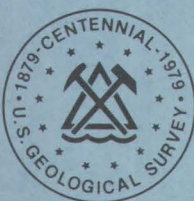
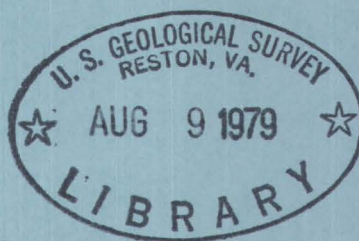


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Water Resources Data for Nevada



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

WATER YEAR 1978

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

CALENDAR FOR WATER YEAR 1978

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Water Resources Data for Nevada

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

WATER YEAR 1978

Prepared in cooperation with State of Nevada
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

Dr. H. William Menard, Director

For information on the water program in Nevada write to
District Chief, Water Resources Division
U.S. Geological Survey
Room 220, Federal Building
705 North Plaza Street
Carson City, Nevada 89701

1979

Preface

This report was prepared by the U.S. Geological Survey in cooperation with the State of Nevada and with other agencies, by personnel of the Nevada district of the Water Resources Division under the supervision of Frank T. Hidaka, District Chief, and William H. Robinson, Regional Hydrologist, Western Region.

This report is one of a series issued State by State under the general direction of J. S. Cragwall, Jr., Chief Hydrologist, and S. M. Lang, Acting Assistant Chief Hydrologist for Scientific Publications and Data Management.

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INTRODUCTION

Water resources data for the 1978 water year for Nevada 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 wells. This volume contains records of water discharge at 126 gaging stations; stage and contents for 20 lakes and reservoirs; water-quality data for continuing-record stations at 32 stream sites and 2 lake sites, for partial-record stations at 69 stream sites, 8 lake sites, and 7 wells; and water levels for 185 observation wells. Also included are data for 109 crest-stage partial-record stations and 13 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 Nevada.

Records of discharge 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 water year 1960, these water-supply papers were in an annual series and then in 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 are 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 the 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 volume is identified as "U.S. Geological Survey Water-Data Report NV-78-1." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (702) 882-1388.

COOPERATION

The U.S. Geological Survey and organizations of the State of Nevada have had cooperative agreements for the systematic collection of stream-flow records since 1909, and for water-quality records since 1951. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Nevada Department of Conservation and Natural Resources,
Norman S. Hall, Director.

Division of Water Resources, Roland Westergard, State Engineer.
Division of Environmental Protection, Ernest G. Gregory, Chief.

Nevada Department of Highways, Joseph Souza, P. E.,
State Highway Engineer.

Carson City Public Works Department, Larry Werner, Director.

California Department of Water Resources, Ronald B. Robie,
Director.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army; the Bureau of Reclamation, the Fish & Wildlife Service, the Bureau of Indian Affairs, U.S. Department of the Interior; U.S. District Court Watermaster; the Environmental Protection Agency; Washoe County Public Works Department; Desert Research Institute; Nevada Power Company; Sierra Pacific Power Company; and Southern California Edison.

The following organizations aided in collecting records:

Clark County Flood Control District; Walker River Irrigation District; Carson-Truckee Water Conservancy District; Truckee-Carson Irrigation District; City of Las Vegas; Nevada Department of Fish and Game; Nevada Department of General Services Administration; Carson Water Sub-Conservancy District; and the U.S. Board of Water Commissioners; Nevada First Corporation.

Organizations that supplied data are acknowledged in station descriptions.

ACKNOWLEDGMENTS

Nevada district personnel who contributed significantly to the collection and preparation of the data in this report were: Leo A. Bohner, Chief, Hydrologic Data Section, assisted by Charles J. Bartholet, Robert E. Bostic, Rodney L. Carson, Louise E. Davis, Ann M. Eurich, Howard R. Frisbie, Kerry T. Garcia, Otto Moosburner, Gregory L. Pope, Robert R. Squires, Thomas B. Tucker, and David B. Wood.

HYDROLOGIC CONDITIONS

Streamflows for the 1978 water year showed considerable improvement over last year with the Humboldt River averaging 80 percent of the 1941-70 median and the eastern slope of the Sierras 130 percent of the median. Virgin River runoff in southern Nevada was about 160 percent of the 49-year average and more than three times last year's average flow. Rainfall was below average in the northern half of the State and near average in the southern half. Figure 1 on the next page compares the monthly and yearly mean discharges for the 1978 water year with the median discharges for the reference period 1941 to 1970 at two long-term gaging stations.

During the year, overall reservoir contents were about 60 percent below capacity in the Humboldt River drainage basin to near capacity in the Walker River drainage basin. Storage in Rye Patch Reservoir on the Humboldt River only reached 39 percent of capacity in June of this year.

Thunderstorm activity and consequent flash flooding were below normal through the summer months. Isolated storms were the rule and damages from flash floods were minor. Road washouts and traffic delays were rare.

Water quality in the northern part of the State during water year 1978 was still being influenced by the drought of 1976-77. The lower-than-normal streamflows during October had an influence on suspended-sediment concentrations at station 10301500 on the Walker River. A new minimum of 10 mg/L was established at this site. Specific conductance maximums for the period of record were once again established at stations 10346000, 10350050, and 10351700 on the Truckee River, during October and November 1977; the new maximums were 190, 587, and 1,110 micromhos, respectively. In the southern part of the State, high flows from January through May, which were the result of severe rainstorms, caused lower-than-normal concentrations of dissolved solids at station 09415000 on the Virgin River.

In 1978, the number of observation wells that showed declines in water levels was about equal to the number that showed rises in water levels. Of 185 wells measured, 54 exhibited declines of 1 foot or greater and 53 displayed rises of 1 foot or greater. The remaining 78 wells exhibited changes less than 1 foot or lacked 1977 water-level records for comparison.

New record lows were observed for 61 wells and new record highs were observed for 12 wells. Most record lows occurred in heavily pumped areas, for example, 20 record lows were recorded in Las Vegas Valley.

HYDROLOGIC CONDITIONS

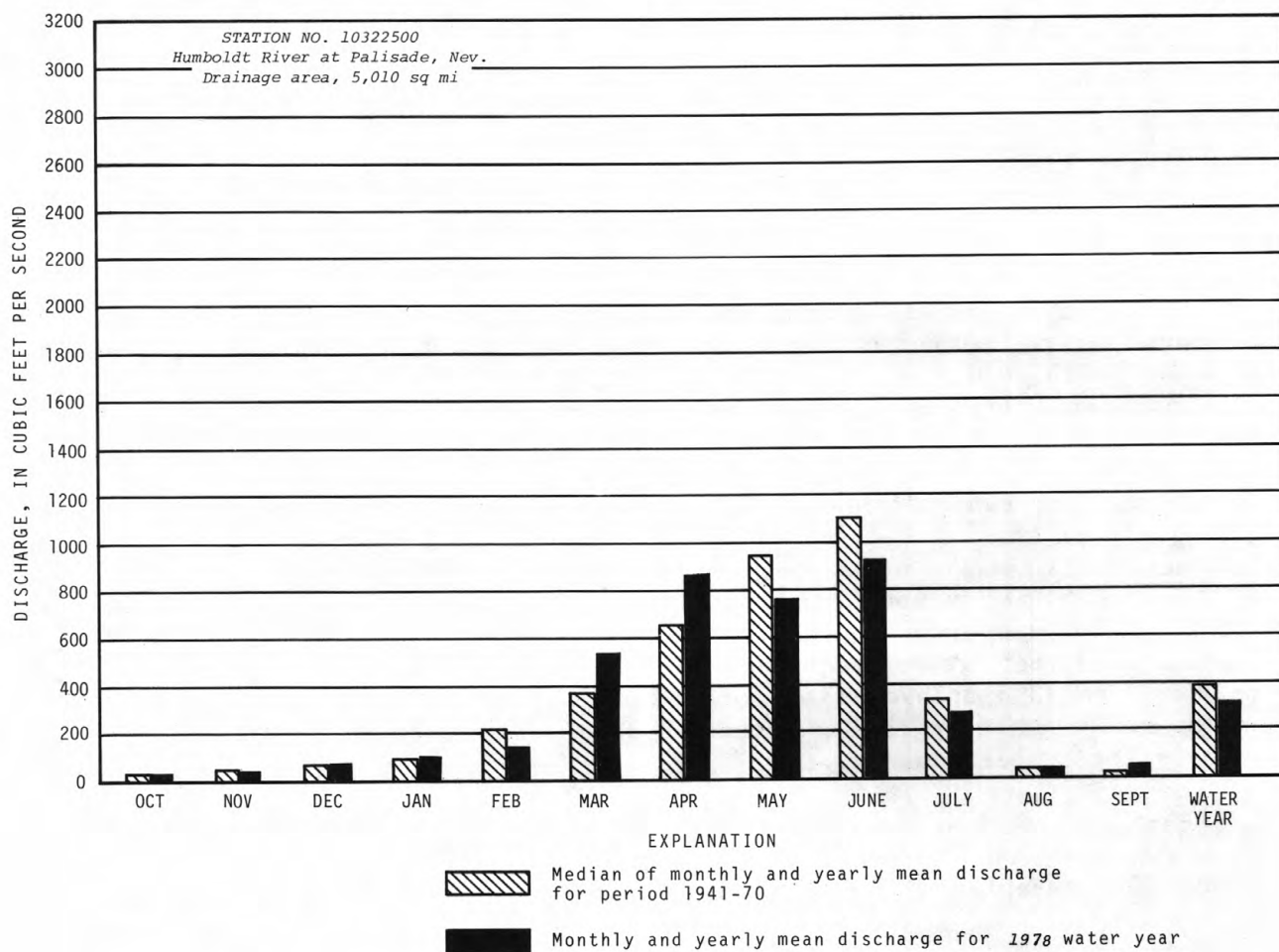
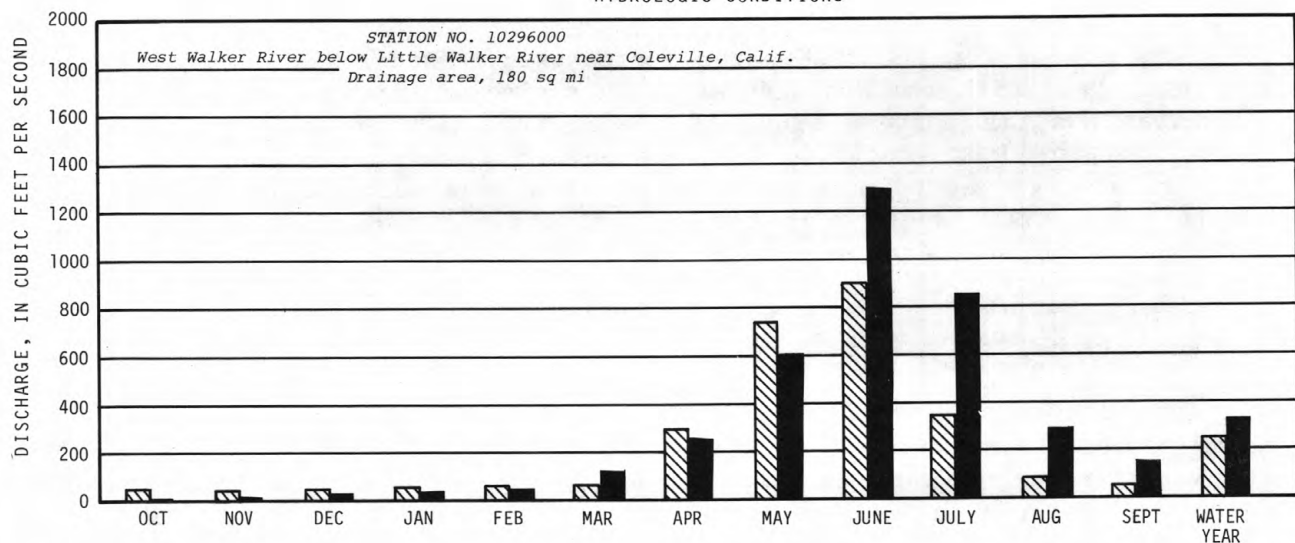


FIGURE 1.--COMPARISON OF DISCHARGE AT TWO LONG-TERM REPRESENTATIVE GAGING STATIONS DURING 1978 WATER YEAR WITH MEDIAN DISCHARGE FOR PERIOD 1941-70.

DEFINITION OF TERMS

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

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

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 the organisms which produce colonies within 24 hours when incubated at 35°C \pm 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 warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ 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 liter, 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 mass per unit area or volume of habitat.

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

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

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

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

Bottom material: See Bed material.

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 flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 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 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 and does not include bank storage.

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

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

Cubic 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 approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

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

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

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

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

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, half the bicarbonate (generally a major dissolved component of water) is converted to carbonate, and the rest is lost as carbon dioxide plus water vapor. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in mg/L, is multiplied by 0.492 to reflect the loss and to thereby make calculated and "residue-on-evaporation" values comparable.

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 a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

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

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

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

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

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

Measuring point (MP) is an arbitrary datum point from which water levels in observation wells are measured.

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.

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

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

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (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 by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

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

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

The particle-size 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 (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

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

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 productivity 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
[mg C/(m²·time) for periphyton and macrophytes and mg C/(m³·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
[mg O₂/(m²·time) for periphyton and macrophytes and mg O₂/(m³·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 transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates, and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

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

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

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that 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 lived.

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 artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time 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 the U.S. Series Bed-Material Samplers.

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

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

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

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

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

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.....Hexageria
Species.....Hexagenia limbata

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that automatically records water temperatures on paper tape.

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 year.

Tons per acre-foot indicates the dry mass 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 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 reference to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBERS

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

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction 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 10351700, which appears just to the left of the station name, includes the 2-digit part number "10" plus the 6-digit downstream order number "351700." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 9 (Colorado River basin), Part 10 (The Great Basin), and Part 13 (Snake River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

Latitude-Longitude Numbers

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.

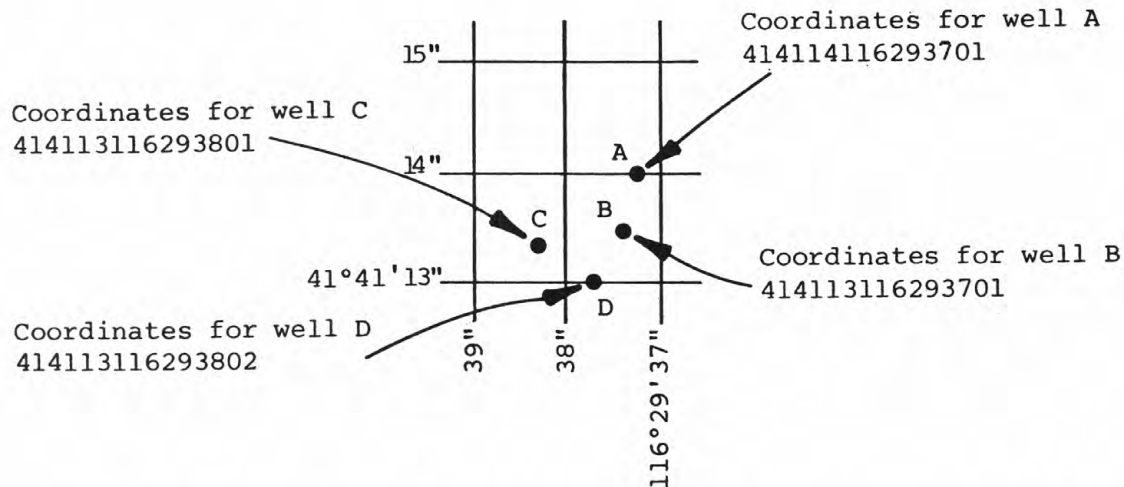


Figure 2.--Site-numbering system based on longitude and latitude.

Local Site Numbers

Local site numbers used in Nevada locate ground-water data sites (wells or springs) by hydrographic areas and by the official rectangular subdivision of the public lands with reference to the Mt. Diablo meridian and base line. Nevada has been divided into 14 hydrographic regions and basins and approximately 250 individual hydrographic areas or valleys which are used to compile information pertaining to water resources in Nevada. The local site number uses as many as 19 digits to locate the site by hydrographic area, township, range, section, and section subdivision.

The first segment of the local site number specifies the hydrographic area as defined by Rush ¹/. The remainder of the number specifies the township north or south of the Mt. Diablo base line, the range east of the Mt. Diablo meridian, the section, and subdivision of the section. Sections are divided into quadrants labeled counterclockwise from upper right as A, B, C, and D. Each quadrant is then similarly subdivided up to as many as 3 times, depending on the accuracy of available maps; thus each section of about 640 acres (259 ha) may be subdivided into tracts approximately 330 ft (100 m) on a side containing about 2.5 acres (1.0 ha). Lettered quadrants are read from left to right with the largest subdivision on the left. Sites within the smallest subdivision used are numbered sequentially with 1 digit. For example, as shown in figure 3, a well in Mason Valley (hydrographic area 108) located within the unshaded area of section 6, Township 13 North, Range 26 East, would have the number 108 N13 E26 06CCCC1. A second well within the same 2.5-acre (1.0-ha) tract would be numbered 108 N13 E26 06CCCC2.

1. Rush, F. E., 1968, Index of hydrographic areas: Nevada Dept. Conserv. and Nat. Resources Inf. Ser. Rept. 6, 38 p.

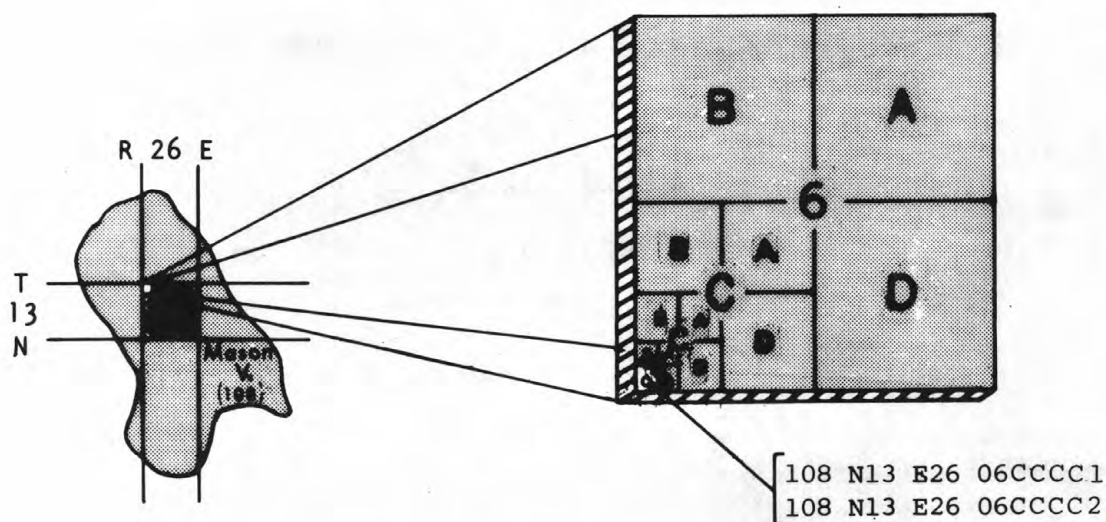


Figure 3.--Numbering system used in Nevada for ground-water sites.

Prior to January 1976, published local site numbers in Nevada followed the general format exemplified by 13/26-16abl, where the first number was the township north, but if the township is south, the first number was preceded by an "S." The second number was the range east, the third number was the section, and the following letter or letters and number indicated the quarter sections and sequence number as defined above.

