKED 370-493 FT (112.8-150.3 M), CONCRETE SEAL 326-353 FT (99.4-107.6 M), 493-540 FT (150.3-164.6 M), LSD 4,794.58 FT (1,458.950 M) NGVD OF 1929. MP NO. 1 TOP OF 8-IN (20-CM) CASING, 1.80 FT (0.549 M) ABOVE LSD (SINCE DEC. 5, 1969).

RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 258.77 FEET BELOW LAND SURFACE DATUM FEB 19, 1974.

LOWEST WATER LEVEL 269.01 FEET BELOW LAND SURFACE DATUM AUG 23, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 25, 1976	259.77 S	DEC 20, 1976	261.49 S	AUG 19, 1977	266.12 S	MAY 23, 1978	264.79 S
APR 20	260.12 S	JAN 29, 1977	260.71 S	OCT 26	265.33 S	JUN 27	266.56 S
MAY 21	260.87 S	FEB 23	260.56 S	NOV 23	264.50 S	JUL 15	267.54 S
JUN 17	261.71 S	MAR 23	260.55 S	DEC 16	263.83 S	AUG 23	269.01 S
JUL 21	263.44 S	APR 22	261.40 S	JAN 23, 1978	263.44 S	SEP 19	268.88 S
SEP 21	264.50 S	MAY 23	261.96 S	FFB 24	263.43 S		
OCT 25	263.27 S	JUN 22	263.39 S	MAR 27	263.90 S		
NOV 27	262.20 S	JUL 15	264.75 S	APR 22	264.35 S		

WELL 05N 33E 1380C3

SITE NUMBER 434604112315703

DRILLED OBSERVATION ARTESIAN WELL IN SNAKE RIVER GROUP, DEPTH 1,006.5 FT (306.8 M), 1-IN (2.5-CM) PIEZOMETER TUBE 0-725.0 FT (0-221.0 M), PERFORATED 717.5-722.5 FT (218.7-220.2 M), GRAVEL PACKED 750-1,006.5 FT (228.6-306.8 M), CONCRETE SEAL 493-540 FT (150.3-164.6 M), LSD 4,794.58 FT (1,458.950 M) NGVD OF 1929, MP NO. 1 TOP OF 8-IN (20-CM) CASING, 1.80 FT (0.549 M) ABOVE LSD (SINCE DEC. 5, 1969).

RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 250.92 FEET BELOW LAND SURFACE DATUM FEB 19, 1974.

LOWEST WATER LEVEL 258.90 FEET BELOW LAND SURFACE DATUM SEP 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 25, 1976	251.48	S	DEC 20, 1976	253.08	S	AUG 19, 1977	256.54	S	MAY 23, 1978	255.25	S
APR 20	251.65	S	JAN 29, 1977	252.41	S	OCT 26	256.10	S	JUN 27	256.68	S
MAY 21	252.19	S	FEB 23	252.20	S	NOV 23	255.53	S	JUL 15	257.48	S
JUN 17	252.84	S	MAR 23	252.14	S	DEC 16	254.93	S	AUG 23	258.77	S
JUL 21	254.17	S	APR 22	252.79	S	JAN 23, 1978	254.64	S	SEP 19	258.90	S
SEP 21	255.28	S	MAY 23	253.05	S	FEB 24	254.46	S			
OCT 25	254.40	S	JUN 22	254.18	S	MAR 27	254.83	S			
NOV 27	253.65	S	JUL 15	255.37	S	APR 22	255.13	S			

WELL 05N 33E 1740D1

SITE NUMBER 434600112360101

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 TO 5 IN (15 TO 13 CM), DEPTH 334 FT (101.8 M), 6-IN (15-CM) CASING 0-287 FT (0-87.5 M), 5-IN (13-CM) CASING 287-334 FT (87.5-101.8 M), PERFORATED 254-274 FT (77.4-83.5 M), CEMENTED BOTTOM, LSD 4,771.61 FT (1,454.387 M) NGVD OF 1929, MP NO. 1 TOP NORTHEAST EDGE OF 6 1/4-IN (16-CM) THREADED CASING, 2.00 FT (0.610 M) ABOVE LSD (SINCE MAR. 18, 1953).

RECORDS AVAILABLE 1953, 1954 - 1963, 1964 TO CURRENT YEAR.

HIGHEST WATER LEVEL 225.53 FEET BELOW LAND SURFACE DATUM JUL 14, 1975.

LOWEST WATER LEVEL 235.78 FEET BELOW LAND SURFACE DATUM OCT 22, 1958.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

WELL 05N 33E 2300A1

SITE NUMBER 434444112322601

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 392 FT (119.5 M), CASD TO 324 FT (98.8 M), PERFORATED 306-323 FT (93.3-98.4 M), LSD 4,812.38 FT (1,466.813 M) NGVD OF 1929, MP NO. 2 TOP NORTHEAST EDGE OF 6 1/4-IN (16-CM) THREADED CASING, 1.58 FT (0.482 M) ABOVE LSD (SINCE JULY 13, 1953).

RECORDS AVAILABLE 1953, 1954 - 1959, 1960 TO CURRENT YEAR.

HIGHEST WATER LEVEL 282.61 FEET BELOW LAND SURFACE DATUM JAN 14, 1954.

LOWEST WATER LEVEL 289.49 FEET BELOW LAND SURFACE DATUM JUL 15, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFR LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JUN 17, 1976	283.79	S	JUL 21, 1976	285.35	S	JUL 15, 1977	286.66	S	JUL 15, 1978	289.49	S

WELL 05N 34E 098DA1

SITE NUMBER 434657112282201

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE-RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 320 FT (97.5 M), CASIN TO 320 FT (97.5 M), PERFORATED 285-315 FT (86.9-96.0 M), LSD 4,791.28 FT (1,460.382 M) NGVD OF 1929. DEC. 9, 1952, WELL WAS DEEPENED TO A DEPTH OF 553 FT (168.6 M), DIAM 4 IN (10 CM), OPEN HOLE 320-553 FT (97.5-168.6 M). AUG. 11, 1961, WELL HAD FILLED IN TO A DEPTH OF 436 FT (132.9 M), JAN. 12, 1962, TO 434 FT (132.3 M). WATER LEVELS AFFECTED BY BAROMETRIC PRESSURE. RECORDER INSTALLED MAY 13, 1950. RECORDER REMOVED OCT. 18, 1952. RECORDER INSTALLED APR. 8, 1953. RECORDER REMOVED MAY 11, 1961. RECORDER INSTALLED APR. 22, 1965. RECORDER REMOVED OCT. 30, 1965. RECORDER INSTALLED JAN. 12, 1966. RECORDER REMOVED DEC. 20, 1966. RECORDER INSTALLED MAY 30, 1967. MP NO. 1 PAINTED X IN TOP OF 6-IN (15-CM) CASING NORTHWEST SIDE, 1.76 FT (0.536 M) ABOVE LSD (SINCE APR. 26, 1950).

RECORDS AVAILABLE 1950 - 1961, 1962 - 1964, 1966 TO CURRENT YEAR.

HIGHEST WATER LEVEL 252.00 FEET BELOW LAND SURFACE DATUM FEB 11, 1973.

LOWEST WATER LEVEL 263.39 FEET BELOW LAND SURFACE DATUM AUG 28, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	253.33	AUG 10, 1976	258.38	MAR 05, 1977	254.18	JAN 31, 1978	256.77
10	253.50	15	258.35	10	254.11	FEB 05	256.81
15	253.45	20	258.48	15	254.18	10	256.60
20	253.53	25	258.52	20	254.18	11	256.54
25	253.75	31	258.68	25	254.07	15	256.82
31	253.45	SEP 05	258.58	30	254.38	20	257.11
FEB 05	253.15	08	258.74	APR 05	254.54	25	257.03
10	253.22	09	258.74	10	254.55	28	256.98
15	252.98	10	258.54	15	254.70	MAR 05	256.90
20	253.15	15	258.43	20	254.76	27	257.56
25	253.11	20	258.30	22	254.96	APR 24	258.15
29	252.84	25	257.98	25	254.95	25	258.02
MAR 01	252.66	30	257.83	30	255.08	26	258.00
05	253.73	OCT 05	257.65	MAY 05	255.12	30	258.12
10	253.11	10	257.38	10	255.37	MAY 25	258.93
15	253.35	15	257.18	15	255.57	31	259.30
20	253.31	20	257.07	20	255.86	JUN 05	259.57
25	253.27	25	256.67	25	255.89	15	260.18
31	253.40	31	256.58	31	256.33	20	260.54
APR 05	253.36	NOV 05	256.37	JUN 05	256.62	25	260.88
10	253.65	10	256.10	10	256.80	26	260.96
15	253.33	15	255.95	15	257.08	30	261.21
20	253.70	20	255.75	20	257.33	JUL 05	261.51
25	253.77	25	255.26	25	257.74	10	261.77
30	254.18	30	255.42	30	258.18	15	262.20
MAY 05	254.02	DEC 05	255.16	JUL 05	258.48	20	262.44
10	254.24	10	255.14	10	258.85	25	262.72
15	254.42	15	254.99	15	259.18	31	262.85
20	254.53	20	254.85	20	259.49	AUG 05	263.15
25	254.58	25	254.68	25	259.85	10	263.17
31	254.90	30	254.33	31	260.09	15	263.22
JUN 05	255.20	JAN 06, 1977	254.42	AUG 05	260.15	20	263.25
10	255.30	10	254.21	10	260.10	25	263.31
15	255.65	15	254.16	15	260.24	28	263.39
20	255.69	20	254.20	20	260.33	31	263.21
25	256.10	25	254.16	25	260.20	SEP 05	263.15
30	256.40	31	254.07	28	260.37	10	262.95
JUL 05	256.85	FEB 05	254.12	31	260.24	15	262.83
10	257.10	10	254.15	SEP 05	260.25	20	262.74
15	257.49	15	254.15	10	260.14	25	262.52
20	257.81	20	254.10	15	259.91	30	262.30
25	258.00	21	253.73	20	259.86		
31	258.15	25	254.06	OCT 26	258.84		
AUG 05	258.24	28	254.06	JAN 25, 1978	256.90		

WELL 05N 34E 29DAA1

SITE NUMBER 434407112285101

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 6 TO 5 IN (15 TO 13 CM), DEPTH 425.5 FT (129.7 M), 6-IN (15-CM) CASING 0-328 FT (0-100.0 M), 5-IN (13-CM) CASING 328-398 FT (100.0-121.3 M), PERFORATED 363-398 FT (110.6-121.3 M), LSD 4,877.52 FT (1,486.668 M) NGVD OF 1929, MP NO. 1 TOP OF 6 1/4-IN (16-CM) THREADED CASING, 2.30 FT (0.701 M) ABOVE LSD (SINCE MAY 14, 1953).

RECORDS AVAILABLE 1953, 1954 - 1963, 1964 TO CURRENT YEAR.

HIGHEST WATER LEVEL 346.98 FEET BELOW LAND SURFACE DATUM JAN 14, 1954.

LOWEST WATER LEVEL 354.83 FEET BELOW LAND SURFACE DATUM JUL 15, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JUN 17, 1976	348.61	S	JUL 21, 1976	350.44	S	JUL 15, 1977	351.87	S	JUL 15, 1978	354.83	S

WELL 05N 36E 02BDA1

SITE NUMBER 434748112113601

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 16 IN (41 CM), REPORTED DEPTH 405 FT (123.4 M), CASING TO 18 FT (5.5 M), LSD 4,763.57 FT (1,451.936 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 TOP OF 16-IN (41-CM) CASING COVER, 1.00 FT (0.305 M) ABOVE LSD (SINCE AUG. 30, 1968).

RECORDS AVAILABLE 1968, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 41.32 FEET BELOW LAND SURFACE DATUM JAN 23, 1974.

LOWEST WATER LEVEL 47.55 FEET BELOW LAND SURFACE DATUM SEP 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 22, 1976	44.29	S	JUN 18, 1976	45.29	S	DEC 27, 1976	45.10	S	DEC 24, 1977	46.82	S
MAR 05	44.61	S	19	45.30	S	JAN 31, 1977	44.87	S	FFB 04, 1978	46.66	S
APR 22	44.60	S	22	45.24	S	MAR 12	45.76	S	MAR 09	46.67	S
JUN 02	45.04	S	JUL 26	45.62	S	MAY 05	46.26	S	APR 18	47.10	S
08	45.03	S	AUG 26	45.84	S	JUN 21	46.66	S	JUN 19	47.00	S
09	45.01	S	SEP 08	45.98	S	JUL 29	46.70	S	JUL 21	47.39	S
12	45.09	S	OCT 11	44.77	S	SEP 12	47.50	S	SEP 19	47.55	S
15	45.23	S	NOV 17	45.16	S	OCT 26	47.14	S			

WELL 05N 36E 02BDA2

SITE NUMBER 434748112113602

DRILLED OBSERVATION ARTESIAN WELL IN SNAKE RIVER GROUP, DIAM 12 IN (30 CM), REPORTED DEPTH 923 FT (281.3 M), CASING TO 838 FT (255.4 M), LSD 4,763.57 FT (1,451.936 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 3 TOP OF TEE, 1.56 FT (0.475 M) ABOVE LSD (SINCE JUNE 19, 1978).

RECORDS AVAILABLE 1968, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 10.40 FEET ABOVE LAND SURFACE DATUM OCT 24, 1972.

LOWEST WATER LEVEL -1.26 FEET BELOW LAND SURFACE DATUM JUL 21, 1978.

WATER LEVELS IN FEET ABOVE OR BELOW (-) LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 22, 1976	1.99	E M	JUN 18, 1976	1.64	M	MAR 12, 1977	2.21	S	MAR 09, 1978	0.30	S
MAR 05	2.05	E M	19	1.69	M	MAY 05	1.38	S	APR 18	0.14	S
APR 22	1.90	E M	AUG 27	1.09	S	JUN 21	0.62	S	JUN 19	-0.39	S
JUN 02	1.70	E M	SEP 08	1.28	S	JUL 29	-0.18	S	JUL 21	-1.26	S
08	1.69	E M	OCT 11	2.08	S	SEP 12	-0.33	S	SEP 19	-0.96	S
09	2.18	E M	NOV 17	2.47	S	OCT 26	0.27	S			
12	1.94	M	DEC 27	3.10	S	DEC 24	0.51	S			
15	1.78	M	JAN 31, 1977	2.39	S	FFB 04, 1978	0.28	S			

JEFFERSON COUNTY -- CONTINUED

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WELL 05N 36E 02BDA3

SITE NUMBER 434748112113603

DRILLED OBSERVATION ARTESIAN WELL IN SNAKE RIVER GROUP, DIAM 8 IN (20 CM), REPORTED DEPTH 995 FT (303.3 M), CASIED TO 985 FT (300.2 M), LSD 4,763.57 FT (1,451.936 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 TOP OF 3-IN (8-CM) REDUCER NORTHEAST SIDE, 3.26 FT (0.994 M) ABOVE LSD (SINCE AUG. 30, 1968).

RECORDS AVAILABLE 1968, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.88 FEET ABOVE LAND SURFACE DATUM DEC 12, 1975.

LOWEST WATER LEVEL -16.14 FEET BELOW LAND SURFACE DATUM AUG 30, 1968.

WATER LEVELS IN FEET ABOVE LAND SURFACE DATUM.

DATE	WATFP LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 1976	2.75 S	JUN 18, 1976	2.60 S	DEC 27, 1976	2.04 S	DEC 24, 1977	2.66 S
MAR 05	2.71 S	19	2.58 S	JAN 31, 1977	2.62 S	FEB 04, 1978	2.62 S
APR 22	2.68 S	22	2.62 S	MAR 12	2.60 S	MAR 09	2.68 S
JUN 02	2.72 S	JUL 26	2.60 S	MAY 05	2.63 S	APR 18	2.68 S
08	2.68 S	AUG 27	2.66 S	JUN 21	2.61 S	JUN 19	2.64 S
09	2.59 S	SEP 08	2.57 S	JUL 29	2.59 S	JUL 21	2.64 S
12	2.58 S	OCT 11	2.71 S	SEP 12	2.61 S	SEP 19	2.77 S
15	2.58 S	NOV 17	1.60 S	OCT 26	2.61 S		

WELL 05N 36E 21DAC1

SITE NUMBER 434447112133401

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 299.5 FT (91.3 M), CASIED TO 103 FT (31.4 M), LSD 4,800.94 FT (1,463.326 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, RECORDER INSTALLED NOV. 23, 1976, RECORDER MAINTAINED, AND ITS RECORD FURNISHED BY US BUREAU OF RECLAMATION, PERIODIC MEASUREMENTS MADE BY US GEOL SURVEY, MP NO. 1 TOP OF CASING, 1.00 FT (0.305 M) ABOVE LSD (SINCE AUG. 24, 1960).

RECORDS AVAILABLE 1960 - 1969, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 252.25 FEET BELOW LAND SURFACE DATUM DEC 20, 1974.

LOWEST WATER LEVEL 264.26 FEET BELOW LAND SURFACE DATUM AUG 10, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 1976	254.37 S	JUN 25, 1977	258.90	NOV 10, 1977	257.83	APR 05, 1978	259.58
JUN 02	255.84 S	30	259.25	15	257.50	10	259.42
08	256.00 S	JUL 05	259.57	20	257.29	15	259.20
12	256.09 S	10	259.90	25	257.27	20	259.05
15	256.33 S	15	260.17	30	257.12	25	259.92 S
SEP 09	258.98 S	20	260.45	DEC 05	256.80	30	258.56
NOV 10	255.76 T	25	260.72	10	256.81	MAY 05	258.34
11	255.33 T	29	263.72 S	15	256.73	JUN 30	262.31
23	254.94 T	31	260.63	20	256.53	JUL 05	262.59
JAN 28, 1977	253.55 S	AUG 05	260.70	25	256.46	10	262.85
MAR 10	254.70	10	260.81	31	256.56	15	263.25
15	254.40	11	260.87	JAN 01, 1978	256.46	20	263.47
23	254.36 S	15	260.84	05	256.65	25	263.82
25	254.48	20	260.82	10	256.73	31	263.99
31	254.77	25	260.69	15	256.83	AUG 05	264.19
APR 05	254.70	31	260.60	20	256.83	10	264.26
10	254.65	SEP 05	260.44	25	256.75	14	264.26
15	254.91	10	260.25	31	256.94	15	264.26
24	255.68 S	15	260.30 S	FFB 05	257.56	17	264.25
30	255.79	20	259.95	10	257.62	25	264.19
MAY 05	255.93	25	259.56	15	257.87	31	263.95
10	256.24	30	259.56	20	257.92	SEP 05	263.81
15	256.45	OCT 05	260.44	25	258.15	10	263.54
20	256.86	10	260.25	28	258.16	15	263.37
25	256.90	15	259.00	MAR 05	258.31	19	263.14
31	257.57	20	258.74	10	258.53	20	263.14 T
JUN 05	257.73	25	258.55	15	258.91	25	262.79
10	258.04	26	258.68 S	20	259.47	30	262.41
15	258.16 S	30	258.14	25	259.92 S		
21	258.63 S	NOV 05	257.94	31	259.73		

WELL 04N 35E 14AAA1

SITE NUMBER 434102112180701

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 1,000.0 FT (304.8 M). CASING TO 430 FT (131.1 M). LSD 4,939.32 FT (1,505.504 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1958. RECORDER INSTALLED NOV. 5, 1969. RECORDER MAINTAINED, AND ITS RECORD FURNISHED BY US BUREAU OF RECLAMATION. PERIODIC MEASUREMENTS MADE BY US GEOL SURVEY. RECORDER REMOVED MAR. 17, 1976. MP NO. 1 TOP OF 6-IN (15-CM) CASING EAST SIDE, 0.60 FT (0.183 M) ABOVE LSD (SINCE NOV. 5, 1969).

RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 402.48 FEET BELOW LAND SURFACE DATUM JAN 05, 1974.

LOWEST WATER LEVEL 411.83 FEET BELOW LAND SURFACE DATUM SEP 09, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	403.43	FEB 05, 1976	403.76	MAR 05, 1976	404.55 S	SEP 09, 1977	411.83 S
10	403.71	10	403.96	10	404.23	15	411.62 S
15	403.75	15	403.82	15	404.59	MAR 09, 1978	409.10 S
20	403.87	20	404.05	17	404.58 S		
25	403.69	25	404.08	SEP 09	410.01 S		
31	403.04	29	403.90	MAR 12, 1977	405.50 S		

WELL 04N 38E 128881

SITE NUMBER 434153111563201

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 10-8-6 IN (25-20-15 CM), DEPTH 420.0 FT (128.0 M). 10-IN (25-CM) CASING 0-291.8 FT (88.9 M), 8-IN (20-CM) CASING 280-381.6 FT (85.3-116.3 M), 6-IN (15-CM) CASING 364-510 FT (110.9-155.4 M), PERFORATED 190-200 FT (57.9-61.0 M), 225-235 FT (68.6-71.6 M), 265-275 FT (80.8-83.8 M), CONCRETE SEAL 420-450 FT (128.0-137.2 M). LSD 4,829.55 FT (1,472.047 M) NGVD OF 1929. MP NO. 3 TOP OF 1-IN (2.5-CM) PIPE, 1.10 FT (0.335 M) ABOVE LSD (SINCE AUG. 26, 1976).

RECORDS AVAILABLE 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.30 FEET BELOW LAND SURFACE DATUM JUL 26, 1976.

LOWEST WATER LEVEL 32.56 FEET BELOW LAND SURFACE DATUM AUG 03, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 1976	16.72 S	JUN 15, 1976	9.93 S	DEC 23, 1976	11.52 S	NOV 23, 1977	11.24 S
FEB 18	14.82 S	17	9.44 S	JAN 31, 1977	17.26 S	JAN 13, 1978	21.47 S
MAR 10	22.78 S	19	8.91 S	MAR 12, 1977	23.08 S	FEB 22	23.24 S
APR 22	25.04 S	21	8.48 S	MAY 04	23.08 S	MAR 06	23.46 S
JUN 01	17.89 S	JUL 01	6.67 S	JUN 13	9.34 S	APR 11	25.94 S
07	14.77 S	26	2.30 S	JUL 21	4.18 S	MAY 25	21.38 S
09	13.77 S	SEP 29	3.75 S	SEP 15	4.13 S	AUG 03	32.56 S
13	10.72 S	NOV 18	6.80 S	OCT 14	6.89 S	SEP 09	22.59 S

WELL 04N 38F 1288B2

SITE NUMBER 434153111563202

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 10-8-6 IN (25-20-15 CM), DEPTH 528.0 FT (160.9 M). 10-IN (25-CM) CASING 0-291.8 FT (0-88.9 M), 8-IN (20-CM) CASING 280-381.6 FT (85.3-116.3 M), 6-IN (15-CM) CASING 364-510 FT (110.9-155.4 M), 10-IN (25-CM) CASING PERFORATED 190-200 FT (57.9-61.0 M), 225-235 FT (68.6-71.6 M), 265-275 FT (80.8-83.8 M), 6-IN (15-CM) CASING PERFORATED 475-490 FT (144.8-149.4 M), 1-IN (2.5-CM) PIEZOMETER TUBE 0-480.0 FT (0-146.3 M), PERFORATED 472.5-477.5 FT (144.0-145.5 M), GRAVEL PACKED 450-528 FT (137.2-160.9 M), CONCRETE SEAL 420-450 FT (128.0-137.2 M), 528-538 FT (160.9-164.0 M). LSD 4,829.55 FT (1,472.046 M) NGVD OF 1929. MP NO. 1 TOP OF 1-IN (2.5-CM) PIPE SOUTH SIDE, 1.25 FT (0.381 M) ABOVE LSD (SINCE JAN. 19, 1970).

RECORDS AVAILABLE 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 12.11 FEET BELOW LAND SURFACE DATUM DEC 23, 1978.

LOWEST WATER LEVEL 48.04 FEET BELOW LAND SURFACE DATUM APR 11, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 1976	38.44 S	JUN 15, 1976	39.40 S	DEC 23, 1976	35.73 S	NOV 23, 1977	37.18 S
FEB 18	41.20 S	17	38.90 S	JAN 31, 1977	40.03 S	JAN 13, 1978	42.89 S
MAR 10	42.89 S	19	38.35 S	MAR 12	43.64 S	FEB 22	45.73 S
APR 22	45.34 S	21	37.66 S	MAY 04	45.83 S	MAR 06	46.40 S
JUN 01	43.81 S	JUL 01	35.65 S	JUN 13	39.66 S	APR 11	48.04 S
07	41.91 S	26	30.70 S	JUL 21	34.31 S	MAY 25	47.65 S
09	41.52 S	SEP 29	28.11 S	SEP 15	32.09 S		
13	40.13 S	NOV 18	31.88 S	OCT 14	33.43 S		

WELL 04N 38F 1288B3

SITE NUMBER 434153111563203

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DEPTH 705.0 FT (214.9 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-550.0 FT (0-167.6 M), PERFORATED 542.5-547.5 FT (165.4-166.9 M), GRAVEL PACKED 538-705 FT (164.0-214.9 M), CONCRETE SEAL 528-538 FT (160.9-164.0 M), 705-726 FT (214.9-221.3 M). LSD 4,829.55 FT (1,472.046 M) NGVD OF 1929. MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE SOUTH SIDE, 1.05 FT (0.320 M) ABOVE LSD (SINCE JAN. 19, 1970).

RECORDS AVAILABLE 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 27.03 FEET BELOW LAND SURFACE DATUM OCT 01, 1975.

LOWEST WATER LEVEL 51.02 FEET BELOW LAND SURFACE DATUM APR 11, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 1976	38.20 S	JUN 15, 1976	39.00 S	DEC 23, 1976	35.38 S	NOV 23, 1977	39.92 S
FEB 18	40.81 S	17	38.50 S	JAN 31, 1977	39.62 S	JAN 13, 1978	45.61 S
MAR 10	42.51 S	19	37.95 S	MAR 12	43.23 S	FEB 22	48.60 S
APR 22	44.93 S	21	37.28 S	MAY 04	45.30 S	MAR 06	49.27 S
JUN 01	43.33 S	JUL 01	35.28 S	JUN 13	42.20 S	APR 11	51.02 S
07	41.47 S	26	30.41 S	JUL 21	36.93 S	MAY 25	50.74 S
09	41.10 S	SEP 29	27.86 S	SEP 15	34.75 S	AUG 03	31.79 S
13	39.71 S	NOV 18	31.57 S	OCT 14	36.07 S	SEP 09	29.18 S

WELL 04N 38E 128884

SITE NUMBER 434153111563204

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP. DEPTH 842.0 FT (256.6 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-760.0 FT (0-231.6 M), PERFORATED 752.5-757.5 FT (229.4-230.9 M), GRAVEL PACKED 726-842 FT (221.3-256.6 M), CONCRETE SEAL 705-726 FT (214.9-221.3 M), 842-850 FT (256.6-259.1 M). LSD 4,829.55 FT (1,472.046 M) NGVD OF 1929. MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE SOUTH SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE JAN. 19, 1970).

RECORDS AVAILABLE 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 27.38 FEET BELOW LAND SURFACE DATUM SEP 10, 1974.