SPECIAL NETWORKS AND PROGRAMS

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

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

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

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radio-isotopes. 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 discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which

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

At some stream-gaging stations, the stage-discharge relation is affected by ice in 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 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 stage or 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 referred to National Geodetic Vertical Datum, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 10.

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

For 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 are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or 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 Nevada at other sites during the current water year by other State and Federal agencies. The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, Reston, Virginia 22090, maintains an index of these sites. Information on records at specific sites can be obtained from that office 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 detailed records of water-quality records gives periods of record daily for the parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily records; 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 all 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

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

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local well 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 mean sea level (msl) 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 in 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.

In 1945, the Geological Survey and the office of the Nevada State Engineer entered a cooperative agreement to investigate the ground-water resources of Nevada. The Geological Survey began to publish ground-water level data for Nevada in 1950 starting with Water-Supply Paper 1170 which contained data for calendar years 1946-50. Measurements prior to 1946 are contained in State of Nevada Water Resources Bulletin No. 3. Publications of ground-water level data to date are listed below:

<u>Calendar year</u>	<u>Publications</u>
1913-45	State of Nevada Water Resources Bulletin No. 3
1946-50	WSP-1170
1951	WSP-1196
1952	WSP-1226
1953	WSP-1270
1954	WSP-1326
1956-60	WSP-1770
1961-65	WSP-1855
1966-70	WSP-2010
1971-74	WSP-2162
1975	USGS-Water Data Report NV-75-1
1976	USGS-Water Data Report NV-76-1
1977	USGS-Water Data Report NV-77-1

WATER-RELATED REPORTS PREPARED BY THE GEOLOGICAL SURVEY
FOR RELEASE DURING THE WATER YEAR

McDermitt: Appraisal of water resources in the Fort McDermitt Indian Reservation, Humboldt County, Nevada, by Freddy E. Arteaga; U.S. Geological Survey open-file report 78-139, 64 p.

Nevada: Flood investigations in Nevada through 1977 water year; U.S. Geological Survey open-file report 78-610, 90 p.

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. Ehlike, 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.

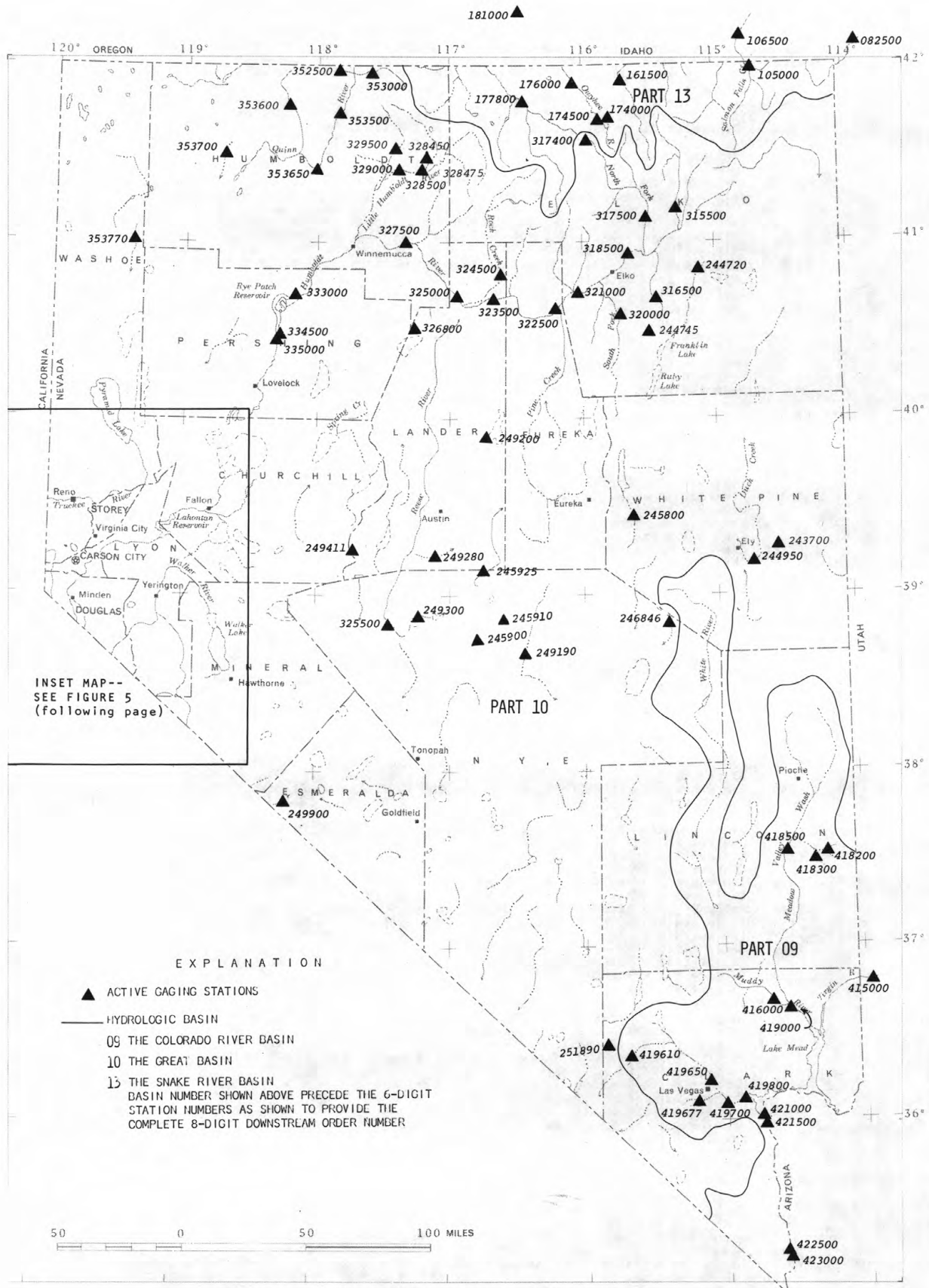


FIGURE 4.--GAGING STATIONS LISTED IN THIS REPORT.

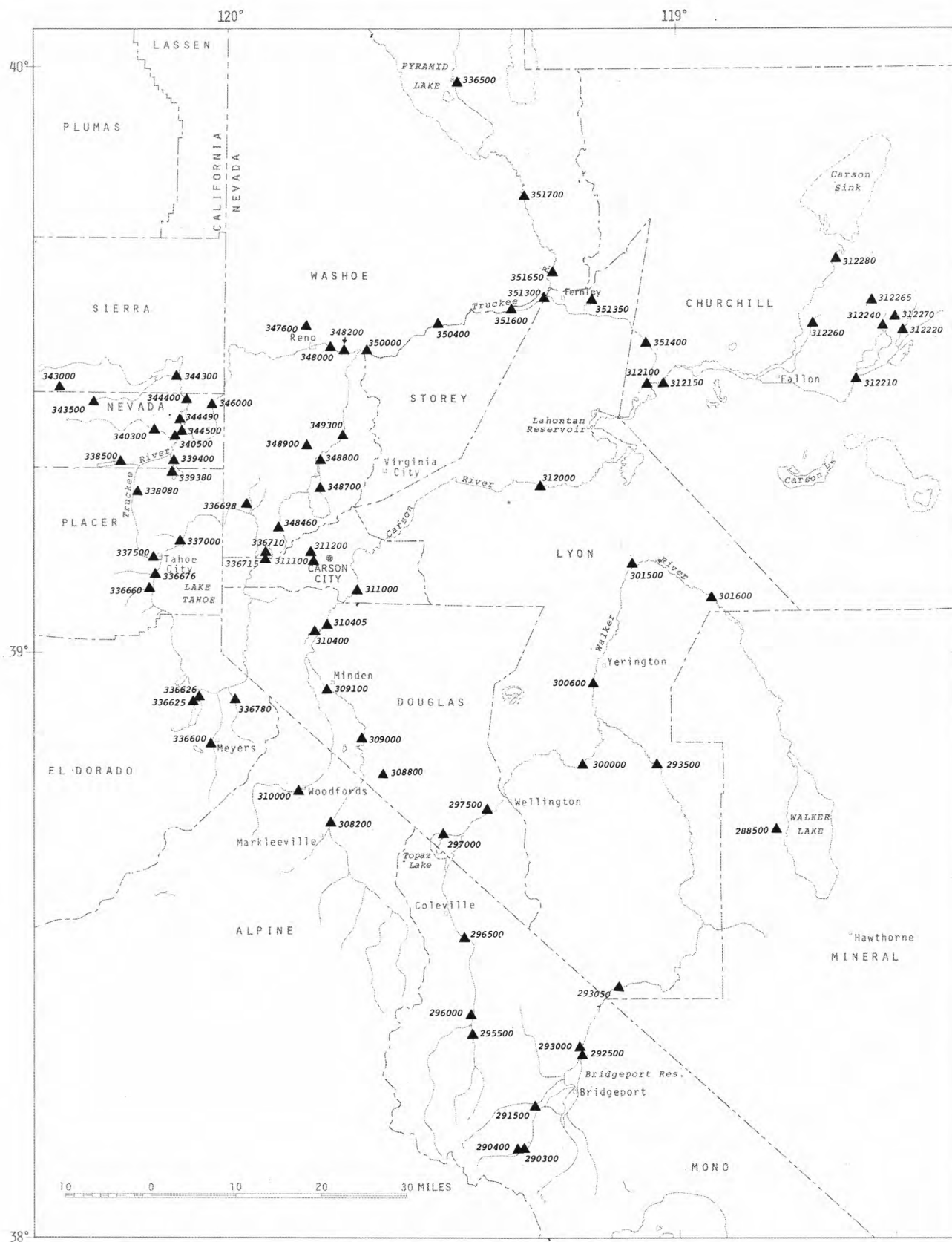


FIGURE 5.--ACTIVE GAGING STATIONS IN WEST-CENTRAL NEVADA.

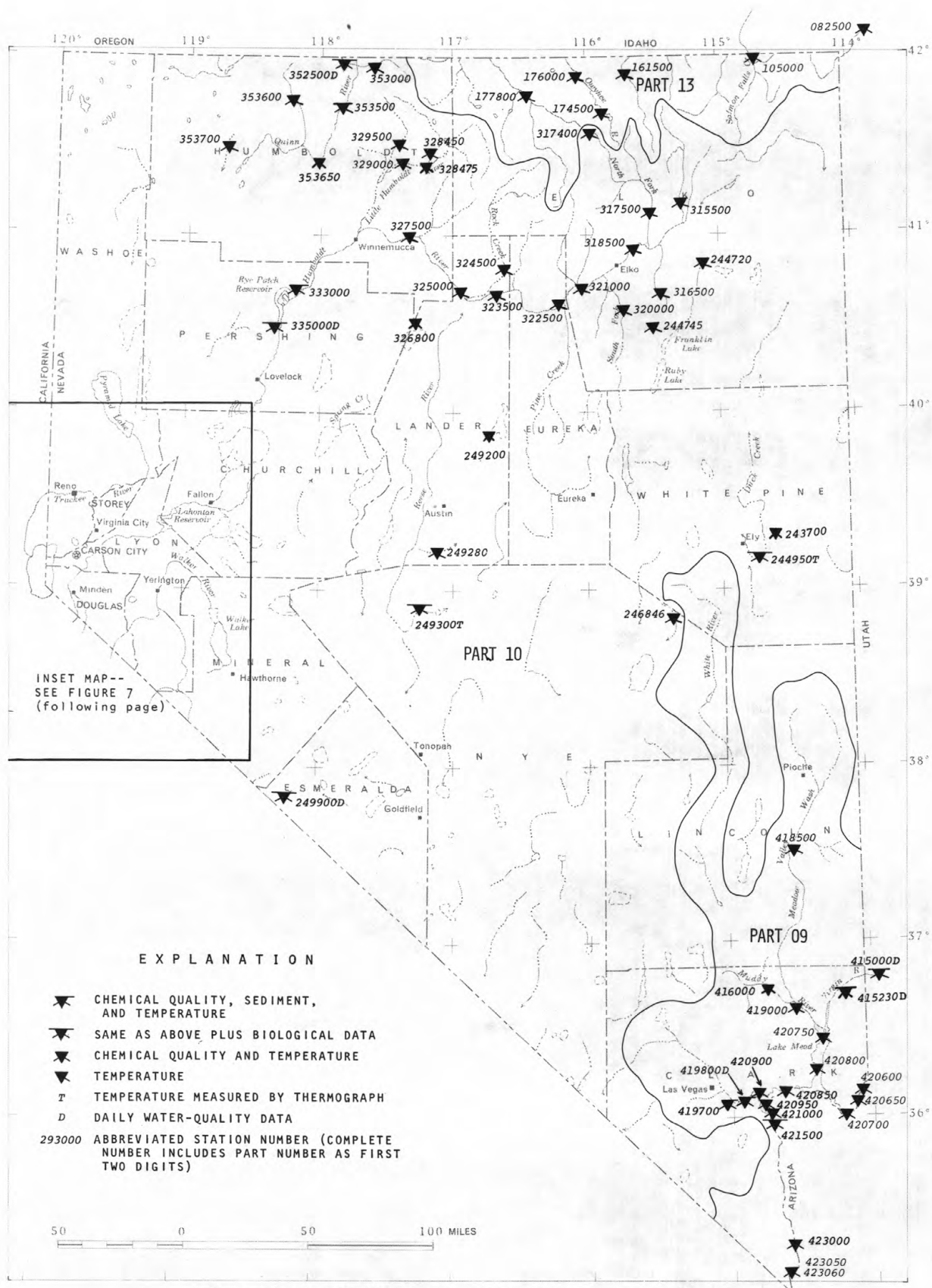


FIGURE 6.--SURFACE-WATER QUALITY SITES LISTED IN THIS REPORT.

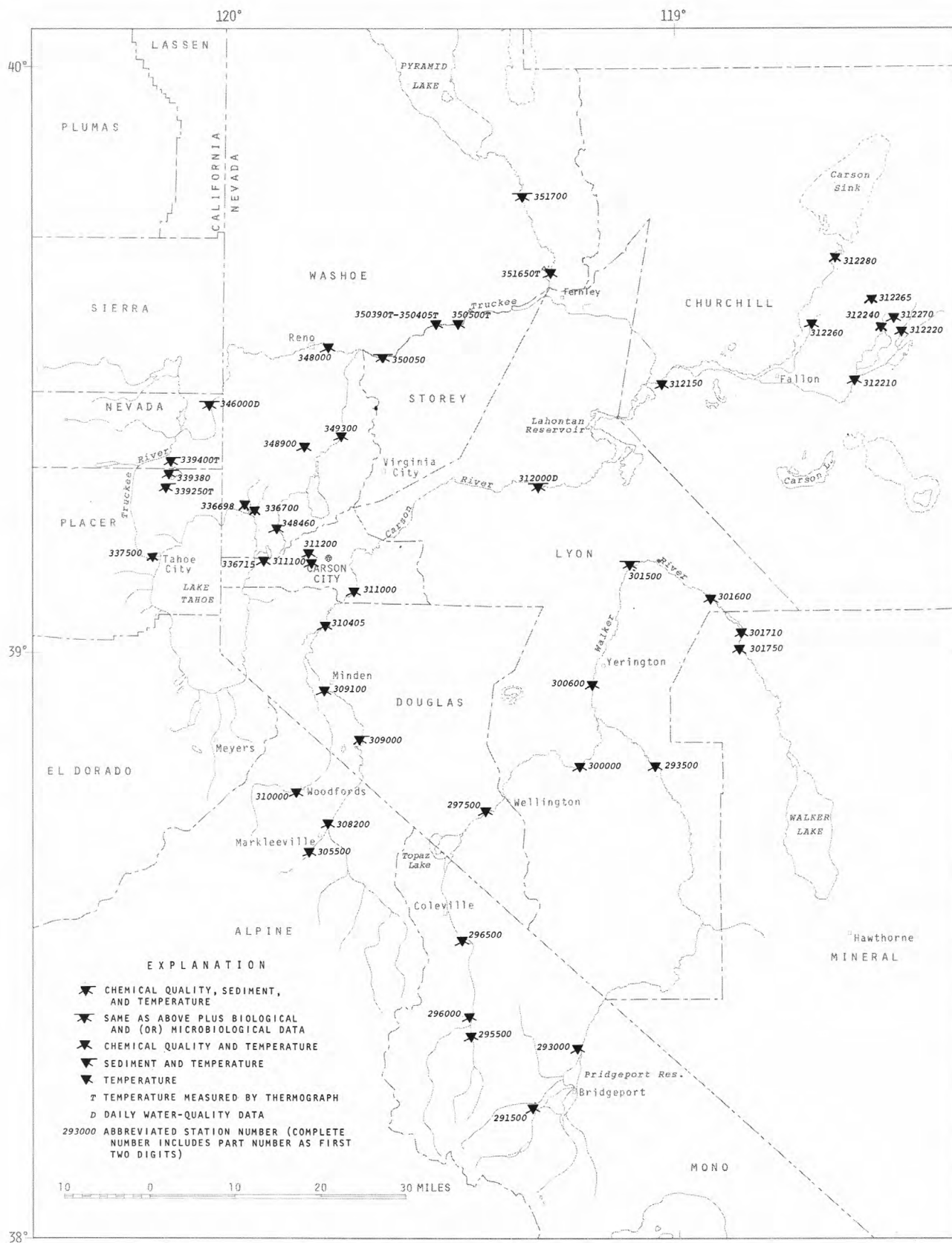


FIGURE 7.--STREAM-QUALITY SITES IN WEST-CENTRAL NEVADA.

COLORADO RIVER BASIN

VIRGIN RIVER BASIN

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ

LOCATION.--Lat 36°53'30", long 113°55'25", in SW¼SW¼ sec. 4, T.40 N., R.15 W., Mohave County, Hydrologic Unit 15010010, on right bank 0.5 mi (0.8 km) downstream from Beaver Dam Wash, 0.4 mi (0.6 km) upstream from Littlefield, and 36 mi (58 km) upstream from waterline of Lake Mead at elevation 1,221 ft (372.2 m) above mean sea level.

DRAINAGE AREA.--5,090 mi² (13,200 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1929 to current year.

REVISED RECORDS.--WSP 959: 1932. WSP 979: 1930-31, 1933-37. WSP 1313: 1940 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,763.68 ft (537.570 m) National Geodetic Vertical Datum of 1929. Prior to May 28, 1933, nonrecording gage at same site and May 28, 1933, to Nov. 7, 1939, at site 300 ft (90 m) downstream, both at datum 2.53 ft (0.771 m) higher. Nov. 8, 1939, to Mar. 31, 1942, nonrecording gage at site 300 ft (90 m) downstream at datum 2.00 ft (0.610 m) higher. Apr. 1, 1942, to Sept. 30, 1970, water-stage recorder at site 300 ft (90 m) downstream at same datum.

REMARKS.--Records poor. Diversion above station for irrigation of about 23,200 acres (93.9 km²).

AVERAGE DISCHARGE.--49 years, 223 ft³/s (6,315 m³/s), 161,600 acre-ft/yr (199 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,200 ft³/s (997 m³/s) Dec. 6, 1966, gage height, 15.66 ft (4.773 m), site then in use, from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement of peak flow; minimum, 38 ft³/s (1.08 m³/s) May 1, 10, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 10	0430	11,160 316	12.80 3.901
Mar. 2	2200	*about 22,000 623	13.60 4.145
Mar. 5	0100	9,400 266	11.20 3.414
Mar. 22	1000	5,000 142	10.13 3.088
Apr. 1	1600	6,000 170	10.35 3.155

Minimum daily, 52 ft³/s (1.47 m³/s) Aug. 25-27.

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	58	89	112	228	145	1060	3550	498	195	63	59	59
2	59	91	107	176	145	7210	2000	473	170	63	59	61
3	61	89	105	170	139	13300	1650	473	150	63	61	61
4	63	89	105	170	136	2970	1060	508	130	64	61	63
5	64	83	128	173	131	7720	1030	458	120	64	61	64
6	64	103	103	176	139	3180	693	478	110	64	64	68
7	64	100	115	496	448	1400	687	513	100	64	64	66
8	63	103	123	224	439	782	645	510	92	66	61	64
9	63	107	133	170	317	611	651	520	86	66	61	63
10	66	110	110	190	3550	539	628	520	82	66	61	59
11	64	112	112	288	740	566	706	510	78	66	59	59
12	64	115	120	232	510	957	712	500	75	68	191	59
13	66	112	105	183	430	681	699	480	72	70	123	59
14	68	112	94	163	350	483	616	470	70	73	60	63
15	68	105	89	473	283	420	657	470	68	75	58	63
16	66	107	98	865	256	410	620	470	66	71	58	61
17	71	100	89	524	256	400	620	480	65	70	58	61
18	75	100	98	347	248	380	610	480	64	68	56	63
19	66	96	154	257	220	400	610	490	63	66	56	63
20	71	100	110	283	212	463	620	510	63	66	56	61
21	77	107	117	257	220	402	640	540	63	64	54	61
22	105	103	128	183	220	1900	680	570	63	66	54	61
23	91	112	133	176	204	904	730	600	63	66	53	59
24	91	112	125	180	236	634	770	605	63	66	53	59
25	81	125	125	160	194	550	769	518	64	66	52	59
26	79	112	125	151	201	630	688	508	63	73	52	59
27	73	112	120	151	261	663	483	450	63	59	52	59
28	73	128	183	154	224	756	545	380	63	64	55	59
29	81	103	216	148	---	828	550	320	63	59	56	59
30	77	110	216	142	---	815	488	270	63	59	56	59
31	87	---	197	145	---	972	---	230	---	58	59	---
TOTAL	2219	3147	3895	7635	10854	52986	25407	14802	2550	2036	1983	1834
MEAN	71.6	105	126	246	388	1709	847	477	85.0	65.7	64.0	61.1
MAX	105	128	216	865	3550	13300	3550	605	195	75	191	68
MIN	58	83	89	142	131	380	483	230	63	58	52	59
AC-FT	4400	6240	7730	15140	21530	105100	50390	29360	5060	4040	3930	3640

CAL YR 1977	TOTAL	36844	MEAN 101	MAX 1590	MIN 51	AC-FT 73080
WTR YR 1978	TOTAL	129348	MEAN 354	MAX 13300	MIN 52	AC-FT 256600

VIRGIN RIVER BASIN

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1947 to current year.

CHEMICAL ANALYSES: July 1949 to September 1969, once-daily (composited); October 1969 to current year, monthly.

SPECIFIC CONDUCTANCES AND WATER TEMPERATURES: October 1947 to current year, once-daily.

BIOLOGICAL DATA: October 1977 to current year, twice-yearly.

MICROBIOLOGICAL DATA: November 1977 to current year, monthly.

SEDIMENT DATA: October 1947 to September 1968, once-daily, September 1977 to current year, monthly.

REMARKS.--Streamflow is not completely homogenous chemically from bank to bank. Flow adjacent to north bank is generally somewhat more dilute than average; monthly data collected during June 1975 - September 1976 indicate that specific conductance off north bank was 93 to 100 percent of stream-wide average (range of discharge, 60-230 ft³/s). This doubtless affects specific conductance of daily samples, which are collected off north bank. Water temperature characteristically shows little or no variation from bank to bank. Much of day-to-day fluctuation in water temperature prior to August 1975 was due to measurement at different times of day (rather than at about the same time each day). Detailed sampling information for period since June 1975 is available from U.S. Geol. Survey office, Carson City, Nev.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 4,650 micromhos Aug. 21, 1966; minimum, 685 micromhos May 12, 1973.

FECAL STREPTOCOCCI: Maximum, 46,000 colonies/100 mL (non-ideal colony count) Jan. 25, 1978; minimum, 250 colonies/100 mL (non-ideal colony count) Aug. 23, 1978.

WATER TEMPERATURES: Maximum, 33.5°C July 7, 1953; minimum, 2.0°C Jan. 4, 1949, Jan. 4, 1950, Jan. 4, 5, 1971.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 247,000 mg/L Aug. 14, 1964; minimum, 40 mg/L June 16, 20, 1962.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

SPECIFIC CONDUCTANCES: Maximum, 3,990 micromhos Aug. 1; minimum, 805 micromhos May 15.

WATER TEMPERATURES: Maximum, 32.0°C Aug. 3-5; minimum, 9.0°C Jan. 16.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
19...	1130	64	3400	7.7	19.5	290	9.0	--	--	470	--
27...	1030	79	3480	8.0	18.5	--	--	--	--	--	--
NOV											
09...	1120	106	3200	7.8	15.0	700	9.7	--	K1300	--	2900
23...	1000	73	3250	8.2	13.0	--	--	--	--	--	--
DEC											
13...	1100	95	3150	7.9	14.0	270	9.5	--	K500	--	7200
29...	1100	179	2740	8.1	14.0	--	--	--	--	--	--
JAN											
25...	1400	164	2650	7.9	12.0	280	13.0	K1600	--	K46000	--
FEB											
13...	1345	410	1880	8.1	10.0	900	10.4	K220	--	5600	--
MAR											
29...	1330	952	1460	8.1	18.0	1400	11.7	2000	--	3300	--
APR											
26...	1000	747	1370	8.0	16.0	310	9.0	--	K1000	--	4000
MAY											
24...	1230	619	1150	8.0	16.0	300	8.2	--	880	--	1400
JUN											
21...	1015	63	3300	8.0	25.0	35	7.9	--	K30	--	K300
JUL											
26...	1715	59	3190	8.0	30.0	75	--	--	260	--	1000
AUG											
23...	1300	54	3200	8.4	28.0	20	--	--	K40	--	K250
SEP											
28...	1430	59	3530	8.2	28.0	--	--	--	K180	--	--

K: NON-IDEAL COLONY COUNT.

VIRGIN RIVER BASIN

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09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

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

DATE	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SURP- TIUM RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
OCT											
19...	1500	390	120	290	3.3	30	210	1100	420	1.0	20
27...	1300	350	110	300	3.6	30	270	1100	440	--	19
NOV											
09...	1200	320	100	310	3.9	27	300	960	420	.8	19
23...	1200	300	110	330	4.1	28	290	970	440	--	19
DEC											
13...	1200	320	100	290	3.6	29	250	930	400	.9	17
29...	960	250	81	260	3.7	26	290	720	340	--	17
JAN											
25...	1000	270	82	250	3.4	24	290	710	360	.5	12
FEB											
13...	670	190	48	140	2.4	12	190	520	180	.2	12
MAR											
29...	570	150	47	110	2.0	11	210	390	130	.4	14
APR											
26...	460	120	38	90	1.8	11	130	310	130	.2	12
MAY											
24...	440	120	33	96	2.0	9.2	190	260	120	.3	21
JUN											
21...	1400	380	120	290	3.3	33	192	1100	410	1.0	19
JUL											
26...	1400	370	120	280	3.2	33	220	1200	410	1.1	18
AUG											
23...	1400	380	120	280	3.2	32	120	1300	400	1.0	18
SEP											
28...	1500	390	120	290	3.3	32	210	1200	410	1.1	19

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL NO2+NO3 (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
19...	2740	2500	480	--	--	--	--	--	--	--	--
27...	--	2510	535	.34	.01	--	--	--	--	.03	--
NOV											
09...	2410	2340	690	--	--	--	--	--	--	--	--
23...	--	2370	467	--	--	--	--	--	--	--	--
DEC											
13...	2320	2240	600	--	--	--	--	--	--	--	--
29...	--	1870	904	--	--	--	--	--	--	--	--
JAN											
25...	--	1880	1690	.42	.01	--	--	--	--	.03	--
FEB											
13...	1270	1220	1410	--	--	--	--	--	--	--	--
MAR											
29...	971	976	2500	--	--	.37	1.6	2.0	1.9	--	39
APR											
26...	766	791	1550	.12	.00	--	--	--	--	.01	--
MAY											
24...	789	774	1320	--	--	--	--	--	--	--	--
JUN											
21...	2550	2470	435	--	--	--	--	--	--	--	--
JUL											
26...	2660	2570	429	.24	.02	--	--	--	--	.01	--
AUG											
23...	2690	2610	394	--	--	--	--	--	--	--	--
SEP											
28...	2750	2590	443	.25	.01	.14	.18	.32	.01	.01	2.4

VIRGIN RIVER BASIN

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

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

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
MAR 29...	1330	11	5	100	310	2	0	20
SEP 28...	1430	7	8	0	1300	--	--	0

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)
MAR 29...	0	10	1	47	0	26000	50	40	1
SEP 28...	0	0	0	10	1	150	20	--	--

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAR 29...	1100	30	.0	.0	2	1	140	10
SEP 28...	50	20	.0	.0	2	2	50	30

VIRGIN RIVER BASIN

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09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

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

PHYTOPLANKTON

DATE TIME	OCT 19,77 1130	MAR 29,78 1330
TOTAL CELLS/ML	1700	140
DIVERSITY: DIVISION	0.4	0.7
..CLASS	0.5	0.7
...ORDER	0.9	0.7
....FAMILY	1.9	2.4
.....GENUS	2.2	2.4

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)				
..CHLOROPHYCEAE				
...CHLOROCOCCALES				
....DOCYSTACEAE				
.....CHLORELLA	54	3	--	-
...VOLVOCALES				
...CHLAMYDOMONADACEAE				
....CHLAMYDOMONAS	--	-	29#	20
...ZYGNEMATALES				
...DESMIDIACEAE				
....CLOSTERIUM	27	2	--	-
CHRYSOPHYTA				
..BACILLARIOPHYCEAE				
...PENNALES				
...NAVICULACEAE				
....ENTOMONEIS	27	2	--	-
...CENTRALES				
...COSCINODISCACEAE				
....CYCLOTELLA	110	6	--	-
...PENNALES				
...CYMBELLACEAE				
....CYMBELLA	54	3	--	-
....EPITHEMIA	--	-	29#	20
...DIATOMACEAE				
....DIATOMA	--	-	43#	30
...NAVICULACEAE				
....NAVICULA	560#	34	14	10
....NEIDIUM	81	5	--	-
...NITZSCHACEAE				
....NITZSCHIA	700#	42	14	10
...SURIRELLACEAE				
....SURIRELLA	--	-	14	10
..CHRYSOPHYCEAE				
...CHRYSDOMONADALES				
...CHROMULINACEAE				
....CHRYSOCCUS	27	2	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)				
..CYANOPHYCEAE				
...CHROCOCCALES				
...CHRUCCOCCAEAE				
....ANACYSTIS	27	2	--	-

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

VIRGIN RIVER BASIN

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (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
JUN 10...	1215	297	75800	60800	95	99	100

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 19...	1130	64	668	117
NOV 09...	1120	106	2680	767
DEC 13...	1100	95	1510	391
JAN 25...	1400	164	2170	961
MAR 29...	1330	952	6110	15700
APR 26...	1000	747	3420	6900
MAY 24...	1230	619	3970	6640
JUN 21...	1015	63	256	44
JUL 26...	1715	59	310	50
AUG 23...	1300	54	97	14
SEP 28...	1430	59	93	15

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3310	3360	3220	2890	2630	2330	1030	985	1690	3250	3990	3340
2	3380	3320	3180	2880	2690	1270	1030	1030	1670	3270	3590	3350
3	3350	3330	3300	2890	2680	1150	1050	853	1720	3300	3560	3350
4	3380	3470	3260	2880	2630	1120	1230	861	1800	3350	3500	3440
5	3400	3600	3160	2850	2650	1100	1300	917	1820	3310	3520	3440
6	3370	3400	3100	1780	1530	1290	1300	1140	1800	3240	3520	3490
7	3390	3330	3160	1180	1750	1490	1300	1400	1960	3320	3360	3490
8	3320	3230	3030	2480	2090	1710	1300	1390	2000	3390	3530	3400
9	3390	3150	3000	2760	868	1810	1390	1440	2170	3290	3370	3410
10	3420	3060	3140	2660	1790	1560	1330	1250	2250	3420	3440	3450
11	3310	3150	3150	2530	1780	1560	1470	1050	2700	3310	3380	3460
12	3410	3200	3120	2530	1780	1560	1460	990	2740	3330	3380	3460
13	3420	3120	3180	2520	1790	1620	1450	925	2740	3290	3400	3440
14	3430	3150	3300	1600	1880	2210	1260	839	2700	3310	3450	3350
15	3400	3250	3340	1600	2330	2210	1280	805	2900	3310	3470	3430
16	3410	3250	3320	1600	2360	2190	1260	892	2940	3340	3380	3440
17	3450	3220	3260	1570	2460	2240	1580	1060	2860	3400	3500	3370
18	3280	3130	3300	2080	2560	2210	1530	1220	3450	3390	3450	3350
19	3310	3160	3070	2340	2600	2190	1550	1210	2940	3430	3350	3370
20	3430	3160	2970	2260	2530	1700	1540	1190	3390	3400	3360	3410
21	3310	3180	3140	2370	2540	1820	1450	1190	3390	3400	3500	3410
22	3310	3190	3200	2560	2460	1040	1460	1160	3390	3330	3500	3400
23	3320	3250	3060	2570	2500	1220	1560	1180	3330	3400	3520	3370
24	3300	3300	3030	2590	2520	1520	1430	1160	3450	3400	3520	3380
25	3420	3210	3030	2890	2530	1600	1300	1380	3330	3460	3470	3400
26	3410	3170	3080	2880	2500	1630	1210	1380	3390	3390	3480	3400
27	3460	3160	3110	2810	2560	1610	971	1520	3500	3380	3470	3460
28	3430	3200	2720	2680	2600	1580	967	1480	3450	3030	3470	3450
29	3440	3270	2630	2690	---	1430	1010	1460	3500	3400	3480	3460
30	3390	3270	2560	2700	---	1390	1010	1520	3500	3430	3520	3470
31	3420	---	2920	2670	---	1350	---	1500	---	3440	3520	---
MEAN	3380	3240	3100	2430	2270	1640	1300	1170	2750	3350	3480	3410
MAX	3460	3600	3340	2890	2690	2730	1580	1520	3500	3460	3990	3490
MIN	3280	3060	2560	1180	868	1040	967	805	1670	3030	3350	3340
WTR YR 1978	MEAN	2630	MAX	3990	MIN	805						

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	24.5	19.0	15.5	15.0	15.0	15.0	14.0	17.0	23.0	26.0	30.0	28.0
2	24.5	19.0	16.0	15.0	15.5	15.0	14.0	19.0	23.0	26.0	31.0	29.0
3	26.0	20.0	17.0	15.0	16.0	17.0	15.5	17.0	24.0	26.0	32.0	29.0
4	25.0	19.0	17.5	15.0	14.5	14.0	15.0	17.0	26.0	28.0	32.0	28.0
5	24.5	18.0	17.0	15.0	15.0	11.0	14.0	15.0	25.0	29.0	32.0	28.0
6	24.0	17.5	17.0	11.5	15.0	12.5	14.0	15.0	26.5	30.0	30.0	26.0
7	25.5	18.0	16.0	11.5	13.0	13.0	13.0	20.0	27.0	27.5	30.0	25.5
8	24.5	15.0	15.5	13.0	14.5	13.5	12.0	20.0	28.0	29.0	31.0	26.5
9	25.0	15.0	13.0	12.5	14.0	13.5	13.5	21.5	25.5	28.5	31.5	26.0
10	25.0	16.0	14.5	13.0	10.0	14.0	17.0	21.0	23.0	27.0	31.0	25.0
11	22.5	17.0	16.0	14.0	11.0	13.0	19.5	20.5	24.0	27.0	30.0	26.5
12	22.5	18.0	16.0	15.0	11.0	12.5	20.0	22.0	24.0	27.5	29.0	26.0
13	23.5	17.5	15.5	14.5	11.5	11.0	19.0	22.0	25.5	29.0	27.0	25.0
14	24.5	18.0	17.0	14.0	13.0	14.0	18.0	22.0	25.5	29.0	29.0	26.0
15	25.0	18.5	16.5	11.0	12.0	15.0	18.5	20.0	25.0	31.0	29.0	27.5
16	24.0	18.0	16.5	9.0	12.0	17.0	17.0	18.0	27.0	29.0	25.0	25.0
17	24.0	19.0	15.5	10.5	12.0	19.0	16.5	19.0	28.0	28.0	25.0	24.0
18	23.5	18.0	16.5	12.0	13.0	20.0	17.0	22.5	25.0	28.5	25.0	24.0
19	21.5	14.0	12.0	13.0	14.0	21.0	18.0	21.5	28.0	28.0	26.5	22.0
20	23.5	12.5	12.0	13.5	15.0	21.0	18.0	22.0	28.0	28.0	27.5	23.5
21	22.5	13.0	14.5	13.0	15.0	17.0	17.5	22.0	28.0	30.0	27.0	25.0
22	22.5	15.0	14.5	13.0	15.0	13.5	17.5	21.5	28.5	29.5	25.0	25.5
23	21.0	15.5	15.0	11.0	16.0	17.0	19.0	20.0	25.0	30.5	24.5	26.0
24	21.5	16.5	15.0	10.0	15.5	17.5	19.0	19.5	25.0	30.0	25.5	26.0
25	21.0	17.0	14.0	13.0	16.0	17.0	17.0	20.0	28.0	31.0	26.0	27.0
26	21.0	16.5	14.0	13.0	16.0	18.0	19.0	20.5	26.0	30.0	26.0	25.5
27	21.5	16.0	17.0	13.0	16.0	19.0	19.0	22.0	27.0	31.5	28.0	26.0
28	21.5	15.5	13.5	16.0	16.0	20.0	19.5	23.5	25.5	26.0	28.0	26.5
29	20.0	16.5	14.5	16.0	---	19.5	19.0	24.5	28.0	31.0	28.5	26.5
30	20.0	16.5	15.0	14.5	---	17.5	17.0	25.0	26.0	30.0	26.0	26.0
31	20.0	---	16.0	16.0	---	16.5	---	23.5	---	28.5	26.0	---
MEAN	23.0	17.0	15.5	13.5	14.0	16.0	17.0	20.5	26.0	28.5	28.0	26.0
MAX	26.0	20.0	17.5	16.0	16.0	21.0	20.0	25.0	28.5	31.5	32.0	29.0
MIN	20.0	12.5	12.0	9.0	10.0	11.0	12.0	15.0	23.0	26.0	24.5	22.0
WTR YR 1978	MEAN	20.5	MAX	32.0	MIN	9.0						

VIRGIN RIVER BASIN

09415230 VIRGIN RIVER AT HALFWAY WASH NEAR RIVERSIDE, NV

LOCATION.—Lat 36°40'10", long 114°18'10", in SE¼ sec.32, T.14 S., R.69 E., Clark County, Hydrologic Unit 15010010, on left bank, 0.8 mi (1.3 km) upstream from Halfway Wash and 6.5 mi (10.5 km) southeast of Riverside.