LOWEST WATER LEVEL 48.33 FEET BELOW LAND SURFACE DATUM MAY 04, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 1976	40.00 S	JUN 15, 1976	40.25 S	DEC 23, 1976	37.98 S	NOV 23, 1977	36.85 S
FEB 19	42.71 S	17	40.77 S	JAN 31, 1977	42.34 S	JAN 13, 1978	42.50 S
MAR 10	44.45 S	19	40.20 S	MAR 12	46.06 S	FEB 22	45.33 S
APR 22	47.00 S	21	39.53 S	MAY 04	48.33 S	MAR 06	46.00 S
JUN 01	45.62 S	JUL 01	38.50 S	JUN 13	39.32 S	APR 11	47.62 S
07	43.73 S	26	32.61 S	JUL 21	34.14 S	MAY 25	47.23 S
09	43.36 S	SEP 29	30.12 S	SEP 15	31.89 S	AUG 03	35.22 S
13	41.97 S	NOV 18	34.03 S	OCT 14	33.05 S	SEP 09	32.61 S

WELL 04N 38E 128885

SITE NUMBER 434153111563205

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP. DEPTH 1,026.0 FT (312.7 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-918.0 FT (0-279.8 M), PERFORATED 910.5-915.5 FT (277.5-279.0 M) GRAVEL PACKED 850-1,026.0 FT (259.1-312.7 M), CONCRETE SEAL 842-850 FT (256.6-259.1 M). LSD 4,829.55 FT (1,472.046 M) NGVD OF 1929. MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE SOUTH SIDE, 0.81 FT (0.247 M) ABOVE LSD (SINCE JAN. 19, 1970).

RECORDS AVAILABLE 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 79.14 FEET BELOW LAND SURFACE DATUM SEP 10, 1974.

LOWEST WATER LEVEL 110.77 FEET BELOW LAND SURFACE DATUM MAY 25, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 1976	96.67 S	JUN 15, 1976	101.15 S	DEC 23, 1976	92.28 S	NOV 23, 1977	93.53 S
FEB 19	100.35 S	17	100.47 S	JAN 31, 1977	98.31 S	JAN 13, 1978	101.32 S
MAR 10	102.75 S	19	99.69 S	MAR 12	103.33 S	FEB 22	105.84 S
APR 22	106.64 S	21	99.48 S	MAY 04	107.91 S	MAR 06	106.87 S
JUN 01	106.47 S	JUL 01	95.41 S	JUN 13	100.97 S	APR 11	109.53 S
07	104.38 S	26	86.95 S	JUL 21	92.09 S	MAY 25	110.77 S
09	103.91 S	SEP 29	80.69 S	SEP 15	87.29 S	AUG 03	87.88 S
13	102.14 S	NOV 18	86.48 S	OCT 14	88.47 S	SEP 09	82.19 S

WELL 04N 39E 16DAD1

SITE NUMBER 434028111515001

DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 77.6 FT (23.7 M). CASING DEPTH NOT AVAILABLE. LSD ABOUT 4,885 FT (1,489 M) NGVD OF 1929. MEASUREMENTS PRIOR TO SEPT. 19, 1973, MADE BY UNIVERSITY OF IDAHO, WATER RESEARCH INSTITUTE. MP NO. 1 TOP OF CASING, 5.80 FT (1.768 M) BELOW LSD (SINCE SEPT. 19, 1973).

RECORDS AVAILABLE 1970 - 1973, 1974 TO CURRENT YEAR.

HIGHEST WATER LEVEL 10.19 FEET BELOW LAND SURFACE DATUM SEP 16, 1975.

LOWEST WATER LEVEL 64.00 FEET BELOW LAND SURFACE DATUM APR 17, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 08, 1976	45.35 S	JUN 13, 1976	34.85 S	MAR 12, 1977	58.12 S	JAN 13, 1978	55.32 S
FEB 18	54.24 S	JUL 01	23.62 S	APR 27	63.18 S	FEB 22	59.91 S
MAR 16	58.45 S	SEP 29	13.90 S	JUN 13	35.92 S	MAR 06	60.51 S
APR 22	61.94 S	NOV 18	25.88 S	JUL 21	23.18 S	APR 10	63.05 S
MAY 18	60.97 S	DEC 23	39.90 S	SEP 09	19.90 S	MAY 25	57.49 S
JUN 07	42.48 S	JAN 31, 1977	50.24 S	NOV 23	39.91 S	AUG 14	10.98 S

WELL 04N 39E 25DBB1

SITE NUMBER 433835111484301

DRILLED DOMESTIC WATER-TABLE WELL IN UNCONSOLIDATED ALLUVIUM OF QUATERNARY AGE, DIAM 6 IN (15 CM), REPORTED DEPTH 90 FT (27.4 M), CASED TO 90 FT (27.4 M). LSD ABOUT 4,932 FT (1,503 M) NGVD OF 1929. MP NO. 1 TOP OF 6-IN (15-CM) CASING SOUTHEASTSIDE, 0.60 FT (0.183 M) ABOVE LSD (SINCE JULY 31, 1975).

RECORDS AVAILABLE 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 12.95 FEET BELOW LAND SURFACE DATUM AUG 14, 1978.

LOWEST WATER LEVEL 77.76 FEET BELOW LAND SURFACE DATUM APR 27, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	53.54 S	SEP 29, 1976	21.71 S	JUN 10, 1977	50.45 S	FEB 22, 1978	73.12 S
FEB 18	65.40 S	NOV 18	34.52 S	JUL 21	31.09 S	MAR 06	74.55 S
APR 05	73.48 S	DEC 10	42.43 S	SEP 09	26.23 S	APR 18	74.02 S
22	75.45 S	JAN 31, 1977	60.69 S	OCT 14	34.05 S	MAY 25	69.05 S
MAY 18	76.11 S	MAR 12	69.54 S	NOV 23	46.17 S	AUG 14	12.95 N S
JUL 01	30.75 S	APR 27	77.76 S	JAN 13, 1978	65.91 S		

WELL 04N 39E 26DAA1

SITE NUMBER 433849111492601

DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 107.8 FT (32.9 M), CASED TO 108 FT (32.9 M). LSD ABOUT 4,922 FT (1,500 M) NGVD OF 1929. MEASUREMENTS PRIOR TO SEPT. 16, 1975, MADE BY WATER RESOURCES RESEARCH INSTITUTE. MP NO. 2 TOP OF 1 1/2-IN (3.8-CM) PIPE, 1.02 FT (0.311 M) ABOVE LSD (SINCE SEPT. 16, 1975).

RECORDS AVAILABLE 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 15.28 FEET BELOW LAND SURFACE DATUM AUG 14, 1978.

LOWEST WATER LEVEL 85.27 FEET BELOW LAND SURFACE DATUM APR 10, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 08, 1976	58.36 S	SEP 29, 1976	23.62 S	JUN 10, 1977	58.18 S	FEB 22, 1978	79.33 S
FEB 18	70.40 S	NOV 18	38.34 S	JUL 21	35.23 S	MAR 06	80.98 S
APR 05	79.70 S	DEC 10	47.03 S	SEP 09	31.67 S	APR 10	85.27 S
22	81.78 S	JAN 31, 1977	65.84 S	OCT 14	38.18 S	MAY 25	84.51 S
MAY 18	83.89 S	MAR 12	75.84 S	NOV 23	53.20 S	AUG 14	15.28 S
JUL 01	37.29 S	APR 27	84.06 S	JAN 13, 1978	70.95 S	SEP 09	17.77 S

WELL 07S 17E 06ACA1

SITE NUMBER 425053114302201

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 6 IN (15 CM), DEPTH 345.1 FT (105.2 M), CASIED TO 345 FT (105.2 M), PERFORATED 322-345 FT (98.2-105.2 M), OPEN BOTTOM, LSD 3,879.61 FT (1,182.505 M) NGVD OF 1929, RECORDER INSTALLED DEC. 10, 1963, RECORDER REMOVED AUG. 17, 1971, MP NO. 2 TOP OF 6-IN (15-CM) CASING NORTHEAST SIDE, 1.10 FT (0.335 M) ABOVE LSD (SINCE DEC. 10, 1963).

RECORDS AVAILABLE 1963 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 307.77 FEET BELOW LAND SURFACE DATUM NOV 27, 1972.

LOWEST WATER LEVEL 318.63 FEET BELOW LAND SURFACE DATUM MAR 25, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 08, 1976	309.44	S	JUL 14, 1976	313.71	S	MAY 16, 1977	314.40	S	MAR 25, 1978	318.63	S
FEB 17	310.48	S	SEP 22	309.08	S	JUL 12	314.93	S	MAY 17	317.73	S
MAR 25	311.33	S	NOV 15	309.01	S	SEP 13	313.88	S	JUL 07	318.32	S
MAY 06	312.44	S	JAN 17, 1977	310.38	S	NOV 15	313.03	S	SEP 18	314.20	S
JUN 24	313.97	S	MAR 07	311.74	S	JAN 23, 1978	314.75	S			

WELL 08S 19E 05DAB1

SITE NUMBER 424529114150901

FORMERLY SITE ID NO. 424524114150901, DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 21 TO 16 IN (53 TO 41 CM), DEPTH 329.1 FT (100.3 M), 21-IN (53-CM) CASING 0-4 FT (0-1.2 M), 16-IN (41-CM) CASING 197-277 FT (60.0-84.4 M), CONCRETE SEAL AT 272 FT (82.9 M), LSD 4,075.54 FT (1,242.225 M) NGVD OF 1929, RECORDER INSTALLED APR. 6, 1960, RECORDER REMOVED AUG. 13, 1971, MP NO. 2 TOP OF 2-IN (5.1-CM) PIPE COUPLING NORTHEAST SIDE, 1.17 FT (0.357 M) ABOVE LSD (SINCE AUG. 13, 1971).

RECORDS AVAILABLE 1957 - 1959, 1960 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 257.71 FEET BELOW LAND SURFACE DATUM OCT 07, 1957.

LOWEST WATER LEVEL 275.99 FEET BELOW LAND SURFACE DATUM MAY 11, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 10, 1976	268.75	S	MAR 08, 1977	269.64	T	NOV 15, 1977	271.75	S	JUL 07, 1978	274.67	V
MAR 25	269.29	S	MAY 17	269.78	T	JAN 24, 1978	273.88	S	SEP 19	272.58	V
JUN 20	269.88	T	JUL 13	269.60	T	MAR 25	275.57	S			
SEP 22	268.43	T	SEP 13	269.91	T	MAY 17	275.36	V			

WELL 09S 17E 19ABA1

SITE NUMBER 423812114302701

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 IN (20 CM), DEPTH 131.0 FT (39.9 M), CASING DEPTH NOT AVAILABLE, LSD 3,580.33 FT (1,091.285 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, DEC. 29, 1975, WELL WAS DEEPENED TO A DEPTH OF 280.7 FT (85.6 M), MP NO. 2 TOP OF CONCRETE NORTHWEST SIDE, 0.02 FT (0.006 M) ABOVE LSD (SINCE DEC. 29, 1975).

RECORDS AVAILABLE 1951 TO CURRENT YEAR.

HIGHEST WATER LEVEL 74.74 FEET BELOW LAND SURFACE DATUM OCT 05, 1971.

LOWEST WATER LEVEL 190.65 FEET BELOW LAND SURFACE DATUM MAY 12, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 28, 1976	187.93	T	MAR 31, 1976	187.73	S	MAY 12, 1976	190.65	S	JUN 18, 1976	188.12	T

WELL 095 18E 35CCA1

SITE NUMBER 423538114191901

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 176.0 FT (53.6 M), CASED TO 44 FT (13.4 M). LSD 3,818.26 FT (1,163.806 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 3 TOP OF PUMP COLUMN, 12.04 FT (3.670 M) BELOW LSD (SINCE MAR. 8, 1977).

RECORDS AVAILABLE: 1949 TO CURRENT YEAR.

HIGHEST WATER LEVEL 127.34 FEET BELOW LAND SURFACE DATUM OCT 22, 1952.

LOWEST WATER LEVEL 145.28 FEET BELOW LAND SURFACE DATUM MAR 14, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 25, 1976	139.86	S	MAR 08, 1977	137.82	S	SEP 13, 1977	137.06	S	SEP 18, 1978	138.77	S
SEP 22	134.09	S	APR 22	139.04	S	MAR 25, 1978	141.53	S			

WELL 095 19E 25B8C1

SITE NUMBER 423659114111601

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 16 IN (41 CM), DEPTH 207.6 FT (63.3 M), CASED TO 134 FT (40.8 M), PERFORATED 114-134 FT (34.7-40.8 M). LSD 3,932.37 FT (1,198.586 M) NGVD OF 1929. RECORDER INSTALLED APR. 12, 1960. RECORDER REMOVED JULY 21, 1960. MP NO. 1 TOP OF 16-IN (41-CM) CASING SOUTH SIDE, 2.00 FT (0.610 M) ABOVE LSD (SINCE JULY 21, 1960).

RECORDS AVAILABLE 1957 - 1959, 1960, 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 101.06 FEET BELOW LAND SURFACE DATUM OCT 01, 1957.

LOWEST WATER LEVEL 124.27 FEET BELOW LAND SURFACE DATUM APR 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 21, 1976	116.77	S	DEC 14, 1976	114.05	S	JUL 13, 1977	116.40	S	MAR 25, 1978	124.00	S
MAR 31	117.72	S	JAN 18, 1977	115.68	S	AUG 17	115.50	S	APR 19	124.27	S
MAY 11	117.78	S	FEB 17	117.21	S	SEP 13	115.66	S	MAY 17	123.89	S
JUN 20	116.09	S	MAR 08	117.97	S	OCT 13	117.10	S	JUN 14	122.70	S
JUL 14	115.03	S	APR 22	118.44	S	NOV 15	118.48	S	JUL 07	121.52	S
SEP 22	112.40	S	22	140.51	R S	DEC 18	119.97	S	AUG 15	119.11	S
OCT 27	112.67	S	MAY 17	117.71	S	JAN 24, 1978	121.75	S	SEP 19	118.08	S
NOV 16	113.11	S	JUN 22	116.70	S	FFB 22	122.97	S			

WELL 10S 20E 27BCC1

SITE NUMBER 423134114062601

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 20 IN (51 CM), DEPTH 735.0 FT (224.0 M), CASED TO 20 FT (6.1 M). LSD 4,182.13 FT (1,274.713 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED OCT. 29, 1952. RECORDER REMOVED JULY 30, 1953. MP NO. 2 TOP OF 2-IN (5.1-CM) PIPE SOUTH SIDE, SET IN CONCRETE WELL COVER, 1.30 FT (0.396 M) ABOVE LSD (SINCE APR. 1, 1959).

RECORDS AVAILABLE 1952 - 1953, 1954, 1955 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 314.90 FEET BELOW LAND SURFACE DATUM OCT 29, 1952.

LOWEST WATER LEVEL 348.49 FEET BELOW LAND SURFACE DATUM JUL 22, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 10, 1976	330.15	S	OCT 27, 1976	331.74	S	SEP 13, 1977	334.87	S	MAR 25, 1978	336.07	S
MAR 25	331.02	S	MAR 08, 1977	331.55	S	NOV 15	332.77	S	MAY 17	338.30	S
MAY 11	331.95	S	MAY 17	335.48	S	JAN 24, 1978	334.35	S	SEP 19	338.28	S

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 4 IN (10 CM), DEPTH 571.5 FT (174.2 M), CASIED TO 571.5 FT (174.2 M), PERFORATED 536-566 FT (163.4-172.5 M). AUG. 4, 1972, WELL HAD FILLED IN TO A DEPTH OF 569.3 FT (173.5 M). LSD ABOUT 4.604 FT (1.403 M) NGVD OF 1929. MP NO. 2 TOP OF 1-IN (2.5-CM) PIPE IN CASING CAP NORTHEAST SIDE, 0.86 FT (0.262 M) ABOVE LSD (SINCE AUG. 4, 1972).

RECORDS AVAILABLE 1972 - 1973, 1974 TO CURRENT YEAR.

HIGHEST WATER LEVEL 519.58 FEET RELOW LAND SURFACE DATUM NOV 06, 1974.

LOWEST WATER LEVEL 546.17 FEET RELOW LAND SURFACE DATUM MAR 30, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 07, 1976	525.68	S	NOV 19, 1976	528.68	S	SEP 18, 1977	540.65	S	MAY 21, 1978	540.32	V
FEB 18	531.70	T	JAN 20, 1977	526.69	S	NOV 18	540.16	S	JUN 12	540.79	S
MAR 26	536.75	T	MAR 15	536.68	S	DEC 16	540.07	S	JUL 13	541.35	S
MAY 06	539.75	S	MAY 20	541.29	S	JAN 27, 1978	541.79	S	AUG 15	539.51	S
JUN 23	538.42	S	JUN 22	541.36	S	FFB 22	542.89	S	SEP 27	536.07	S
JUL 15	538.09	S	JUL 17	540.98	S	MAR 30	546.17	S			
SEP 27	532.94	S	AUG 17	540.71	S	APR 19	544.13	S			

WELL 05S 17E 26ACA1

SITE NUMBER 425746114240101

FORMERLY SITE ID NO. 425742114240401. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 16 IN (41 CM), DEPTH 253.5 FT (77.3 M), CASED TO 201 FT (61.3 M). LSD 3,972.64 FT (1,210.861 M) NGVD OF 1929. RECORDER INSTALLED JULY 29, 1959. RECORDER CHANGED TO DIGITAL JULY 24, 1975. MP NO. 1 TOP OF 16-IN (41-CM) CASING NORTH SIDE, 1.30 FT (0.396 M) ABOVE LSD (SINCE AUG. 5, 1957).

RECORDS AVAILABLE 1957 - 1958, 1959 TO CURRENT YEAR.

HIGHEST WATER LEVEL 175.81 FEET BELOW LAND SURFACE DATUM SEP 28, 1975.

LOWEST WATER LEVEL 209.07 FEET BELOW LAND SURFACE DATUM MAY 05, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	187.68	SEP 15, 1976	184.28	MAY 25, 1977	195.92	JAN 23, 1978	204.49
10	188.45	20	184.31	31	196.13	25	204.57
15	188.77	25	184.07	JUN 05	196.12	31	204.72
20	189.70	30	184.10	10	196.10	FEB 05	204.93
25	189.25	OCT 05	184.22	15	196.35	10	204.94
31	189.86	10	184.26	20	196.33	15	205.34
FEB 05	189.87	15	184.59	25	196.47	20	205.79
10	190.29	20	185.12	30	196.47	25	205.85
15	190.24	25	185.41	JUL 05	196.68	28	205.90
20	190.86	31	186.07	06	196.76	MAR 05	206.06
25	190.91	NOV 05	186.44	10	196.62	10	206.32
29	190.73	10	186.76	15	196.55	15	206.73
MAR 05	191.56	15	187.29	20	196.49	20	206.83
10	191.47	20	187.61	25	196.58	25	206.88
15	192.05	25	187.58	31	196.52	31	206.95
20	192.15	30	188.36	AUG 05	196.33	APR 05	207.26
25	192.15	DEC 05	188.57	06	196.19	10	207.47
31	192.14	10	189.10	10	196.36	15	207.50
APR 05	192.18	15	189.41	15	196.45	20	207.62
10	192.56	20	189.66	20	196.63	25	207.81
15	192.05	25	189.99	25	196.67	30	207.91
20	192.37	31	190.03	31	196.85	MAY 05	208.10
25	192.16	JAN 03, 1977	189.85	SEP 05	197.05	08	208.25
30	192.63	05	190.50	10	197.27	10	208.09
MAY 05	192.21	10	190.81	13	197.55	15	207.74
10	192.25	15	191.15	15	197.49	20	207.54
15	192.24	20	191.44	20	197.97	25	206.85
20	191.86	25	191.81	25	198.18	31	206.13
25	191.25	31	192.07	30	198.61	JUN 05	205.47
31	190.67	FEB 05	192.45	OCT 05	198.78	10	204.64
JUN 05	190.24	10	192.79	10	199.32	15	203.97
10	189.50	15	193.04	15	199.54	20	203.19
15	189.41	20	193.24	20	199.67	25	202.70
20	188.79	25	193.64	25	200.09	JUL 07	201.42
25	188.37	28	193.42	31	200.46	10	201.18
30	187.98	MAR 05	194.11	NOV 05	200.51	15	200.67
JUL 05	187.82	10	194.32	10	201.08	20	200.15
10	187.44	15	194.51	15	201.15	25	199.76
14	186.93	20	194.75	20	201.39	31	198.96
15	186.92	25	194.77	25	201.76	AUG 05	198.44
20	185.93	31	195.04	30	201.97	10	197.70
25	185.26	APR 05	195.45	DEC 05	202.23	15	197.29
31	184.91	10	195.55	10	202.40	20	196.83
AUG 05	184.86	15	195.72	15	202.35	25	196.52
10	184.46	20	195.76	20	203.16	31	196.21
15	183.93	25	195.80	25	203.20	SEP 05	196.01
20	183.85	30	195.83	31	203.45	10	195.52
25	183.57	MAY 05	195.77	JAN 05, 1978	203.50	15	195.27
31	184.16	10	195.81	10	203.73	20	195.11
SEP 05	184.17	15	195.95	15	203.82	25	194.82
10	184.37	20	196.12	20	204.31	30	194.56

WFL 055 23F 17CAA1

SITE NUMBER 425907113444001

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 332.7 FT (101.4 M), CASFD TO 333 FT (101.5 M), PERFORATED 311-331 FT (94.8-101.5 M), STEEL PLATE BOTTOM SEAL. LSD 4,374.87 FT (1,333.460 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED AUG. 21, 1957, MP NO. 1 TOP OF 6-IN (15-CM) CASING NORTHEAST SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE JULY 2, 1957).

RECORDS AVAILABLE 1957 TO CURRENT YEAR.

HIGHEST WATER LEVEL 303.04 FEET BELOW LAND SURFACE DATUM JUL 02, 1957.

LOWEST WATER LEVEL 312.88 FEET BELOW LAND SURFACE DATUM OCT 19, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	306.27	SEP 30, 1976	307.85	JUN 10, 1977	307.12	FEB 25, 1978	309.40
10	306.34	OCT 05	307.86	15	307.22	28	309.31
15	306.30	07	307.92	20	307.34	MAR 05	309.25
20	306.32	10	307.87	25	307.41	10	309.35
25	306.17	15	307.82	30	307.62	15	309.42
31	306.22	20	307.83	JUL 05	307.77	20	309.41
FEB 05	305.98	25	307.73	10	307.98	25	309.42
10	305.99	31	307.73	15	308.12	31	309.28
15	305.88	NOV 05	307.66	20	308.30	APR 04	309.17
20	305.96	10	307.59	25	308.49	05	309.34
25	305.87	15	307.48	31	308.72	10	309.34
29	305.68	20	307.49	AUG 05	308.84	15	309.25
MAR 05	305.81	25	307.32	10	309.01	20	309.25
10	305.70	30	307.38	15	309.12	25	309.30
15	305.53	DEC 05	307.34	20	309.24	30	309.29
20	305.49	10	307.27	25	309.32	MAY 05	309.32
25	305.49	15	307.26	31	309.40	10	309.38
31	305.50	20	307.17	SEPT 05	309.57	15	309.36
APR 05	305.43	25	307.13	08	309.69	19	309.53
10	305.46	31	307.00	15	309.65	20	309.52
15	305.22	JAN 05, 1977	306.90	20	309.74	23	309.40
20	305.78	10	306.91	25	309.79	25	309.52
25	305.70	15	306.91	30	309.89	31	309.67
30	305.45	20	306.91	OCT 05	309.90	JUN 05	309.75
MAY 05	305.29	25	306.90	10	309.97	10	309.82
10	305.34	31	306.82	15	310.03	15	309.96
15	305.38	FEB 05	306.83	20	309.95	20	310.08
20	305.33	10	306.79	25	309.96	25	310.24
25	305.28	15	306.81	31	309.90	30	310.37
27	305.21	20	306.77	NOV 05	309.83	JUL 05	310.50
31	305.31	25	306.68	10	309.94	07	310.53
JUN 05	305.42	28	306.63	15	309.82	10	310.66
10	305.78	MAR 05	306.67	20	309.83	15	310.86
15	305.52	10	306.64	25	309.83	20	310.79
25	305.82	12	306.46	30	309.79	25	311.2
30	305.96	15	306.58	DEC 05	309.73	31	311.37
JUL 05	306.13	20	306.41	10	309.69	AUG 05	311.56
10	306.25	25	306.45	15	309.50	10	311.69
15	306.43	27	306.25	20	309.51	15	311.79
20	306.58	31	306.40	25	309.63	20	311.93
25	306.77	APR 05	306.53	31	309.60	25	312.02
31	306.93	10	306.48	JAN 05, 1978	309.49	31	312.12
AUG 05	307.07	15	306.44	07	309.60	SEP 05	312.17
10	307.18	20	306.44	10	309.46	07	312.26
15	307.29	25	306.45	15	309.34	10	312.20
20	307.40	30	306.44	20	309.42	15	312.30
25	307.50	MAY 05	306.49	25	309.48	20	312.34
31	307.55	10	306.59	31	309.38	23	312.37
SEP 05	307.64	15	306.67	FEB 05	309.38	25	312.34
10	307.66	20	306.84	10	309.17	30	312.29
15	307.69	25	306.86	15	309.30		
20	307.71	31	307.03	20	309.47		
25	307.85	JUN 05	307.08	22	309.53		

WELL 07N 38E 23DBA1

SITE NUMBER 435506111563101

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 16 IN (41 CM), DEPTH 236.0 FT (71.9 M), CASED TO 177 FT (53.9 M), LSD 4,852.35 FT (1,478.996 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, RECORDER INSTALLED APR. 9, 1960. RECORDER CHANGED TO DIGITAL MAR. 12, 1973. MP NO. 1 TOP OF 16-IN (41-CM) CASING NORTHEAST SIDE, 1.95 FT (0.594 M) ABOVE LSD (SINCE JULY 23, 1965).

RECORDS AVAILABLE 1958 - 1959, 1960 TO CURRENT YEAR.

HIGHEST WATER LEVEL 37.47 FEET BELOW LAND SURFACE DATUM OCT 20, 1974.

LOWEST WATER LEVEL 45.27 FEET BELOW LAND SURFACE DATUM APR 22, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	39.46	OCT 15, 1976	38.82	JUN 22, 1977	41.00	JAN 17, 1978	43.40
10	39.83	20	39.00	25	40.99	20	43.50
15	39.96	25	38.99	30	40.99	25	43.63
20	40.19	31	39.25	JUL 04	40.84	31	43.67
25	40.20	NOV 05	39.37	05	40.94	FEB 05	43.77
31	40.52	09	39.43	10	41.02	10	43.79
FEB 05	40.52	10	39.45	14	41.13	15	43.98
10	40.72	15	39.64	15	41.07	20	44.22
15	40.72	20	39.75	20	41.09	25	44.25
20	40.99	25	39.62	21	41.12	28	44.27
25	41.08	30	39.93	22	41.12	MAR 05	44.30
29	41.01	DEC 05	39.95	25	41.06	10	44.45
MAR 05	41.40	10	40.12	31	41.08	15	44.66
10	41.40	15	40.21	AUG 05	41.07	18	44.57
15	41.69	17	40.03	10	41.00	20	44.68
20	41.76	20	40.24	14	40.86	25	44.77
25	41.79	25	40.32	15	40.97	31	44.69
31	41.90	27	40.35	20	40.98	APR 05	44.77
APR 05	41.91	31	40.26	25	40.96	09	44.83
10	42.09	JAN 03, 1977	40.15	31	41.02	10	44.79
15	41.89	05	40.45	SEF 02	41.05	15	44.69
20	42.08	10	40.58	05	40.97	20	44.58
25	42.05	15	40.73	10	40.96	25	44.57
30	42.28	16	40.85	11	40.83	30	44.45
MAY 05	42.05	FEB 09	41.51	15	40.85	MAY 05	44.32
10	42.01	10	41.58	20	40.90	10	44.20
15	41.93	15	41.69	24	40.78	15	44.01
20	41.74	20	41.81	25	40.90	20	44.01
25	41.48	25	41.95	30	41.04	25	43.83
31	41.28	28	41.98	OCT 05	41.04	31	43.68
JUN 05	41.12	MAR 05	42.18	06	40.99	JUN 05	43.48
10	40.69	10	42.23	08	41.17	10	43.23
15	40.52	11	42.34	09	41.02	15	43.10
20	40.22	15	42.30	10	41.26	20	42.93
25	39.98	17	42.12	15	41.37	25	42.73
30	39.92	20	42.36	20	41.36	30	42.60
JUL 05	39.85	25	42.34	25	41.55	JUL 05	42.45
10	39.74	31	42.44	31	41.67	10	42.26
15	39.66	APR 05	42.66	NOV 05	41.71	15	42.22
20	39.56	10	42.64	10	42.05	20	42.08
25	39.50	12	42.70	15	42.01	25	42.00
31	39.35	15	42.64	20	42.25	30	41.86
AUG 05	39.27	20	42.57	25	42.38	AUG 05	41.78
10	39.22	22	42.65	29	42.51	10	41.60
15	39.04	23	42.65	30	42.46	15	41.51
20	39.03	25	42.50	DEC 05	42.58	20	41.36
25	38.94	30	42.44	10	42.67	25	41.30
31	38.97	MAY 05	42.31	15	42.50	30	41.22
SEP 05	38.85	10	42.24	20	43.02	SFP 05	41.11
10	38.83	15	42.08	21	42.00	10	40.99
15	38.75	20	42.00	22	42.00	15	41.00
20	38.78	25	41.69	25	43.01	17	40.78
25	38.66	31	41.62	31	43.09	20	41.06
30	38.73	JUN 05	41.46	JAN 05, 1978	43.11	25	41.03
OCT 02	38.57	10	41.25	10	43.20	30	41.07
05	38.79	15	41.16	13	43.44		
10	38.74	20	41.00	15	43.20		

DRILLED OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 8 IN (20 CM), REPORTED DEPTH 152 FT (46.3 M), CASIED TO 154 FT (46.9 M), PERFORATED 65-140 FT (19.8-42.7 M). AUG. 28, 1958, WELL HAD FILLED WITH SAND THROUGH PERFORATIONS TO A DEPTH OF 84 FT (25.6 M). LSD 4,852.38 FT (1,479.005 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED APR. 9, 1960. RECORDER CHANGED TO DIGITAL MAR. 12, 1975. MP NO. 1 TOP OF CASING COUPLING NORTH SIDE, 0.70 FT (0.213 M) ABOVE LSD (SINCE APR. 9, 1960).

RECORDS AVAILABLE 1958 - 1959, 1960 TO CURRENT YEAR.

HIGHEST WATER LEVEL 20.09 FEET BELOW LAND SURFACE DATUM SEP 11, 1977.

LOWEST WATER LEVEL 42.34 FEET BELOW LAND SURFACE DATUM APR 30, 1975.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	35.65	SEP 30, 1976	34.56	APR 30, 1977	38.21	JAN 17, 1978	37.67
10	35.88	OCT 02	34.48	MAY 05	38.13	18	37.67
15	35.96	05	34.59	10	38.06	20	37.72
20	36.08	10	34.57	15	37.94	25	37.82
25	36.16	15	34.61	20	37.84	31	37.94
31	36.31	20	34.72	25	37.70	FEB 05	38.03
FEB 05	36.39	25	34.75	31	37.56	10	38.12
10	36.53	31	34.93	JUN 05	37.41	15	38.24
15	36.59	NOV 05	35.02	10	37.26	20	38.36
20	36.74	08	35.09	15	37.11	25	38.45
25	36.82	10	35.13	20	36.95	28	38.50
29	36.86	15	35.28	22	36.87	MAR 05	38.58
MAR 05	37.04	20	35.38	23	36.87	10	38.67
10	37.11	25	35.40	25	36.79	15	38.77
15	37.28	30	35.61	30	36.62	20	38.85
20	37.37	DEC 05	35.71	JUL 05	36.46	25	38.93
25	37.49	10	35.83	10	36.31	31	38.99
31	37.58	15	35.92	15	36.14	APR 05	39.07
APR 05	37.68	17	35.89	20	35.93	10	39.12
10	37.81	20	36.00	25	35.85	15	39.16
15	37.85	25	36.08	31	35.71	17	39.21
20	37.97	31	36.14	AUG 05	35.57	18	39.21
25	38.05	JAN 03, 1977	36.12	10	35.48	20	39.19
30	38.15	05	36.24	15	35.40	25	39.24
MAY 05	38.20	10	36.32	20	35.35	30	39.29
10	38.25	15	36.42	25	35.31	MAY 05	39.31
12	38.30	20	36.51	26	35.25	10	39.30
14	38.30	25	36.61	28	35.28	11	39.35
15	38.28	31	36.73	31	35.24	15	39.22
20	38.22	FEB 05	36.84	SEP 05	35.21	20	39.18
25	38.11	09	36.92	10	35.20	JUN 10	38.82
31	37.97	10	36.95	11	20.09	15	38.69
JUN 05	37.83	15	37.05	15	35.19	20	38.53
10	37.67	20	37.15	16	35.16	25	38.36
15	37.55	25	37.28	20	35.24	30	38.18
20	37.41	28	37.33	25	35.26	JUL 05	37.98
25	37.21	MAR 05	37.46	30	35.35	10	37.76
30	37.06	10	37.58	OCT 02	35.34	15	37.58
JUL 05	36.86	14	37.64	05	35.38	20	37.35
10	36.66	15	37.62	10	35.44	25	37.17
15	36.47	16	37.60	15	35.53	31	36.94
20	36.25	20	37.72	20	35.58	AUG 05	36.78
25	36.06	25	37.81	25	35.71	10	36.61
31	35.82	31	37.89	30	34.79	15	36.46
AUG 05	35.65	APR 05	38.00	NOV 05	35.92	20	36.34
10	35.47	10	38.09	10	36.12	25	36.21
15	35.27	15	38.14	15	36.19	31	36.07
20	35.13	17	38.19	20	36.34	SEP 05	35.96
25	34.99	20	38.19	25	36.48	10	35.86
31	34.91	23	38.24	30	36.60	12	34.84
SEP 05	34.80	25	38.21	DEC 03	36.67	15	35.80
10	34.73	26	38.24	05	36.74	20	35.79
15	34.66	27	38.24	10	36.86	25	35.76
20	34.61	28	38.24	15	36.92	30	35.75
25	34.54	29	38.24	19	37.11		

WELL 06N 39E 04ABC1

SITE NUMBER 435252111520001

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 18 IN (46 CM), REPORTED DEPTH 199 FT (60.6 M), CASED TO 159 FT (48.5 M). LSD 4,827.64 FT (1,471.465 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 2 TOP OF CASING NORTH SIDE, 1.10 FT (0.335 M) ABOVE LSD (SINCE MAY 27, 1962).

RECORDS AVAILABLE 1959, 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.00 FEET BELOW LAND SURFACE DATUM SEP 18, 1974.

LOWEST WATER LEVEL 18.68 FEET BELOW LAND SURFACE DATUM MAR 13, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 09, 1976	11.38	S	JUN 21, 1976	11.57	S	NOV 12, 1976	11.20	S	OCT 08, 1977	12.59	S
FEB 25	14.02	S	23	11.64	S	DEC 17	11.90	S	DEC 03	14.22	S
MAR 26	14.21	S	26	11.56	S	JAN 31, 1977	13.10	S	JAN 18, 1978	15.48	S
MAY 18	13.67	S	JUL 07	11.09	S	MAR 14	14.36	S	MAR 13	18.68	S
JUN 12	12.10	S	15	11.04	S	APR 18	14.53	S	APR 18	16.92	S
16	11.91	S	27	10.69	V S	JUN 23		P	JUN 07		P
17	11.94	S	AUG 19	10.26	S	JUL 20		P	JUL 06		P
19	11.87	S	SEP 29	10.10	S	SEP 12	12.39	S	AUG 08	12.91	N S

WELL 06N 39E 1088B1

SITE NUMBER 435209111512101

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 260.0 FT (79.2 M), CASED TO 168 FT (51.2 M). LSD 4,834.20 FT (1,473.464 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 TOP OF PIPE COUPLING IN CASING CAP, 1.80 FT (0.549 M) ABOVE LSD (SINCE DEC. 14, 1962).

RECORDS AVAILABLE 1962 TO CURRENT YEAR.

HIGHEST WATER LEVEL 15.46 FEET BELOW LAND SURFACE DATUM SEP 18, 1974.

LOWEST WATER LEVEL 23.29 FEET BELOW LAND SURFACE DATUM APR 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 09, 1976	17.86	S	JUN 17, 1976	18.42	S	DEC 17, 1976	18.27	S	JAN 18, 1978	21.84	S
FEB 25	19.53	S	19	18.37	S	JAN 31, 1977	19.56	S	MAR 13	23.01	S
MAR 26	20.34	S	21	18.08	S	MAR 14	20.71	S	APR 18	23.29	S
MAY 18	20.18	S	23	18.17	S	APR 18	21.02	S	JUN 07	21.64	S
JUN 07	18.98	S	26	18.13	S	JUN 23	19.00	S	JUL 06	20.29	S
08	18.93	S	JUL 27	17.21	S	JUL 20	18.96	S	AUG 08	19.38	S
09	18.71	S	AUG 19	16.80	S	SEP 12	18.75	S	SEP 21	18.68	S
12	16.64	S	SEP 29	16.53	S	OCT 08	18.29	S			
16	18.42	S	NOV 12	17.60	S	DEC 03	18.52	S			

WFLL 06N 39F 1088B2

SITE NUMBER 435209111512102

DRILLED OBSERVATION WATER-TABLE WFLL IN SNAKERIVER GROUP, DEPTH 317 FT (96.6 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-316 FT (0-96.3 M), PERFORATED 307.5-312.5 FT (93.7-95.2 M), GRAVEL PACKED 290-317 FT (88.4-96.6 M), CONCRETE SEAL 265-290 FT (80.8-88.4 M), 317-339 FT (96.6-103.3 M). LSD 4,834.20 FT (1,473.464 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE, 2.32 FT (0.707 M) ABOVE LSD (SINCE JUNE 12, 1967).

RECORDS AVAILABLE 1967 - 1969, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 15.45 FEET BELOW LAND SURFACE DATUM SEP 18, 1974.

LOWEST WATER LEVEL 23.42 FEET BELOW LAND SURFACE DATUM APR 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 09, 1976	17.87	S	JUN 17, 1976	18.47	S	DEC 17, 1976	18.30	S	JAN 18, 1978	21.93	S
FEB 25	19.54	S	19	18.41	S	JAN 31, 1977	19.63	S	MAR 13	23.12	S
MAR 26	20.35	S	21	18.11	S	MAR 14	20.78	S	APR 18	23.42	S
MAY 18	20.21	S	23	18.20	S	APR 18	21.12	S	JUN 07	21.77	S
JUN 07	19.04	S	26	18.18	S	JUN 23	19.07	S	JUL 06	20.43	S
08	18.94	S	JUL 27	17.21	S	JUL 20	19.01	S	AUG 08	19.49	S
09	18.92	S	AUG 19	16.79	S	SEP 12	18.80	S	SEP 21	18.76	S
12	18.68	S	SEP 29	16.58	S	OCT 08	18.76	S			
16	18.46	S	NOV 12	17.62	S	DEC 03	20.30	S			

WFLL 06N 39F 1088B3

SITE NUMBER 435209111512103

DRILLED OBSERVATION WATER-TABLE WFLL IN SNAKERIVER GROUP, DEPTH 545 (166.1 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-387 FT (0-118.0 M), PERFORATED 376.5-381.5 FT (114.8-116.3 M), GRAVEL PACKED 339-545 FT (103.3-166.1 M), CONCRETE SEAL 317-339 FT (96.6-103.3 M), 545-570 FT (166.1-173.7 M). LSD 4,834.20 FT (1,473.464 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE, 2.02 FT (0.616 M) ABOVE LSD (SINCE JUNE 12, 1967).

RECORDS AVAILABLE 1967 - 1969, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 15.38 FEET BELOW LAND SURFACE DATUM SEP 18, 1974.

LOWEST WATER LEVEL 23.38 FEET BELOW LAND SURFACE DATUM APR 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 09, 1976	17.83	S	JUN 17, 1976	18.40	S	DEC 17, 1976	18.25	S	JAN 18, 1978	21.88	S
FEB 25	19.49	S	19	18.35	S	JAN 31, 1977	19.58	S	MAR 13	23.07	S
MAR 26	20.31	S	21	18.05	S	MAR 14	20.73	S	APR 18	23.38	S
MAY 18	20.15	S	23	18.15	S	APR 18	21.07	S	JUN 07	21.64	S
JUN 07	18.97	S	26	18.09	S	JUN 23	19.02	S	JUL 06	20.40	S
08	18.90	S	JUL 27	17.15	S	JUL 20	18.92	S	AUG 08	19.43	S
09	18.87	S	AUG 19	16.73	S	SEP 12	18.76	S	SEP 21	18.73	S
12	18.63	S	SEP 29	16.55	S	OCT 08	19.43	S			
16	18.39	S	NOV 12	17.58	S	DEC 03	21.02	S			

WELL 06N 39E 108884

SITE NUMBER 435209111512104

DRILLED OBSERVATION ARTESIAN WELL IN SILICIC VOLCANIC ROCKS OF QUATERNARY AGE, DEPTH 636.8 FT (194.1 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-600 FT (0-182.9 M), PERFORATED 592.5-597.5 FT (180.6-182.1 M), GRAVEL PACKED 570-636.5 FT (173.7-194.0 M), CONCRETE SEAL 545-570 FT (166.1-173.7 M), LSD 4,834.20 FT (1,473.464 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE, 1.74 FT (0.530 M) ABOVE LSD (SINCE JUNE 12, 1967).

RECORDS AVAILABLE 1967 - 1969, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 10.26 FEET BELOW LAND SURFACE DATUM OCT 11, 1967.

LOWEST WATER LEVEL 21.04 FEET BELOW LAND SURFACE DATUM JUN 07, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 09, 1976	15.72	S	JUN 17, 1976	11.20	S	DEC 17, 1976	15.60	S	JAN 18, 1978	19.27	S
FEB 25	16.58	S	19	11.33	S	JAN 31, 1977	16.58	S	MAR 13	20.30	S
MAR 26	17.29	S	21	11.50	S	MAR 14	17.57	S	APR 18	20.94	S
MAY 18	18.25	S	23	11.62	S	APR 18	18.34	S	JUN 07	21.04	S
JUN 07	10.33	S	26	11.80	S	JUN 23	18.60	S	JUL 06	20.71	S
08	10.43	S	JUL 27	13.20	S	JUL 20	19.54	S	AUG 08	20.01	S
09	10.60	S	AUG 19	13.78	S	SEP 12	18.62	S	SEP 21	19.04	S
12	10.79	S	SEP 29	14.41	S	OCT 08	19.10	S			
16	11.13	S	NOV 12	14.91	S	DEC 03	20.70	S			

WELL 06N 39E 30ADC1

SITE NUMBER 434915111540501

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 6 IN (15 CM), DEPTH 295.0 FT (89.9 M), CASED TO 263 FT (80.2 M), LSD 4,816.92 FT (1,468.197 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 2 TOP OF 1-IN (2.5-CM) PIPE COUPLING IN CASING CAP, 2.00 FT (0.610 M) ABOVE LSD (SINCE JAN. 14, 1963).

RECORDS AVAILABLE 1963 TO CURRENT YEAR.

HIGHEST WATER LEVEL 0.18 FEET BELOW LAND SURFACE DATUM OCT 10, 1975.

LOWEST WATER LEVEL 7.29 FEET BELOW LAND SURFACE DATUM APR 24, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 09, 1976	2.55	S	SEP 29, 1976	1.16	S	JUN 23, 1977	2.75	S	MAR 02, 1978	6.60	S
FEB 25	3.94	S	NOV 09	2.03	S	JUL 13	2.71	S	APR 18	6.78	S
MAR 31	4.40	S	DEC 17	2.69	S	SEP 12	2.78	S	JUN 05	4.70	S
MAY 18	4.07	S	FEB 09, 1977	4.18	S	OCT 08	3.19	S	JUL 07	3.52	S
JUN 24	1.04	S	MAR 15	5.13	S	DEC 03	4.62	S	AUG 08	3.02	S
AUG 19	1.14	S	APR 18	5.52	S	JAN 20, 1978	5.89	S	SEP 07	2.65	S

## MADISON COUNTY -- CONTINUED

WFL 06N 39E 30ADC2

SITE NUMBER 434915111540502

DRILLED OBSERVATION ARTESIAN WELL IN SNAKE RIVER GROUP, DEPTH 620 FT (189.0 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-445 FT (0-135.6 M), PERFORATED 437.5-442.5 FT (133.4-134.9 M), GRAVEL PACKED 406-620 FT (123.7-189.0 M), CONCRETE SEAL 385-406 FT (117.3-123.7 M), 620-638 FT (189.0-194.5 M), LSD 4,816.92 FT (1,468.197 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE, 2.20 FT (0.671 M) ABOVE LSD (SINCE JULY 25, 1967).

RECORDS AVAILABLE 1967 - 1969, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.73 FEET BELOW LAND SURFACE DATUM SEP 20, 1971.

LOWEST WATER LEVEL 9.53 FEET BELOW LAND SURFACE DATUM APR 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 09, 1976	4.09 S	SEP 29, 1976	2.77 S	JUN 23, 1977	5.40 S	MAR 02, 1978	7.37 S
FEB 25	5.65 S	NOV 09	3.73 S	JUL 13	5.39 S	APR 18	9.53 S
MAR 31	6.46 S	DEC 17	4.42 S	SEP 12	5.13 S	JUN 05	8.07 S
MAY 18	6.38 S	FEB 09, 1977	6.06 S	OCT 08	4.77 S	JUL 07	6.69 S
JUN 24	4.40 S	MAR 15	6.93 S	DEC 03	5.32 S	AUG 08	5.77 S
AUG 19	3.05 S	APR 18	7.29 S	JAN 20, 1978	6.41 S	SEP 07	5.03 S

WFL 06N 39E 30ADC3

SITE NUMBER 434915111540503

DRILLED OBSERVATION ARTESIAN WELL IN SNAKE RIVER GROUP, DEPTH 699.7 FT (213.3 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-685 FT (0-208.8 M), PERFORATED 677.5-682.5 FT (206.5-208.0 M), GRAVEL PACKED 638-699.7 FT (194.5-213.3 M), CONCRETE SEAL 620-638 FT (189.0-194.5 M), LSD 4,816.92 FT (1,468.197 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE, 2.03 FT (0.619 M) ABOVE LSD (SINCE JULY 25, 1967).

RECORDS AVAILABLE 1967 - 1969, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 0.92 FEET BELOW LAND SURFACE DATUM JUN 24, 1976.

LOWEST WATER LEVEL 9.12 FEET BELOW LAND SURFACE DATUM MAR 02, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 09, 1976	2.97 S	SEP 29, 1976	2.30 S	JUN 23, 1977	5.45 S	MAR 02, 1978	9.12 S
FEB 25	4.27 S	NOV 09	2.51 S	JUL 13	8.55 S	APR 18	8.41 S
MAR 31	5.26 S	DEC 17	3.29 S	SEP 12	5.48 S	JUN 05	8.14 S
MAY 18	5.90 S	FEB 09, 1977	4.59 S	OCT 08	5.45 S	JUL 07	6.14 S
JUN 24	0.92 S	MAR 15	5.53 S	DEC 03	7.04 S	AUG 08	6.07 S
AUG 19	2.47 S	APR 18	6.25 S	JAN 20, 1978	8.23 S	SEP 07	5.31 S

WFL 06N 40E 09BBB1

SITE NUMBER 435205111452501

DRIVEN OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 1 1/4 IN (3.2 CM), DEPTH 24.4 FT (7.4 M), CASED TO 24.4 FT (7.4 M), WELL POINT 22.4-24.4 FT (6.8-7.4 M), LSD 4,886.53 FT (1,489.414 M) NGVD OF 1929, MP NO. 1 TOP OF COLLAR, 0.60 FT (0.183 M) ABOVE LSD (SINCE NOV. 8, 1966).

RECORDS AVAILABLE 1966, 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.77 FEET BELOW LAND SURFACE DATUM JUL 30, 1970.

LOWEST WATER LEVEL 18.68 FEET BELOW LAND SURFACE DATUM APR 30, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 09, 1976	7.46 S	MAR 30, 1976	14.49 S	MAY 26, 1976	15.20 S		

WELL 06N 40E 0988B2

SITE NUMBER 435205111452301

BORED OBSERVATION WATER-TABLE WELL IN ALLUVIUM OF HOLOCENE AGE, DIAM 1 1/4 IN (3.2 CM), REPORTED DEPTH 25 FT (7.6 M), CASIED 0-23 FT (0-7.0 M), WELL POINT 23.0-25.0 FT (7.0-7.6 M), LSD 4,886.80 FT (1,489.496 M) NGVD OF 1929, MP NO. 1 TOP OF 1 1/4-IN (3.2-CM) CASING, 0.70 FT (0.213 M) ABOVE LSD (SINCE JULY 21, 1977).

RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 5.66 FEET BELOW LAND SURFACE DATUM AUG 07, 1978.

LOWEST WATER LEVEL 22.53 FEET BELOW LAND SURFACE DATUM APR 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 21, 1977	8.20 S	AUG 24, 1977	7.88 S	OCT 08, 1977	10.29 S	JUL 06, 1978	11.06 S
22	8.10 S	31	8.54 S	DFC 03	14.24 S	AUG 07	5.66 S
AUG 01	7.91 S	SEP 09	8.61 S	MAR 13, 1978	22.37 S	SEP 21	7.90 S
04	7.83 S	13	8.68 S	APR 18	22.53 S		
17	7.80 S	28	9.48 S	JUN 07	22.19 S		

WELL 06N 41E 028DC1

SITE NUMBER 435237111352701

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 18 IN (46 CM), REPORTED DEPTH 350 FT (106.7 M), CASIED TO 60 FT (18.3 M), LSD 5,131.80 FT (1,564.173 M) NGVD OF 1929, MP NO. 2 BOTTOM EDGE OF 5/8-IN (1.6-CM) HOLE OUTSIDE PUMPBASE WEST SIDE, 0.80 FT (0.244 M) ABOVE LSD (SINCE NOV. 20, 1973).

RECORDS AVAILABLE 1959, 1967 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 266.17 FEET BELOW LAND SURFACE DATUM SEP 29, 1976.

LOWEST WATER LEVEL 279.46 FEET BELOW LAND SURFACE DATUM SEP 17, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 30, 1976	271.23 S	JUN 08, 1976	271.82 S	SEP 29, 1976	266.17 S	SEP 13, 1977	273.80 S
MAY 18	271.75 S	15	271.45 S	MAR 21, 1977	269.47 S	MAR 13, 1978	275.42 S
21	271.93 S	17	271.04 S	JUN 16	P	SEP 29	270.08 S

WELL 06N 41E 11CDB2

SITE NUMBER 435128111353402

DRILLED IRRIGATION WATER-TABLE WELL IN WELDED TUFF AND ASH OF QUATERNARY AGE, DIAM 20 IN (51 CM), REPORTED DEPTH 512 FT (156.1 M), CASIED TO 14 FT (4.3 M), LSD ABOUT 5,220 FT (1,591 M) NGVD OF 1929, MP NO. 1 TOP OF 1-IN (2.5-CM) HOLE INSIDE PUMPBASE EAST SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE SEPT. 20, 1967).

RECORDS AVAILABLE 1967 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 349.00 FEET BELOW LAND SURFACE DATUM MAR 30, 1976.

LOWEST WATER LEVEL 364.40 FEET BELOW LAND SURFACE DATUM AUG 19, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 27, 1976	355.30 S	JUN 15, 1976	P	JUN 16, 1977	359.94 P T		
MAR 30	349.00 S	MAR 11, 1977	356.48 T	SEP 13	361.87 T		
MAY 21	359.03 S	25	354.32 T	MAR 13, 1978	356.74 T		

WELL 05N 39E 08DAD1

SITE NUMBER 434638111530401

DRIVEN OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 1 1/4 IN (3.2 CM), DEPTH 27.5 FT (8.4 M), CASED TO 27.5 FT (8.4 M), WELL POINT 25.5-27.5 FT (7.8-8.4 M), LSD 4,830.36 FT (1,472.294 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 TOP OF COLLAR, 0.70 FT (0.213 M) ABOVE LSD (SINCE NOV. 8, 1966).

RECORDS AVAILABLE 1966, 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.37 FEET BELOW LAND SURFACE DATUM SEP 10, 1974.

LOWEST WATER LEVEL 8.10 FEET BELOW LAND SURFACE DATUM APR 18, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 09, 1976	7.44	S	JUN 23, 1976	5.64	S	FEB 03, 1977	7.82	S	JAN 16, 1978	7.90	S
MAR 26	6.84	S	26	5.27	S	MAR 17	8.05	S	MAR 13	7.34	S
MAY 18	6.68	S	30	5.37	S	APR 18	8.10	S	APR 18	7.67	S
JUN 07	4.80	S	JUL 08	5.25	S	JUN 23	5.13	S	JUN 05	5.44	S
08	4.99	S	14	4.80	S	JUL 20	5.30	S	JUL 07	4.73	S
12	5.60	S	27	4.83	S	27	5.45	S	AUG 08	5.13	S
15	5.44	S	AUG 19	5.40	S	SEP 09	6.01	S	SEP 29	6.07	S
17	5.62	S	SEP 29	5.81	S	12	5.86	S			
19	5.67	S	NOV 09	6.75	S	OCT 08	6.54	S			
21	5.73	S	DEC 16	7.35	S	DEC 03	7.57	S			

WELL 05N 39E 18CAC1

SITE NUMBER 434546111550301

DRILLED OBSERVATION ARTESIAN WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 6 IN (15 CM), REPORTED DEPTH 336 FT (102.4 M), CASED TO 336 FT (102.4 M), 6 PERFORATIONS AT 300 FT (91.4 M), LSD 4,823.49 FT (1,470.200 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 1 TOP OF 1-IN (2.5-CM) PIPE COUPLING IN CASING CAP, 1.90 FT (0.579 M) ABOVE LSD (SINCE JAN. 13, 1963).

RECORDS AVAILABLE 1963 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.73 FEET ABOVE LAND SURFACE DATUM JAN 08, 1971.

LOWEST WATER LEVEL -8.64 FEET BELOW LAND SURFACE DATUM JAN 13, 1963.

WATER LEVELS IN FEET ABOVE LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAY 18, 1976	0.15	S	JUN 21, 1976	1.65	S	FEB 03, 1977	1.05	S	DEC 03, 1977	1.23	S
JUN 07	1.70	S	23	1.65	S	MAR 17	1.01	S	JAN 20, 1978	0.98	S
08	1.69	S	JUL 27	1.48	S	APR 18	0.96	S	MAR 13	0.81	S
12	1.67	S	AUG 19	1.48	S	JUN 23	1.02	S	APR 18	0.77	S
15	1.66	S	27	1.47	S	JUL 20	1.06	S	JUN 05	0.78	S
17	1.66	S	SEP 29	1.52	S	SEP 12	1.18	S	JUL 07	0.85	S
19	1.65	S	NOV 09	1.54	S	OCT 08	1.62	S	AUG 08	0.97	N S

WELL 05N 40E 01CCD1

SITE NUMBER 434712111415601

DRILLED UNUSED WATER-TABLE WELL IN BASALT OF QUATERNARY AGE, DIAM 20 IN (51 CM), REPORTED DEPTH 716 FT (218.2 M), CASED TO 104 FT (31.7 M), LSD ABOUT 5,305 FT (1,617 M) NGVD OF 1929, AUG. 24, 1972, WELL HAD FILLED IN TO A DEPTH OF 508.6 FT (155.0 M), MP NO. 2 TOP OF HOLE IN 55-GAL (208-L) DRUM SOUTH SIDE, 1.20 FT (0.366 M) ABOVE LSD (SINCE MAY 1, 1973).