DRAINAGE AREA.--5,980 mi² (15,490 km²), approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 1,320 ft (402 m), from topographic map.

REMARKS.--Records poor. Diversion above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 16,000 ft³/s (453 m³/s) Mar. 5, 1978, gage height, 6.60 ft (2.012 m); no flow June 29 to July 25, Aug. 1 to Sept. 13, 1978.

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	60	89	191	158	242	1600	370	200	.00	.00	.00
2	48	60	89	163	155	3530	1000	360	170	.00	.00	.00
3	48	61	90	179	150	3070	900	380	140	.00	.00	.00
4	49	62	91	163	150	3530	780	390	120	.00	.00	.00
5	50	63	92	197	148	4210	660	370	110	.00	.00	.00
6	51	64	92	216	148	2500	600	380	85	.00	.00	.00
7	51	66	92	244	200	1400	580	400	70	.00	.00	.00
8	52	68	92	158	300	800	560	400	60	.00	.00	.00
9	52	70	92	179	476	632	550	400	50	.00	.00	.00
10	52	72	94	259	2210	617	540	390	43	.00	.00	.00
11	53	76	95	292	1670	603	530	400	36	.00	.00	.00
12	53	79	96	292	600	855	520	400	31	.00	.00	.00
13	54	81	97	283	460	855	520	410	25	.00	.00	.00
14	54	85	98	267	510	737	520	410	20	.00	.00	20
15	54	92	99	530	460	603	510	420	18	.00	.00	47
16	54	98	100	348	370	512	500	420	14	.00	.00	3.2
17	54	98	102	452	300	442	500	430	11	.00	.00	8.2
18	54	98	104	358	280	476	500	440	9.0	.00	.00	1.3
19	55	98	104	330	260	537	500	450	7.5	.00	.00	.00
20	56	97	105	310	250	675	500	460	6.0	.00	.00	1.3
21	58	93	106	270	240	488	490	470	4.5	.00	.00	11
22	60	91	108	250	240	1410	490	480	3.5	.00	.00	9.1
23	68	88	110	225	240	737	480	490	3.0	.00	.00	9.1
24	70	88	115	210	240	540	480	500	2.5	.00	.00	14
25	66	88	126	200	230	490	470	510	2.0	.00	.00	7.4
26	64	88	126	190	230	510	460	440	1.4	4.7	.00	11
27	60	88	110	180	230	540	350	400	.90	.14	.00	5.4
28	60	88	100	165	230	560	380	360	.40	.20	.00	7.4
29	60	88	174	165	---	600	400	320	.00	13	.00	15
30	60	88	191	162	---	680	370	280	.00	5.4	.00	16
31	60	---	168	160	---	800	---	230	---	.08	.00	---
TOTAL	1728	2436	3347	7588	11135	34181	17240	12560	1243.70	23.52	.00	186.40
MEAN	55.7	81.2	108	245	398	1103	575	405	41.5	.76	.000	6.21
MAX	70	98	191	530	2210	4210	1600	510	200	13	.00	47
MIN	48	60	89	158	148	242	350	230	.00	.00	.00	.00
AC-FT	3430	4830	6640	15050	22090	67800	34200	24910	2470	47	.00	370
WTR YR 1978	TOTAL	91668.62	MEAN	251	MAX	4210	MIN	.00	AC-FT	181800		

VIRGIN RIVER BASIN

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09415230 VIRGIN RIVER ABOVE HALFWAY WASH NEAR RIVERSIDE, NV--Continued

WATER-QUALITY RECORDS

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

CHEMICAL ANALYSES, MICROBIOLOGICAL DATA, AND SEDIMENT DATA: January to September 1978, monthly.

SPECIFIC CONDUCTANCES AND WATER TEMPERATURES: December 1977 to April 1978, monthly; May to September 1978, once-daily.

BIOLOGICAL DATA: March to September 1978, monthly (seasonal).

REMARKS.--Daily specific-conductance and temperature data are collected approximately 5 mi (8 km) upstream, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.12, T.14 S., R.69 E. Stream channel at both sampling sites was dry or almost dry during part of year.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 5,260 micromhos Sept. 16, 1978; minimum, 1,080 micromhos May 14, 1978.

PHYTOPLANKTON: Maximum, 2,500 cells/mL June 22, 1978; minimum, 27 cells/mL Mar. 30, 1978.

FECAL STREPTOCOCCI: Maximum, 7,200 colonies/100 mL Mar. 30, 1978; minimum, 750 colonies/100 mL (non-ideal colony count) June 22, 1978.

WATER TEMPERATURES: Maximum, 34.0°C June 20, July 30, 1978; minimum, 10.0°C Jan. 26, 1978.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 3,600 mg/L Feb. 14, 1978; minimum, 166 mg/L Sept. 27, 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTANTANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BIO- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
JAN 26...	1330	185	3130	8.3	10.0	350	--	13.0	--	K200	--
FEB 14...	1450	509	2260	8.2	14.0	900	--	7.8	--	K200	--
MAR 30...	0930	642	1650	8.3	18.0	950	--	11.7	--	4800	--
APR 24...	1300	487	1680	8.5	22.0	420	--	8.8	--	--	260
MAY 25...	1300	560	1380	8.3	20.5	--	260	7.7	--	--	310
JUN 22...	1015	3.8	4250	8.2	20.5	--	110	--	65	--	440
SEP 27...	1320	11	5020	8.3	29.5	--	40	--	43	--	K1200

DATE	STREP- TOCOCOCCI FECAL, (COLS. PER 100 ML)	STREP- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
JAN 26...	5500	--	1200	280	110	290	3.7	26	240	930
FEB 14...	4800	--	760	240	65	200	3.2	14	200	650
MAR 30...	7200	--	600	160	48	120	2.1	13	200	440
APR 24...	--	1100	640	170	53	140	2.4	13	200	460
MAY 25...	--	1000	500	130	43	110	2.1	10	170	340
JUN 22...	--	K750	1500	350	160	440	4.9	38	150	1600
SEP 27...	--	--	1700	370	200	510	5.3	50	150	1700

K: NON-IDEAL COLONY COUNT.

VIRGIN RIVER BASIN

09415230 VIRGIN RIVER ABOVE HALFWAY WASH NEAR RIVERSIDE, NV--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)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
JAN										
26...	400	.6	19	2270	2200	1130	--	--	.26	.10
FEB										
14...	240	.4	14	1670	1520	2300	--	--	.37	.09
MAR										
30...	150	.4	15	1110	1060	1920	--	--	.32	.05
APR										
24...	190	.5	15	1150	1160	1510	.31	.01	.32	.03
MAY										
25...	140	.3	13	858	889	1300	.52	.00	.52	.10
JUN										
22...	610	.9	21	3550	3310	37.2	.01	.00	.01	.01
SEP										
27...	740	.9	23	4070	3680	121	.01	.00	.01	.01
DATE	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)
JAN										
26...	--	.67	--	.67	1.0	.64	.01	--	--	--
FEB										
14...	--	1.0	--	.48	1.5	1.4	.02	31	--	--
MAR										
30...	--	1.5	--	1.1	1.8	.99	.02	--	--	--
APR										
24...	--	.79	--	--	1.1	.14	.01	12	--	--
MAY										
25...	--	--	--	.75	--	.53	.03	18	--	--
JUN										
22...	--	.65	--	.48	.67	.08	.00	--	17	2.7
SEP										
27...	.01	.39	.38	.39	.41	.05	.01	6.2	--	--

VIRGIN RIVER BASIN

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09415230 VIRGIN RIVER ABOVE HALFWAY WASH NEAR RIVERSIDE, NV--Continued

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

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
MAR 30...	0930	11	5	400	100	<10	0	20	0
JUN 22...	1015	3	4	300	200	--	--	20	0
SEP 27...	1320	6	6	0	0	--	--	10	10

DATE	COPBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPBALT, DIS- SOLVED (UG/L AS CO)	CUPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	CUPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
MAR 30...	10	0	40	0	23000	40	30	1	800
JUN 22...	1	1	9	9	1600	70	--	--	150
SEP 27...	0	1	6	3	980	80	--	--	60

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAR 30...	20	--	--	1	1	0	0	100	10
JUN 22...	20	.0	.0	0	0	0	0	20	30
SEP 27...	10	.1	.0	0	1	0	0	40	30

VIRGIN RIVER BASIN

09415230 VIRGIN RIVER ABOVE HALFWAY WASH NEAR RIVERSIDE, NV--Continued

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

PHYTOPLANKTON

DATE TIME	MAR 30,78 0930	MAY 25,78 1300	JUN 22,78 1015	SEP 27,78 1320				
TOTAL CELLS/ML	27	270	2500	760				
DIVERSITY: DIVISION	0.0	0.0	1.0	0.8				
..CLASS	0.0	0.0	1.0	0.8				
...ORDER	0.0	0.0	1.7	0.8				
...FAMILY	0.0	1.6	2.6	1.9				
....GENUS	1.0	1.6	2.7	2.0				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....OOCYSTACEAE								
.....DICTYOSPHAERIUM	--	-	--	-	89	4	--	-
.....OOCYSTIS	--	-	--	-	180	7	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	--	-	360	14	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	310	12	--	-
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	--	-	250	10	--	-
...PENNALES								
....CYMBELLACEAE								
.....CYMBELLA	--	-	--	-	--	-	15	2
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	44	6
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	89#	33	67	3	--	-
...NAVICULACEAE								
....AMPHIPLEURA	--	-	--	-	--	-	15	2
....GYROSIGMA	14#	50	--	-	--	-	--	-
...NAVICULA	14#	50	130#	50	740#	29	88	12
...NITZSCHACEAE								
....NITZSCHIA	--	-	22	8	540#	21	400#	52
...SURIPELLACEAE								
....CYMATOPLEURA	--	-	--	-	--	-	29	4
....SURIPELLA	--	-	22	8	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCCOCCALES								
....CHROCCOCCAEAE								
...ANACYSTIS	--	-	--	-	--	-	180#	23

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

VIRGIN RIVER BASIN

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09415230 VIRGIN RIVER ABOVE HALFWAY WASH NEAR RIVERSIDE, NV--Continued

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

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM
JAN 26...	1330	185	3210	1600	11	13	13	19	26
FEB 14...	1430	509	3600	4950	--	--	--	--	--
MAR 30...	0930	642	3500	6070	--	--	--	--	--
APR 24...	1300	487	2680	3520	10	13	17	21	27
MAY 25...	1300	560	1970	2980	12	17	22	26	31
JUN 22...	1015	3.8	322	3.4	--	--	--	--	--
SEP 27...	1320	11	166	4.9	--	--	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. 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
JAN 26...	--	--	--	--	46	73	96	100
FEB 14...	--	--	--	--	--	--	--	--
MAR 30...	--	--	--	--	--	--	--	--
APR 24...	42	75	99	100	--	--	--	--
MAY 25...	45	77	99	100	--	--	--	--
JUN 22...	--	--	--	--	--	--	--	--
SEP 27...	--	--	--	--	--	--	--	--

VIRGIN RIVER BASIN

09415230 VIRGIN RIVER ABOVE HALFWAY WASH NEAR RIVERSIDE, NV--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								---	1610	---		---
2								---	1690	---		---
3								---	1670	---		---
4								---	1940	---		---
5								---	1940	---		---
6								---	2080	---		---
7								---	2190	---		---
8								1550	2170	---		---
9								1710	2340	---		---
10								1600	2620	---		---
11								1420	2520	---		---
12								1290	2870	---		---
13								1250	2910	---		---
14								1080	3640	---		2970
15								1110	3920	---		4420
16								1120	3400	---		5260
17								1200	3580	---		4530
18								1370	3780	---		5070
19								1440	4160	---		---
20								1470	4310	---		5070
21								1420	4670	---		4950
22								1390	4170	---		4800
23								1390	4860	---		4790
24								1410	4840	---		4260
25								1410	4740	---		4530
26								1520	4510	4140		---
27								1640	5060	4230		4790
28								1660	---	5020		4330
29								1690	---	3970		4630
30								1690	---	4020		4480
31								1690	---	4960		---
MEAN								1440	3270	4390		4590
MAX								1710	5060	5020		5260
MTN								1080	1610	3970		2970
WTR YP 1978	MEAN	3030		MAY	5260		MIN	1080				

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								---	27.0	---		---
2								---	26.0	---		---
3								---	28.0	---		---
4								---	30.5	---		---
5								---	30.5	---		---
6								---	31.5	---		---
7								---	33.5	---		---
8								25.0	33.5	---		---
9								25.0	26.0	---		---
10								23.0	23.0	---		---
11								24.0	33.0	---		---
12								26.5	27.5	---		---
13								26.0	28.0	---		---
14								---	24.0	---		19.0
15								22.0	24.0	---		29.0
16								21.5	29.0	---		28.0
17								22.0	32.5	---		22.5
18								25.0	26.0	---		24.5
19								27.0	31.0	---		---
20								25.5	34.0	---		23.5
21								25.5	27.0	---		25.5
22								21.0	27.5	---		30.0
23								21.0	24.5	---		28.5
24								23.0	26.5	---		29.0
25								23.0	29.0	---		31.0
26								23.0	25.0	33.0		31.0
27								27.0	24.5	32.0		28.5
28								29.0	---	28.0		29.0
29								29.5	---	33.5		32.0
30								29.5	---	34.0		30.5
31								29.0	---	31.0		---
MEAN								25.0	28.0	32.0		27.5
MAX								29.5	34.0	34.0		32.0
MTN								21.0	23.0	28.0		19.0

VIRGIN RIVER BASIN

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09415950 MUDDY RIVER POWER DIVERSION NEAR MOAPA, NV

LOCATION.--Lat 36°42'42", long 114°41'40", in SE $\frac{1}{4}$ sec.15, T.14 S., R.65 E., Clark County, Hydrologic Unit 15010012, on left bank of Muddy River, 0.1 mi (0.2 km) upstream from Battleship Wash, 0.8 mi (1.3 km) downstream from Home Ranch, 5 mi (8 km) northwest of Moapa, and 9.5 mi (15.3 km) upstream from Meadow Valley Wash.

PERIOD OF RECORD.--October 1977 to September 1978. Prior to October 1977, discharge included in daily flow figures of Muddy River near Moapa (station 09416000).

GAGE.--Water-stage recorder and Sparling meter.

REMARKS.--Flow is pumped 100 ft upstream from Muddy River near Moapa (09416000) for powerplant cooling. Flow estimated July 5 to Sept. 26.

COOPERATION.--Record of flow furnished by Nevada Power Company.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9.8 ft³/s (0.278 m³/s) Apr. 16; no flow at times.

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	1.9	4.9	4.8	4.0	4.7	4.8	8.6	.00	5.1	2.0	4.8	4.7
2	1.8	4.9	5.0	4.6	4.8	4.9	8.6	.90	6.7	2.6	4.8	4.7
3	1.8	5.9	5.8	4.7	4.8	4.6	5.4	5.3	6.1	2.6	4.8	4.7
4	1.9	5.1	6.8	4.8	4.8	3.8	2.1	5.6	5.3	4.2	4.8	4.7
5	1.9	4.8	5.4	4.3	4.8	3.8	4.7	7.8	4.5	4.3	4.8	4.7
6	1.9	4.9	4.0	4.6	4.8	3.8	8.7	7.3	7.5	.00	4.8	3.0
7	1.9	3.7	5.3	4.8	4.8	3.6	8.8	6.5	6.2	2.6	4.8	3.0
8	1.9	2.9	7.0	4.8	4.8	3.0	5.9	6.5	8.8	2.7	4.8	3.0
9	.80	2.8	5.4	4.6	4.9	4.8	.10	8.7	7.7	2.0	4.8	3.0
10	.00	3.3	3.8	4.3	4.2	5.5	3.1	9.6	4.6	2.4	4.7	3.0
11	3.4	2.9	3.6	4.2	2.8	4.2	5.3	8.8	3.4	3.1	4.7	3.0
12	3.9	3.4	2.2	4.1	1.0	3.8	.00	9.1	5.5	2.4	4.7	3.0
13	6.1	.40	2.0	3.8	.00	2.7	.00	8.5	7.4	2.6	4.7	3.0
14	7.2	4.1	1.9	3.8	.00	.40	3.6	6.4	7.0	2.9	4.7	3.0
15	5.5	4.7	3.9	3.8	.00	.00	6.6	6.9	4.8	2.5	4.7	3.0
16	4.7	4.7	4.6	4.3	.30	.00	9.8	4.4	3.4	4.4	4.7	3.0
17	2.3	3.8	4.4	4.8	1.1	.00	9.0	3.4	3.9	2.6	4.7	3.0
18	5.1	3.3	4.6	4.1	4.5	.00	6.5	3.8	4.4	2.0	4.7	3.0
19	7.4	3.4	4.7	3.8	4.3	.00	5.1	4.9	4.3	2.0	4.7	3.0
20	7.8	3.0	4.1	3.9	3.8	.00	4.6	4.8	2.3	1.5	4.7	3.0
21	6.2	2.2	3.0	3.5	3.8	.00	4.0	4.2	2.7	1.2	4.7	3.0
22	4.8	1.9	2.2	4.1	2.8	.00	4.3	4.0	2.8	1.0	4.7	3.0
23	4.1	1.9	3.6	4.8	.00	2.4	6.0	5.1	3.2	.60	4.7	3.0
24	4.6	1.9	3.8	4.8	.60	4.7	6.6	3.9	3.3	.00	4.7	3.0
25	6.8	3.9	3.8	4.8	2.2	5.5	5.0	6.2	2.9	.00	4.7	3.0
26	6.6	4.7	3.9	4.6	1.9	4.8	4.0	6.8	3.5	.00	4.7	3.0
27	5.7	3.9	2.8	3.9	1.2	4.8	4.8	6.2	2.5	.00	4.7	2.1
28	5.4	3.0	1.8	3.8	3.0	4.3	4.5	6.5	2.6	.90	4.7	3.0
29	4.9	3.1	2.0	3.8	---	6.1	4.3	5.2	2.0	1.0	4.7	2.9
30	4.8	4.6	2.3	4.3	---	8.5	3.1	5.2	2.0	2.0	4.7	2.5
31	4.8	---	3.9	4.8	---	8.6	---	7.0	---	4.0	4.7	---
TOTAL	127.90	108.00	122.4	133.3	80.70	103.40	153.10	179.50	136.4	62.10	146.6	97.0
MEAN	4.13	3.60	3.95	4.30	2.88	3.34	5.10	5.79	4.55	2.00	4.73	3.23
MAX	7.8	5.9	7.0	4.8	4.9	8.6	9.8	9.6	8.8	4.4	4.8	4.7
MIN	.00	.40	1.8	3.5	.00	.00	.00	.00	2.0	.00	4.7	2.1
AC-FT	254	214	243	264	160	205	304	356	271	123	291	192
WTR YR 1978	TOTAL	1450.40	MEAN	3.97	MAX	9.8	MIN	.00	AC-FT	2880		

09416000 MUDDY RIVER NEAR MOAPA, NV

LOCATION.--Lat 36°42'40", long 114°41'40", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.15, T.14 S., R.65 E., Clark County, Hydrologic Unit 15010012, on left bank 0.1 mi (0.2 km) upstream from Battleship Wash, 0.8 mi (1.3 km) downstream from Home Ranch, 5 mi (8 km) northwest of Moapa, and 9.5 mi (15.3 km) upstream from Meadow Valley Wash.