RECORDS AVAILABLE 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 438.50 FEET BELOW LAND SURFACE DATUM OCT 07, 1970.

LOWEST WATER LEVEL 449.76 FEET BELOW LAND SURFACE DATUM SEP 27, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
APR 15, 1976	442.44	S	JUN 12, 1976	443.20	S	SEP 13, 1977	444.08	S		
MAY 18	441.88	S	SEP 29	443.30	S	APR 18, 1978	441.70	S		
JUN 07	441.77	S	MAR 21, 1977	440.37	S	SEP 29	444.73	S		

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WELL 04S 24E 06R8C1

SITE NUMBER 430626113391001

FORMERLY SITE ID NO. 430623113390801. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 6 IN (15 CM), DEPTH 445.1 FT (135.7 M), CASIED TO 444 FT (135.3 M), PERFORATED 420-444 FT (128.0-135.3 M). LSD 4,493.44 FT (1,369.600 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED AUG. 20, 1957. MP NO. 1 TOP OF 6-IN (15-CM) CASING NORTHEAST SIDE, 1.50 FT (0.457 M) ABOVE LSD (SINCE AUG. 1, 1957).

RECORDS AVAILABLE 1957 TO CURRENT YEAR.

HIGHEST WATER LEVEL 410.98 FEET BELOW LAND SURFACE DATUM APR 03, 1958.

LOWEST WATER LEVEL 420.48 FEET BELOW LAND SURFACE DATUM OCT 19, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05, 1976	414.00	SEP 15, 1976	415.00	MAY 15, 1977	414.53	JAN 15, 1978	417.04
10	414.14	20	415.12	18	414.57	20	417.23
15	414.18	25	415.07	20	414.55	25	417.32
16	414.22	30	415.12	25	414.58	31	417.18
20	414.18	OCT 05	415.17	31	414.78	FEB 05	417.22
25	413.97	10	415.13	JUN 05	414.81	10	416.95
31	414.10	15	415.12	10	414.75	15	417.16
FEB 05	413.83	20	415.23	15	414.92	20	417.38
10	413.88	25	415.10	20	414.94	22	417.44
15	413.71	31	415.17	25	415.11	25	417.22
20	413.81	NOV 05	415.14	30	415.22	28	417.15
25	413.73	10	415.08	JUL 05	415.34	MAR 05	417.08
29	413.50	13	414.98	10	415.46	10	417.21
MAR 05	413.73	15	415.10	15	415.60	15	417.36
10	413.53	20	415.10	20	415.68	20	417.27
15	413.69	25	414.89	25	415.79	25	417.35
20	413.57	30	415.12	27	415.92	31	417.17
25	413.46	DEC 05	414.99	31	416.05	APR 04	417.06
31	413.37	10	415.04	AUG 05	416.11	05	417.25
APR 05	413.27	15	415.04	10	416.20	10	417.30
10	413.37	20	414.98	15	416.36	15	417.18
15	413.09	25	414.92	20	416.50	20	417.15
20	413.28	31	414.69	25	416.52	25	417.21
25	413.19	JAN 03, 1977	414.49	31	416.67	30	417.17
30	413.42	05	414.72	SEP 05	416.78	MAY 05	417.21
MAY 05	413.19	10	414.73	10	416.86	10	417.26
10	413.27	15	414.71	13	416.92	15	417.18
15	413.30	20	414.77	15	416.85	19	417.46
19	413.08	25	414.78	20	417.01	20	417.41
20	413.23	31	414.71	25	417.04	23	417.20
25	413.16	FEB 05	414.72	30	417.10	25	417.39
31	413.18	10	414.71	OCT 05	417.19	31	417.52
JUN 05	413.28	15	414.68	10	417.33	JUN 05	417.59
10	413.17	20	414.64	15	417.39	10	417.54
15	413.41	25	414.62	20	417.25	15	417.7
20	413.38	28	414.58	25	417.35	20	417.82
25	413.46	MAR 05	414.65	31	417.32	25	417.91
30	413.53	09	414.35	NOV 05	417.23	30	418.00
JUL 05	413.71	10	414.54	10	417.49	JUL 05	418.11
10	413.79	15	414.50	15	417.33	06	418.16
15	413.94	20	414.45	20	417.37	10	418.18
20	414.08	25	414.33	25	417.44	15	418.37
25	414.19	27	414.16	30	417.42	20	418.46
31	414.29	31	414.38	DFC 05	417.34	SEP 14	419.48
AUG 05	414.46	APR 05	414.53	10	417.36	15	419.52
10	414.56	10	414.40	15	417.05	17	419.37
15	414.50	15	414.42	20	417.57	20	419.61
20	414.20	20	414.37	25	417.37	25	419.61
25	414.74	25	414.41	31	417.30	30	419.61
31	414.92	30	414.39	JAN 01, 1978	417.42		
SEP 05	414.86	MAY 05	414.38	05	417.20		
10	415.00	10	414.16	10	417.10		

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WELL 05S 25E 22DAD1

SITE NUMBER 425812113271201

FORMERLY SITE ID NO. 425812113271201. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 4 IN (10 CM), DEPTH 581.3 FT (177.2 M), CASED TO 581.3 FT (177.2 M), PERFORATED 525-538 FT (160.0-164.0 M), 555-560 FT (169.2-170.7 M), 575-578 FT (175.3-176.2 M). LSD 4,583.37 FT (1,397.011 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1962. MP NO. 3 TOP OF 2-IN (5.1-CM) PIPE NIPPLE NORTHEAST SIDE, 2.34 FT (0.713 M) ABOVE LSD (SINCE MAY 4, 1972).

RECORDS AVAILABLE 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 491.46 FEET BELOW LAND SURFACE DATUM APR 27, 1973.

LOWEST WATER LEVEL 497.98 FEET BELOW LAND SURFACE DATUM SEP 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAY 03, 1976	491.76	S	JAN 19, 1977	493.19	S	SEP 17, 1977	495.43	S	MAY 20, 1978	495.17	S
JUL 15	492.83	S	MAR 14	492.86	S	NOV 17	495.37	S	JUL 12	496.30	S
SEP 25	493.77	S	MAY 19	493.23	S	FEB 02, 1978	495.18	S	SEP 19	497.98	S
NOV 18	493.45	S	JUL 27	495.44	S	APR 18	495.33	S			

WELL 07S 24E 02ADD1

SITE NUMBER 425040113363101

FORMERLY SITE ID NO. 425037113363201. DRILLED OBSERVATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 5 IN (13 CM), DEPTH 252.0 FT (76.8 M), CASED TO 252 FT (76.8 M), PERFORATED 222-252 FT (67.7-76.8 M). LSD 4,285.88 FT (1,306.336 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MEASUREMENTS PRIOR TO MAR. 21, 1972. MADE BY US BUREAU OF RECLAMATION. RECORDER INSTALLED NOV. 3, 1953. RECORDER REMOVED AUG. 4, 1972. MP NO. 2 TOP OF 3/4-IN (1.9-CM) HOLE IN CASING COVER, 0.92 FT (0.280 M) ABOVE LSD (SINCE JULY 23, 1975).

RECORDS AVAILABLE 1953 - 1972, 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 200.95 FEET BELOW LAND SURFACE DATUM JAN 17, 1954.

LOWEST WATER LEVEL 217.21 FEET BELOW LAND SURFACE DATUM AUG 04, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 15, 1976	209.32	S	MAR 13, 1977	209.33	S	NOV 30, 1977	212.30	S	JUN 21, 1978	214.92	S
FEB 26	208.04	S	MAY 25	211.04	S	JAN 26, 1978	211.98	S	AUG 04	217.21	S
MAR 25	208.51	S	JUN 29	213.42	S	MAR 22	211.70	S	SEP 12	216.29	S
MAY 05	208.73	S	JUL 26	214.94	S	APR 24	211.97	S			
SEP 16	212.31	S	SEP 22	214.21	S	JUN 01	213.56	S			

WELL 08S 23E 27BUC1

SITE NUMBER 424201113452701

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 20 IN (51 CM), REPORTED DEPTH 260 FT (79.2 M), CASED TO 21 FT (6.4 M). LSD 4,234.52 FT (1,290.682 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER MEASUREMENTS FROM JUNE 10, 1949, THROUGH DEC. 20, 1949. MADE BY US BUREAU OF RECLAMATION. RECORDER INSTALLED MAY 20, 1949. RECORDER REMOVED DEC. 20, 1949. MP NO. 3 LOWER LIP OF 1-IN (2.5-CM) PIPE NORTH SIDE OF PUMP, 0.54 FT (0.165 M) ABOVE LSD (SINCE MAR. 27, 1963).

RECORDS AVAILABLE 1948, 1949, 1950 - 1954, 1955 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 176.75 FEET BELOW LAND SURFACE DATUM DEC 01, 1953.

LOWEST WATER LEVEL 192.32 FEET BELOW LAND SURFACE DATUM SEP 22, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 25, 1976	181.79	S	NOV 03, 1976	184.46	S	MAY 25, 1977	186.30	S	MAR 22, 1978	184.75	S
SEP 16	190.16	P S	MAR 13, 1977	182.65	S	SEP 22	192.32	S	SEP 12	190.69	S

WFLL 08S 24E 31DAC1

SITE NUMBER 424053113412801

DRILLED OBSERVATION WATER-TABLE WFLL IN SNAKE RIVER GROUP, DIAM 8 TO 6 IN (20 TO 15 CM), REPORTED DEPTH 194 FT (59.1 M), 8-IN (20-CM) CASING 0-85 FT (0-25.9 M), 6-IN (15-CM) CASING 85-188 FT (25.9-57.3 M), PERFORATED 158-188 FT (48.2-57.3 M), LSD 4,226.54 FT (1,288.249 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, RECORDER INSTALLED SEPT. 20, 1950, RECORDER MAINTAINED, AND ITS RECORD FURNISHED BY US BUREAU OF RECLAMATION, PERIODIC MEASUREMENTS MADE BY US GEOL SURVEY, MP NO. 1 TOP OF CASING, 1.80 FT (0.549 M) ABOVE LSD (SINCE SEPT. 6, 1950).

RECORDS AVAILABLE 1950 TO CURRENT YEAR.

HIGHEST WATER LEVEL 140.50 FEET BELOW LAND SURFACE DATUM OCT 18, 1953.

LOWEST WATER LEVEL 157.23 FEET BELOW LAND SURFACE DATUM JUL 21, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
JAN 15, 1976	149.61	S	JUN 29, 1977	155.04	S	FFB 23, 1978	152.18	S	JUN 07, 1978	154.69
FEB 26	149.53	S	JUL 26	156.08	S	25	151.96		21	155.73
MAR 25	148.78	S	AUG 25	154.50	S	27	151.92		22	155.74
MAY 05	149.38	S	31	153.94	S	MAR 05	151.86		25	155.92
JUN 28	152.27	S	SEP 22	153.31	S	10	152.07		30	156.24
JUL 27	153.83	S	NOV 30	151.68	S	12	151.98		JUL 05	156.57
AUG 26	152.06	S	DEC 22	151.55	S	22	152.19	S	10	156.80
SEP 16	151.52	S	JAN 05, 1978	151.58	S	APR 05	152.37		15	157.08
NOV 03	149.86	S	10	151.58		10	152.41		20	157.10
DEC 10	149.91	S	15	151.44		24	152.60	S	21	157.23
JAN 14, 1977	149.86	S	20	151.75		MAY 10	153.41		23	157.14
FFB 24	150.14	S	25	151.96		15	153.82		AUG 04	157.07
MAR 10	150.25	S	26	151.93	S	20	154.16		SEP 12	154.71
13	150.08	S	28	151.81		25	154.12		13	154.53
25	150.14	S	FEB 06	151.75	S	31	154.45		15	154.42
APR 15	151.04	S	10	151.52		JUN 01	154.64	S	20	153.98
MAY 25	151.95	S	13	151.81		05	154.64		23	154.23

WFLL 08S 25F 16DAC1

SITE NUMBER 424334113320201

DRILLED IRRIGATION WATER-TABLE WFLL IN SNAKE RIVER GROUP, DIAM 20 IN (51 CM), REPORTED DEPTH 230 FT (70.1 M), CASING DEPTH NOT AVAILABLE, LSD 4,243.40 FT (1,293.388 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 3 TOP OF 1-IN (2.5-CM) HOLE INSIDE PUMPBASE NORTH SIDE, 1.62 FT (0.494 M) ABOVE LSD (SINCE MAY 25, 1977).

RECORDS AVAILABLE 1949 - 1955, 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 148.37 FEET BELOW LAND SURFACE DATUM DEC 01, 1953.

LOWEST WATER LEVEL 162.71 FEET BELOW LAND SURFACE DATUM SEP 17, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVFL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAR 25, 1976	156.08	S	MAR 13, 1977	157.02	S	SEP 22, 1977	161.24	S	SEP 12, 1978	162.71
NOV 03	157.73	S	MAY 25	158.12	S	MAR 22, 1978	159.27	S		

WELL 085 25E 360AA1

SITE NUMBER 424102113282101

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 12 TO 10 IN (30 TO 25 CM), REPORTED DEPTH 207 FT (63.1 M), 12-IN (30-CM) CASING 0-56 FT (0-17.1 M), 10-IN (25-CM) CASING 0-111 FT (0-33.8 M), PERFORATED, INTERVAL NOT AVAILABLE, LSD 4,209.00 FT (1,282.903 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MEASUREMENTS PRIOR TO MAR. 21, 1972, MADE BY US BUREAU OF RECLAMATION, RECORDER INSTALLED APR. 14, 1952, RECORDER REMOVED SEPT. 12, 1962, MP NO. 1 TOP OF 10-IN (25-CM) CASING, 0.63 FT (0.192 M) ABOVE LSD (SINCE MAR. 12, 1952).

RECORDS AVAILABLE 1951, 1952 - 1962, 1963 - 1972, 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 97.04 FEET BELOW LAND SURFACE DATUM SEP 10, 1952.

LOWEST WATER LEVEL 109.63 FEET BELOW LAND SURFACE DATUM MAR 21, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 25, 1976	106.56	S	MAY 25, 1977	107.63	S	NOV 30, 1977	108.60	S	APR 24, 1978	109.62	S
SEP 16	105.98	S	JUN 29	107.61	S	JAN 25, 1978	109.06	S	JUN 01	109.27	S
MAR 10, 1977	107.72		JUL 26	107.84	S	MAR 09	109.48	S	21	109.18	S
12	107.57	S	SEP 22	108.47	S	21	109.63	S	AUG 04	109.36	S

WELL 095 22E 16CDB1

SITE NUMBER 423817113530201

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 21 IN (53 CM), DEPTH 297.0 FT (90.5 M), CASED TO 16 FT (4.9 M), LSD ABOUT 4,201 FT (1,280 M) NGVD OF 1929, MAY 17, 1961, WELL WAS DEEPENED TO A REPORTED DEPTH OF 380 FT (115.8 M), DIAM 20 IN (51 CM), CASED TO 20 FT (6.1 M), APR. 25, 1966, WELL WAS REAMED AND DEEPENED TO A REPORTED DEPTH OF 495 FT (150.9 M), 10-IN (25-CM) CASING 322-384 FT (98.1-117.0 M), 10-IN (25-CM) BORE 384-473 FT (117.0-144.2 M), 8-IN (20-CM) BORE 473-495 FT (144.2-150.9 M), MP NO. 1 TOP OF 1-IN (2.5-CM) TAP HOLE INSIDE PUMPBASE EAST SIDE, 0.70 FT (0.213 M) ABOVE LSD (SINCE MAY 18, 1966).

RECORDS AVAILABLE 1952 - 1953, 1954 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 235.52 FEET BELOW LAND SURFACE DATUM MAR 23, 1954.

LOWEST WATER LEVEL 257.78 FEET BELOW LAND SURFACE DATUM SEP 17, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 25, 1976	243.90	S	NOV 03, 1976	248.62	S	MAY 25, 1977	248.24	S	MAR 22, 1978	247.34	S
SEP 16	253.40	S	MAR 13, 1977	244.59	S	SEP 22	254.43	S	SEP 12	256.44	S

WELL 095 22E 33ADA1

SITE NUMBER 423604113522401

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 12 IN (30 CM), DEPTH 252.5 FT (77.0 M), CASED TO 90 FT (27.4 M), LSD 4,190.42 FT (1,277.240 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, RECORDER INSTALLED JAN. 10, 1950, RECORDER REMOVED OCT. 16, 1950, MP NO. 5 TOP OF HOLE IN WELL SEAL NORTH SIDE, 2.80 FT (0.853 M) ABOVE LSD (SINCE SEPT. 16, 1965).

RECORDS AVAILABLE 1948 - 1949, 1950, 1951 - 1954, 1955 TO CURRENT YEAR.

HIGHEST WATER LEVEL 216.96 FEET BELOW LAND SURFACE DATUM MAY 25, 1977.

LOWEST WATER LEVEL 240.39 FEET BELOW LAND SURFACE DATUM SEP 17, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 25, 1976	233.68	S	MAR 13, 1977	233.88	S	JUN 29, 1977	235.72	S	MAR 22, 1978	235.33	S
SEP 16	236.38	S	MAY 25	216.96	S	SEP 22	237.26	S	SEP 12	238.83	S

## ONEIDA COUNTY

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WELL 13S 33E 04ADD1

SITE NUMBER 421917112354901

DRILLED UNUSED WATER-TABLE WELL IN SALT LAKE FORMATION, DIAM 4 IN (10 CM), DEPTH 145.8 FT (44.4 M), CASIED TO 122 FT (37.2 M). LSD ABOUT 5,153 FT (1,571 M) NGVD OF 1929. MP NO. 1 TOP OF 4-IN (10-CM) CASING SOUTH SIDE, 0.70 FT (0.213 M) ABOVE LSD (SINCE MAY 5, 1947).

RECORDS AVAILABLE 1947, 1969 - 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 55.70 FEET BELOW LAND SURFACE DATUM MAR 11, 1976.

LOWEST WATER LEVEL 81.60 FEET BELOW LAND SURFACE DATUM MAY 05, 1947.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 11, 1976	55.70	S	AUG 05, 1977	57.66	S	NOV 10, 1977	58.72	S	JUN 01, 1978	59.57	S
SEP 10	55.92	S	18	57.92	S	FEB 09, 1978	58.64	S	JUL 13	59.75	S
MAR 10, 1977	56.65	S	SEP 16	57.71	S	MAR 22	59.06	S	AUG 23	59.79	S
MAY 25	57.16	S	30	58.18	S	APR 27	59.39	S	SEP 27	60.01	S

WELL 13S 35E 36CCD1

SITE NUMBER 421434112191401

DRILLED UNUSED WATER-TABLE WELL IN SEDIMENTS OF QUATERNARY AGE, DIAM 4 IN (10 CM), DEPTH 131 FT (39.9 M), CASIED TO 131 FT (39.9 M). LSD ABOUT 4,853 FT (1,479 M) NGVD OF 1929. MP NO. 1 TOP OF CASING, 0.80 FT (0.244 M) ABOVE LSD (SINCE MAR. 11, 1976).

RECORDS AVAILABLE 1946 - 1959, 1962 - 1969, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 79.72 FEET BELOW LAND SURFACE DATUM MAR 11, 1976.

LOWEST WATER LEVEL 85.33 FEET BELOW LAND SURFACE DATUM APR 21, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 11, 1976	79.72	S	AUG 18, 1977	80.59	S	FEB 10, 1978	81.07	S	JUL 13, 1978	81.45	S
SEP 10	79.95	S	SEP 29	80.76	S	MAR 21	81.23	S	AUG 23	81.49	S
MAR 09, 1977	80.15	S	NOV 10	80.90	S	APR 27	81.35	S	SEP 27	81.48	S
MAY 25	80.12	S	DEC 21	81.16	S	JUN 01	81.40	S			

WELL 14S 35E 13DBA1

SITE NUMBER 421219112184101

DRILLED IRRIGATION WATER-TABLE WELL IN GRAVEL OF QUATERNARY AGE, DIAM 14 IN (36 CM), REPORTED DEPTH 289 FT (88.1 M), CASIED TO 289 FT (88.1 M), PERFORATED OPPOSITE ALL GRAVELS 114-289 FT (34.7-88.1 M). LSD ABOUT 4,641 FT (1,415 M) NGVD OF 1929. MP NO. 1 TOP OF 1/2-IN (1.3-CM) HOLE IN PUMPHASE WEST SIDE, 0.80 FT (0.244 M) (SINCE MAR. 11, 1976).

RECORDS AVAILABLE 1943 - 1952, 1953 TO CURRENT YEAR.

HIGHEST WATER LEVEL 66.07 FEET BELOW LAND SURFACE DATUM APR 26, 1953.

LOWEST WATER LEVEL 100.10 FEET BELOW LAND SURFACE DATUM NOV 11, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 11, 1976	76.66	S	AUG 18, 1977	75.19	S	DEC 21, 1977	73.17	S	JUN 01, 1978	71.04	S
OCT 21	76.18	S	SEP 20	74.64	S	FEB 10, 1978	71.94	S	AUG 23	72.32	S
MAR 09, 1977	73.95	S	29	74.44	S	MAR 21	71.54	S	SEP 27	72.40	S
MAY 25	74.20	S	NOV 10	73.97	S	APR 27	70.99	S			

WELL 155 32E 09AAA2

SITE NUMBER 420819112425402

DRILLED STOCK WATER-TABLE WELL IN SEDIMENTS OF QUATERNARY AGE, DIAM 10 IN (25 CM), REPORTED DEPTH 270 FT (82.3 M), CASING DEPTH NOT AVAILABLE, LSD ABOUT 5.040 FT (1.536 M) NGVD OF 1929, MP NO. 1 TOP OF STEEL PLATE OVER 10-IN (25-CM) CASING, 0.70 FT (0.213 M) ABOVE LSD (SINCE APR. 7, 1970).

RECORDS AVAILABLE 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 211.43 FEET BELOW LAND SURFACE DATUM APR 07, 1970.

LOWEST WATER LEVEL 214.11 FEET BELOW LAND SURFACE DATUM JUN 01, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
APR 22, 1976	212.10	S	AUG 05, 1977	213.08	S	NOV 10, 1977	213.34	S	JUL 13, 1978	213.93	S
SEP 10	212.53	S	18	213.18	S	DEC 22	213.25	S	AUG 23	213.90	S
MAR 09, 1977	212.59	S	SEP 16	213.22	S	APR 27, 1978	216.55	P S	SEP 27	213.72	S
MAY 25	213.43	S	30	213.46	S	JUN 01	214.11	S			

WELL 155 35E 01DAA1

SITE NUMBER 420855112182301

DRILLED IRRIGATION ARTESIAN WELL IN GRAVEL OF QUATERNARY AGE, DIAM 3 IN (8 CM), DEPTH 275 FT (83.8 M), CASING TO 249 FT (75.9 M), LSD 4,452.95 FT (1,357.259 M) NGVD OF 1929, REPORTED FLOWING JULY 25, 1931, MP NO. 1 TOP OF 3-IN (8-CM) CASING, 1.80 FT (0.549 M) ABOVE LSD (SINCE JULY 12, 1943).

RECORDS AVAILABLE 1943 - 1952, 1953 TO CURRENT YEAR.

HIGHEST WATER LEVEL 33.10 FEET ABOVE LAND SURFACE DATUM MAY 03, 1944.

LOWEST WATER LEVEL -8.46 FEET BELOW LAND SURFACE DATUM SEP 14, 1962.

WATER LEVELS IN FEET ABOVE OR BELOW (-) LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 10, 1976	21.14	E M	AUG 18, 1977	2.18	E M	MAR 21, 1978	23.25	E M	AUG 23, 1978	4.53	E M
SEP 09	12.84	E M	NOV 10	16.18	E M	APR 27	19.07	E M	SEP 27	9.32	E M
MAR 09, 1977	21.07	E M	DEC 21	18.53	E M	JUN 01	16.17	E M			
MAY 25	11.87	E M	FEB 10, 1978	20.25	E M	JUL 13	-3.62	S			

WELL 155 35E 22AAB1

SITE NUMBER 420636112175201

DRILLED IRRIGATION WATER-TABLE WELL IN GRAVEL OF QUATERNARY AGE, DIAM 10 IN (25 CM), REPORTED DEPTH 229 FT (69.8 M), CASING TO 229 FT (69.8 M), LSD ABOUT 4.575 FT (1,394.460 M) NGVD OF 1929, MP NO. 1 TOP OF 3/4-IN (1.9-CM) HOLE IN PUMPBASE SOUTHWEST SIDE, 0.90 FT (0.274 M) ABOVE LSD (SINCE JUNE 18, 1963).

RECORDS AVAILABLE 1963 TO CURRENT YEAR.

HIGHEST WATER LEVEL 125.69 FEET BELOW LAND SURFACE DATUM SEP 20, 1975.

LOWEST WATER LEVEL 142.00 FEET BELOW LAND SURFACE DATUM SEP 15, 1963.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 10, 1976	126.70	S	AUG 18, 1977	131.52	S	FEB 10, 1978	132.98	V S	JUL 13, 1978	132.68	V S
SEP 09	127.97	S	SEP 29	132.03	S	MAR 22	133.21	V S	AUG 23	132.99	V S
MAR 09, 1977	130.09	S	NOV 10	132.45	S	APR 27	132.55	V S	SEP 27	133.21	V S
MAY 25	130.65	S	DEC 21	132.62	S	JUN 01	132.33	V S			

WELL 15S 36E 22ABA1

SITE NUMBER 420638112140301

DRILLED IRRIGATION ARTESIAN WELL IN GRAVEL OF QUATERNARY AGE, DIAM 8 IN (20 CM), DEPTH 100 FT (30.5 M), CASING DEPTH NOT AVAILABLE. LSD ABOUT 4,419 FT (1,347 M) NGVD OF 1929. MP NO. 1 TOP OF CASING COUPLING, 1.00 FT (0.305 M) ABOVE LSD (SINCE SEPT. 15, 1963).

RECORDS AVAILABLE 1943 - 1952, 1953 - 1960, 1964 TO CURRENT YEAR.

HIGHEST WATER LEVEL 28.50 FEET ABOVE LAND SURFACE DATUM SEP 20, 1975.

LOWEST WATER LEVEL 12.03 FEET ABOVE LAND SURFACE DATUM SEP 15, 1963.

WATER LEVELS IN FEET ABOVE LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 10, 1976	22.89 E M	AUG 18, 1977	16.93 E M	MAR 22, 1978	18.33 E M	AUG 23, 1978	21.07 E M
SEP 09	25.44 E M	NOV 10	16.73 E M	APR 27	19.42 E M	SEP 27	20.52 E M
MAR 09, 1977	20.89 E M	DEC 21	16.38 E M	JUN 01	22.78 E M		
MAY 25	19.49 E M	FEB 09, 1978	20.20 E M	JUL 13	21.98 E M		

WELL 16S 30E 09ABB2

SITE NUMBER 420323112571202

DRILLED STOCK WATER-TABLE WELL IN SALT LAKE FORMATION, DIAM 10 TO 8 IN (25 TO 20 CM), REPORTED DEPTH 485 FT (147.8 M), 10-IN (25-CM) CASING 0-212 FT (0-64.6 M), 8-IN (20-CM) CASING 200-485 FT (61.0-147.8 M), PERFORATED 200-485 FT (61.0-147.8 M). LSD ABOUT 4,658 FT (1,420 M) NGVD OF 1929. MP NO. 2 TOP OF 10-IN (25-CM) CASING NORTHWEST SIDE, 1.20 FT (0.366 M) ABOVE LSU (SINCE SEPT. 21, 1970).