DRAINAGE AREA.--3,820 mi² (9,890 km²), approximately, of which about 40 mi² (104 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--July 1913 to September 1915, April 1916 to September 1918, June 1928 to October 1931, April to July 1932, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for January 1904 to December 1906 (gage heights only), 1908-9 (discharge measurements only), and April to October 1910 not equivalent owing to large difference in drainage area.

REVISED RECORDS.--WSP 1243: 1914 (M). WSP 1343: 1950 (M). WSP 1733: Drainage area.

GAGE.--Water-stage recorder and Cipolletti weir. Altitude of gage is 1,710 ft (521 m), from river-profile map. October 21, 1944 to September 30, 1948, water-stage recorder at datum 0.08 ft (0.024 m) higher.

REMARKS.--Records good. Diversions for irrigation above station. Beginning Oct. 1, 1976, records do not include part-time diversion about 100 ft (30.5 m) upstream, for cooling of powerplant downstream. Normal flow originates from springs in reach 0.9 to 2.5 mi (1.4 to 4.0 km) upstream from station. Flood peaks may be dampened by Arrow Canyon Dam. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--39 years (1913-15, 1916-18, 1928-31, 1944-76), 41.5 ft³/s (1.175 m³/s), 32,670 acre-ft/yr (40.3 hm³/yr), adjusted for flow which bypasses stream due to pump about 100 ft upstream which diverts water part of the time for powerplant cooling.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,100 ft³/s (144 m³/s) Sept. 7, 1967, gage height, 12.35 ft (3.764 m); minimum, 27 ft³/s (0.76 m³/s) Nov. 26, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 311 ft³/s (8.81 m³/s) Mar. 5, gage height, 3.34 ft (1.018 m); minimum daily, 27 ft³/s (0.76 m³/s) Oct. 14, Aug. 16, 18, 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	30	32	36	36	40	45	33	83	37	33	30	30
2	30	32	36	35	40	42	33	40	37	33	32	29
3	31	31	35	36	40	45	32	37	38	33	32	29
4	30	31	35	36	39	73	32	37	39	33	32	30
5	31	31	36	37	40	133	31	37	37	33	31	55
6	31	32	40	37	40	86	31	35	36	33	31	34
7	31	32	37	36	40	51	31	34	35	33	31	32
8	31	33	34	37	40	49	32	35	34	32	30	31
9	32	33	35	37	43	45	38	34	33	31	30	33
10	32	34	37	39	67	45	36	35	33	33	31	34
11	31	35	37	39	51	53	34	35	33	32	31	33
12	30	35	38	39	51	50	38	34	35	30	31	31
13	29	38	38	42	58	48	38	34	35	30	30	31
14	27	36	38	40	52	49	36	36	34	31	29	32
15	29	35	36	44	51	47	33	38	33	30	28	43
16	30	36	36	39	50	47	31	39	32	29	27	34
17	32	36	36	39	49	46	31	39	31	30	28	34
18	31	37	36	39	45	46	32	38	31	31	27	33
19	30	37	36	42	47	46	34	37	33	30	27	32
20	30	37	37	40	48	46	34	36	33	29	28	31
21	32	38	38	40	47	43	34	35	33	29	29	32
22	33	39	39	40	46	42	34	36	33	28	29	33
23	33	39	37	39	42	40	33	35	32	28	30	33
24	34	39	37	39	42	39	33	35	31	28	30	33
25	30	37	37	39	40	38	34	35	31	28	28	34
26	29	36	37	40	40	37	34	35	33	29	29	34
27	32	37	38	42	40	36	34	36	33	29	29	33
28	32	38	40	40	41	36	36	37	33	29	29	33
29	32	37	38	40	---	35	36	37	33	29	29	32
30	31	37	38	40	---	34	47	37	33	29	29	32
31	31	---	36	40	---	34	---	35	---	29	29	---
TOTAL	957	1060	1144	1208	1269	1506	1025	1166	1014	944	916	1000
MEAN	30.9	35.3	36.9	39.0	45.3	48.6	34.2	37.6	33.8	30.5	29.5	33.3
MAX	34	39	40	44	67	133	47	83	39	33	32	55
MIN	27	31	34	35	39	34	31	34	31	28	27	29
AC-FT	1900	2100	2270	2400	2520	2990	2030	2310	2010	1870	1820	1980
CAL YR 1977	TOTAL	12982	MEAN 35.6	MAX 67	MIN 27	AC-FT 25750						
WTR YR 1978	TOTAL	13209	MEAN 36.2	MAX 133	MIN 27	AC-FT 26200						

VIRGIN RIVER BASIN

51

09418200 MATHEWS CANYON WASH NEAR CALIENTE, NV

LOCATION.--Lat 37°29'55", long 114°13'20", in E½ sec.24, T.5 S., R.69 E., Lincoln County, Hydrologic Unit 15010013, on right bank at downstream end of stilling basin at outlet of conduit through flood-control dam, 2.5 mi (4.0 km) upstream from mouth, and 17 mi (27 km) southeast of Caliente.

DRAINAGE AREA.--34 mi² (88 km²), approximately (by Corps of Engineers, U.S. Army).

PERIOD OF RECORD.--June 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,409.10 ft (1,648.694 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records poor, no gage-height record Feb. 10-21, Mar. 1-23. No flow exists in this channel except at times of heavy rainfall or rapid snowmelt. Floods that occur in the drainage above station will be controlled by dam (constructed in 1958 by the Corps of Engineers, U.S. Army). Water is released from a 3.5-ft (1.07-m) diameter uncontrolled conduit through dam. Flow over dam spillway will bypass station.

AVERAGE DISCHARGE.--20 years, 0.634 ft³/s (0.0180 m³/s), 459 acre-ft/yr (566,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 206 ft³/s (5.83 m³/s) Dec. 29, 1965, gage height, 11.85 ft (3.615 m); no flow most of the time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 170 ft³/s (4.81 m³/s) Mar. 5, gage height 11.04 ft (3.365 m) from peak stage indicator, no flow most of time.

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	55	.62	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	104	.44	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	109	.32	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	120	.22	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	132	.14	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	126	.09	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	106	.03	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	91	.17	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	74	.12	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	65	41	.10	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	122	15	.07	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	124	9.0	.02	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	104	6.0	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	86	2.0	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	47	1.5	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	8.0	1.0	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	4.0	.80	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	2.0	.60	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	1.0	.40	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.50	.20	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.20	17	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	37	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	33	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	11	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	7.0	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	4.6	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	3.5	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	2.3	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	1.6	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	1.0	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.77	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	563.70	1113.27	2.34	.00	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	20.1	35.9	.078	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	124	132	.62	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	1120	2210	4.6	.00	.00	.00	.00	.00
CAL YR 1977 TOTAL	0.00		MEAN .000	MAX .00	MIN .00	AC-FT .00						
WTR YR 1978 TOTAL	1679.31		MEAN 4.60	MAX 132	MIN .00	AC-FT 3330						

VIRGIN RIVER BASIN

09418300 PINE CANYON WASH NEAR CALIENTE, NV

LOCATION.--Lat 37°28'40", long 114°19'00", in sec.30, T.5 S., R.69 E., Lincoln County, Hydrologic Unit 15010013, on left bank 100 ft (30 m) downstream from outlet of flood-control dam, 4 mi (6 km) upstream from mouth, and 14 mi (23 km) southeast of Caliente.

DRAINAGE AREA.--45 mi² (117 km²), approximately (by Corps of Engineers, U.S. Army).

PERIOD OF RECORD--June 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,595 ft (1,705.4 m) (by Corps of Engineers damsite topography).

REMARKS.--There is no flow at this station except following heavy rainstorms or during periods of rapid snowmelt. Floods that occur in the drainage above the station will be controlled by dam (constructed in 1958 by the Corps of Engineers, U.S. Army). Water is released from a 3.5-ft (1.07-m) diameter uncontrolled conduit through dam.

AVERAGE DISCHARGE.--20 years, 1.67 ft³/s (0.0473 m³/s), 1210 acre-ft/yr (149,200 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 303 ft³/s (8.58 m³/s) Mar. 3, 1978, gage height, 4.12 ft (1.256 m); no flow most of the time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 303 ft³/s (8.58 m³/s) Mar. 3, gage height, 4.12 ft (1.256 m); no flow most of 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	292	77	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	285	64	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	295	43	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	292	30	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	278	22	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	257	16	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	227	30	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	159	54	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	52	37	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	189	36	31	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	245	37	24	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	206	28	26	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	58	18	26	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	4.3	12	22	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	2.0	6.6	16	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	1.0	4.5	17	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	5.6	4.5	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	18	2.2	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	61	1.9	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	59	.70	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	157	.40	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	212	.30	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	165	.10	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	69	.04	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	52	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	43	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	155	37	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	257	36	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	39	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	45	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	57	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	1117.30	3334.7	545.14	.00	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	39.9	108	18.2	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	257	295	77	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	4.5	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	2220	6610	1080	.00	.00	.00	.00	.00

CAL YR 1977 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1978 TOTAL 4997.14 MEAN 13.7 MAX 295 MIN .00 AC-FT 9910

53

LOCATION.--Lat 37°33'20", long 114°33'50", in NE¼ sec.35, T.4 S., R.66 E., Lincoln County, Hydrologic Unit 15010013, on right bank 0.5 mi (0.8 km) east of Etna, 4.5 mi (7.2 km) southwest of Caliente, and 6 mi (10 km) downstream from Clover Creek.

PERIOD OF RECORD.--January 1951 to September 1960, November 1964 to current year.

REMARKS.--Records poor. Several diversions for irrigation above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 2,400 ft³/s (68.0 m³/s) Mar. 5, 1978, gage height, 9.41 ft (2.868 m), from floodmarks; no flow July 26-28, 1966.

Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Feb. 10	1330	580	16.4	7.11	2.167
Mar. 5	0045	*about 2400	68.0	9.41	2.868

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	3.0	2.0	1.7	3.5	6.2	305	26	47	8.8	3.1	1.8	1.6
2	3.1	1.9	1.7	3.2	5.8	992	26	54	8.5	3.1	1.7	1.5
3	3.0	2.2	1.7	3.2	5.8	846	26	47	7.8	3.1	1.8	1.5
4	2.6	2.0	1.7	4.0	5.2	725	24	35	7.5	3.2	1.7	1.5
5	2.4	2.1	1.7	4.5	5.8	1480	20	27	8.0	2.9	1.5	3.0
6	2.4	2.4	1.7	5.2	7.4	982	19	25	8.1	1.9	1.5	2.8
7	1.5	2.4	1.7	4.8	7.8	734	20	24	7.2	1.9	1.6	2.6
8	1.3	3.0	1.7	4.4	8.6	593	42	21	6.7	1.8	1.5	2.5
9	1.4	2.8	1.7	4.0	13	484	58	21	6.3	1.8	1.4	2.4
10	1.3	2.6	1.7	9.0	309	380	54	19	5.7	1.7	1.5	2.4
11	1.6	2.4	1.7	6.0	230	221	58	19	5.2	1.7	1.7	2.4
12	2.2	2.3	1.7	5.0	175	186	50	18	5.1	1.7	1.6	2.4
13	2.2	2.4	1.7	4.5	145	99	48	16	5.2	1.7	1.5	2.4
14	2.2	2.8	1.7	7.0	58	46	42	15	5.4	1.8	1.4	2.4
15	2.2	2.7	1.7	8.0	18	26	32	15	5.0	1.9	1.7	2.4
16	2.4	2.7	1.7	10	12	22	37	14	4.9	1.8	1.8	2.4
17	2.7	2.7	2.5	8.0	10	21	34	14	4.6	1.8	1.8	2.4
18	2.6	1.8	2.3	6.5	9.0	20	34	14	4.5	1.8	1.9	2.4
19	1.6	1.7	3.5	8.5	8.6	19	37	14	4.8	1.8	1.9	2.4
20	1.6	1.8	2.5	8.0	8.2	18	36	13	4.4	1.8	1.8	2.4
21	1.8	1.5	2.0	6.5	8.2	18	34	13	4.3	1.8	1.3	2.4
22	1.7	1.6	2.1	7.0	8.2	18	28	13	3.9	1.8	1.3	2.4
23	1.7	1.4	2.0	8.0	8.2	114	27	13	3.9	1.8	1.3	2.4
24	1.8	1.6	2.0	6.6	7.8	74	28	13	4.0	1.8	1.3	2.4
25	1.7	1.7	2.0	4.8	7.4	44	30	12	4.1	2.0	1.4	2.4
26	1.7	1.7	2.0	4.2	7.4	42	23	12	4.4	2.0	1.4	2.4
27	1.7	1.8	2.2	3.5	7.4	40	23	12	4.4	1.9	1.5	2.4
28	1.8	1.8	2.8	3.7	7.4	42	24	11	4.7	2.0	1.5	2.4
29	2.0	1.8	4.8	4.8	---	37	26	11	5.0	1.8	1.6	2.4
30	2.0	1.7	5.8	6.6	---	31	27	11	3.3	1.9	1.6	2.4
31	2.0	---	4.0	6.6	---	27	---	10	---	1.8	1.5	---
TOTAL	63.2	63.3	69.7	179.6	1110.4	8686	993	603	165.7	62.9	48.8	69.8
MEAN	2.04	2.11	2.25	5.79	39.7	280	33.1	19.5	5.52	2.03	1.57	2.33
MAX	3.1	3.0	5.8	10	309	1480	58	54	8.8	3.2	1.9	3.0
MIN	1.3	1.4	1.7	3.2	5.2	18	19	10	3.3	1.7	1.3	1.5
AC=FT	125	126	138	356	2200	17230	1970	1200	329	125	97	138
CAL YR 1977	TOTAL	1198.95	MEAN	3.28	MAX	36	MIN	.34	AC=FT	2380		
WTR YR 1978	TOTAL	12115.40	MEAN	33.2	MAX	1480	MIN	1.3	AC=FT	24030		

09419000 MUDDY RIVER NEAR GLENDALE, NV

LOCATION.—Lat 36°38'35", long 114°32'20", in SW¹/₄ sec.7, T.15 S., R.67 E., Clark County, Hydrologic Unit 15010012, on left bank at the Narrows, 150 ft (50 m) downstream from Weiser Wash, 2 mi (3 km) southeast of Glendale, 2.4 mi (3.9 km) downstream from Meadow Valley Wash, and 4.5 mi (7.2 km) northwest of Logandale.

DRAINAGE AREA.—6,780 mi² (17,600 km²), approximately, of which about 3,000 mi² (7,800 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--January 1904 to December 1906 (gage heights only) and April to October 1910 (published as "near Moapa"), July 1913 to February 1914 (published as "near Logan"), February 1950 to current year.

REVISED RECORDS.--WSP 1243: 1906 (M). WSP 1733: Drainage area.

GAGE.—Water-stage recorder. Altitude of gage is 1,460 ft (445 m), from river-profile map. Jan. 1, 1904, to Dec. 31, 1906, non-recording gage just upstream at different datum. Apr. 22, 1910, to Feb. 21, 1914, nonrecording gage and rating flume at lower end of the Narrows, 1.2 mi (1.9 km) downstream at different datum.

REMARKS.--Records fair except for period of no gage-height record, Mar. 27 to Apr. 29, which are poor. Diversions for irrigation above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--28 years (1950-78), 45.5 ft³/s (1.289 m³/s), 32,960 acre-ft/yr (40.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,380 ft³/s (209 m³/s) Nov. 6, 1960, gage height, 20.36 ft (6.206 m) from rating curve extended above 460 ft³/s (13.0 m³/s) on basis of slope-area measurements at gage heights 8.42 ft (2.566 m) and 20.36 ft (6.206 m); minimum, 7.6 ft³/s (0.22 m³/s) Sept. 29, 1964, result of temporary storage upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 30 ft (9.1 m) Mar. 26, 1906 (datum then in use), discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 210 ft³/s (5.95 m³/s) and maximum (*):

Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Feb. 11	1645	1620	45.9	16.87	5.142
Mar. 6	0345	*1850	52.4	17.92	5.462

Minimum discharge, 20 ft³/s (0.566 m³/s) Aug. 25.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	32	34	41	43	41	42	76	31	29	25	25
2	27	34	34	40	42	40	41	64	33	29	25	26
3	28	30	36	40	42	1030	40	40	36	27	25	26
4	28	31	37	40	42	998	39	40	39	29	25	27
5	27	32	35	40	42	844	39	40	38	27	25	26
6	30	33	36	41	42	1400	39	37	35	25	25	46
7	30	35	38	39	43	492	39	37	33	23	25	30
8	31	33	37	39	42	224	39	37	32	24	24	29
9	32	33	36	39	42	179	39	37	30	23	25	30
10	33	34	37	42	52	150	39	37	29	24	26	29
11	33	36	37	43	656	120	39	37	31	23	26	31
12	30	36	38	41	630	110	39	37	32	24	26	29
13	30	37	38	43	220	96	39	36	31	23	25	29
14	28	38	39	44	148	86	39	36	32	23	24	29
15	27	35	39	48	96	80	39	36	32	25	25	39
16	26	34	40	44	76	75	39	36	32	24	25	31
17	29	33	40	42	67	72	39	36	31	24	25	30
18	34	32	40	42	60	70	39	36	32	26	24	29
19	32	34	41	43	55	68	39	36	34	23	23	29
20	31	36	42	45	52	66	39	36	31	23	23	28
21	33	39	44	43	49	64	39	35	30	23	23	29
22	35	37	46	44	47	64	39	36	29	23	23	30
23	35	37	47	43	45	96	39	36	28	23	22	33
24	36	39	48	42	44	197	39	36	29	23	24	30
25	35	40	48	42	43	104	39	36	30	23	22	30
26	29	38	44	42	42	68	39	34	31	24	24	30
27	34	38	40	45	42	54	39	34	28	24	24	30
28	35	37	44	43	41	50	39	35	29	24	24	28
29	33	35	43	43	---	47	39	35	29	24	24	27
30	31	35	43	44	---	46	52	37	29	24	25	26
31	33	---	42	43	---	44	---	32	---	24	25	---
TOTAL	964	1053	1243	1310	2845	7075	1189	1193	946	757	756	891
MEAN	31.1	35.1	40.1	42.3	102	228	39.6	38.5	31.5	24.4	24.4	29.7
MAX	36	40	48	48	656	1400	52	76	39	29	26	46
MIN	26	30	34	39	41	40	39	32	28	23	22	25
AC-FT	1910	2090	2470	2600	5640	14030	2360	2370	1880	1500	1500	1770
CAL YR 1977	TOTAL	12996	MEAN	35.6	MAX	417	MIN	25	AC-FT	25780		
WTR YR 1978	TOTAL	20222	MEAN	55.4	MAX	1400	MIN	22	AC-FT	40110		

09419610 LEE CANYON NEAR CHARLESTON PARK, NV

LOCATION.--Lat 36°20'25", long 115°39'00", in NE¼ sec.35, T.18 S., R.56 E., Clark County, Hydrologic Unit 15010015, in Toiyabe National Forest, on right bank 50 ft (15 m) above bridge on Deer Creek Springs road, just south of junction with State Highway 52, and 5.5 mi (8.8 km) north of Charleston Park.

DRAINAGE AREA.--9.20 mi² (23.83 km²).

PERIOD OF RECORD.--Water years 1961-63 (annual maximum), October 1963 to current year.

GAGE.--Water-stage recorder with rain-gage attachment. Altitude of gage is 7,820 ft (2,384 m) from topographic map. Oct. 1, 1960, to Sept. 30, 1963, crest-stage gage at same site and datum. Prior to May 16, 1973, on right bank at datum 0.14 ft (0.043 m) higher.

REMARKS.--No flow exists in this channel except at times of heavy rainfall or rapid snowmelt. Discharge measurements or observation of no flow are generally made once a month.

AVERAGE DISCHARGE.--15 years, 0.034 ft³/s (0.0010 m³/s), 25 acre-ft/yr (30,800 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 880 ft³/s (24.9 m³/s) July 28, 1969, gage height, 3.60 ft (1.097 m), on basis of slope-area measurement of peak flow; no flow most of the time.

EXTREMES FOR CURRENT YEAR.--No flow for entire year.

LAS VEGAS VALLEY

09419650 LAS VEGAS WASH AT NORTH LAS VEGAS, NV

LOCATION.--Lat 36°12'40", long 115°06'20", in SW¼NE¼ sec.13, T.20 S., R.61 E., Clark County, Hydrologic Unit 15010015, on right bank 100 ft (30 m) upstream from U.S. Highway 91 and 3.5 mi (5.6 km) northeast of Fremont Street, Las Vegas.

DRAINAGE AREA.--1,300 mi² (3,370 km²), approximately, of which about 700 mi² (1,810 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--June 1962 to September 1978, discontinued as a continuous record station; converted to a crest-stage partial-record station.

GAGE.--Water-stage recorder. Altitude of gage is 1,850 ft (564 m), from topographic map.

REMARKS.--Records poor, no gage-height record July 8 to Sept. 30. No diversion for irrigation above station.

AVERAGE DISCHARGE.--16 years, 0.666 ft³/s (0.0189 m³/s), 485 acre-ft/yr (598,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,010 ft³/s (340 m³/s) July 3, 1975, gage height, 9.64 ft (2.938 m), from slope-area measurement of peak flow; no flow most of the time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 166 ft³/s (4.70 m³/s) Sept. 14, gage height, 1.68 ft (0.512 m) from culvert computation of peak flow; no flow most of the 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	1.4	.00	7.9	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.80	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	9.0	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	2.2	.00	4.5	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	2.5	.00	.20	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	1.1	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	3.4	.00	.08	.00	.00	.00	.00	.00
10	.00	.00	.00	2.0	.56	3.5	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.08	.00	4.4	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	6.6	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	2.0	.37	.00	.00	.00	.00	.00	.00	7.0
15	.00	.00	.00	2.6	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.79	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.32	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	13	.00	1.4	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.40	---	.00	---	.00	.00	---
TOTAL	.00	.00	13.00	13.59	12.33	25.34	.08	7.90	.00	.00	.00	7.00
MEAN	.000	.000	.42	.44	.44	.82	.003	.25	.000	.000	.000	.23
MAX	.00	.00	13	2.6	6.6	9.0	.08	7.9	.00	.00	.00	7.0
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	26	27	24	50	.2	16	.00	.00	.00	14
CAL YR 1977	TOTAL	232.12	MEAN .64	MAX 203	MIN .00	AC-FT 460						
WTR YR 1978	TOTAL	79.24	MEAN .22	MAX 13	MIN .00	AC-FT 157						

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LOCATION.--Lat 36°07'05", long 115°08'15", in SE¹SE¹ sec.15, T.21 S., R.61 E., Clark County, Hydrologic Unit 15010015, on right bank 90 ft (27.4 m) upstream from two 10 x 12 ft box culverts under Maryland Parkway between Flamingo Road and Twain Avenue in Las Vegas.

PERIOD OF RECORD.--October 1969 to September 1978, discontinued as continuous-record station; converted to a crest-stage partial-record station.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,750 ft³/s (77.9 m³/s) July 3, 1975, gage height, 11.37 ft (3.466 m), from indirect measurement of peak flow; no flow most of the time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 368 ft³/s (10.4 m³/s) Feb. 13, gage height, 3.43 ft (1.045 m); no flow many days.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.01	.03	.01	.62	.06	1.5	.00	.00	.00	.00
2	.00	.00	.01	.03	.01	1.1	.05	.02	.00	.00	.00	.00
3	.00	.00	.01	.03	.01	4.6	.05	.02	.00	.00	.00	.00
4	.01	.00	.01	.03	.01	41	.05	.02	.00	.00	.00	.00
5	.02	.00	.01	.03	.01	13	.05	.02	.00	.00	.00	.00
6	.02	.00	.01	.03	.01	.10	.05	.02	.00	.00	.00	.00
7	.01	.00	.01	.02	.01	.06	.05	.02	.00	.00	.00	.00
8	.01	.00	.01	.02	.01	.05	.05	.02	.00	.00	.00	.00
9	.01	.00	.01	.02	1.7	.05	.13	.02	.00	.00	.00	.00
10	.01	.00	.01	.11	14	.13	.05	.02	.00	.00	.00	.00
11	.00	.00	.01	.03	1.0	.07	.04	.02	.00	.00	.00	.00
12	.01	.00	.02	.02	.35	.06	.04	.01	.00	.00	.00	.00
13	.01	.00	.02	.02	34	.06	.04	.01	.00	.00	.00	.00
14	.01	.00	.02	1.1	20	.06	.04	.01	.00	.00	.00	.00
15	.00	.00	.02	4.7	.43	.06	.04	.01	.00	.00	.00	.00
16	.01	.01	.02	1.8	.35	.06	.44	.01	.00	.00	.00	.00
17	.01	.01	.02	.48	.29	.05	.05	.01	.00	.00	.00	.00
18	.00	.01	.02	.15	.26	.05	.04	.01	.00	.00	.00	.00
19	.00	.01	.02	.13	.23	.05	.04	.01	.00	.00	.00	.00
20	.00	.01	.02	.06	.23	.05	.04	.01	.00	.00	.00	.00
21	.00	.01	.02	.03	.26	.06	.03	.01	.00	.00	.00	.00
22	.00	.01	.02	.03	.26	.05	.03	.01	.00	.00	.00	.00
23	.00	.01	.02	.01	.26	.05	.03	.00	.00	.00	.00	.00
24	.00	.01	.02	.00	.26	.05	.03	.01	.00	.00	.00	.00
25	.00	.01	.02	.00	.26	.05	.04	.01	.00	.00	.00	.00
26	.00	.01	.02	.01	.26	.05	.04	.01	.00	.00	.00	.00
27	.00	.01	.02	.01	.26	.05	.03	.01	.00	.00	.00	.00
28	.00	.01	13	.01	1.4	.05	.03	.01	.00	.00	.00	.00
29	.00	.01	.13	.01	---	.05	.03	.01	.00	.00	.00	.00
30	.00	.01	.04	.01	---	.06	.04	.00	.00	.00	.00	.00
31	.00	---	.03	.01	---	.08	---	.00	---	.00	.00	---
TOTAL	.14	.15	13.63	8.97	76.14	61.88	1.73	1.87	.00	.00	.00	.00
MEAN	.005	.005	.44	.29	2.72	2.00	.058	.060	.000	.000	.000	.000
MAX	.02	.01	.13	4.7	.34	.41	.44	1.5	.00	.00	.00	.00
MIN	.00	.00	.01	.00	.01	.05	.03	.00	.00	.00	.00	.00
AC-FT	.3	.3	27	18	151	123	3.4	3.7	.00	.00	.00	.00
CAL YR 1977	TOTAL 127.20	MEAN .35	MAX 105	MIN .00	AC-FT 252							
WTR YR 1978	TOTAL 164.51	MEAN .45	MAX 41	MIN .00	AC-FT 326							

LAS VEGAS VALLEY

09419700 LAS VEGAS WASH NEAR HENDERSON, NV

LOCATION.--Lat 36°05'20", long 114°59'05", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.30, T.21 S., R.63 E., Clark County, Hydrologic Unit 15010015, on right bank at upstream end of 4.5-ft (1.37-m) pipe culvert on road, 3.5 mi (5.6 km) north of Henderson, and 6.0 mi (9.7 km) upstream from highwater line of Lake Mead at elevation 1,221.4 ft (372.28 m) above mean sea level.

DRAINAGE AREA.--2,125 mi² (5,504 km²), of which 1,518 mi² (3,932 km²) contribute directly to surface runoff. Prior to Apr. 4, 1961, 2,179 mi² (5,644 km²), of which 1,571 mi² (4,069 km²) contributed directly to surface runoff.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1926: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 1,540 ft (469 m), from topographic map. Prior to Apr. 4, 1961, at site 2.5 mi (4.0 km) downstream at various datums.

REMARKS.--Records fair. In closed basin above station, 2,150 acres (8.70 km²) are irrigated, mostly by pumping from ground water. Discharge includes waste water from industrial plants and sewage effluent.

AVERAGE DISCHARGE.--21 years, 37.3 ft³/s (1.056 m³/s), 27,020 acre-ft/yr (33.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,510 ft³/s (184 m³/s) July 4, 1975, gage height, 10.67 ft (3.252 m), from flood-marks, from rating curve extended above 3,340 ft³/s (94.6 m³/s) on basis of area-velocity computation to determine peak flow; minimum daily, 4.8 ft³/s (0.14 m³/s) Aug. 17, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,260 ft³/s (35.7 m³/s) Mar. 5, gage height, 8.47 ft (2.582 m); minimum, 33 ft³/s (0.93 m³/s) Aug. 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	64	57	61	90	81	114	83	98	58	53	49	66
2	69	56	64	85	82	102	84	104	61	52	54	75
3	71	56	65	89	83	84	82	72	63	57	60	63
4	68	59	66	83	79	105	75	69	68	58	62	60
5	65	62	70	84	85	534	72	67	69	58	57	68
6	66	66	75	83	89	124	68	70	62	55	61	65
7	66	64	77	81	87	91	64	73	64	57	88	67
8	61	63	76	82	86	81	69	71	60	54	64	65
9	64	66	74	80	87	79	84	71	60	62	59	64
10	62	67	72	95	114	103	80	64	58	63	58	66
11	63	68	78	95	120	115	76	63	58	56	62	73
12	59	77	81	83	96	115	78	64	58	56	64	72
13	59	73	75	83	116	97	80	62	59	55	63	66
14	59	75	73	84	290	81	81	62	54	54	67	66
15	58	71	72	125	112	75	82	62	54	56	66	75
16	62	72	71	111	90	80	86	63	60	55	64	68
17	64	72	72	102	91	80	82	63	62	58	66	71
18	68	71	74	91	87	81	74	62	63	61	66	72
19	68	73	71	87	89	86	72	62	61	60	62	70
20	68	78	74	84	85	89	62	64	62	58	68	68
21	70	79	73	82	72	84	64	60	61	59	69	66
22	69	77	73	84	67	82	67	62	54	59	65	64
23	69	74	75	82	72	74	65	64	50	58	71	62
24	68	75	75	79	71	77	70	62	54	55	75	61
25	63	75	76	80	64	76	74	60	60	55	67	59
26	62	76	71	82	71	75	75	62	59	55	67	58
27	60	73	76	84	77	73	73	61	57	54	74	57
28	58	73	111	77	72	79	74	62	53	57	74	56
29	57	71	218	81	---	76	71	60	55	63	71	55
30	61	66	97	84	---	74	73	58	55	63	68	54
31	58	---	89	80	---	78	---	55	---	58	63	---
TOTAL	1979	2085	2475	2692	2615	3164	2240	2052	1772	1774	2024	1952
MEAN	63.8	69.5	79.8	86.8	93.4	102	74.7	66.2	59.1	57.2	65.3	65.1
MAX	71	79	218	125	290	534	86	104	69	63	88	75
MIN	57	56	61	77	64	73	62	55	50	52	49	54
AC-FT	3930	4140	4910	5340	5190	6280	4440	4070	3510	3520	4010	3870
CAL YR 1977	TOTAL	24730	MEAN 67.8	MAX 520	MIN 45	AC-FT 49050						
WTR YR 1978	TOTAL	26824	MEAN 73.5	MAX 534	MIN 49	AC-FT 53210						

09419700 LAS VEGAS WASH NEAR HENDERSON, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1957 to October 1961, September and October 1962, May 1963 to June 1965, and December 1965 to current year.
 CHEMICAL ANALYSES: January 1964 to January 1965, twice-monthly; October 1967 to January 1969, weekly; February 1969 to January 1970 and July 1970 to current year, monthly.

SPECIFIC CONDUCTANCES: January 1964 to January 1965, twice-monthly; October to November 1967 and April 1968 to January 1969, weekly; February 1969 to January 1970 and July 1970 to current year, monthly.

WATER TEMPERATURES: February 1957 to October 1961, monthly; September and October 1962, May 1963 to June 1965, and December 1965 to current year, monthly.

SEDIMENT DATA: January 1977 to current year, monthly.

REMARKS.--Discharge includes sewage effluent and some waste water from industrial plants.

COOPERATION.--All water-quality sampling and analyses prior to July 1970, plus nutrient analyses for period July 1970 to September 1972, from U.S. Environmental Protection Agency. Data in addition to those listed under "Period of Record" for January 1964 to June 1970 may exist in files of U.S. Environmental Protection Agency.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 6,960 micromhos Sept. 19, 1968; minimum, 2,160 micromhos Sept. 12, 1977.

WATER TEMPERATURES: Maximum, 28.0°C July 30, Sept. 3, 1958; minimum, 2.0°C Jan. 31, 1972.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 347 mg/L July 11, 1978 (questionable value not verified by duplicate determination); minimum, 9 mg/L July 12, 1977, Feb. 16, 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)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (MG/L AS CACO3)
OCT												
11...	1200	64	2660	7.8	18.0	780	180	80	300	4.7	21	250
NOV												
14...	1230	69	2750	--	15.5	--	--	--	--	--	--	--
DEC												
12...	1000	84	2720	--	11.0	--	--	--	--	--	--	--
FEB												
16...	1045	86	2810	--	11.0	--	--	--	--	--	--	--
MAR												
13...	1100	91	2850	--	14.5	--	--	--	--	--	--	--
APR												
19...	1030	68	2860	8.0	16.5	850	190	92	300	4.5	22	230
MAY												
15...	1045	60	3020	--	21.0	--	--	--	--	--	--	--
JUN												
13...	0815	66	--	--	21.0	--	--	--	--	--	--	--
JUL												
11...	1110	55	2690	7.8	23.0	800	180	85	290	4.5	21	260
AUG												
14...	1300	57	2440	--	23.5	--	--	--	--	--	--	--
SEP												
11...	1430	54	2600	--	21.5	--	--	--	--	--	--	--

DATE	SULFATE DIS- SOLVED (MG/L AS SU4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
OCT												
11...	720	340	31	1820	314	1.1	.23	16	--	16	7.5	--
NOV												
14...	--	--	--	--	--	2.2	.41	12	--	--	6.5	--
DEC												
12...	--	--	--	--	--	1.7	.21	12	--	--	--	--
FEB												
16...	--	--	--	--	--	1.7	.33	12	--	--	2.6	--
MAR												
13...	--	--	--	--	--	1.5	.29	13	--	--	2.2	--
APR												
19...	720	400	32	1890	347	.65	.12	16	6.0	23	3.6	3.6
MAY												
15...	--	--	--	--	--	.14	.06	18	--	--	4.9	--
JUN												
13...	--	--	--	--	--	.08	.04	16	--	--	8.2	--
JUL												
11...	690	360	30	1810	269	.01	.04	17	2.0	19	6.9	6.1
AUG												
14...	--	--	--	--	--	.06	.02	14	--	--	5.3	--
SEP												
11...	--	--	--	--	--	.06	.03	15	--	--	5.9	--

LAS VEGAS VALLEY

09419700 LAS VEGAS WASH NEAR HENDERSON, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT				
11...	1200	64	27	4.7
NOV				
14...	1230	69	13	2.4
DEC				
12...	1000	84	13	2.9
FEB				
16...	1045	86	9	2.1
APR				
19...	1030	68	12	2.2
MAY				
15...	1045	60	36	5.8
JUN				
13...	0815	66	16	2.9
JUL				
11...	1110	55	347	52
AUG				
14...	1300	57	17	2.6
SEP				
11...	1430	54	10	1.5

LAS VEGAS VALLEY

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09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV

LOCATION.--Lat 36°07'20", long 114°54'15", in NE¼SE¼ sec.14, T.21 S., R.63 E., Clark County, Hydrologic Unit 15010015, in Lake Mead National Recreation Area, on left bank near mouth, on upstream side of Lake Shore Highway, about 0.8 mi (1.3 km) upstream from high-water line of Lake Mead at elevation 1,221.4 ft (372.28 m) above mean sea level, and 11 mi (18 km) north-northwest of Boulder City.

DRAINAGE AREA.--2,193 mi² (5,680 km²), of which 1,586 mi² (4,108 km²) contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,280 ft (390 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, May 4 to Sept. 30, which are poor. In closed basin above station, 2,150 acres (8.70 km²) are irrigated, mostly by pumping from ground water. Discharge includes sewage effluent.

AVERAGE DISCHARGE.--9 years, 67.9 ft³/s (1.923 m³/s), 49,190 acre-ft (60.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,430 ft³/s (688.8 m³/s) July 4, 1975, gage height, 12.32 ft (3.755 m), from indirect measurement of peak flow; minimum, 14 ft³/s (0.40 m³/s) July 7, 8, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 26, 1964, reached a stage of 7.5 ft (2.29 m), from floodmarks, discharge, 1,050 ft³/s (29.7 m³/s), from indirect measurement of peak flow, and another flood between 1964 and 1969 reached a stage of about 10 ft (3.05 m), from floodmarks, discharge, about 1,700 ft³/s (48.1 m³/s), from rating curve extended above 300 ft³/s (8.50 m³/s) on basis of theoretical weir and culvert formulas.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 829 ft³/s (23.5 m³/s) Mar. 5, gage height, 7.03 ft (2.143 m); minimum daily, 62 ft³/s (1.76 m³/s) July 15-17.

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	86	73	83	107	97	97	97	116	68	66	66	74
2	88	73	81	101	97	121	99	150	71	65	66	82
3	89	73	84	107	95	99	101	113	74	64	66	76
4	88	74	84	99	95	111	99	90	79	64	66	74
5	88	74	84	88	93	378	89	87	79	64	70	74
6	84	76	91	89	91	290	84	82	76	64	80	73
7	84	77	95	89	93	163	77	85	73	64	100	73
8	79	77	99	89	97	121	76	84	72	65	74	73
9	79	79	99	88	99	105	84	82	71	65	70	74
10	77	83	97	89	109	103	93	76	70	66	69	76
11	77	84	101	101	128	130	88	74	70	65	68	78
12	77	89	105	95	121	118	88	73	70	64	68	78
13	77	91	103	91	113	110	86	72	70	63	68	76
14	79	86	101	91	186	100	84	72	70	63	68	78
15	81	84	99	99	260	90	87	73	70	62	68	80
16	83	83	97	123	118	84	90	74	70	62	68	78
17	84	86	99	107	107	97	88	74	70	62	70	77
18	83	88	99	107	109	97	84	73	70	65	70	76
19	84	88	97	99	111	97	77	72	70	67	71	76
20	84	89	99	99	105	103	73	76	72	68	72	76
21	84	93	101	95	101	97	68	70	74	68	72	76
22	84	95	99	95	89	95	71	72	74	68	74	78
23	86	93	97	93	88	93	71	74	71	68	76	86
24	86	93	97	93	86	91	70	72	66	70	77	96
25	84	93	95	93	84	88	71	70	64	70	78	105
26	84	93	95	95	81	93	71	73	67	69	80	90
27	83	91	97	95	88	97	71	72	70	68	82	84
28	79	89	113	97	88	95	71	71	70	68	82	82
29	77	91	251	95	---	91	71	70	69	67	82	81
30	76	88	138	97	---	91	74	68	67	67	80	80
31	79	---	111	101	---	95	---	66	---	66	75	---
TOTAL	2553	2546	3191	3007	3029	3640	2453	2476	2127	2037	2276	2380
MEAN	82.4	84.9	103	97.0	108	117	81.8	79.9	70.9	65.7	73.4	79.3
MAX	89	95	251	123	260	378	101	150	79	70	100	105
MIN	76	73	81	88	81	84	68	66	64	62	66	73
AC-FT	5060	5050	6330	5960	6010	7220	4870	4910	4220	4040	4510	4720
CAL YR 1977	TOTAL	30824	MEAN 84.4	MAX 529	MIN 55	AC-FT 61140						
WTR YR 1978	TOTAL	31715	MEAN 86.9	MAX 378	MIN 62	AC-FT 62910						

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1964 to January 1965, October 1967 to current year.