RECORDS AVAILABLE 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 71.86 FEET BELOW LAND SURFACE DATUM SEP 08, 1970.

LOWEST WATER LEVEL 78.46 FEET BELOW LAND SURFACE DATUM JUN 19, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 1976	81.56 P S	AUG 05, 1977	73.50 S	NOV 10, 1977	74.00 S	APR 27, 1978	79.10 P S
SEP 10	73.84 S	SEP 16	83.16 P S	DEC 22	73.29 S	SEP 27	72.22 S
MAR 09, 1977	73.45 S	30	83.54 P S	FEB 09, 1978	71.95 S		

WELL 16S 32E 27DAB1

SITE NUMBER 420027112414201

DRILLED IRRIGATION WATER-TABLE WELL IN VALLEYFILL OF CENOZOIC AGE, DIAM 16 IN (41 CM), REPORTED DEPTH 230 FT (70.1 M), CASED TO 214 FT (65.2 M), PERFORATED 30-214 FT (9.1-65.2 M). MP NO. 1 BOTTOM OF 1/4-IN (0.64-CM) HOLE OUTSIDE PUMPHOUSE NORTH SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE APR. 13, 1970).

RECORDS AVAILABLE 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 17.55 FEET BELOW LAND SURFACE DATUM SEP 27, 1973.

LOWEST WATER LEVEL 30.39 FEET BELOW LAND SURFACE DATUM SEP 16, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 11, 1976	19.80 S	AUG 18, 1977	P	FEB 09, 1978	20.11 S	AUG 24, 1978	26.66 P S
OCT 21	21.49 S	SEP 16	30.39 S	MAR 22	20.64 S	SEP 27	25.89 S
MAR 09, 1977	20.60 S	30	24.65 S	APR 27	20.25 S		
MAY 25	29.70 P S	NOV 10	23.00 S	JUN 01	45.75 P S		
AUG 05	43.10 P S	DEC 22	21.77 S	JUL 13	28.99 P S		

WELL 055 28E 2688D1

SITE NUMBER 425746113093901

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 4 IN (10 CM), DEPTH 760.6 FT (231.8 M), CASIED TO 760.6 FT (231.8 M), PERFORATED 730.6-760.6 FT (222.7-231.8 M). LSD 4,941.00 FT (1,506.017 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1962. MP NO. 1 TOP OF 2-IN (5.1-CM) PIPE COUPLING, 2.27 FT (0.692 M) ABOVE LSD (SINCE SEPT. 23, 1970).

RECORDS AVAILABLE 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 678.19 FEET BELOW LAND SURFACE DATUM MAR 29, 1973.

LOWEST WATER LEVEL 681.87 FEET BFLOW LAND SURFACE DATUM SEP 09, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 07, 1976	678.89 S	MAR 12, 1977	679.61 S	APR 06, 1978	681.04 S		
SEP 17	680.96 S	SEP 09	681.87 S				

WELL 055 33E 35CCD1

SITE NUMBER 425608112335301

DRILLED OBSERVATION WATER-TABLE WELL IN GRAVEL OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 60 FT (18.3 M), CASIED TO 60 FT (18.3 M), OPEN BOTTOM. LSD 4,424.58 FT (1,348.612 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED JULY 23, 1957. RECORDER REMOVED SEPT. 20, 1969. DIGITAL RECORDER INSTALLED JULY 21, 1977. MP NO. 2 TOP OF CASING NORTHEAST SIDE, 2.10 FT (0.640 M) ABOVE LSD (SINCE MAR. 22, 1955).

RECORDS AVAILABLE 1955 - 1956, 1957 - 1969, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 22.74 FEET BELOW LAND SURFACE DATUM OCT 12, 1957.

LOWEST WATER LEVEL 27.93 FEET BFLOW LAND SURFACE DATUM JUL 14, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 12, 1976	24.49 S	OCT 03, 1977	24.56	FEB 05, 1978	25.29	MAY 15, 1978	25.21
MAY 07	24.18 S	05	24.62	10	25.16	20	24.92
JUL 16	27.09 S	10	24.72	11	25.16	25	25.01
SEP 16	24.30 S	15	24.69	15	25.29	31	25.39
DEC 03	24.04 S	20	24.62	20	25.36	JUN 05	25.39
MAR 11, 1977	24.76 S	25	24.67	25	25.31	10	26.57
JUL 08	27.37 S	31	24.71	28	25.31	15	26.83
21	27.09 S	NOV 05	24.70	MAR 05	25.27	20	26.86
23	27.36	10	24.85	06	25.41	25	27.05
25	26.12	15	24.81	07	25.41	30	27.40
31	26.10	20	24.91	10	25.29	JUL 05	27.04
AUG 05	25.93	25	24.95	15	25.39	10	26.86
08	25.45	30	24.98	16	25.39	14	27.93
10	25.71	DEC 01	24.69	20	25.33	15	27.66
15	25.47	05	24.99	25	25.32	20	27.48
20	25.78	10	25.07	31	25.20	25	27.20
24	26.03	15	24.94	APR 04	25.08	31	26.53
25	25.71	20	25.24	05	25.15	AUG 05	26.64
29	25.17	25	25.22	10	25.13	10	26.32
31	25.49	31	25.21	15	25.08	15	25.80
SEP 05	25.40	JAN 05, 1978	25.20	16	25.01	20	25.54
10	25.63	08	25.35	20	25.07	25	25.89
15	25.42	10	25.19	25	25.14	31	25.86
17	25.53	15	25.15	30	25.14	SEP 05	25.68
20	25.33	20	25.27	MAY 03	25.23	10	25.57
25	24.81	25	25.33	05	25.15	15	25.28
30	24.63	31	25.29	10	25.17	18	25.19

WELL 06S 32E 27ADD1

SITE NUMBER 425218112413901

DRILLED OBSERVATION WATER-TABLE WELL IN SAND OF QUATERNARY AGE, DIAM 6 IN (15 CM), DEPTH 62.7 FT (19.1 M), CASIED TO 73 FT (22.2 M), PERFORATED 63-66 FT (19.2-20.1 M), CASING FILLED WITH SAND AND GRAVEL 63-73 FT (19.2-22.2 M). LSD 4,416.70 FT (1,346.210 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED FEB. 4, 1955. RECORDER REMOVED JAN. 15, 1969. DIGITAL RECORDER INSTALLED JULY 20, 1977. MP NO. 2 TOP OF 6-IN (15-CM) CASING NORTH SIDE, 2.30 FT (0.701 M) ABOVE LSD (SINCE JAN. 12, 1955).

RECORDS AVAILABLE 1954, 1955 - 1969, 1970 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 31.35 FEET BELOW LAND SURFACE DATUM MAY 22, 1971.

LOWEST WATER LEVEL 39.86 FEET BELOW LAND SURFACE DATUM OCT 15, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAR 12, 1976	32.65	S	OCT 01, 1977	38.05		FEB 10, 1978	34.66		MAY 15, 1978	32.34
MAY 07	32.06	S	05	37.89		15	34.40		20	32.29
JUL 16	36.19	S	10	37.74		20	34.18		25	32.17
SEP 16	36.02	S	15	37.64		25	33.97		31	32.10
DEC 03	34.64	S	20	37.52		28	33.83		JUN 01	32.08
MAR 11, 1977	32.65	S	25	37.41		MAR 05	33.60		05	32.15
MAY 25	33.29	S	31	37.27		09	33.44		10	32.33
JUL 08	37.14	S	NOV 05	37.15		10	33.42		15	32.61
20	38.38	S	10	37.03		15	33.31		20	32.94
25	38.77		15	36.93		20	33.24		25	33.33
31	38.97		20	36.78		25	33.13		30	33.51
AUG 05	39.01		25	36.61		31	33.02		JUL 05	34.14
07	39.03		30	36.45		APR 05	32.91		10	34.51
10	39.03		DEC 05	36.28		10	32.80		15	34.86
12	39.03		10	36.11		15	32.68		20	35.21
15	38.83		15	35.94		20	32.55		25	35.48
20	38.86		20	35.76		25	32.43		31	35.74
25	38.99		25	35.59		30	32.35		AUG 05	35.83
31	39.07		31	35.40		MAY 01	32.34		10	35.89
SEP 05	39.07		JAN 05, 1978	35.24		02	32.34		15	35.89
09	39.24		10	35.07		03	32.34		20	35.86
10	39.15		15	34.91		04	32.34		25	35.80
14	38.72		18	34.80		05	32.34		31	35.76
15	38.68		20	35.70		06	32.34		SEP 05	35.72
20	38.49		25	35.45		08	32.34		20	35.35
25	38.28		31	35.16		09	32.34		25	35.16
30	38.04		FEB 05	34.92		10	32.34		30	35.05

WELL 07S 30E 24DDC1

SITE NUMBER 424732112532001

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 16 IN (41 CM), REPORTED DEPTH 215 FT (65.5 M), CASIED TO 187 FT (57.0 M). LSD 4,394.33 FT (1,339.392 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. RECORDER INSTALLED MAY 25, 1961. RECORDER REMOVED SEPT. 15, 1962. MP NO. 2 TOP OF CASING SOUTHWEST SIDE, 0.70 FT (0.213 M) ABOVE LSD (SINCE MAY 11, 1961).

RECORDS AVAILABLE 1953, 1961 - 1962, 1963 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 51.98 FEET BELOW LAND SURFACE DATUM MAR 19, 1970.

LOWEST WATER LEVEL 79.26 FEET BELOW LAND SURFACE DATUM SEP 09, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
APR 02, 1976	58.01	S	SEP 16, 1976	69.84	S	MAY 25, 1977	61.22	S	SEP 09, 1977	79.26	S
MAY 06	56.98	S	DEC 03	65.11	S	JUL 08	69.95	S	AUG 07, 1978	62.25	S
JUL 09	64.37	S	MAR 10, 1977	58.39	S	AUG 11	77.05	S			

WELL 075 30E 2888C1

SITE NUMBER 424720112574701

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 20 IN (51 CM), DEPTH 287.8 FT (87.7 M), CASIED TO 3 FT (0.9 M). LSD 4,533.55 FT (1,381.826 M) NGVD OF 1929. ORIGINAL WELL, DIAM 18 TO 12 IN (46 TO 30 CM), DEPTH 518 FT (157.9 M), CASING WAS PULLED EXCEPT FOR A PIECE THAT IS BELOW WATER LEVEL, HOLE THEN FILLED TO PRESENT DEPTH. RECORDER INSTALLED MAY 25, 1961. RECORDER REMOVED JAN. 15, 1969. MP NO. 1 TOP OF CASING NORTH SIDE, 1.40 FT (0.427 M) ABOVE LSD (SINCE MAY 23, 1961).

RECORDS AVAILABLE 1961 - 1969, 1970 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 194.91 FEET BELOW LAND SURFACE DATUM MAY 06, 1976.

LOWEST WATER LEVEL 207.17 FEET BELOW LAND SURFACE DATUM AUG 11, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
APR 02, 1976	195.15	S	MAR 10, 1977	196.18	S	SEP 09, 1977	206.70	S	MAY 10, 1978	197.43	S
MAY 06	194.91	S	MAY 25	197.00	S	15	206.23	S	JUL 12	206.65	S
JUL 09	202.67	S	JUL 08	203.76	S	NOV 11	201.45	S	SEP 17		0
SEP 16	201.52	S	AUG 10	207.11	S	JAN 18, 1978	198.65	S			
DEC 03	197.53	S	11	207.17	S	MAR 09	197.66	S			

WELL 075 31F 22C881

SITE NUMBER 424748112494101

FORMERLY SITE ID NO. 424748112491101. DRILLED UNUSED WATER-TABLE WELL IN UNKNOWN AQUIFER, DIAM 6 IN (15 CM), DEPTH 103.8 FT (31.6 M), CASIED TO 12 FT (3.7 M). LSD 4,413.74 FT (1,345.308 M) NGVD OF 1929. SUPPLEMENTARY ADJUSTMENT OF 1961. MEASUREMENTS MADE IN 1928 FROM WSP 775, 1957-58 BY US BUREAU OF RECLAMATION. MP NO. 4 TOP OF 3/4-IN (1.9-CM) HOLE IN WELL SEAL NORTH SIDE, 1.04 FT (0.317 M) ABOVE LSD (SINCE SEPT. 20, 1974).

RECORDS AVAILABLE 1928, 1950, 1957 - 1958, 1961 - 1968, 1969 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 53.80 FEET BELOW LAND SURFACE DATUM SEP 22, 1971.

LOWEST WATER LEVEL 64.50 FEET BELOW LAND SURFACE DATUM OCT 16, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 12, 1976	59.02	S	SEP 17, 1976	59.81	R S	MAY 25, 1977	59.12	S	SEP 14, 1977		N
MAY 06	58.14	S	DEC 03	60.82	S	JUL 08	60.56	S			
JUL 09	58.33	S	MAR 10, 1977	59.57	S	AUG 11	61.96	S			

WELL 085 29F 34C8C1

SITE NUMBER 424052113033901

DRILLED OBSERVATION WATER-TABLE WELL IN RAFT FORMATION, DIAM 4 TO 3 IN (10 TO 8 CM), DEPTH 665 FT (202.7 M), 4-IN (10-CM) CASING 0-170 FT (0-51.8 M), 3-IN (8-CM) CASING 313-665 FT (95.4-202.7 M), CONCRETE SEAL 665-673 FT (202.7-205.1 M). LSD ABOUT 4,388 FT (1,337 M) NGVD OF 1929. MP NO. 1 TOP OF 4-IN (10-CM) CASING EAST SIDE AT LSD (SINCE DEC. 2, 1970).

RECORDS AVAILABLE 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 138.08 FEET BELOW LAND SURFACE DATUM MAR 23, 1972.

LOWEST WATER LEVEL 151.31 FEET BELOW LAND SURFACE DATUM DEC 02, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 16, 1976	147.11	S	DEC 02, 1976	148.11	S	SEP 15, 1977	147.36	S	APR 05, 1978	146.54	S
MAR 11	147.75	S	JAN 26, 1977	147.70	S	29	147.29	S	MAY 10	147.89	S
APR 23	147.27	S	MAR 10	147.34	S	NOV 11	146.77	S	JUN 15	147.61	S
JUN 03	147.07	S	APR 21	146.89	S	DEC 14	146.07	S	JUL 12	147.86	S
JUL 16	148.06	S	MAY 25	149.55	S	JAN 18, 1978	146.63	S	AUG 07	148.06	S
SEP 16	148.13	S	JUL 07	147.03	S	FEB 08	146.25	S	SEP 17	147.90	S
OCT 21	147.92	S	AUG 12	147.98	S	MAR 10	146.10	S			

WELL 08S 29E 34C8C2

SITE NUMBER 424052113033902

(249.3 M). 3-IN (8-CM) CASING 313-818 FT (95.4-249.3 M), PERFORATED 697-702 FT (212.4-214.0 M), 3/4-IN (1.9-CM) PIEZOMETER TUBE 0-704 FT (0-214.6 M), PERFORATED 696.5-701.5 FT (212.3-213.8 M), CASING FILLED WITH GRAVEL 673-818 FT (205.1-249.3 M), CONCRETE SEAL 665-673 FT (202.7-205.1 M), 818-826 FT (249.3-251.8 M). LSD ABOUT 4.388 FT (1.337 M) NGVD OF 1929. MP NO. 1 TOP OF 3/4-IN (8-CM) PIPE EAST SIDE, 1.44 FT (0.439 M) ABOVE LSD (SINCE DEC. 2, 1970).

RECORDS AVAILABLE 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 149.08 FEET BELOW LAND SURFACE DATUM OCT 30, 1975.

LOWEST WATER LEVEL 155.74 FEET BELOW LAND SURFACE DATUM APR 16, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 16, 1976	150.34	S	DEC 02, 1976	151.30	S	SEP 15, 1977	151.51	S	APR 05, 1978	151.16	S
MAR 11	150.42	S	JAN 26, 1977	151.11	S	29	151.53	S	MAY 10	150.24	S
APR 23	150.00	S	MAR 10	150.63	S	NOV 11	151.03	S	JUN 15	149.93	S
JUN 03	149.81	S	APR 21	150.64	S	DEC 14	149.20	S	JUL 12	149.99	S
JUL 16	151.36	S	MAY 25	150.94	S	JAN 18, 1978	150.77	S	AUG 07	150.44	S
SEP 16	151.43	S	JUL 07	150.75	S	FEB 08	150.83	S	SEP 17	150.40	S
OCT 21	152.10	S	AUG 12	152.17	S	MAR 10	150.76	S			

WELL 08S 29E 34C8C3

SITE NUMBER 424052113033903

DRILLED OBSERVATION ARTESIAN WELL IN STARLIGHT FORMATION, DIAM 3 IN (8 CM), DEPTH 1,028.1 FT (313.4 M), 3-IN (8-CM) CASING 826-899 FT (251.8-274.0 M), PERFORATED 852-858 FT (259.7-261.5 M), 1-IN (2.5-CM) PIEZOMETER TUBE 0-861 FT (0-262.4 M), PERFORATED 853.5-858.5 FT (260.1-261.7 M), CASING AND HOLE FILLED WITH GRAVEL 826-1,028.1 FT (251.8-313.4 M), CONCRETE SEAL 818-826 FT (249.3-251.8 M). LSD ABOUT 4.388 FT (1.337 M) NGVD OF 1929. MP NO. 1 TOP OF 1-IN (2.5-CM) PIPE EAST SIDE, 1.06 FT (0.323 M) ABOVE LSD (SINCE DEC. 2, 1970).

RECORDS AVAILABLE 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 57.80 FEET BELOW LAND SURFACE DATUM DEC 02, 1970.

LOWEST WATER LEVEL 90.76 FEET BELOW LAND SURFACE DATUM SEP 17, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 16, 1976	85.65	S	DEC 02, 1976	87.13	S	SEP 15, 1977	88.32	S	APR 05, 1978	89.46	S
MAR 11	85.89	S	JAN 26, 1977	87.36	S	29	88.42	S	MAY 10	89.57	S
APR 23	86.10	S	MAR 10	87.53	S	NOV 11	88.57	S	JUN 15	89.68	S
JUN 03	86.28	S	APR 21	87.73	S	DEC 14	88.48	S	JUL 12	89.81	S
JUL 16	86.47	S	MAY 25	87.83	S	JAN 18, 1978	89.08	S	AUG 07	90.65	S
SEP 16	86.75	S	JUL 07	88.02	S	FEB 08	89.20	S	SEP 17	90.76	S
OCT 21	86.97	S	AUG 12	88.14	S	MAR 10	89.33	S			

WELL 08S 30E 23DCC1

SITE NUMBER 424220112544601

FORMERLY SITE ID NO. 4243591125408, WFL NO. 08S 30E 23DCD1. DRILLED UNUSED WATER-TABLE WELL IN UNKNOWN AQUIFER, DIAM 5 IN (13 CM), DEPTH 273 FT (83.2 M), CASED TO 28 FT (8.5 M). LSD 4,511.5 FT (1,375.10 M) NGVD OF 1929. MP NO. 1 TOP OF CASING SOUTHWEST SIDE, 0.40 FT (0.122 M) ABOVE LSD (SINCE AUG. 17, 1949).

RECORDS AVAILABLE 1949, 1950 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 204.88 FEET BELOW LAND SURFACE DATUM OCT 16, 1961.

LOWEST WATER LEVEL 214.80 FEET BELOW LAND SURFACE DATUM AUG 17, 1949.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 26, 1976	210.99	S	JUL 08, 1977	209.66	S	JAN 18, 1978	208.82	S	JUL 11, 1978	208.13	S
SEP 17	210.61	S	SEP 14	210.15	S	MAR 09	208.48	S	SEP 17	207.53	S
MAR 10, 1977	210.36	S	NOV 10	208.94	S	MAY 10	208.63	S			

WELL 08S 31E 04C881

SITE NUMBER 424512112505201

DRILLED UNUSED WATER-TABLE WELL IN UNKNOWN AQUIFER, DIAM 6 IN (15 CM), DEPTH 277 FT (84.4 M), CASED TO 16 FT (4.9 M). LSD 4,568.4 FT (1,392.45 M) NGVD OF 1929. MP NO. 1 TOP OF CASING EAST SIDE, 0.50 FT (0.152 M) ABOVE LSD (SINCE AUG. 19, 1949).

RECORDS AVAILABLE 1949, 1950 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 232.57 FEET BELOW LAND SURFACE DATUM JUN 21, 1950.

LOWEST WATER LEVEL 244.85 FEET BELOW LAND SURFACE DATUM SEP 14, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
MAR 26, 1976	241.20	S	APR 21, 1977	242.00	S	MAR 09, 1978	243.68	S		
SEP 17	243.44	S	SEP 14	244.85	S	SEP 17	244.19	S		

WELL 09S 28E 18HAD1

SITE NUMBER 423837113134301

DRILLED OBSERVATION WATER-TABLE WELL IN RAFT FORMATION, DEPTH 150 FT (45.7 M), 1-IN (2.5-CM) PIEZOMETER TUBF 0-25 FT (0-7.6 M), PERFORATED 17.5-22.5 FT (5.3-6.9 M). LSD 4,216.80 FT (1,285,281 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1961. MP NO. 1 TOP OF 1-IN (2.5-CM) PIPE EAST SIDE, 1.21 FT (0.369 M) ABOVE LSD (SINCE DEC. 2, 1970).

RECORDS AVAILABLE 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 11.69 FEET BELOW LAND SURFACE DATUM JUN 03, 1976.

LOWEST WATER LEVEL 13.67 FEET BELOW LAND SURFACE DATUM APR 05, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 16, 1976	12.80	S	DEC 02, 1976	12.47	S	SEP 15, 1977	13.22	S	APR 05, 1978	13.67	S
MAR 11	12.23	S	JAN 26, 1977	13.04	S	29	13.40	S	MAY 10	13.41	S
APR 23	11.96	S	MAR 10	13.25	S	NOV 11	13.63	S	JUN 15	13.21	S
JUN 03	11.69	S	APR 21	13.03	S	DEC 14	13.48	S	JUL 12	13.24	S
JUL 16	11.76	S	MAY 25	13.08	S	JAN 18, 1978	13.45	S	AUG 07	13.31	S
SEP 16	12.03	S	JUL 07	12.75	S	FEB 08	13.47	S	SEP 17	13.26	S
OCT 21	12.16	S	AUG 12	12.83	S	MAR 10	13.58	S			

WELL 09S 28E 18HAD2

SITE NUMBER 423837113134302

DRILLED OBSERVATION ARTESIAN WELL IN RAFT FORMATION, DEPTH 505 FT (153.9 M), 3/4-IN (1.9-CM) PIEZOMETER TUBF 0-420 FT (0-128.0 M), PERFORATED 412.5-417.5 FT (125.7-127.2 M), GRAVEL PACKED 318-505 FT (96.9-153.9 M), CONCRETE SEAL 280-318 FT (85.3-96.9 M), 505-518 FT (153.9-157.9 M), LSD 4,216.80 FT (1,285,281 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1961. MP NO. 1 TOP OF 3/4-IN (1.9-CM) PIPE EAST SIDE, 1.83 FT (0.558 M) ABOVE LSD (SINCE DEC. 2, 1973).

RECORDS AVAILABLE 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.93 FEET ABOVE LAND SURFACE DATUM MAY 04, 1971.

LOWEST WATER LEVEL -9.44 FEET BELOW LAND SURFACE DATUM SEP 17, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 16, 1976	5.77	S	DEC 02, 1976	7.60	S	SEP 15, 1977	8.22	S	APR 05, 1978	8.06	S
MAR 11	4.97	S	JAN 26, 1977	7.20	S	29	8.64	S	MAY 10	7.35	S
APR 23	4.15	S	MAR 10	6.56	S	NOV 11	9.21	S	JUN 15	7.17	S
JUN 03	3.67	S	APR 21	5.80	S	DEC 14	9.21	S	JUL 12	7.53	S
JUL 16	4.47	S	MAY 25	5.37	S	JAN 18, 1978	8.99	S	AUG 07	7.28	S
SEP 16	6.81	S	JUL 07	6.19	S	FEB 08	8.84	S	SEP 17	9.44	S
OCT 21	7.46	S	AUG 12	7.19	S	MAR 10	8.42	S			

WELL 09S 28E 18BAD3

SITE NUMBER 423837113134303

DRILLED OBSERVATION ARTESIAN WELL IN STARLIGHT FORMATION. DEPTH 1,013.7 FT (309.0 M), 1-IN (2.5-CM) PIEZOMETER TUBE 0-554 FT (0-168.8 M), PERFORATED 546.5-551.5 FT (166.6-168.1 M), GRAVEL PACKED 518-1,013.7 FT (157.9-309.0 M), CONCRETE SEAL 505-518 FT (153.9-157.9 M), LSD 4,216.80 FT (1,285.781 M) NGVD OF 1929, SUPPLEMENTARY ADJUSTMENT OF 1961, MP NO. 1 TOP OF 1-IN (2.5-CM) PIPE, 1.30 FT (0.396 M) ABOVE LSD (SINCE DEC. 2, 1970).

RECORDS AVAILABLE 1970, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 32.90 FEET BELOW LAND SURFACE DATUM SEP 17, 1978.

LOWEST WATER LEVEL 67.62 FEET BELOW LAND SURFACE DATUM DEC 02, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 16, 1976	36.01	S	DEC 02, 1976	34.77	S	SEP 15, 1977	33.80	S	APR 05, 1978	33.43	S
MAR 11	35.74	S	JAN 26, 1977	34.54	S	29	33.79	S	MAY 10	33.23	S
APR 23	35.54	S	MAR 10	34.36	S	NOV 11	33.79	S	JUN 15	33.18	S
JUN 03	35.29	S	APR 21	34.21	S	DEC 14	33.72	S	JUL 12	33.08	S
JUL 16	35.09	S	MAY 25	34.08	S	JAN 18, 1978	33.70	S	AUG 08	32.96	S
SEP 16	34.94	S	JUL 07	34.02	S	FFB 08	33.72	S	SEP 17	32.90	S
OCT 21	34.88	S	AUG 12	33.98	S	MAR 10	33.52	S			

WELL 06N 44E 22DDC1

SITE NUMBER 434936111143601

DRILLED OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 8 IN (20 CM), DEPTH 257.5 FT (84.0 M), CASED TO 242 FT (73.8 M). LSD 6,027.70 FT (1,837.243 M) NGVD OF 1929. MP NO. 1 TOP OF CASING, 1.65 FT (0.503 M) ABOVE LSD (SINCE JULY 18, 1958).

RECORDS AVAILABLE 1958, 1959 - 1966, 1967 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 177.68 FEET BELOW LAND SURFACE DATUM MAR 17, 1972.

LOWEST WATER LEVEL 201.69 FEET BELOW LAND SURFACE DATUM APR 23, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 18, 1976	198.89 S	AUG 11, 1977	199.46 S	DEC 21, 1977	199.22 S	JUN 15, 1978	194.07 S
SEP 10	193.83 S	SFP 09	199.86 S	FFB 16, 1978	200.52 S	JUL 28	190.28 S
MAR 10, 1977	198.95 S	19	199.89 S	MAR 29	195.81 S	SEP 15	196.60 S
JUN 24	198.18 S	NOV 04	200.37 S	MAY 11	195.42 S		

WELL 04N 45E 13ADA1

SITE NUMBER 434032111045001

DRILLED OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 16 IN (41 CM), DEPTH 304.0 FT (92.7 M), CASED TO 301 FT (91.7 M), PERFORATED 230-240 FT (70.1-73.2 M), 255-295 FT (77.7-89.9 M). LSD 6,275.39 FT (1,912.739 M) NGVD OF 1929, WESTERN WYOMING SUPPLEMENTARY ADJUSTMENT OF 1940. RECORDER INSTALLED JULY 25, 1959. RECORDER REMOVED NOV. 24, 1971. DIGITAL RECORDER INSTALLED JUNE 6, 1977. MP NO. 3 TOP OF CASING EAST SIDE, 1.00 FT (0.305 M) ABOVE LSD (SINCE JULY 25, 1959).