CHEMICAL ANALYSES: January 1964 to January 1965, twice-monthly; October 1967 to January 1969, weekly; February to October 1969, monthly; November 1969 to January 1970, twice-monthly; February 1970 to July 1974, monthly; August 1974 to current year, twice-monthly.

SPECIFIC CONDUCTANCES: January 1964 to January 1965, twice-monthly; October 1967 to December 1967 and May 1968 to January 1969, weekly; February to October 1969, monthly; November 1969 to January 1970, twice-monthly; February 1970 to July 1974, monthly; August 1974 to May 1975, twice-monthly; June 1975 to March 1976, 4 times per hour (incomplete record due to recorder malfunctions) and twice-monthly; April to October 1976, twice-monthly; November 1976 to September 1977, 4 times per hour (incomplete record due to recorder malfunctions) and twice-monthly; October 1977 to May 1978, 2-4 times per month; June to September 1978, 3-5 times per week.

MICROBIOLOGICAL DATA: October 1976 to current year, monthly (data prior to October 1977 unpublished).

WATER TEMPERATURES: January to December 1968, weekly; August 1969 to July 1974, monthly; August 1974 to current year, twice-monthly.

SEDIMENT DATA: January 1974 to December 1976, monthly; January 1977 to current year, twice-monthly.

INSTRUMENTATION.--Specific-conductance recorder from June 1975 to March 1976 and November 1976 to April 1978.

REMARKS.--Discharge includes sewage effluent and waste water from industrial plants. Continuous records of specific conductance for 1978 water year are questionable, and therefore are not published here. Recorder was removed in May 1978 prior to demolition of nearby road culvert (removal of culvert caused severe stream-channel downcutting at gage).

COOPERATION.--Microbiological analyses for entire period of record by Nevada Bureau of Laboratories and Research. All water-quality sampling and analyses to October 1969, plus nutrient and trace-metal analyses for period October 1969 to September 1972, from U.S. Environmental Protection Agency. Data in addition to that listed under "Period of Record" for January 1964 to September 1969 may exist in files of U.S. Environmental Protection Agency.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 9,120 micromhos Sept. 8, 1964; minimum, 2,600 micromhos July 3, 1975.

FECAL STREPTOCOCCI: Maximum, 16,000 colonies/100 mL (non-ideal colony count) Aug. 14, 1978; minimum, 55 colonies/100 mL Jan. 10, 1977.

WATER TEMPERATURES: Maximum, 26.0°C July 23, 1969, June 3, 1970; minimum, 3.0°C Jan. 7, 1970.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 17,300 mg/L Feb. 10, 1976; minimum, 111 mg/L Jan. 28, 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	FIELD PH (UNITS)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	CHEM- ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CaCO3)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS Ca)
OCT												
11...	1030	76	8.0	110	10.4	35	7300	K60	--	K100	1100	290
31...	1130	79	--	100	--	34	--	--	--	--	--	--
NOV												
14...	1145	88	--	95	--	42	K1600	K100	--	240	--	--
29...	1315	99	--	150	--	63	2300	--	--	280	--	--
DEC												
12...	1100	111	--	260	--	56	2500	K50	--	300	--	--
27...	1300	111	--	210	--	100	K1000	K60	--	K180	--	--
JAN												
09...	1000	86	8.4	210	--	36	K1500	K60	--	2500	1100	340
30...	1030	93	--	180	--	59	500	K60	--	570	--	--
FEB												
16...	1145	118	--	1200	--	95	>200	K90	--	2200	--	--
28...	1230	89	--	--	--	--	300	500	--	2200	--	--
MAR												
13...	0930	E110	--	900	--	84	K1900	K60	--	2300	--	--
28...	0700	93	--	240	--	58	K1100	K30	--	800	--	--
APR												
19...	1430	E73	7.9	160	8.3	39	--	--	--	--	1200	340
MAY												
01...	1230	109	--	320	--	32	500	<10	--	K190	--	--
15...	1400	E78	--	250	--	490	K15000	K1400	--	K15000	--	--
30...	1400	67	--	56	--	26	--	--	--	--	--	--
JUN												
14...	0930	E64	--	45	--	29	K1100	K40	--	K1800	--	--
27...	1200	70	--	70	--	57	K11000	K20	--	2800	--	--
JUL												
11...	1400	E73	8.2	70	--	34	3400	144	--	K1900	1200	280
24...	1000	69	--	55	--	30	K1600	K110	--	K1700	--	--
AUG												
14...	1300	E68	--	40	--	46	--	--	--	K16000	--	--
28...	1430	81	--	80	--	100	9000	K168	--	2000	--	--
SEP												
11...	1330	77	--	39	--	46	--	--	K530	K4800	--	--
25...	1215	105	--	68	--	39	>1500	K120	--	2200	--	--

E: ESTIMATED.

K: NON-IDEAL COLONY COUNT.

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV--Continued

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

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACU3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)
UCT												
11...	280	100	100	320	340	4.4	36	37	200	1100	380	40
31...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
14...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
12...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
09...	290	120	81	320	240	3.2	32	25	150	960	330	32
30...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
16...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
13...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
19...	300	130	120	370	340	4.2	35	38	180	1000	470	39
MAY												
01...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
14...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
11...	280	120	110	310	340	4.4	40	39	200	1100	440	40
24...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
14...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
11...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
UCT												
11...	2620	2400	538	342	3.4	.66	1.0	1.6	6.7	7.8	5.5	7.2
31...	--	--	--	359	5.4	.33	.58	.82	7.1	5.0	--	6.6
NOV												
14...	2540	--	604	252	6.6	.45	.94	.76	8.7	5.8	--	--
29...	--	--	--	160	6.4	.72	3.2	1.3	12	4.5	--	8.7
DEC												
12...	2420	--	725	672	7.0	.51	2.3	1.4	11	3.5	--	11
27...	--	--	--	744	7.8	.49	1.2	1.5	11	4.8	--	9.3
JAN												
09...	2120	2050	492	982	6.0	.45	4.0	1.2	12	4.2	1.6	--
30...	--	--	--	726	5.8	.57	3.4	1.1	11	3.9	--	8.7
FEB												
16...	3020	--	962	3940	6.0	.14	.55	.85	7.5	2.8	--	38
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
13...	3040	--	--	2480	5.0	.28	2.6	2.4	10	3.8	--	3.7
28...	--	--	--	616	4.6	.43	2.4	1.6	9.0	2.9	--	13
APR												
19...	2690	2420	E559	408	4.3	.48	2.6	1.1	8.5	3.0	2.5	8.9
MAY												
01...	--	--	--	858	2.9	.41	3.9	.70	7.9	--	--	12
15...	2900	--	E611	840	2.9	.66	3.3	1.8	8.7	4.0	--	41
30...	--	--	--	153	2.7	.90	3.1	2.2	8.9	2.5	--	9.0
JUN												
14...	2640	--	E456	159	2.7	.91	6.0	2.1	12	3.7	--	8.3
27...	--	--	--	322	8.4	.01	.04	1.5	9.9	3.6	--	9.8
JUL												
11...	2500	2470	E493	199	2.6	1.4	4.4	2.5	11	4.2	6.1	11
24...	--	--	--	194	3.0	2.0	2.7	2.1	9.8	3.6	--	13
AUG												
14...	2510	--	E459	234	2.0	1.8	6.3	.80	11	3.8	--	20
28...	--	--	--	370	2.9	1.6	4.4	.50	9.4	4.2	--	13
SEP												
11...	2480	--	517	178	--	1.3	4.1	1.5	12	3.9	--	9.3
25...	--	--	--	260	3.3	.85	5.3	.00	8.9	3.8	--	20

E: ESTIMATED.

LAS VEGAS VALLEY

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV--Continued

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

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CUPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT							
11...	1030	50	400	10	20	20	6900
NOV							
14...	1145	30	100	0	4	14	4700
DEC							
12...	1100	33	600	0	30	5	980
JAN							
09...	1000	33	--	--	--	--	--
FEB							
16...	1145	70	1000	0	100	71	54000
MAR							
13...	0930	70	1000	0	0	60	40000
APR							
19...	1430	35	300	--	30	21	7700
MAY							
15...	1400	60	400	--	30	51	17000
JUN							
14...	0930	28	200	--	20	16	2600
JUL							
11...	1400	26	300	--	10	9	--
AUG							
14...	1300	33	200	--	30	17	4800
SEP							
11...	1330	20	300	--	10	15	2700

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT						
11...	100	680	.2	0	10	70
NOV						
14...	28	580	.0	1	0	40
DEC						
12...	43	690	--	--	1	40
JAN						
09...	--	--	.0	--	--	--
FEB						
16...	210	2400	.0	5	1	270
MAR						
13...	110	2500	.0	4	0	190
APR						
19...	--	710	.0	0	0	60
MAY						
15...	--	2100	.0	1	0	140
JUN						
14...	--	1300	.0	2	0	60
JUL						
11...	--	500	.0	2	0	20
AUG						
14...	--	1300	.0	2	0	60
SEP						
11...	--	790	.0	1	0	90

LAS VEGAS VALLEY

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09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV--Continued

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

DATE	TIME	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 11...	1030	.0	.00	.00	.0	.00	.00	.00
JAN 09...	1000	.0	.00	.00	.0	.00	.00	.00
APR 19...	1430	.0	.00	.00	.0	.00	.00	.00
JUL 18...	0730	.0	.00	.00	.0	.00	.00	.00

DATE	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)
OCT 11...	.06	.00	.00	.00	.00	.00	.00	.04	.00
JAN 09...	.08	.00	.00	.00	.00	.00	.00	.30	.00
APR 19...	.07	.00	.00	.00	.00	.00	.00	.03	.00
JUL 18...	.04	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT 11...	.00	.00	.00	0	.00	.01	.00	.00
JAN 09...	.00	.00	.00	0	.00	.00	.00	.00
APR 19...	.00	.00	.00	0	.00	.12	.01	.02
JUL 18...	.00	.00	.00	0	.00	.04	.00	.00

LAS VEGAS VALLEY

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAR 14...	1100	89	523	126	8	15	20
MAY 31...	1000	71	251	48	--	--	--
AUG 15...	1000	56	530	80	4	8	14
29...	1000	82	1980	438	13	14	21
SEP 12...	0930	76	2610	536	7	9	16

DATE	TIME	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	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
MAR 14...	27	35	44	61	71	76	100	
MAY 31...	--	--	84	98	99	100	--	
AUG 15...	21	31	47	70	87	97	100	
29...	28	38	53	76	94	99	100	
SEP 12...	24	33	48	67	86	96	100	

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 11...	1030	76	757	155
31...	1130	79	939	200
NOV 14...	1145	88	685	163
29...	1315	99	834	223
DEC 12...	1100	111	1300	390
JAN 09...	1000	86	1480	344
30...	1030	93	1100	276
FEB 28...	1230	89	1460	351
MAR 28...	0700	93	1640	412
APR 19...	1430	E73	1350	E281
MAY 01...	1230	109	2650	780
15...	1400	E78	3440	E724
30...	1400	67	524	95
JUN 14...	0930	E64	418	E72
27...	1200	70	525	99
JUL 11...	1400	E73	556	E110
24...	1000	69	376	71
AUG 14...	1300	E68	626	E115
28...	1430	81	814	178
SEP 11...	1330	77	371	77
25...	1215	105	504	143

E: ESTIMATED.

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NV--Continued

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

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS)	WATER TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS)	WATER TEMPER- ATURE (DEG C)
OCT , 1977					AUG				
03...	1000	E89	3360	17.0	01...	0730	E66	3180	24.5
11...	1030	76	3420	17.0	02...	0730	E66	3160	22.5
26...	0845	E84	3340	25.0	03...	0730	E66	3190	23.0
31...	1130	79	3560	15.0	04...	0730	E66	3090	22.5
NOV					07...	0730	E100	3180	23.0
14...	1145	88	3330	14.0	09...	0730	E70	3350	23.0
29...	1315	99	3270	15.0	10...	0730	E69	3300	22.0
DEC					11...	0730	E68	3350	23.0
12...	1100	111	3260	10.0	14...	0730	E68	3150	23.5
19...	1400	E97	3330	11.5	14...	1300	E68	2910	23.5
27...	1500	111	3260	12.5	16...	0730	E68	3050	22.0
JAN , 1978					17...	0730	E70	3220	19.5
04...	0900	E99	3230	11.0	18...	0730	E70	3220	19.5
09...	1000	86	3050	10.0	21...	0730	E72	3200	20.0
17...	0930	E107	3290	11.5	22...	0730	E74	3210	19.5
24...	0815	E93	3370	9.0	25...	0730	E78	3150	17.0
30...	1030	93	3330	11.5	28...	0730	E82	3000	18.5
FEB					28...	1430	81	3270	23.0
01...	0900	E97	3300	12.0	29...	0730	E82	3000	19.0
07...	0830	E93	3630	--	SEP				
16...	1115	E118	3750	10.0	01...	0730	E74	3100	23.0
16...	1145	118	3750	10.0	06...	0730	E73	2820	22.0
28...	1230	89	3500	14.5	07...	0730	E73	3000	21.0
MAR					08...	0730	E73	3050	19.0
09...	0830	E105	--	14.0	11...	0730	E78	3000	21.0
13...	0930	E110	3890	13.5	11...	1330	77	3000	21.0
28...	0700	93	3840	14.5	12...	0730	E78	3080	18.0
APR					13...	0730	E76	2950	17.5
04...	1000	E99	3630	17.0	14...	0730	E78	3180	19.0
19...	1430	E73	3520	17.0	15...	0730	E80	3180	18.0
MAY					18...	0730	E76	3120	17.5
01...	1230	109	3560	16.0	20...	0730	E76	2880	16.0
15...	1400	E78	3920	21.0	21...	0730	E76	3090	15.5
30...	1400	67	3530	22.0	22...	0730	E78	3020	15.0
JUN					25...	0730	E105	3050	21.5
13...	0730	E70	3500	23.0	25...	1215	105	3050	21.5
14...	0730	E70	3500	20.5	26...	0730	E90	3090	19.5
14...	0930	E64	3500	20.5	27...	0730	E84	3650	19.5
15...	0730	E70	3800	17.5	28...	0730	E82	3260	19.5
16...	0730	E70	3700	18.5	29...	0730	E81	2910	20.0
19...	0730	E70	3400	19.0					
21...	0730	E74	3400	20.5					
22...	0730	E74	3500	20.0					
23...	0730	E71	3600	19.5					
26...	0730	E67	3500	18.5					
27...	0730	E70	3450	21.0					
27...	1200	70	3450	21.0					
28...	0730	E70	3300	18.5					
29...	0730	E69	3700	18.0					
30...	0730	E67	3600	18.5					
JUL									
03...	0730	E64	3400	22.0					
05...	0730	E64	3500	18.0					
06...	0730	E64	3600	17.5					
07...	0730	E64	3800	18.0					
10...	0730	E66	3450	19.5					
11...	0730	E65	3700	23.5					
11...	1400	E73	3450	23.5					
12...	0730	E64	3300	19.0					
13...	0730	E63	3550	19.0					
17...	0730	E62	3400	23.0					
18...	0730	E65	3400	21.0					
19...	0730	E67	3200	21.0					
21...	0730	E68	3400	20.5					
24...	0730	E70	3120	23.0					
24...	1000	69	3400	23.0					
25...	0730	E70	3300	22.5					
27...	0730	E68	3450	21.0					
28...	0730	E68	3200	23.0					
31...	0730	E66	3150	22.0					

E: ESTIMATED.

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV

LOCATION.--Lat 36°00'58", long 114°44'13", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, Mohave-Clark Counties, Hydrologic Unit 15010005, in center of Hoover Dam on Colorado River.

DRAINAGE AREA.--171,700 mi² (444,700 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

RESERVOIR-CONTENTS RECORDS

PERIOD OF RECORD.--Contents: February 1935 to current year. Evaporation: March 1952 to current year. Diversions (monthly totals only): to Boulder City area, since October 1935; to Henderson and Las Vegas areas, since April 1942; combined diversions since October 1968. Prior to 1946 published as "at Boulder Dam."

REVISED RECORDS.--WSP 899: 1935-39.

GAGE.--Water-stage indicator read once daily at midnight, with supplementary water-stage recorder. Datum of gage is 0.00 ft (0.000 m) to Local Powerhouse datum and is 0.40 ft (0.122 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete arch-gravity dam; storage began Feb. 1, 1935; dam completed Mar. 1, 1936. Total capacity (based on 1963-64 resurvey by Coast and Geodetic Survey; capacity table put into use Apr. 1, 1967), 29,755,000 acre-ft (36,700 hm³), consisting of the following: Dead storage, 2,378,000 acre-ft (2,930 hm³) below gage height 895.0 ft (272.80 m) —gate sills in outlet towers; usable contents, 26,159,000 acre-ft (32,300 hm³) between gage heights 895.0 ft (272.80 m) and 1,221.4 ft (372.28 m)—top of automatic spillway gates in raised position; and uncontrolled storage, 1,218,000 acre-ft (1,500 hm³) between gage heights 1,221.4 ft (372.28 m) and 1,229.0 ft (374.60 m)—maximum water surface. Reservoir is used to store water for flood control, irrigation, municipal water supply, and power development. Figures given herein represent usable contents.

DIVERSIONS FROM LAKE MEAD.--Diversions to Boulder City area at dam; diversions to Henderson and Las Vegas areas from intakes 6 mi (10 km) upstream. Diversions measured by Venturi meters. Water used for municipal and industrial purposes.

COOPERATION.--Records of gage height and contents furnished by Bureau of Reclamation. Records of diversions from Lake Mead furnished by Bureau of Reclamation and Colorado River Commission of Nevada.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,790,000 acre-ft (34,300 hm³) July 29, 30, 1941, gage height, 1,220.45 ft (371.993 m); minimum (since 1940), 10,695,000 acre-ft (1,200 hm³) Apr. 26, 1956, gage height, 1,083.21 ft (330.162 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 21,460,000 acre-ft (26,500 hm³) Mar. 12, gage height, 1,189.73 ft (362.630 m); minimum, 20,004,000 acre-ft (24,700 hm³) Dec. 15, gage height, 1,178.96 ft (359.347 m).