RECORDS AVAILABLE 1958, 1959 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 122.79 FEET BELOW LAND SURFACE DATUM JUN 30, 1971.

LOWEST WATER LEVEL 203.52 FEET BELOW LAND SURFACE DATUM MAR 29, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATFP LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 18, 1976	198.30 S	SEP 30, 1977	199.22	FFB 10, 1978	201.81	MAY 25, 1978	191.76
SEP 10	177.12 S	OCT 05	199.62	15	202.00	31	188.20
MAR 10, 1977	198.23 S	10	200.10	20	202.21	JUN 05	183.62
JUN 06	197.28 S	15	200.35	25	202.41	10	178.79
10	190.12	20	200.62	28	202.53	15	167.69
15	180.32	25	200.85	MAR 05	202.72	20	161.80
20	177.42	31	201.06	10	202.83	25	158.45
25	176.82	NOV 05	201.13	15	203.08	30	152.36
30	177.06	10	201.34	20	203.23	JUL 05	145.44
JUL 05	178.19	15	201.41	25	203.42	10	142.05
10	180.05	20	201.63	29	203.52	15	140.30
15	182.29	25	201.75	30	203.52	20	139.21
20	184.53	30	201.91	31	203.52	25	142.09
25	186.54	DEC 05	202.12	APR 05	203.27	31	147.30
31	188.54	10	202.06	10	202.71	AUG 05	151.64
AUG 05	189.84	15	201.70	15	201.93	10	155.82
10	191.03	20	201.59	20	200.92	15	160.22
15	192.36	25	201.26	24	199.99	20	164.35
20	193.58	31	201.17	25	199.78	25	168.12
25	194.62	JAN 05, 1978	201.18	30	198.58	31	171.99
31	195.60	10	201.17	MAY 05	197.59	SFP 05	174.57
SFP 05	196.36	15	201.20	10	196.61	10	176.77
10	197.02	20	201.37	11	196.42	15	178.79
15	197.59	25	201.36	12	196.40	20	180.58
20	198.18	31	201.43	15	195.28	25	182.10
25	198.70	FEB 05	201.61	20	194.17	30	183.44

## TWIN FALLS COUNTY

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WELL 085 12E 24CCC1

SITE NUMBER 424243115002401

DRILLED IRRIGATION WATER-TABLE WELL IN BANBURY FORMATION, DIAM 12 IN (30 CM), REPORTED DEPTH 500 FT (152.4 M), CASED TO 46 FT (14.0 M), LSD ABOUT 3,470 FT (1,058 M) NGVD OF 1929, MP NO. 2 TOP OF HOLE INSIDE PUMPRASE SOUTH SIDE, 0.50 FT (0.152 M) ABOVE LSD (SINCE JUNE 3, 1968).

RECORDS AVAILABLE 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 200.84 FEET BELOW LAND SURFACE DATUM APR 25, 1967.

LOWEST WATER LEVEL 294.64 FEET BELOW LAND SURFACE DATUM OCT 21, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 10, 1976	314.15 P S	MAR 09, 1977	241.92 S	MAR 24, 1978	246.04 S		
SEP 21	254.35 S	SEP 12	250.38 S	SEP 11	251.06 S		

WELL 085 13E 23CCD1

SITE NUMBER 424242114541601

DRILLED DOMESTIC WATER-TABLE WELL IN BANBURY FORMATION, DIAM 6 IN (15 CM), REPORTED DEPTH 100 FT (30.5 M), CASED TO 50 FT (15.2 M), LSD ABOUT 3,390 FT (1,033 M) NGVD OF 1929, MP NO. 1 HOLE IN TOP OF 6-IN (15-CM) CASING, 0.80 FT (0.244 M) ABOVE LSD (SINCE FEB. 16, 1967).

RECORDS AVAILABLE 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 65.27 FEET BELOW LAND SURFACE DATUM NOV 12, 1975.

LOWEST WATER LEVEL 73.34 FEET BELOW LAND SURFACE DATUM AUG 12, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 12, 1976	69.03 S	SEP 21, 1976	67.42 S	JUL 12, 1977	70.49 S	MAY 16, 1978	70.44 S
MAR 28	70.19 S	NOV 16	67.76 S	SEP 12	66.09 S	JUL 05	69.85 S
MAY 10	71.78 P S	JAN 18, 1977	69.62 S	NOV 14	65.37 S	SEP 11	65.44 S
JUN 20	71.63 P S	MAR 09	70.19 R S	JAN 23, 1978	67.68 S		
JUL 12	70.82 S	MAY 16	71.14 S	MAR 24	69.49 S		

WELL 095 13E 20CCD1

SITE NUMBER 423724114572101

DRILLED IRRIGATION WATER-TABLE WELL IN IDAVADA VOLCANICS, DIAM 20 IN (51 CM), REPORTED DEPTH 920 FT (280.4 M), CASED TO 165 FT (50.3 M), LSD ABOUT 3,805 FT (1,160 M) NGVD OF 1929, JUNE 17, 1968, WELL HAD FILLED IN TO A DEPTH OF 790.4 FT (240.9 M), RECORDER INSTALLED JUNE 4, 1968, RECORDER REMOVED AUG. 10, 1971, MP NO. 1 TOP OF 20-IN (51-CM) CASING EAST SIDE, 0.70 FT (0.213 M) ABOVE LSD (SINCE FEB. 16, 1967).

RECORDS AVAILABLE 1967, 1968 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 440.80 FEET BELOW LAND SURFACE DATUM SEP 23, 1967.

LOWEST WATER LEVEL 454.79 FEET BELOW LAND SURFACE DATUM SEP 21, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 12, 1976	452.47 S	SEP 21, 1976	454.79 S	JUL 12, 1977	454.19 S	MAY 16, 1978	451.15 V
MAR 28	451.82 S	NOV 16	453.79 S	SEP 12	454.05 T	JUL 05	453.33 V
MAY 10	451.86 S	JAN 18, 1977	452.92 S	NOV 14	453.17 T	SEP 11	453.36 V
JUN 20	453.00 S	MAR 09	451.20 S	JAN 23, 1978	452.41 T		
JUL 13	453.86 S	MAY 16	452.83 S	MAR 24	452.10 V		

WELL 10S 12E 1108D1

SITE NUMBER 423406115003401

DRILLED UNUSED IRRIGATION WATER-TABLE WELL IN INDAVADA VOLCANICS, DIAM 24 IN (61 CM), DEPTH 687.9 FT (209.7 M), CASIED TO 6 FT (1.8 M). LSD 3,750 FT (1,143 M) NGVD OF 1929. MP NO. 1 TOP OF CASING NORTHEAST SIDE, 0.50 FT (0.152 M) ABOVE LSD (SINCE AUG. 2, 1962).

RECORDS AVAILABLE 1962, 1968 TO CURRENT YEAR.

HIGHEST WATER LEVEL 326.32 FEET BELOW LAND SURFACE DATUM AUG 02, 1962.

LOWEST WATER LEVEL 423.20 FEET BELOW LAND SURFACE DATUM SEP 12, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 12, 1976	367.22	S	SEP 21, 1976	402.18	S	JUL 12, 1977	408.40	S	MAY 16, 1978	373.31	S
MAR 28	361.86	S	NOV 16	381.67	S	SFP 12	423.20	S	JUL 05	402.45	S
MAY 10	362.28	S	JAN 18, 1977	370.45	S	NOV 14	398.46	S	SEP 11	420.09	S
JUN 20	388.05	S	MAR 09	364.10	S	JAN 23, 1978	380.49	S			
JUL 13	399.99	S	MAY 16	385.74	S	MAR 24	371.58	S			

WELL 10S 18E 200DD1

SITE NUMBER 423207114215301

DRILLED PUBLIC SUPPLY WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 8 TO 6 IN (20 TO 15 CM), REPORTED DEPTH 1,200 FT (365.8 M), 8-IN (20-CM) CASING 0-735 FT (0-224.0 M), 6-IN (15-CM) CASING 735-1,110 FT (224.0-338.3 M), PERFORATED 300-1,110 FT (91.4-338.3 M). LSD ABOUT 3,919 FT (1,194 M) NGVD OF 1929. RECORDER INSTALLED AUG. 13, 1951. RECORDER REMOVED FEB. 12, 1952. MP NO. 5 TOP OF HOLE IN CASING COVER WEST SIDE, 1.30 FT (0.396 M) ABOVE LSD (SINCE MAR. 19, 1973).

RECORDS AVAILABLE 1951, 1953 - 1961, 1962 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 164.70 FEET BELOW LAND SURFACE DATUM SEP 14, 1972.

LOWEST WATER LEVEL 178.47 FEET BELOW LAND SURFACE DATUM MAY 19, 1955.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 10, 1976	173.32	S	SEP 22, 1976	172.34	S	JUL 13, 1977	238.50	P S	JAN 24, 1978	174.00	S
MAR 25	174.53	S	NOV 16	171.95	S	SFP 12	176.63	S	MAR 24	176.03	S
MAY 11	176.74	S	JAN 18, 1977	173.08	S	NOV 15	172.39	S	MAY 16	177.60	S
JUN 20	177.42	S	MAR 09	174.44	S	16	173.68	S	JUL 06	178.40	S
JUL 14	177.55	S	MAY 17	176.51	S	DFC 14	175.70	T	SEP 12	173.54	S

WELL 11S 15E 07ACH1

SITE NUMBER 422913114442601

DRILLED OBSERVATION WATER-TABLE WELL IN BANBURY FORMATION, DIAM 6 IN (15 CM), DEPTH 347.0 FT (105.8 M), CASIED TO 275 FT (83.8 M), PERFORATED 225-275 FT (68.6-83.8 M). LSD 4,108.14 FT (1,252.161 M) NGVD OF 1929. PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. MP NO. 2 TOP EDGE OF CASING CAP WEST SIDE, 1.05 FT (0.320 M) ABOVE LSD (SINCE NOV. 15, 1960).

RECORDS AVAILABLE 1960 - 1964, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 220.44 FEET BELOW LAND SURFACE DATUM SEP 21, 1976.

LOWEST WATER LEVEL 237.89 FEET BELOW LAND SURFACE DATUM MAY 22, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
SEP 21, 1976	220.44	S	NOV 14, 1977	224.13	S	JAN 24, 1978	229.70	S	JUL 05, 1978	232.40	S
MAR 09, 1977	230.95	S	16	224.37	S	MAR 24	232.50	S	SEP 11	221.86	S
SEP 12	220.96	S	DEC 19	227.42	S	MAY 16	234.31	S			

WELL 11S 17E 25DDD2

SITE NUMBER 422600114240901

DRILLED OBSERVATION WATER-TABLE WELL IN SNAKERIVER GROUP, DIAM 6 IN (15 CM), DEPTH 351.6 FT (107.2 M), CASIED TO 175 FT (53.3 M), PERFORATED 145-175 FT (44.2-53.3 M), LSD 4,138.54 FT (1,261.427 M) NGVD OF 1929, RECORDER INSTALLED OCT. 27, 1960, RECORDER REMOVED AUG. 11, 1971, MP NO. 3 TOP OF CASING NORTH SIDE, 1.50 FT (0.457 M) ABOVE LSD (SINCE AUG. 21, 1961).

RECORDS AVAILABLE 1960 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 77.23 FEET BELOW LAND SURFACE DATUM AUG 24, 1965.

LOWEST WATER LEVEL 97.23 FEET BELOW LAND SURFACE DATUM APR 06, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 28, 1976	90.18	S	SEP 12, 1977	84.59	S	MAR 24, 1978	94.14	S	SEP 12, 1978	84.27	S
OCT 28	84.18	S	NOV 15	88.99	S	MAY 16	89.84	S			
MAR 09, 1977	90.70	S	JAN 24, 1978	92.54	S	JUL 06	85.62	S			

DRILLED UNUSED WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 14 IN (36 CM), REPORTED DEPTH 860 FT (262.1 M), CASSED TO 16 FT (4.9 M), LSD ABOUT 4,229 FT (1,289 M) NGVD OF 1929. JULY 17, 1968, WELL HAD FILLED IN TO A DEPTH OF 834.0 FT (254.2 M). RECORDER INSTALLED AUG. 17, 1961. MP NO. 4 TOP OF CASING NORTHEAST SIDE, 0.40 FT (0.122 M) ABOVE LSD (SINCE JULY 26, 1966).

RECORDS AVAILABLE 1959, 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 315.93 FEET BELOW LAND SURFACE DATUM JUN 16, 1974.

LOWEST WATER LEVEL 328.50 FEET BELOW LAND SURFACE DATUM NOV 18, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVFL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 02, 1976	321.83	SEP 25, 1976	321.76	JUL 31, 1977	321.54 E	MAR 26, 1978	323.99
05	321.39	30	322.03	AUG 05	321.66 E	31	323.65
10	321.71	OCT 05	322.28	10	322.10 E	APR 05	323.81
15	321.67	10	322.13	15	322.32 E	10	323.75
20	321.65	15	322.26	20	322.62 E	15	323.33
25	321.23	20	322.57	23	322.70	20	323.15
31	321.44	25	322.60	SFP 13	324.06	25	323.07
FFR 05	320.95	31	322.65	15	324.02	30	322.92
10	321.22	NOV 03	322.84	20	324.48	MAY 05	322.89
15	320.84	17	322.90	25	324.65	10	322.77
20	320.97	20	322.75	30	325.02	14	322.40
25	320.68	25	322.38	OCT 05	325.03	15	322.45
29	320.34	30	322.77	10	325.46	19	322.82
MAR 05	320.83	DEC 05	322.59	15	325.53	20	322.62
10	320.15	10	322.85	20	325.43	25	322.52
15	320.46	15	322.70	25	325.67	31	322.44
20	320.76	20	322.56	NOV 15	325.79	JUN 05	322.33
25	319.68	25	322.52	20	326.05	09	322.02
31	319.77	31	322.15	25	326.06	10	322.09
APR 05	319.53	JAN 18, 1977	322.09 S	30	325.99	15	322.24
10	319.72	20	321.95	DEC 05	325.96	20	322.21
15	319.13	24	322.15	10	325.91	25	322.35
20	319.39	25	321.95	15	325.33	30	322.35
25	319.18	29	321.87	20	326.35	JUL 05	322.46
MAY 11	319.04	MAR 10	320.96 S	25	325.94	07	322.32
15	318.87	15	320.85 S	31	325.74	10	322.37
20	318.75	20	320.76 S	JAN 01, 1978	325.93	15	322.53
25	318.52	25	320.43	05	325.35	20	322.81
31	318.79	31	320.35	10	325.23	25	323.15
JUN 05	318.48	APR 05	320.46	15	324.89	31	323.33
10	318.19	10	320.21	20	325.41	AUG 05	323.69
15	318.44	15	320.08	24	325.40	10	323.82
16	318.09	20	319.84	25	325.35	15	324.26
20	318.19	25	319.68	31	324.95	20	324.48
25	318.25	MAY 20	319.61	FFR 05	324.84	25	324.41
30	318.06	23	319.2	10	324.63	31	325.16
JUL 05	318.44	31	319.67	15	324.84	SFP 05	325.50
10	318.48	JUN 05	319.66	20	324.89	10	325.75
15	318.63	10	319.52	25	324.49	12	325.94
20	318.72	15	319.76	28	324.44	15	326.18
25	318.90	20	319.72	MAR 05	324.28	17	325.92
31	319.06	25	319.90	10	324.29	20	326.58
AUG 05	319.31	JUL 13	320.60	15	324.57	25	326.56
10	319.60	15	320.64	20	324.14	30	326.74
15	319.58	20	320.86 E	22	323.82		
20	320.04	25	321.23	25	324.21		

WELL 11S 19E 31ADD1

SITE NUMBER 422529114160701

DRILLED UNUSED WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 8 IN (20 CM), REPORTED DEPTH 350 FT (106.7 M), CASED TO 140 FT (42.7M), LSD 4,197.70 FT (1,279.459 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MP NO. 2 TOP OF HOLE IN WELL SEAL NORTH SIDE, 4.50 FT (1.372 M) BELOW LSD (SINCE MAY 18, 1967).

RECORDS AVAILABLE 1951 - 1954, 1955 - 1961, 1962 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 118.75 FEET BELOW LAND SURFACE DATUM MAY 03, 1952.

LOWEST WATER LEVEL 159.68 FEET BELOW LAND SURFACE DATUM NOV 12, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 10, 1976	135.31	S	SEP 22, 1976	172.10	P S	JUL 13, 1977	151.62	S
MAR 25	136.45	R S	NOV 17	142.19	S	SEP 13	164.70	R S
MAY 11	134.57	S	JAN 18, 1977	139.92	S	NOV 15	155.18	S
JUN 20	136.92	S	MAR 10	137.25	S	JAN 24, 1978	149.38	S
JUL 14	143.28	T T	MAY 17	141.58	S	MAR 26	146.50	R S
						MAY 19, 1978	148.04	S
						JUL 06	189.55	P V
						SEP 12	175.99	R S

WELL 11S 20E 10DCC1

SITE NUMBER 422835114055201

DRILLED IRRIGATION WATER-TABLE WELL IN SNAKE RIVER GROUP, DIAM 16 IN (41 CM), DEPTH 250 FT (76.2 M), CASED TO 28 FT (8.5 M), LSD 4,174.82 FT (1,272.485 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947, MAR. 31, 1971, WELL HAD FILLED IN TO A DEPTH OF 219.4 FT (66.9 M), MP NO. 1 TAP HOLE INSIDE PUMPBASE NORTHWEST SIDE, 5.00 FT (1.524 M) BELOW LSD (SINCE JULY 24, 1959).

RECORDS AVAILABLE 1951 - 1952, 1953 - 1961, 1962 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 125.35 FEET BELOW LAND SURFACE DATUM OCT 25, 1956.

LOWEST WATER LEVEL 170.62 FEET BELOW LAND SURFACE DATUM SEP 12, 1963.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
MAR 25, 1976	149.10	S	MAR 10, 1977	150.39	S	MAR 26, 1978	156.70	N S
SEP 23	149.06	S	SEP 14	164.30	S			

WELL 11S 20E 33DAD1

SITE NUMBER 422518114062701

DRILLED UNUSED WATER-TABLE WELL IN IDAVADA VOLCANICS, DIAM 14-8-6 IN (36-20-15 CM), REPORTED DEPTH 680 FT (207.3 M), 14-IN (36-CM) CASING 0-40 FT (0-12.2 M), PERFORATED 8-IN (20-CM) LINER 312-509 FT (95.1-155.1 M), PERFORATED 6-IN (15-CM) LINER 501-638 FT (152.7-194.5 M). LSD 4,245.03 FT (1,293.885 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. OCT. 14, 1968, WELL HAD FILLED IN TO A DEPTH OF 386.0 FT (117.6 M), MP NO. 3 TOP OF HOLE IN 55-GAL (208-L) DRUM WEST SIDE, 1.95 FT (0.594 M) ABOVE LSD (SINCE SEPT. 16, 1969).

RECORDS AVAILABLE 1951 - 1953, 1954 - 1961, 1962 - 1968, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 37.82 FEET BELOW LAND SURFACE DATUM DEC 11, 1951.

LOWEST WATER LEVEL 211.57 FEET BELOW LAND SURFACE DATUM AUG 10, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
JAN 10, 1976	165.89	S	SEP 23, 1976	180.25	S	SEP 14, 1977	186.52	S	JUL 06, 1978	180.36	S
MAR 25	162.20	S	NOV 17	176.70	S	NOV 15	179.92	S	SEP 12	191.54	S
MAY 11	161.89	S	MAR 10, 1977	165.31	S	JAN 24, 1978	173.66	S			
JUN 20	168.34	S	MAY 17	168.99	S	MAR 26	169.61	S			
JUL 14	186.11	S	JUL 13	179.46	S	MAY 19	170.05	S			

WELL 14S 15E 28RAD2

SITE NUMBER 421057114421101

DRILLED OBSERVATION WATER-TABLE WELL IN IDAVADA VOLCANICS, DIAM 6 IN (15 CM), DEPTH 455 FT (138.7 M), CASING TO 341 FT (103.9 M), PERFORATED 231-341 FT (70.4-103.9 M). LSD 4,976.12 FT (1,516.721 M) NGVD OF 1929, PACIFIC NORTHWEST SUPPLEMENTARY ADJUSTMENT OF 1947. AUG. 11, 1971, WELL HAD FILLED IN TO A DEPTH OF 420.4 FT (128.1 M). RECORDER INSTALLED APR. 19, 1961. RECORDER REMOVED AUG. 11, 1971. MP NO. 2 TOP OF CASING WEST SIDE, 2.10 FT (0.640 M) ABOVE LSD (SINCE APR. 19, 1961).

RECORDS AVAILABLE 1960, 1961 - 1971, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 90.76 FEET BELOW LAND SURFACE DATUM NOV 17, 1965.

LOWEST WATER LEVEL 120.02 FEET BELOW LAND SURFACE DATUM SEP 12, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL	
FEB 12, 1976	101.98	S	JUL 13, 1976	118.07	S S	MAY 16, 1977	110.01	S	MAR 04, 1978	107.67	S
MAR 27	100.75	S	SEP 21	109.15	S	JUL 13	118.44	S	MAY 20	112.58	S
MAY 12	109.13	S S	NOV 16	105.22	S	SEP 12	114.28	S	JUL 05	121.81	S S
28	113.76	S S	JAN 18, 1977	103.38	S	NOV 15	109.94	S	SEP 12	120.02	S
JUN 17	109.33	S S	MAR 09	102.15	S	JAN 24, 1978	108.46	S			

## FOOTNOTE EXPLANATION

SITE STATUS: D DRY, F FLOWED RECENTLY, F FLOWING,  
G NEARBY FLOWING, N MEASUREMENT DISCONTINUED,  
O OBSTRUCTION, P PUMPING, R RECENTLY PUMPED,  
S NEARBY PUMPING, V FOREIGN SUBSTANCE, W WELL DESTROYED.

METHOD OF MEASUREMENT: G PRESSURE GAGE, M MANOMETER,  
S STEEL TAPE, T ELECTRIC TAPE, V CALIBRATED ELECTRIC TAPE.

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	LOCAL IDENT- I- FIER	COUNTY	DATE OF SAMPLE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)
BANNOCK COUNTY									
423702111574700	42 37 02	111 57 47	00	09S 38E 25BRB1S	005	78-04-06	0830	--	--
BEAR LAKE COUNTY									
415036115145201	41 50 36	115 14 52	01	46N 60E 13ACC1S	007	78-06-27	1300	--	--
BINGHAM COUNTY									
432533112504901	43 25 33	112 50 49	01	01N 31E 08CDD1	011	78-06-06	1000	--	--
431907112560201	43 19 07	112 56 02	01	01S 30E 22DBD1	011	78-06-05	1645	--	--
431212112185801	43 12 12	112 18 58	01	02S 35E 35DAA1	011	78-04-06	1515	--	--
431052112211101	43 10 52	112 21 11	01	03S 35E 10RBA1	011	78-04-06	1430	--	--
430611112322000	43 06 11	112 32 20	00	04S 33E 01ADC1S	011	78-04-08	1300	--	--
BUTTE COUNTY									
432424113165401	43 24 24	113 16 54	01	01N 27E 22ACB1	023	78-06-05	1330	--	--
433655113174501	43 36 55	113 17 45	01	03N 26E 01DAA1	023	78-09-12	1315	132.50	225
433657113201001	43 36 57	113 20 10	01	03N 26E 03DAA1	023	78-08-04	1330	E102.30	240
433517113190001	43 35 17	113 19 00	01	03N 26E 14DAA1	023	78-07-24	1250	E59.23	200
433707113165001	43 37 07	113 16 50	01	03N 27E 06ADC1	023	78-09-12	1000	23.94	62
433631113143701	43 36 31	113 14 37	01	03N 27E 09ABR1	023	78-09-13	0815	--	503
434239113204201	43 42 39	113 20 42	01	04N 26E 03ABR1	023	78-08-11	0945	E7.02	170
434239113221801	43 42 39	113 22 18	01	04N 26E 04RBA1	023	78-08-10	1230	30.71	160
434148113231701	43 41 48	113 23 17	01	04N 26E 05CDC1	023	78-08-10	0845	69.52	215
433908113203101	43 39 08	113 20 31	01	04N 26E 27ABA1	023	78-08-10	1900	41.87	114
434735113252801	43 47 35	113 25 28	01	05N 25E 01ACC1	023	78-08-02	1545	77.50	200
434649113235401	43 46 49	113 23 54	01	05N 26E 07AAC1	023	78-08-04	0920	141.10	177
434635113231901	43 46 35	113 23 19	01	05N 26E 08CAR1	023	78-08-08	1700	118.50	202
434538113205701	43 45 38	113 20 57	01	05N 26E 15CAB1	023	78-08-08	1130	--	127
434608113215501	43 46 08	113 21 55	01	05N 26E 16ABR1	023	78-08-03	1015	51.76	170
434508113223101	43 45 08	113 22 31	01	05N 26E 21RBC1	023	78-08-04	0945	49.67	--
434335113211501	43 43 35	113 21 15	01	05N 26E 27CCC1	023	78-08-10	1545	21.92	160
434423113223101	43 44 23	113 22 31	01	05N 26E 28RBR1	023	78-08-09	1000	27.80	162
434347113225801	43 43 47	113 22 58	01	05N 26E 290BD1	023	78-08-09	1230	60.67	180
434258113230601	43 42 58	113 23 06	01	05N 26E 32DRC1	023	78-08-09	1830	122.38	250
434754112594401	43 47 54	112 59 44	01	05N 29E 03RBR1	023	78-07-20	1700	131.80	585
434702112594301	43 47 02	112 59 43	01	05N 29E 03CCC1	023	78-09-11	1510	--	265
434558112585301	43 45 58	112 58 53	01	05N 29E 15ABD1	023	78-09-11	1625	262.40	540
434742112543201	43 47 42	112 54 32	01	05N 30E 05BAC1	023	78-07-21	1130	278.10	650
435250113273301	43 52 50	113 27 33	01	06N 25E 03DAB1	023	78-07-31	1515	38.82	205
435211113260801	43 52 11	113 26 08	01	06N 25E 12BCB1	023	78-08-01	1100	26.70	150
435100113255301	43 51 00	113 25 53	01	06N 25E 13CBA1	023	78-08-01	0915	49.82	175
434809113263701	43 48 09	113 26 37	01	06N 25E 35OCB1	023	78-08-02	1200	E23.29	194
435233113244701	43 52 33	113 24 47	01	06N 26E 06CCB1	023	78-07-31	1730	78.07	195
434952113243501	43 49 52	113 24 35	01	06N 26E 19CDR1	023	78-08-01	1300	--	160
434954113215001	43 49 54	113 21 50	01	06N 26E 21DCB1	023	78-08-01	1530	106.80	220
435155113015401	43 51 55	113 01 54	01	06N 29E 08RCC1	023	78-07-19	1530	E110.00	200
434940113005601	43 49 40	113 00 56	01	06N 29E 20DD1	023	78-07-20	0920	71.00	118

## QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	ELEV. OF LAND SURFACE (FT. NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE (GPM)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	COLIFORM, TOTAL, IMMEDIATE (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
BANNOCK COUNTY--Continued											
423702111574700	78-04-06	--	--	--	404	7.2	--	9.0	--	--	--
BEAR LAKE COUNTY--Continued											
415036115145201	78-06-27	#280.00	--	10	35	6.1	--	4.0	--	--	--
BINGHAM COUNTY--Continued											
432533112504901	78-06-06	--	--	--	357	7.7	--	17.0	--	--	--
431907112560201	78-06-05	--	--	--	376	7.6	--	17.0	--	--	--
431212112185801	78-04-06	--	--	--	628	7.2	--	12.0	--	--	--
431052112211101	78-04-06	--	--	--	681	7.1	--	13.0	--	--	--
430611112322000	78-04-08	--	--	--	791	7.1	--	11.0	--	--	--
BUTTE COUNTY--Continued											
432424113165401	78-06-05	--	--	--	315	7.7	--	15.0	--	--	--
433655113174501	78-09-12	--	5	E15	435	7.8	--	12.0	--	<1	<1
433657113201001	78-08-04	--	--	--	404	7.7	32.0	9.5	--	K1	<1
433517113190001	78-07-24	5307.00	30	E1233	488	7.5	29.5	11.5	--	<1	<1
433707113165001	78-09-12	--	5	E25	505	7.5	--	11.0	--	<1	<1
433631113143701	78-09-13	--	.0	--	580	7.4	--	27.0	--	--	--
434239113204201	78-08-11	--	--	E2700	462	7.7	--	10.0	--	K1	<1
434239113221801	78-08-10	--	--	E2925	445	7.6	27.5	10.5	--	K2	<1
434148113231701	78-08-10	--	--	E2869	478	7.6	16.5	9.5	--	<1	<1
433908113203101	78-08-10	--	--	--	447	7.6	26.0	11.0	--	--	--
434735113252801	78-08-02	--	--	--	445	7.8	27.5	9.5	--	<1	<1
434649113235401	78-08-04	--	--	E25	329	7.9	13.5	10.5	--	K10	<1
434635113231901	78-08-08	--	--	--	424	7.9	32.5	10.5	--	<1	<1
434538113205701	78-08-08	--	--	--	411	7.7	24.5	9.5	--	<1	<1
434608113215501	78-08-03	--	--	--	445	7.6	19.5	9.0	--	<1	<1
434508113223101	78-08-04	--	--	--	393	7.6	21.5	12.0	--	K12	<1
434335113211501	78-08-10	--	--	E2943	440	7.5	32.0	12.0	--	K5	<1
434423113223101	78-08-09	--	--	E4000	275	7.7	20.5	10.5	--	K8	<1
434347113225801	78-08-09	--	--	--	325	7.9	29.5	10.0	--	<1	<1
434258113230601	78-08-09	--	--	--	322	7.8	31.0	9.5	--	<1	<1
434754112594401	78-07-20	--	--	E3600	322	7.4	24.0	11.5	--	<1	<1
434702112594301	78-09-11	--	15	--	498	7.5	--	10.0	--	K2	<1
434558112585301	78-09-11	--	5	--	243	8.0	--	14.5	--	<1	<1
434742112543201	78-07-21	--	--	E3600	335	7.3	20.0	11.5	--	<1	<1
435250113273301	78-07-31	--	--	--	467	8.1	25.0	10.5	--	<1	<1
435211113260801	78-08-01	--	--	--	452	7.6	26.5	9.0	--	<1	<1
435100113255301	78-08-01	--	--	--	499	7.6	18.5	9.0	--	<1	<1
434809113263701	78-08-02	--	--	E1300	337	8.0	26.5	8.5	--	<1	<1
435233113244701	78-07-31	--	--	E2250	329	7.7	29.5	9.5	--	41	<1
434952113243501	78-08-01	--	--	--	368	7.6	26.0	9.5	--	<1	<1
434954113215001	78-08-01	--	--	E1422	390	7.8	25.5	11.0	--	K2	<1
435155113015401	78-07-19	--	--	>500	403	7.4	31.5	10.0	--	<1	<1
434940113005601	78-07-20	--	--	E15	584	7.2	18.5	12.0	--	<1	<1

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	STREP-TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	
BANNOCK COUNTY--Continued											
423702111574700	78-04-06	--	200	21	46	21	7.9	8	.2	1.2	220
BEAR LAKE COUNTY--Continued											
415036115145201	78-06-27	--	5	0	1.9	.0	1.7	31	.3	2.8	13
BINGHAM COUNTY--Continued											
432533112504901	78-06-06	--	150	20	36	15	15	17	.5	3.3	160
431907112560201	78-06-05	--	150	16	36	14	17	20	.6	2.5	160
431212112185801	78-04-06	--	240	13	74	24	16	11	.4	4.0	330
431052112211101	78-04-06	--	300	49	77	25	18	12	.5	4.3	300
430611112322000	78-04-08	--	290	57	67	29	46	25	1.2	5.3	280
BUTTE COUNTY--Continued											
432424113165401	78-06-05	--	140	18	35	13	8.3	11	.3	2.0	150
433655113174501	78-09-12	--	210	14	63	13	5.6	5	.2	1.2	240
433657113201001	78-08-04	--	220	23	64	14	7.5	7	.2	1.3	240
433517113190001	78-07-24	--	210	5	62	13	20	17	.6	1.6	250
433707113165001	78-09-12	--	240	23	70	17	11	9	.3	1.5	270
433631113143701	78-09-13	--	210	0	51	21	33	24	1.0	7.1	270
434239113204201	78-08-11	--	230	25	69	15	7.6	7	.2	1.4	250
434239113221801	78-08-10	--	240	35	69	16	11	9	.3	1.5	250
434148113231701	78-08-10	--	240	27	71	15	13	11	.4	1.7	260
433908113203101	78-08-10	--	240	27	73	14	7.2	6	.2	1.4	260
434735113252801	78-08-02	--	220	23	66	13	8.0	7	.2	1.8	240
434649113235401	78-08-04	--	130	0	41	5.7	13	18	.5	1.2	170
434635113231901	78-08-08	--	210	5	66	11	8.4	8	.3	1.5	250
434538113205701	78-08-08	--	210	38	56	16	10	10	.3	1.1	210
434608113215501	78-08-03	--	230	33	67	14	7.2	6	.2	1.4	240
434508113223101	78-08-04	--	140	0	42	7.8	7.5	11	.3	1.2	220
434335113211501	78-08-10	--	220	23	62	16	4.8	4	.1	1.8	240
434423113223101	78-08-09	--	140	28	43	8.5	7.0	10	.3	.9	140
434347113225801	78-08-09	--	160	12	45	11	6.5	8	.2	1.2	180
434258113230601	78-08-09	--	--	--	--	13	7.0	--	--	1.3	160
434754112594401	78-07-20	--	140	13	33	13	7.1	10	.3	.9	150
434702112594301	78-09-11	--	250	22	68	20	9.4	7	.3	1.6	280
434558112585301	78-09-11	--	110	0	24	11	11	18	.5	1.5	130
434742112543201	78-07-21	--	160	4	37	16	6.1	8	.2	1.3	190
435250113273301	78-07-31	--	220	26	58	19	5.1	5	.1	1.0	240
435211113260801	78-08-01	--	210	0	61	15	3.3	3	.1	.8	260
435100113255301	78-08-01	--	250	12	71	17	10	8	.3	1.2	290
434809113263701	78-08-02	--	150	27	47	7.5	4.5	6	.2	1.2	150
435233113244701	78-07-31	--	180	0	49	14	11	12	.4	.9	220
434952113243501	78-08-01	--	120	0	37	7.7	4.8	8	.2	.8	200
434954113215001	78-08-01	--	180	16	39	19	5.2	6	.2	.8	200
435155113015401	78-07-19	--	200	45	46	21	7.6	8	.2	1.1	190
434940113005601	78-07-20	--	270	28	70	24	22	15	.6	1.6	300

## QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	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 SI02)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
BANNOCK COUNTY--Continued										
423702111574700	78-04-06	0	180	22	9.1	15	.1	15	230	.31
BEAR LAKE COUNTY--Continued										
415036115145201	78-06-27	0	11	17	2.7	.4	.1	33	49	.07
BINGHAM COUNTY--Continued										
432533112504901	78-06-06	0	130	5.1	18	16	.6	31	218	.30
431907112560201	78-06-05	0	130	6.4	20	21	1.0	30	225	.31
431212112185801	78-04-06	0	270	33	36	12	.6	27	366	.50
431052112211101	78-04-06	0	250	38	46	23	.4	26	382	.52
430611112322000	78-04-08	0	230	36	64	58	.7	29	446	.61
BUTTE COUNTY--Continued										
432424113165401	78-06-05	0	120	4.8	18	9.5	.3	24	186	.25
433655113174501	78-09-12	0	200	6.1	20	5.7	.2	14	247	.34
433657113201001	78-08-04	0	197	7.7	21	6.5	.2	15	255	.35
433517113190001	78-07-24	0	205	13	23	12	.3	17	283	.28
433707113165001	78-09-12	0	220	14	24	6.6	.4	21	292	.40
433631113143701	78-09-13	0	220	17	42	18	.5	30	340	.46
434239113204201	78-08-11	0	205	8.0	17	5.1	.1	13	251	.35
434239113221801	78-08-10	0	205	10	25	6.0	.1	16	277	.37
434148113231701	78-08-10	0	213	10	24	6.9	.1	18	278	.38
433908113203101	78-08-10	0	213	10	21	5.0	.2	14	264	.36
434735113252801	78-08-02	0	197	6.1	20	3.3	.1	17	257	.35
434649113235401	78-08-04	0	139	3.4	20	4.8	.1	6.4	177	.24
434635113231901	78-08-08	0	205	5.0	18	3.5	.1	15	247	.34
434538113205701	78-08-08	0	172	6.7	16	4.8	.1	13	221	.31
434608113215501	78-08-03	0	197	9.6	18	4.7	.1	14	250	.34
434508113223101	78-08-04	0	180	8.8	8.0	2.3	.1	16	196	.27
434335113211501	78-08-10	0	197	12	20	4.5	.1	14	242	.33
434423113223101	78-08-09	0	115	4.5	13	3.2	.1	16	161	.30
434347113225801	78-08-09	0	148	3.6	18	6.0	.2	14	195	.26
434258113230601	78-08-09	0	130	4.1	16	5.7	.2	13	--	--
434754112594401	78-07-20	0	120	9.6	16	6.5	.1	19	172	.23
434702112594301	78-09-11	0	230	14	20	13	.1	14	288	.39
434558112585301	78-09-11	0	110	2.1	16	4.8	.1	17	151	.21
434742112543201	78-07-21	0	156	15	17	8.5	.1	19	201	.28
435250113273301	78-07-31	0	200	3.1	9.2	2.3	.1	13	228	.31
435211113260801	78-08-01	0	213	10	14	3.8	.1	15	245	.33
435100113255301	78-08-01	0	238	12	23	6.6	.1	16	292	.39
434809113263701	78-08-02	0	123	2.4	18	3.6	.1	4.5	161	.22
435233113244701	78-07-31	0	180	7.0	20	18	.1	14	240	.33
434952113243501	78-08-01	0	160	8.0	8.1	2.0	.1	12	172	.23
434954113215001	78-08-01	0	164	5.1	10	4.6	.1	9.3	189	.25
435155113015401	78-07-19	0	160	12	21	23	.1	14	231	.31
434940113005601	78-07-20	0	250	30	37	17	.1	17	342	.47

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	NITRO-GEN, NO2+N03 SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)
BANNOCK COUNTY--Continued				
423702111574700	78-04-06	1.5	.01	10
BEAR LAKE COUNTY--Continued				
415036115145201	78-06-27	.04	.01	--
BINGHAM COUNTY--Continued				
432533112504901	78-06-06	1.0	.02	40
431907112560201	78-06-05	1.1	.01	60
431212112185801	78-04-06	2.1	.02	0
431052112211101	78-04-06	3.3	.02	10
430611112322000	78-04-08	2.0	.03	0
BUTTE COUNTY--Continued				
432424113165401	78-06-05	.53	.01	10
433655113174501	78-09-12	1.4	.01	80
433657113201001	78-08-04	1.7	.03	10
433517113190001	78-07-24	2.4	.00	80
433707113165001	78-09-12	1.6	.05	50
433631113143701	78-09-13	.92	.00	50
434239113204201	78-08-11	E.93	.03	140
434239113221801	78-08-10	2.0	.03	170
434148113231701	78-08-10	E2.3	.03	170
433908113203101	78-08-10	E.75	.02	110
434735113252801	78-08-02	2.2	.04	20
434649113235401	78-08-04	.28	.05	50
434635113231901	78-08-08	E1.3	.05	100
434538113205701	78-08-08	E.64	.03	130
434608113215501	78-08-03	1.1	.03	60
434508113223101	78-08-04	.54	.04	30
434335113211501	78-08-10	E.60	.03	110
434423113223101	78-08-09	E.83	.03	50
434347113225801	78-08-09	.70	.03	1100
434258113230601	78-08-09	.85	.03	300
434754112594401	78-07-20	.54	.02	530
434702112594301	78-09-11	.83	.03	50
434558112585301	78-09-11	.25	.01	50
434742112543201	78-07-21	.58	.02	50
435250113273301	78-07-31	.36	.03	40
435211113260801	78-08-01	.81	.03	40
435100113255301	78-08-01	.97	.03	60
434809113263701	78-08-02	.09	.06	50
435233113244701	78-07-31	.90	.03	50
434952113243501	78-08-01	.14	.02	30
434954113215001	78-08-01	.44	.03	50
435155113015401	78-07-19	.77	.01	60
434940113005601	78-07-20	1.1	.00	70

## QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENTIFIER	COUNTY	DATE OF SAMPLE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)
BUTTE COUNTY--Continued									
434938112563401	43 49 38	112 56 34	01	06N 29E 25ABB1	023	78-07-20	1330	E10.00	110
434912112585701	43 49 12	112 58 57	01	06N 29E 27DBB1	023	78-07-20	1130	82.00	132
434833112544901	43 48 33	112 54 49	01	06N 30E 31AAD1	023	78-07-21	1130	E246.00	524
435934113452401	43 59 34	113 45 24	01	08N 23E 29CAC1	023	78-07-25	1645	52.36	105
435945113091501	43 59 45	113 09 15	01	08N 28E 29RCC1	023	78-07-19	1000	71.25	150
435952113095201	43 59 52	113 09 52	01	08N 28E 30RDA1	023	78-07-19	1200	E107.00	220
440809113144001	44 08 09	113 14 40	01	09N 27E 04DBC1	023	78-07-18	1230	59.06	155
440740113145201	44 07 40	113 14 52	01	09N 27E 09BDB1	023	78-07-18	1420	E24.00	205
441052113171001	44 13 52	113 17 10	01	10N 27E 19CAA1	023	78-07-18	1000	45.65	128
CAMAS COUNTY									
435828116483501	43 58 28	116 48 35	01	07N 04W 03CBB1	025	77-11-03	1100	--	--
CUSTER COUNTY									
435158113282601	43 51 58	113 28 26	01	06N 25E 10RCC1	037	78-07-27	1615	15.40	145
435122113313701	43 51 22	113 31 37	01	06N 25E 18ABC1	037	78-07-27	1445	79.27	230
435639113382201	43 56 39	113 38 22	01	07N 24E 18AAA1	037	78-07-26	1600	80.45	125
435639113385401	43 56 39	113 38 54	01	07N 24E 18ABR1	037	78-07-27	0900	25.19	142
435450113365501	43 54 50	113 36 55	01	07N 24E 28RBD1	037	78-07-27	1015	4.38	115
435435113285401	43 54 35	113 28 54	01	07N 25E 28ACD1	037	78-07-27	1215	E103.00	297
435355113305801	43 53 55	113 30 58	01	07N 25E 32BCB1	037	78-07-27	1125	15.30	165
440323113533401	44 03 23	113 53 34	01	08N 22E 06ABC1	037	78-07-25	1230	E55.00	88
435941113490401	43 59 41	113 49 04	01	08N 22E 26CAB1	037	78-07-26	1215	13.36	86
440454113554301	44 04 54	113 55 43	01	09N 21E 25BCC1	037	78-07-26	1000	E73.49	>240
440744113535401	44 07 44	113 53 54	01	09N 22E 07ABC1	037	78-07-25	1100	E4.66	42
440436113511501	44 04 36	113 51 15	01	09N 22E 28CDB1	037	78-07-25	1500	E30.00	51
GOODING COUNTY									
430255114570501	43 02 55	114 57 05	00	04S 13E 30ADB1S	047	78-02-07	1650	--	--
					047	78-06-26	1140	--	--
425426114563101	42 54 26	114 56 31	01	06S 13E 17BAB1S	047	77-12-01	1300	--	--
					047	78-04-03	1100	--	--
					047	78-07-24	1130	--	--
425246114542601	42 52 46	114 54 26	01	06S 13E 27RBB1S	047	77-12-01	1500	--	--
					047	78-04-03	1200	--	--
425142114531601	42 51 42	114 53 16	01	06S 13E 35RCB1S	047	77-12-01	1100	--	--
					047	78-04-03	1245	--	--
					047	78-07-24	1300	--	--
425054114523901	42 50 54	114 52 39	01	07S 13E 01ACC1	047	77-12-07	1245	--	--
					047	78-04-03	1400	--	--
					047	78-07-24	1400	--	--
424933114515701	42 49 33	114 51 57	01	07S 14E 18BAR1	047	78-02-06	1345	--	--
					047	78-04-06	1330	--	--
424812114513701	42 48 12	114 51 37	01	07S 14E 19RBD1	047	78-07-24	1430	--	--
					047	77-12-07	1130	--	--
					047	78-07-24	1500	--	--

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE (GPM)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	COLIFORM, TOTAL, IMMEDIATE (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
BUTTE COUNTY--Continued											
434938112563401	78-07-20	--	--	>500	733	7.2	27.5	9.5	--	<1	<1
434912112585701	78-07-20	--	--	>500	696	7.3	20.0	10.5	--	<1	<1
434833112544901	78-07-21	--	--	E4500	333	7.4	20.0	10.0	--	<1	<1
435934113452401	78-07-25	--	30	E450	263	7.5	28.5	10.5	--	<1	<1
435945113091501	78-07-19	--	--	>500	380	7.5	21.5	10.0	--	<1	<1
435952113095201	78-07-19	--	--	>300	259	7.8	--	14.5	--	38	29
440809113144001	78-07-18	--	--	500	360	7.7	22.5	8.0	--	K2	<1
440740113145201	78-07-18	--	--	--	314	7.4	27.5	9.0	--	<1	<1
441052113171001	78-07-18	--	--	500	302	7.4	--	9.0	--	<1	<1
CAMAS COUNTY--Continued											
435828116483501	77-11-03	--	--	--	737	7.3	--	12.5	--	--	--
CUSTER COUNTY--Continued											
435158113282601	78-07-27	5708.00	>15	--	484	7.6	23.5	10.0	--	K16	--
435122113313701	78-07-27	5835.00	30	2385	470	7.5	30.0	9.5	--	K7	--
435639113382201	78-07-26	--	>30	--	381	7.5	31.5	12.0	--	<1	<1
435639113385401	78-07-27	5950.00	--	>500	322	7.5	19.0	8.5	--	K78	--
435450113365501	78-07-27	--	>60	>500	356	7.5	24.0	8.5	--	<1	--
435435113285401	78-07-27	5820.00	--	500	360	7.5	22.0	8.5	--	<1	--
435355113305801	78-07-27	5775.00	>30	>500	399	7.5	25.5	8.5	--	K9	--
440323113533401	78-07-25	--	>30	E800	154	7.4	28.0	9.5	--	<1	<1
435941113490401	78-07-26	6185.00	>30	E2439	281	7.5	30.5	11.0	--	K688	<1
440454113554301	78-07-26	--	--	>500	244	7.6	21.5	9.0	--	K10	<1
440744113535401	78-07-25	6340.00	>30	--	397	7.5	27.5	7.0	--	<1	<1
440436113511501	78-07-25	--	30	--	311	7.5	30.5	11.5	--	<1	<1
GOODING COUNTY--Continued											
430255114570501	78-02-07	3300.00	--	810	366	8.8	--	66.0	--	--	--
	78-06-26	--	--	--	345	--	--	66.0	--	--	--
425426114563101	77-12-01	--	--	--	590	7.5	--	14.0	--	--	<1
	78-04-03	--	--	--	580	7.5	--	14.0	--	--	<1
	78-07-24	--	--	--	666	7.9	--	14.0	.10	--	K11
425246114542601	77-12-01	--	--	--	636	7.4	--	14.0	--	--	<1
	78-04-03	--	--	--	638	7.5	--	14.5	--	--	<1
425142114531601	77-12-01	--	--	--	437	7.5	--	15.0	--	--	<1
	78-04-03	--	--	--	406	7.7	--	15.0	--	--	<1
	78-07-24	--	--	--	471	7.9	--	15.0	.20	--	<1
425054114523901	77-12-07	--	--	--	547	7.3	--	14.0	--	--	<1
	78-04-03	--	--	--	483	7.2	--	15.0	--	--	<1
	78-07-24	--	--	--	704	7.6	--	17.0	.20	--	<1
424933114515701	78-02-06	--	--	--	313	7.9	--	15.0	--	--	<1
	78-04-06	--	--	--	307	7.9	--	15.0	--	--	<1
	78-07-24	--	--	--	353	8.0	--	19.5	.20	--	<1
424812114513701	77-12-07	--	--	--	355	7.5	--	14.0	--	--	<1
	78-07-24	--	--	--	447	7.8	--	--	.20	--	<1

## QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	STREP- TOCOCI 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)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)
BUTTE COUNTY--Continued										
434938112563401	78-07-20	--	270	0	64	27	62	33	1.6	330
434912112585701	78-07-20	--	290	32	70	27	37	22	1.0	310
434833112544901	78-07-21	--	160	0	38	16	6.8	8	.2	200
435934113452401	78-07-25	--	180	0	48	14	6.2	7	.2	220
435945113091501	78-07-19	--	160	0	36	18	16	17	.5	200
435952113095201	78-07-19	--	150	11	35	14	2.7	4	.1	170
440809113144001	78-07-18	--	180	16	44	16	10	11	.3	200
440740113145201	78-07-18	--	160	18	40	14	6.3	8	.2	170
441052113171001	78-07-18	--	150	15	37	13	5.0	7	.2	160
CAMAS COUNTY--Continued										
435828116483501	77-11-03	--	180	0	46	16	120	59	3.9	500
CUSTER COUNTY--Continued										
435158113282601	78-07-27	--	250	27	70	18	6.7	6	.2	270
435122113313701	78-07-27	--	170	0	59	5.4	31	28	1.0	250
435639113382201	78-07-26	--	200	36	52	17	5.5	6	.2	200
435639113385401	78-07-27	--	170	42	43	14	4.6	6	.2	150
435450113365501	78-07-27	--	190	41	49	16	5.0	5	.2	180
435435113285401	78-07-27	--	160	30	48	10	6.5	8	.2	160
435355113305801	78-07-27	--	200	23	55	14	5.1	5	.2	210
440323113533401	78-07-25	--	65	9	19	4.3	3.0	9	.2	69
435941113490401	78-07-26	--	130	11	39	8.9	5.6	8	.2	150
440454113554301	78-07-26	--	110	23	33	7.4	3.8	7	.2	110
440744113535401	78-07-25	--	190	35	50	16	5.6	6	.2	190
440436113511501	78-07-25	--	140	21	38	12	3.8	5	.1	150
GOODING COUNTY--Continued										
430255114570501	78-02-07	--	5	0	1.7	.1	94	97	19	170
	78-06-26	--	--	--	--	--	--	--	--	--
425426114563101	77-12-01	K1	270	15	60	29	41	25	1.1	310
	78-04-03	<1	280	14	63	29	44	25	1.2	320
	78-07-24	28	280	13	61	30	30	19	.8	320
425246114542601	77-12-01	K2	280	37	69	27	45	25	1.2	300
	78-04-03	K9	260	6	61	27	46	27	1.2	310
425142114531601	77-12-01	<1	210	22	43	25	23	19	.7	230
	78-04-03	<1	180	8	37	22	21	20	.7	210
	78-07-24	K3	200	8	41	23	24	21	.7	230
425054114523901	77-12-07	<1	270	41	59	30	25	16	.7	280
	78-04-03	<1	220	7	47	24	23	18	.7	260
	78-07-24	<1	320	41	72	34	26	15	.6	340
424933114515701	78-02-06	<1	140	9	31	15	16	20	.6	160
	78-04-06	<1	130	0	29	14	15	20	.6	160
	78-07-24	<1	140	14	30	15	16	20	.6	150
424812114513701	77-12-07	<1	160	21	33	19	18	19	.6	170
	78-07-24	<1	180	9	38	21	19	18	.6	210

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	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, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
BUTTE COUNTY--Continued										
434938112563401	78-07-20	0	270	33	61	28	.1	19	446	.61
434912112585701	78-07-20	0	250	25	43	41	.1	17	402	.55
434833112544901	78-07-21	0	160	13	16	7.9	.1	18	205	.28
435934113452401	78-07-25	0	180	11	16	4.0	.1	12	211	.24
435945113091501	78-07-19	0	164	10	22	14	.1	16	225	.29
435952113095201	78-07-19	0	139	4.3	12	3.3	.1	7.1	159	.20
440809113144001	78-07-18	0	164	6.4	10	9.8	.1	15	208	.28
440740113145201	78-07-18	0	140	11	9.6	7.2	.1	16	181	.25
441052113171001	78-07-18	0	130	10	11	4.2	.1	15	167	.23
CAMAS COUNTY--Continued										
435828116483501	77-11-03	0	410	40	8.5	1.2	.6	58	512	.70
CUSTER COUNTY--Continued										
435158113282601	78-07-27	0	220	11	18	5.4	.2	15	271	.37
435122113313701	78-07-27	0	210	13	14	4.4	.3	28	269	.37
435639113382201	78-07-26	0	160	10	25	9.2	.2	11	224	.30
435639113385401	78-07-27	0	120	7.6	28	11	.3	9.8	188	.26
435450113365501	78-07-27	0	150	9.1	25	8.0	.3	11	208	.28
435435113285401	78-07-27	0	130	8.1	19	8.8	.3	9.6	186	.25
435355113305801	78-07-27	0	170	11	17	4.7	.3	12	216	.29
440323113533401	78-07-25	0	57	4.4	8.3	1.6	.2	9.4	82	.11
435941113490401	78-07-26	0	120	7.6	12	2.4	.3	13	157	.21
440454113554301	78-07-26	0	90	4.4	14	2.6	.1	12	129	.18
440744113535401	78-07-25	0	160	9.6	34	5.6	.4	12	221	.30
440436113511501	78-07-25	0	120	7.6	14	3.9	.3	12	162	.22
GOODING COUNTY--Continued										
430255114570501	78-02-07	18	169	.5	15	6.1	13	100	334	--
	78-06-26	--	--	--	--	--	--	--	--	--
425426114563101	77-12-01	0	250	16	55	24	.5	42	409	.55
	78-04-03	0	260	16	56	16	.5	42	413	.54
	78-07-24	0	262	6.4	48	23	.6	41	396	.56
425246114542601	77-12-01	0	250	19	71	29	.4	37	431	.58
	78-04-03	0	254	16	67	27	.4	36	422	.58
425142114531601	77-12-01	0	190	12	35	16	.5	36	296	.39
	78-04-03	0	172	6.7	30	11	.6	35	264	.35
	78-07-24	0	189	4.6	33	13	.6	35	287	.38
425054114523901	77-12-07	0	230	22	40	21	.7	42	360	.49
	78-04-03	0	213	26	36	18	.7	39	320	.42
	78-07-24	0	279	14	50	26	.7	43	424	.58
424933114515701	78-02-06	0	131	3.2	22	9.7	.4	34	210	.27
	78-04-06	0	130	3.2	22	8.8	.5	33	205	.26
	78-07-24	0	123	2.4	23	11	.4	32	205	.29
424812114513701	77-12-07	0	139	8.6	27	11	.5	35	231	.31
	78-07-24	0	172	5.3	30	14	.5	34	264	.36

## QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	NITRO-GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)
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## BUTTE COUNTY--Continued

434938112563401	78-07-20	4.5	.03	70
434912112585701	78-07-20	2.8	.00	70
434833112544901	78-07-21	.40	.03	50
435934113452401	78-07-25	.23	.05	50
435945113091501	78-07-19	.57	.02	70
435952113095201	78-07-19	.11	.00	100
440809113144001	78-07-18	.68	.00	80
440740113145201	78-07-18	.53	.00	70
441052113171001	78-07-18	.35	.03	80

## CAMAS COUNTY--Continued

435828116483501	77-11-03	3.1	.13	60
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## CUSTER COUNTY--Continued

435158113282601	78-07-27	.76	.00	70
435122113313701	78-07-27	.38	.06	70
435639113382201	78-07-26	.82	.02	40
435639113385401	78-07-27	.59	.00	80
435450113365501	78-07-27	.85	.00	70
435435113285401	78-07-27	.93	.02	70
435355113305801	78-07-27	.49	.08	130
440323113533401	78-07-25	.29	.01	140
435941113490401	78-07-26	.17	.01	70
440454113554301	78-07-26	.21	.02	60
440744113535401	78-07-25	.67	.01	80
440436113511501	78-07-25	.58	.00	70

## GOODING COUNTY--Continued

430255114570501	78-02-07	.11	.01	--
	78-06-26	--	--	--
425426114563101	77-12-01	--	.03	--
	78-04-03	--	.02	--
	78-07-24	--	.03	--
425246114542601	77-12-01	--	.04	--
	78-04-03	--	.05	--
425142114531601	77-12-01	--	.00	--
	78-04-03	--	.01	--
	78-07-24	--	.01	--
425054114523901	77-12-07	--	.01	--
	78-04-03	--	.02	--
	78-07-24	--	.00	--
424933114515701	78-02-06	--	.01	--
	78-04-06	--	.01	--
	78-07-24	--	.00	--
424812114513701	77-12-07	--	.00	--
	78-07-24	--	.00	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	COUNTY	DATE OF SAMPLE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)
GOODING COUNTY--Continued									
424707114511201	42 47 07	114 51 12	01	07S 14E 30DDB1	047	77-12-08	1420	--	--
					047	78-04-03	1515	--	--
					047	78-07-24	1600	--	--
424523114503801	42 45 23	114 50 38	01	08S 14E 05CDB1	047	78-02-06	1500	--	--
					047	78-04-05	1645	--	--
424055114423601	42 40 55	114 42 36	01	08S 15E 31CDD1	047	78-07-27	1115	--	--
					047	77-12-08	0920	--	--
					047	78-04-05	1000	--	--
					047	78-07-26	1530	--	--
424053114421001	42 40 53	114 42 10	01	08S 15E 33DCC1	047	78-02-07	1100	--	--
					047	78-04-05	0900	--	--
					047	78-07-26	1600	--	--
424028114464001	42 40 28	114 46 40	01	09S 14E 02ACD1S	047	77-11-30	0950	--	--
					047	78-04-05	1045	--	--
					047	78-05-31	0950	--	--
					047	78-05-31	1130	--	--
					047	78-05-31	1300	--	--
					047	78-05-31	1430	--	--
					047	78-05-31	1630	--	--
					047	78-06-01	0830	--	--
					047	78-06-01	1030	--	--
					047	78-06-01	1230	--	--
					047	78-06-01	1430	--	--
					047	78-06-01	1630	--	--
					047	78-07-26	1500	--	--
424028114464002	42 40 28	114 46 40	02	09S 14E 02ACD2S	047	78-02-07	1200	--	--
424028114464003	42 40 28	114 46 40	03	09S 14E 02ACD3S	047	78-02-07	1240	--	--
424028114464004	42 40 28	114 46 40	04	09S 14E 02ACD4S	047	78-02-07	1320	--	--
424028114464005	42 40 28	114 46 40	05	09S 14E 02ACD5S	047	78-02-07	1350	--	--
423954114402501	42 39 54	114 40 25	01	09S 15E 10AAA1S	047	77-11-29	1615	--	--
					047	78-04-04	1630	--	--
					047	78-07-26	1730	--	--
JEROME COUNTY									
423920114371501	42 39 20	114 37 15	01	09S 16E 07DCA1	053	77-11-29	1400	--	--
					053	78-04-04	1445	--	--
					053	78-07-25	1600	--	--
423832114325001	42 38 32	114 32 50	01	09S 16E 14CDA1	053	77-12-06	1630	--	--
					053	78-04-04	1115	--	--
					053	78-07-25	1300	--	--

## QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE (GPM)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	COLIFORM, TOTAL, IMMEDIATE (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
GOODING COUNTY--Continued											
424707114511201	77-12-08	--	--	--	226	7.7	--	16.0	--	--	<1
	78-04-03	--	--	--	286	7.7	--	15.5	--	--	<1
	78-07-24	--	--	--	299	8.0	--	20.0	.10	--	<1
424523114503801	78-02-06	--	--	--	289	7.9	--	15.0	--	--	<1
	78-04-05	--	--	--	295	8.0	--	15.5	--	--	<1
	78-07-27	--	--	--	359	7.8	--	16.0	.20	--	<1
424055114423601	77-12-08	--	--	--	639	7.3	--	14.0	--	--	<1
	78-04-05	--	--	--	637	7.5	--	13.0	--	--	<1
	78-07-26	--	--	--	742	7.8	--	16.5	.10	--	<1
424053114421001	78-02-07	--	--	--	494	7.6	--	13.5	--	--	<1
	78-04-05	--	--	--	491	7.7	--	14.0	--	--	<1
	78-07-26	--	--	--	554	7.8	--	15.5	.10	--	<1
424028114464001	77-11-30	--	--	--	406	7.7	--	14.0	--	--	<1
	78-04-05	--	--	--	469	7.8	--	14.5	--	--	<1
	78-05-31	--	--	--	475	7.9	--	14.0	--	--	--
	78-05-31	--	--	--	478	7.9	--	14.0	--	--	<1
	78-05-31	--	--	--	497	7.7	--	14.0	--	--	--
	78-05-31	--	--	--	497	7.9	--	14.0	--	--	<1
	78-05-31	--	--	--	476	7.7	--	14.0	--	--	<1
	78-06-01	--	--	--	431	7.8	--	14.0	--	--	K1
	78-06-01	--	--	--	487	7.8	--	14.0	--	--	<1
	78-06-01	--	--	--	502	7.6	--	14.0	--	--	<1
	78-06-01	--	--	--	495	7.6	--	14.0	--	--	<1
	78-06-01	--	--	--	515	7.8	--	14.0	--	--	<1
	78-07-26	--	--	--	535	7.8	--	14.5	.20	--	<1
424028114464002	78-02-07	--	--	--	484	7.8	--	14.0	--	--	<1
424028114464003	78-02-07	--	--	--	466	7.7	--	14.0	--	--	<1
424028114464004	78-02-07	--	--	--	493	7.6	--	14.0	--	--	<1
424028114464005	78-02-07	--	--	--	480	7.7	--	14.0	--	--	<1
423954114402501	77-11-29	--	--	--	636	7.8	--	14.0	--	--	<1
	78-04-04	--	--	--	633	7.6	--	14.5	--	--	K5
	78-07-26	--	--	--	692	8.0	--	16.0	.10	--	<1
JEROME COUNTY--Continued											
423920114371501	77-11-29	--	--	--	712	7.5	--	14.0	--	--	<1
	78-04-04	--	--	--	705	7.4	--	14.0	--	--	<1
	78-07-25	--	--	--	817	7.7	--	15.0	.10	--	<1
423832114325001	77-12-06	--	--	--	623	7.5	--	13.0	--	--	<1
	78-04-04	--	--	--	570	7.4	--	12.5	--	--	<1
	78-07-25	--	--	--	725	7.7	--	15.5	.10	--	<1

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	
GOODING COUNTY--Continued											
424707114511201	77-12-08	--	110	3	28	9.7	16	23	.7	4.6	130
	78-04-03	<1	110	0	28	9.8	16	23	.7	4.2	140
	78-07-24	<1	110	0	27	9.9	16	23	.7	4.6	150
424523114503801	78-02-06	--	140	9	30	16	17	20	.6	3.4	160
	78-04-05	<1	130	0	29	14	16	21	.6	3.6	170
	78-07-27	<1	140	0	31	16	18	21	.7	3.7	180
424055114423601	77-12-08	<1	320	47	63	39	34	19	.8	4.9	330
	78-04-05	K13	300	59	61	37	36	20	.9	4.7	300
	78-07-26	<1	350	38	69	43	37	18	.9	5.1	380
424053114421001	78-02-07	<1	220	64	51	22	26	20	.8	4.4	190
	78-04-05	<1	220	56	55	20	29	22	.9	4.4	200
	78-07-26	<1	220	66	51	23	27	21	.8	4.6	190
424028114464001	77-11-30	K2	180	58	41	19	23	21	.7	4.0	150
	78-04-05	--	210	42	51	19	27	22	.8	4.1	200
	78-05-31	K4	--	--	--	--	--	--	--	--	240
	78-05-31	--	--	--	--	--	--	--	--	--	180
	78-05-31	--	--	--	--	--	--	--	--	--	200
	78-05-31	--	--	--	--	--	--	--	--	--	180
	78-05-31	--	--	--	--	--	--	--	--	--	180
	78-06-01	--	--	--	--	--	--	--	--	--	220
	78-06-01	--	--	--	--	--	--	--	--	--	200
	78-06-01	--	--	--	--	--	--	--	--	--	200
	78-06-01	--	--	--	--	--	--	--	--	--	200
	78-06-01	--	--	--	--	--	--	--	--	--	200
	78-07-26	K13	200	60	47	20	25	21	.8	3.8	170
424028114464002	78-02-07	K1	210	54	48	22	26	21	.8	4.2	190
424028114464003	78-02-07	<1	210	54	48	21	26	21	.8	4.2	190
424028114464004	78-02-07	<1	220	60	50	22	28	22	.8	4.3	190
424028114464005	78-02-07	K2	220	60	50	22	28	22	.8	4.3	190
423954114402501	77-11-29	K14	270	48	60	29	38	23	1.0	5.6	270
	78-04-04	64	270	49	60	29	38	23	1.0	5.0	270
	78-07-26	60	270	59	63	28	37	22	1.0	5.5	260
JEROME COUNTY--Continued											
423920114371501	77-11-29	K1	310	0	70	34	55	27	1.4	5.3	390
	78-04-04	<1	310	0	68	33	52	27	1.3	4.8	410
	78-07-25	<1	350	0	81	35	55	25	1.3	5.5	450
423832114325001	77-12-06	<1	280	35	63	30	35	21	.9	3.8	300
	78-04-04	<1	260	30	61	27	41	25	1.1	5.5	280
	78-07-25	<1	330	35	72	36	34	18	.8	2.7	360

## QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	CARBONATE (MG/L AS CO <sub>3</sub> )	ALKALINITY (MG/L AS CaCO <sub>3</sub> )	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO <sub>2</sub> )	SULFATE DIS-SOLVED (MG/L AS SO <sub>4</sub> )	CHLORIDE DIS-SOLVED (MG/L AS CL)	FLUORIDE DIS-SOLVED (MG/L AS F)	SILICA DIS-SOLVED (MG/L AS SiO <sub>2</sub> )	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
GOODING COUNTY--Continued										
424707114511201	77-12-08	0	110	4.2	24	9.7	.5	36	193	.25
	78-04-03	0	115	4.5	23	8.3	.5	35	194	.24
	78-07-24	0	123	2.4	22	8.7	.4	35	198	.26
424523114503801	78-02-06	0	131	3.2	24	12	.6	33	215	.28
	78-04-05	0	140	2.7	23	9.9	.5	33	213	.28
424055114423601	78-07-27	0	148	4.6	25	10	.5	32	225	.28
	77-12-08	0	270	26	56	36	.8	46	442	.58
	78-04-05	0	250	15	65	36	.8	46	434	.59
	78-07-26	0	312	9.6	60	34	.8	44	480	.64
424053114421001	78-02-07	0	156	7.6	52	42	.7	33	325	.44
424028114464001	78-04-05	0	160	6.4	52	36	.6	33	329	.44
	78-07-26	0	156	4.8	53	42	.6	32	327	.46
	77-11-30	0	120	4.8	39	25	.7	34	260	.36
	78-04-05	0	160	5.1	50	34	.6	34	318	.42
	78-05-31	0	197	4.8	--	36	--	--	--	--
	78-05-31	0	148	3.6	--	34	--	--	--	--
	78-05-31	0	164	6.4	--	34	--	--	--	--
	78-05-31	0	148	3.6	--	34	--	--	--	--
	78-05-31	0	148	5.7	--	34	--	--	--	--
	78-06-01	0	180	5.6	--	36	--	--	--	--
	78-06-01	0	164	5.1	--	36	--	--	--	--
	78-06-01	0	164	8.0	--	36	--	--	--	--
	78-06-01	0	164	8.0	--	36	--	--	--	--
78-06-01	0	164	5.1	--	36	--	--	--	--	
78-07-26	0	139	4.3	52	37	.6	32	301	.41	
424028114464002	78-02-07	0	156	4.8	49	38	.8	33	315	.42
424028114464003	78-02-07	0	156	6.1	50	38	.6	33	314	.43
424028114464004	78-02-07	0	160	7.6	52	42	.5	34	326	.45
424028114464005	78-02-07	0	160	6.1	52	40	.6	33	324	.44
423954114402501	77-11-29	0	220	6.8	62	41	.6	40	409	.56
	78-04-04	0	221	11	62	44	.6	38	410	.55
	78-07-26	0	213	4.2	64	48	.6	38	412	.57
JEROME COUNTY--Continued										
423920114371501	77-11-29	0	320	20	49	23	.6	48	477	.64
	78-04-04	0	336	26	50	23	.5	47	480	.63
	78-07-25	0	369	14	49	27	.5	46	521	.74
423832114325001	77-12-06	0	250	15	51	30	.5	49	410	.56
	78-04-04	0	230	18	62	46	.5	38	419	.56
	78-07-25	0	295	11	50	31	.4	55	458	.61

QUALITY OF GROUND WATER

449

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	NITRO-GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)
----------------	----------------	---	---	--

GOODING COUNTY--Continued

424707114511201	77-12-08	--	.00	--
	78-04-03	--	.00	--
	78-07-24	--	.00	--
424523114503801	78-02-06	--	.01	--
	78-04-05	--	.01	--
424055114423601	78-07-27	--	.01	--
	77-12-08	--	.02	--
	78-04-05	--	.03	--
424053114421001	78-07-26	--	.03	--
	78-02-07	--	.01	--
424028114464001	78-04-05	--	.01	--
	78-07-26	--	.01	--
	77-11-30	--	.00	--
	78-04-05	--	.01	--
	78-05-31	--	--	--
	78-05-31	--	--	--
	78-05-31	--	--	--
	78-05-31	--	--	--
	78-06-01	--	--	--
	78-06-01	--	--	--
424028114464002	78-06-01	--	--	--
	78-06-01	--	--	--
	78-06-01	--	--	--
	78-06-01	--	--	--
	78-07-26	--	.01	--
	78-02-07	--	.01	--
	78-02-07	--	.01	--
424028114464003	78-02-07	--	.01	--
	78-02-07	--	.01	--
424028114464004	78-02-07	--	.01	--
	78-02-07	--	.01	--
424028114464005	78-02-07	--	.01	--
	78-02-07	--	.01	--
423954114402501	77-11-29	--	.01	--
	78-04-04	--	.02	--
	78-07-26	--	.02	--

JEROME COUNTY--Continued

423920114371501	77-11-29	--	.02	--
	78-04-04	--	.02	--
	78-07-25	--	.01	--
423832114325001	77-12-06	--	.00	--
	78-04-04	--	.01	--
	78-07-25	--	.00	--

## QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENTIFIER	COUNTY	DATE OF SAMPLE	TIME	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. NGVD)
JEROME COUNTY--Continued									
423730114340901	42 37 30	114 34 09	01	09S 16E 16ADA1	053	77-12-20	1200	--	--
					053	78-04-04	1215	--	--
					053	78-07-25	1445	--	--
423906114360501	42 39 06	114 36 05	01	09S 16E 17ABA1	053	77-12-07	0900	--	--
					053	78-04-04	1315	--	--
					053	78-07-25	1500	--	--
423806114311601	42 38 06	114 31 16	01	09S 16E 24AAB1	053	77-12-02	0930	--	--
					053	78-04-04	1020	--	--
					053	78-07-25	1130	--	--
423758114294401	42 37 58	114 29 44	01	09S 17E 20RDB1	053	77-12-20	1300	--	--
					053	78-04-03	1645	--	--
					053	78-07-25	1100	--	--
423655114291801	42 36 55	114 29 18	01	09S 17E 29ACD1	053	77-12-07	1515	730	3150.00
					053	78-06-26	1745	--	--
MADISON COUNTY									
435211111451001	43 52 11	111 45 10	01	06N 40E 04CCD1	065	78-06-28	1600	--	--
POWER COUNTY									
424548112532800	42 45 48	112 53 28	00	07S 30E 36DCD1S	077	78-04-07	1000	--	--
424744112493101	42 47 44	112 49 31	01	07S 31E 22CBD1	077	78-04-07	1130	--	--
TWIN FALLS COUNTY									
424215114512201	42 42 15	114 51 22	01	08S 14E 30ACD1S	083	78-02-08	0940	--	2890.00
					083	78-06-26	1350	--	2890.00
424118114493101	42 41 18	114 49 31	00	08S 14E 33CBA1	083	78-02-08	1115	210	2902.00
423550114564001	42 35 50	114 56 40	01	09S 13E 33CBD1	083	78-06-26	1530	840	3762.00
424006114491201	42 40 06	114 49 12	01	09S 14E 04DCC1	083	77-12-08	1130	590	2920.00
421322114473501	42 13 21	114 47 01	01	14S 14E 11CB1S	083	78-06-27	0930	--	5115.00

QUALITY OF GROUND WATER

451

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	FLOW RATE (GPM)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	COLIFORM, FECAL, 0.7 UM-MF (CULS./100 ML)	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS AS CAC03 (MG/L)	HARDNESS, NONCARBONATE (MG/L CAC03)
JEROME COUNTY--Continued											
423730114340901	77-12-20	--	597	7.2	--	10.0	--	<1	<1	270	54
	78-04-04	--	635	7.4	--	10.0	--	<1	<1	280	55
	78-07-25	--	678	7.6	--	18.0	.10	<1	<1	270	52
423906114360501	77-12-07	--	850	7.4	--	14.0	--	<1	<1	360	1
	78-04-04	--	850	7.6	--	15.0	--	--	<1	320	0
	78-07-25	--	942	7.6	--	14.5	.10	<1	<1	360	0
423806114311601	77-12-02	--	615	7.6	--	15.0	--	<1	<1	240	0
	78-04-04	--	634	7.5	--	14.0	--	<1	K3	240	0
	78-07-25	--	691	7.8	--	16.0	.10	<1	K1	240	0
423758114294401	77-12-20	--	641	7.4	--	15.5	--	<1	<1	290	120
	78-04-03	--	702	7.5	--	17.0	--	<1	K2	290	130
	78-07-25	--	756	7.7	--	18.0	.10	<1	<1	320	150
423655114291801	77-12-07	300	445	8.8	--	42.0	--	--	--	7	0
	78-06-26	--	443	--	--	45.0	--	--	--	--	--
MADISON COUNTY--Continued											
435211111451001	78-06-28	--	443	7.8	23.0	10.0	--	--	--	220	16
POWER COUNTY--Continued											
424548112532800	78-04-07	--	1202	7.4	--	11.0	--	--	--	380	130
424744112493101	78-04-07	--	756	7.1	--	12.0	--	--	--	310	120
TWIN FALLS COUNTY--Continued											
424215114512201	78-02-08	20	601	9.1	--	68.0	--	--	--	3	0
	78-06-26	20	614	--	--	70.5	--	--	--	--	--
424118114493101	78-02-08	60	454	9.0	--	59.0	--	--	--	3	0
423550114564001	78-06-26	1200	326	8.0	--	30.0	--	--	--	81	0
424006114491201	77-12-08	300	305	8.3	--	35.0	--	--	--	21	0
421322114473501	78-06-27	1000	91	7.0	--	12.0	--	--	--	23	0

## QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM DIS-SOLVED (MG/L AS MG)	SODIUM DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM DIS-SOLVED (MG/L AS K)	BICARBONATE AS (MG/L HCO3)	CARBONATE AS (MG/L AS CO3)	ALKALINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
JEROME COUNTY--Continued											
423730114340901	77-12-20	64	26	39	24	1.0	6.2	260	0	210	26
	78-04-04	68	26	41	24	1.1	6.0	270	0	220	17
	78-07-25	65	27	45	26	1.2	6.2	270	0	221	9.7
423906114360501	77-12-07	69	46	81	32	1.9	5.2	440	0	360	28
	78-04-04	60	41	79	35	1.9	5.2	460	0	377	18
	78-07-25	68	45	75	31	1.7	5.0	470	0	385	18
423806114311601	77-12-02	59	22	46	29	1.3	7.0	300	0	250	12
	78-04-04	63	20	61	35	1.7	6.5	330	0	270	17
	78-07-25	61	22	58	33	1.6	6.9	310	0	254	7.9
423758114294401	77-12-20	77	23	29	18	.7	6.4	200	0	160	13
	78-04-03	73	25	29	18	.7	6.0	190	0	156	9.6
	78-07-25	85	25	30	17	.7	6.8	200	0	164	6.4
423655114291801	77-12-07	2.5	.1	110	96	19	1.9	160	22	168	.5
	78-06-26	--	--	--	--	--	--	--	--	--	--
MADISON COUNTY--Continued											
435211111451001	78-06-28	59	18	6.6	6	.2	2.1	250	0	210	6.3
POWER COUNTY--Continued											
424548112532800	78-04-07	96	35	87	32	1.9	7.9	310	0	250	20
424744112493101	78-04-07	71	31	21	13	.5	7.0	230	0	189	29
TWIN FALLS COUNTY--Continued											
424215114512201	78-02-08	1.2	.0	140	99	35	1.1	120	45	170	.3
	78-06-26	--	--	--	--	--	--	--	--	--	--
424118114493101	78-02-08	1.1	.0	100	98	26	1.5	130	35	165	.3
423550114564001	78-06-26	26	3.9	35	46	1.7	7.9	120	0	98	1.9
424006114491201	77-12-08	7.8	.3	63	84	6.0	4.0	140	0	115	1.1
421322114473501	78-06-27	7.2	1.2	5.9	33	.5	2.6	30	0	25	4.8

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION NUMBER	DATE OF SAMPLE	SULFATE DIS-SOLVED (MG/L AS S04)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIUS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)
JEROME COUNTY--Continued										
423730114340901	77-12-20	65	48	.5	38	415	.55	--	.02	--
	78-04-04	63	45	.5	38	421	.56	--	.02	--
	78-07-25	73	49	.4	39	438	.58	--	.01	--
423906114360501	77-12-07	66	40	.4	46	571	.79	--	.02	--
	78-04-04	63	35	.5	45	555	.77	--	.02	--
	78-07-25	65	40	.4	44	574	.78	--	.01	--
423806114311601	77-12-02	61	31	.4	38	412	.57	--	.00	--
	78-04-04	61	28	.3	38	440	.56	--	.02	--
	78-07-25	65	32	.3	37	435	.58	--	.00	--
423758114294401	77-12-20	80	79	.4	47	440	.63	--	.01	--
	78-04-03	80	90	.3	44	441	.66	--	.00	--
	78-07-25	80	92	.3	47	465	.70	--	.00	--
423655114291801	77-12-07	15	16	16	74	338	.46	.23	.00	--
	78-06-26	--	--	--	--	--	--	--	--	--
MADISON COUNTY--Continued										
435211111451001	78-06-28	10	3.4	.1	21	253	.34	2.1	.02	--
POWER COUNTY--Continued										
424548112532800	78-04-07	190	88	.5	50	735	1.00	6.2	.04	10
424744112493101	78-04-07	33	87	.3	51	415	.41	--	.02	140
TWIN FALLS COUNTY--Continued										
424215114512201	78-02-08	32	50	27	89	445	--	.06	.01	--
	78-06-26	--	--	--	--	--	--	--	--	--
424118114493101	78-02-08	27	25	14	100	368	--	.03	.01	--
423550114564001	78-06-26	35	16	1.8	86	275	.38	1.0	.00	--
424006114491201	77-12-08	22	13	3.6	54	237	.32	.01	.00	--
421322114473501	78-06-27	5.0	3.1	.2	35	79	.11	.89	.03	--

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## FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	$2.54 \times 10^1$	millimeters (mm)
	$2.54 \times 10^{-2}$	meters (m)
feet (ft)	$3.048 \times 10^{-1}$	meters (m)
miles (mi)	$1.609 \times 10^0$	kilometers (km)
<i>Area</i>		
acres	$4.047 \times 10^3$	square meters (m <sup>2</sup> )
	$4.047 \times 10^{-1}$	square hectometers (hm <sup>2</sup> )
	$4.047 \times 10^{-3}$	square kilometers (km <sup>2</sup> )
square miles (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometers (km <sup>2</sup> )
<i>Volume</i>		
gallons (gal)	$3.785 \times 10^0$	liters (L)
	$3.785 \times 10^0$	cubic decimeters (dm <sup>3</sup> )
million gallons	$3.785 \times 10^{-3}$	cubic meters (m <sup>3</sup> )
	$3.785 \times 10^3$	cubic meters (m <sup>3</sup> )
cubic feet (ft <sup>3</sup> )	$3.785 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
	$2.832 \times 10^1$	cubic decimeters (dm <sup>3</sup> )
cfs-days	$2.832 \times 10^{-2}$	cubic meters (m <sup>3</sup> )
	$2.447 \times 10^3$	cubic meters (m <sup>3</sup> )
acre-feet (acre-ft)	$2.447 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
	$1.233 \times 10^3$	cubic meters (m <sup>3</sup> )
	$1.233 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
	$1.233 \times 10^{-6}$	cubic kilometers (km <sup>3</sup> )
<i>Flow</i>		
cubic feet per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liters per second (L/s)
	$2.832 \times 10^1$	cubic decimeters per second (dm <sup>3</sup> /s)
gallons per minute (gal/min)	$2.832 \times 10^{-2}$	cubic meters per second (m <sup>3</sup> /s)
	$6.309 \times 10^{-2}$	liters per second (L/s)
million gallons per day	$6.309 \times 10^{-2}$	cubic decimeters per second (dm <sup>3</sup> /s)
	$6.309 \times 10^{-5}$	cubic meters per second (m <sup>3</sup> /s)
	$4.381 \times 10^1$	cubic decimeters per second (dm <sup>3</sup> /s)
	$4.381 \times 10^{-2}$	cubic meters per second (m <sup>3</sup> /s)
<i>Mass</i>		
tons (short)	$9.072 \times 10^{-1}$	megagrams (Mg) or metric tons

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