CONTENTS, IN THOUSANDS OF 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	20221	20182	20036	20280	20974	21173	21294	20947	20751	20785	20571	20647
2	20246	20170	20029	20292	20997	21191	21305	20939	20753	20793	20569	20664
3	20250	20164	20040	20304	21022	21219	21295	20921	20770	20795	20568	20678
4	20245	20153	20055	20319	21042	21259	21281	20898	20791	20795	20568	20700
5	20237	20141	20054	20338	21064	21306	21288	20890	20793	20787	20568	20708
6	20237	20150	20042	20366	21068	21353	21269	20899	20776	20780	20588	20728
7	20229	20153	20028	20399	21073	21381	21244	20914	20783	20755	20583	20746
8	20233	20153	20017	20429	21074	21407	21241	20894	20784	20746	20568	20770
9	20242	20143	20005	20453	21079	21425	21248	20869	20777	20751	20573	20799
10	20238	20140	20019	20478	21094	21439	21239	20850	20788	20737	20577	20827
11	20227	20144	20038	20504	21123	21440	21217	20842	20810	20727	20575	20839
12	20217	20153	20030	20529	21138	21460	21196	20825	20803	20720	20590	20854
13	20219	20160	20026	20548	21142	21454	21173	20825	20792	20715	20610	20871
14	20217	20158	20020	20569	21142	21449	21156	20826	20781	20701	20616	20886
15	20218	20157	20004	20591	21153	21435	21148	20818	20777	20711	20606	20866
16	20226	20148	20016	20610	21163	21418	21160	20815	20783	20715	20592	20898
17	20215	20131	20019	20627	21173	21403	21134	20806	20801	20708	20583	20903
18	20200	20115	20034	20651	21184	21396	21116	20792	20807	20692	20577	20901
19	20170	20112	20033	20680	21202	21392	21103	20785	20803	20683	20585	20893
20	20176	20116	20034	20704	21218	21375	21077	20793	20791	20669	20599	20878
21	20172	20111	20040	20735	21217	21363	21058	20796	20783	20662	20588	20868
22	20176	20100	20063	20769	21200	21341	21052	20784	20777	20666	20581	20861
23	20184	20096	20082	20792	21191	21330	21063	20768	20769	20657	20580	20865
24	20178	20108	20111	20808	21182	21328	21042	20751	20780	20643	20587	20868
25	20166	20107	20135	20833	21189	21232	21019	20743	20801	20620	20595	20860
26	20165	20106	20154	20863	21197	21341	21003	20741	20801	20590	20619	20853
27	20166	20107	20164	20886	21178	21328	20980	20757	20795	20581	20650	20856
28	20173	20086	20177	20913	21169	21335	20951	20773	20787	20576	20653	20854
29	20178	20066	20202	20939	---	21334	20951	20776	20785	20584	20646	20852
30	20190	20048	20225	20952	---	21334	20966	20765	20778	20594	20647	20869
31	20189	---	20250	20959	---	21281	---	20754	---	20583	20641	---
MAX	20250	20182	20250	20959	21218	21460	21305	20947	20810	20795	20653	20903
MIN	20165	20048	20004	20280	20974	21173	20951	20741	20751	20576	20568	20647
*	1180.36	1179.29	1180.82	1186.09	1187.62	1188.44	1186.14	1184.58	1184.76	1183.31	1183.74	1185.43
†	-16,000	-141,000	+202,000	+709,000	+210,000	+112,000	-315,000	-212,000	+24,000	-195,000	+58,000	+228,000
‡	8,040	6,190	4,100	4,160	4,200	5,270	6,850	9,370	11,570	12,260	11,980	10,340
**	6.5	6.4	4.2	3.7	3.7	3.4	4.3	6.2	7.9	7.7	10.5	8.6
††	71,800	70,500	46,200	41,500	-2,300	39,100	49,200	70,100	89,200	86,600	117,700	97,200
CAL YR 1977	† -953,000	‡ 90,880	** 75.5	†† 836,300								
WTR YR 1978	† +664,000	‡ 94,300	** 73.1	†† 821,400								

* Gage height, in feet, at end of month.

† Change in contents, in acre-feet.

‡ Diversions, in acre-feet.

** Gross evaporation, in inches, from Lake Mead.

†† Gross evaporation, in acre-feet, from Lake Mead.

NOTE.--Figures of gross evaporation are based on data obtained on Lake Mead by the Bureau of Reclamation and at Las Vegas by National Weather Service, and are computed by the Geological Survey. Only the mass-transfer method described in Geological Survey Professional Paper 298 is used. "Gross" denoted the total evaporation from the lake without deduction for precipitation on the lake surface or for natural losses that would have occurred in the area now occupied by the lake. Starting February 1976 coefficient changed to 0.00179.

COLORADO RIVER MAIN STEM

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1940 to September 1962, October 1963 to current year.

CHEMICAL ANALYSES, SPECIFIC CONDUCTANCES, AND WATER TEMPERATURES: October 1940 to September 1962 and October 1963 to current year, monthly.

COOPERATION.--Samples and field data collected by U.S. Bureau of Reclamation. Non-nutrient samples analyzed by Metropolitan Water District of Southern California.

EXTREMES MEASURED FOR PERIOD OF RECORD (at 5-ft depth to September 1962; at water surface from October 1963 to current year).--

SPECIFIC CONDUCTANCES: Maximum, 1,250 micromhos Oct. 4, Nov. 1, 1965; minimum, 688 micromhos Nov. 1, 1957.

WATER TEMPERATURES: Maximum, 31.5°C Aug. 30, 1967; minimum, 11.0°C Jan. 28, 1949.

DATE	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT								
27...	.0	1080	8.0	22.0	6.8	330	79	32
27...	10	1100	8.3	22.0	6.8	--	--	--
27...	25	1100	8.5	22.0	6.7	--	--	--
27...	75	1060	8.5	19.0	2.4	--	--	--
27...	125	1080	8.4	15.0	4.3	330	84	30
27...	175	1070	8.3	13.5	5.6	--	--	--
27...	225	1060	8.2	13.0	6.3	--	--	--
27...	267	1050	8.6	12.0	6.6	320	83	28
27...	275	1040	8.3	12.0	6.6	--	--	--
27...	325	1050	8.5	12.0	6.4	--	--	--
27...	375	1050	8.2	12.0	6.0	--	--	--
27...	425	1050	8.2	12.0	5.0	320	82	28
27...	460	1060	8.0	12.0	3.3	--	--	--
DEC								
07...	.0	1100	7.9	16.0	6.8	330	83	30
07...	10	1100	7.8	16.5	6.8	--	--	--
07...	25	1100	8.0	16.5	6.8	--	--	--
07...	75	1100	8.1	16.5	6.6	--	--	--
07...	125	1100	7.9	16.0	4.5	330	84	30
07...	175	1060	7.9	14.0	5.2	330	83	30
07...	225	1050	8.1	13.0	6.3	--	--	--
07...	267	1050	8.0	12.5	6.3	320	82	29
07...	275	1050	8.1	12.5	6.3	--	--	--
07...	325	1040	8.0	12.0	6.3	--	--	--
07...	375	1040	8.0	12.0	5.5	--	--	--
07...	425	1050	7.9	12.0	4.8	320	81	28
07...	460	1050	7.9	12.0	3.5	--	--	--
JAN								
04...	.0	1080	7.3	14.0	7.6	330	83	30
04...	10	1100	7.8	14.0	7.8	--	--	--
04...	25	1100	7.9	14.5	8.0	--	--	--
04...	75	1100	7.9	14.5	8.0	--	--	--
04...	125	1100	8.1	14.5	7.8	--	--	--
04...	175	1060	8.2	13.5	5.9	330	83	30
04...	225	1050	8.2	13.0	6.0	--	--	--
04...	267	1050	8.0	12.5	6.1	320	83	28
04...	275	1050	8.0	12.5	6.3	--	--	--
04...	325	1050	8.0	12.0	6.3	--	--	--
04...	375	1050	7.8	12.0	6.3	--	--	--
04...	425	1050	7.8	12.0	5.5	330	81	30
04...	460	1060	7.6	12.0	4.0	--	--	--
JAN								
30...	.0	1080	8.0	13.5	9.1	330	84	30
30...	10	1090	8.1	13.5	9.0	--	--	--
30...	25	1090	8.1	13.5	9.0	--	--	--
30...	75	1100	8.2	13.5	8.6	--	--	--
30...	125	1100	8.0	13.5	8.5	--	--	--
30...	175	1100	8.2	13.5	8.5	330	84	30
30...	225	1050	7.9	13.0	6.3	330	83	28
30...	275	1040	8.0	12.5	6.2	320	83	28
30...	325	1050	7.8	12.0	6.2	--	--	--
30...	375	1060	7.7	12.0	5.0	330	81	30
30...	425	1060	7.8	12.0	5.0	320	80	29
30...	450	1060	7.7	12.0	4.2	--	--	--
30...	468	1060	10.0	12.0	3.5	--	--	--

COLORADO RIVER MAIN STEM

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09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

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

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
OCT								
27...	100	2.4	5.0	112	300	94	8.3	686
27...	--	--	--	--	--	94	--	--
27...	--	--	--	--	--	94	--	--
27...	--	--	--	--	--	88	--	--
27...	100	2.4	4.6	129	290	88	8.0	683
27...	--	--	--	--	--	86	--	--
27...	--	--	--	--	--	84	--	--
27...	97	2.4	4.3	135	270	84	9.3	658
27...	--	--	--	--	--	84	--	--
27...	--	--	--	--	--	83	--	--
27...	--	--	--	--	--	83	--	--
27...	97	2.4	4.3	134	280	82	9.4	664
27...	--	--	--	--	--	83	--	--
DEC								
07...	100	2.4	5.0	121	300	92	8.0	692
07...	--	--	--	122	--	92	--	--
07...	--	--	--	122	--	92	--	--
07...	--	--	--	122	--	92	--	--
07...	100	2.4	4.7	125	290	90	8.1	683
07...	99	2.4	4.6	131	280	86	7.8	670
07...	--	--	--	131	--	84	--	--
07...	97	2.3	4.4	132	280	84	9.0	665
07...	--	--	--	132	--	84	--	--
07...	--	--	--	132	--	84	--	--
07...	--	--	--	134	--	84	--	--
07...	96	2.3	4.4	134	270	84	9.1	654
07...	--	--	--	132	--	84	--	--
JAN								
04...	100	2.4	5.0	124	300	92	8.6	694
04...	--	--	--	125	--	91	--	--
04...	--	--	--	126	--	90	--	--
04...	--	--	--	125	--	92	--	--
04...	--	--	--	125	--	92	--	--
04...	96	2.3	4.6	133	280	86	8.8	669
04...	--	--	--	135	--	85	--	--
04...	95	2.3	4.4	135	280	83	9.0	665
04...	--	--	--	134	--	83	--	--
04...	--	--	--	135	--	83	--	--
04...	--	--	--	135	--	84	--	--
04...	93	2.2	4.4	135	270	84	9.2	654
04...	--	--	--	136	--	83	--	--
JAN								
30...	100	2.4	4.7	126	290	90	8.6	684
30...	--	--	--	126	--	90	--	--
30...	--	--	--	126	--	90	--	--
30...	--	--	--	126	--	90	--	--
30...	--	--	--	126	--	91	--	--
30...	100	2.4	4.8	125	290	92	8.2	685
30...	98	2.4	4.4	123	280	91	8.9	668
30...	97	2.4	4.3	134	270	83	8.9	655
30...	--	--	--	134	--	84	--	--
30...	100	2.4	4.6	130	280	88	9.0	672
30...	98	2.4	4.3	135	270	84	9.7	657
30...	--	--	--	--	--	--	--	--
30...	--	--	--	136	--	84	--	--

COLORADO RIVER MAIN STEM

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

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

DATE	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)
MAR								
07...	.0	1060	7.2	14.0	8.9	330	84	30
07...	10	1080	7.2	13.3	9.4	--	--	--
07...	25	1080	7.8	13.5	9.1	--	--	--
07...	75	1090	7.6	13.0	9.1	--	--	--
07...	125	1090	7.8	13.0	9.0	330	85	29
07...	175	1090	7.8	13.0	9.0	--	--	--
07...	225	1090	7.8	13.0	9.0	330	85	29
07...	275	1090	7.8	13.0	8.7	--	--	--
07...	277	1090	7.8	13.0	8.7	--	--	--
07...	325	1080	7.7	13.0	7.4	330	83	29
07...	375	1060	7.7	12.5	6.2	--	--	--
07...	425	1060	7.6	12.0	5.5	330	83	29
07...	470	1060	8.1	12.0	5.2	--	--	--
30...	.0	1080	8.2	16.5	10.1	330	83	30
30...	10	1080	8.3	16.5	10.1	--	--	--
30...	25	1080	8.3	16.0	10.0	--	--	--
30...	75	1090	8.2	13.5	9.2	--	--	--
30...	125	1090	8.2	13.0	8.8	--	--	--
30...	175	1080	8.0	13.0	8.2	--	--	--
30...	225	1070	8.0	13.0	7.1	330	82	30
30...	275	1050	8.0	12.0	5.6	--	--	--
30...	279	1050	8.0	12.0	5.6	320	82	29
30...	325	1060	7.9	12.0	5.3	--	--	--
30...	375	1070	7.9	12.0	5.2	--	--	--
30...	425	1080	7.9	12.0	5.0	330	84	29
30...	470	1080	7.9	12.0	4.8	--	--	--
APR								
27...	.0	1040	8.5	18.5	9.4	340	85	30
27...	10	1060	8.7	18.0	9.6	--	--	--
27...	25	1070	8.4	17.0	9.4	--	--	--
27...	75	1080	8.2	14.0	8.6	--	--	--
27...	125	1080	8.1	13.5	8.2	330	84	30
27...	175	1080	8.6	13.0	7.8	--	--	--
27...	225	1060	8.4	13.0	7.2	330	83	29
27...	275	1060	8.4	12.5	6.6	--	--	--
27...	325	1050	8.7	12.0	6.4	--	--	--
27...	375	1050	8.7	12.0	6.4	--	--	--
27...	425	1050	8.6	12.0	6.4	330	82	30
27...	468	1060	8.7	12.0	6.4	--	--	--
JUN								
02...	.0	1040	8.1	24.0	10.3	320	78	30
02...	10	1050	8.4	21.5	10.4	--	--	--
02...	25	1080	8.4	19.5	10.4	--	--	--
02...	75	1100	8.3	17.0	7.8	--	--	--
02...	125	1080	7.7	15.0	7.3	331	83	30
02...	175	1080	8.1	13.5	7.3	--	--	--
02...	225	1080	7.5	13.0	7.0	--	--	--
02...	275	1060	8.3	12.5	6.7	324	81	30
02...	325	1060	8.3	12.0	6.3	--	--	--
02...	375	1060	8.3	12.0	6.4	--	--	--
02...	425	1060	8.1	12.0	6.1	319	80	29
02...	468	1060	7.7	12.0	5.8	--	--	--
29...	.0	1060	8.3	24.0	8.5	330	82	30
29...	10	1080	8.3	23.5	8.6	--	--	--
29...	25	1080	8.3	23.0	8.6	--	--	--
29...	75	1080	7.8	17.0	6.4	330	83	30
29...	125	1080	7.8	15.5	6.8	--	--	--
29...	175	1080	7.8	14.0	7.0	--	--	--
29...	225	1070	8.0	13.5	6.8	330	84	30
29...	275	1060	7.8	13.0	6.6	330	83	30
29...	325	1060	7.9	13.0	6.6	--	--	--
29...	375	1060	7.9	13.0	6.2	--	--	--
29...	425	1060	7.9	12.0	6.0	320	81	29
29...	468	1060	7.7	12.0	5.4	--	--	--

COLORADO RIVER MAIN STEM

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09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

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

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLOR- IDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
MAR								
07...	100	2.4	4.6	132	290	86	9.3	684
07...	--	--	--	132	--	87	--	--
07...	--	--	--	133	--	86	--	--
07...	--	--	--	132	--	87	--	--
07...	100	2.4	4.5	132	290	87	9.1	685
07...	--	--	--	133	--	89	--	--
07...	100	2.4	4.7	133	290	88	9.1	687
07...	--	--	--	133	--	88	--	--
07...	--	--	--	--	--	--	--	--
07...	100	2.4	4.4	135	290	85	9.3	683
07...	--	--	--	139	--	81	--	--
07...	97	2.3	4.3	140	270	83	10	662
07...	--	--	--	140	--	82	--	--
30...	100	2.4	4.5	126	290	88	6.8	679
30...	--	--	--	127	--	89	--	--
30...	--	--	--	127	--	87	--	--
30...	--	--	--	127	--	88	--	--
30...	--	--	--	128	--	88	--	--
30...	--	--	--	129	--	87	--	--
30...	97	2.3	4.3	130	280	85	8.7	666
30...	--	--	--	130	--	83	--	--
30...	96	2.3	4.1	132	270	82	9.2	653
30...	--	--	--	133	--	81	--	--
30...	--	--	--	134	--	83	--	--
30...	96	2.3	4.3	138	280	83	9.5	670
30...	--	--	--	139	--	84	--	--
APR								
27...	100	2.4	4.4	127	290	87	8.0	681
27...	--	--	--	129	--	87	--	--
27...	--	--	--	129	--	88	--	--
27...	--	--	--	129	--	87	--	--
27...	100	2.4	4.3	130	290	87	9.0	683
27...	--	--	--	131	--	86	--	--
27...	99	2.4	4.1	132	280	85	9.0	669
27...	--	--	--	134	--	84	--	--
27...	--	--	--	137	--	83	--	--
27...	--	--	--	134	--	82	--	--
27...	99	2.4	4.1	136	280	85	11	674
27...	--	--	--	136	--	84	--	--
JUN								
02...	100	2.4	4.8	118	300	91	7.9	683
02...	--	--	--	115	--	91	--	--
02...	--	--	--	120	--	90	--	--
02...	--	--	--	128	--	89	--	--
02...	100	2.4	4.5	128	300	89	8.8	693
02...	--	--	--	--	--	--	--	--
02...	--	--	--	131	--	87	--	--
02...	100	2.4	4.4	132	280	86	9.0	670
02...	--	--	--	132	--	86	--	--
02...	--	--	--	133	--	85	--	--
02...	98	2.4	4.4	135	280	85	9.9	668
02...	--	--	--	136	--	84	--	--
29...	100	2.4	4.7	116	300	92	8.6	687
29...	--	--	--	117	--	94	--	--
29...	--	--	--	116	--	93	--	--
29...	100	2.4	4.6	127	290	92	8.6	686
29...	--	--	--	128	--	92	--	--
29...	--	--	--	128	--	92	--	--
29...	100	2.4	4.5	130	280	89	9.3	676
29...	99	2.4	4.5	132	280	88	9.6	674
29...	--	--	--	132	--	86	--	--
29...	--	--	--	134	--	87	--	--
29...	99	2.4	4.2	134	270	86	11	661
29...	--	--	--	131	--	89	--	--

COLORADO RIVER MAIN STEM

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

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

DATE	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)
JUL									
27...	.0	1040	8.3	29.0	8.5	320	77	31	110
27...	10	1080	8.6	28.0	8.5	--	--	--	--
27...	25	1090	8.5	26.5	8.5	--	--	--	--
27...	75	1070	8.3	24.0	4.8	--	--	--	--
27...	125	1060	8.1	15.5	6.4	330	84	30	100
27...	175	1070	8.1	14.0	7.0	--	--	--	--
27...	225	1060	8.0	13.5	6.8	330	82	30	100
27...	275	1060	8.0	13.0	6.4	--	--	--	--
27...	325	1060	8.0	13.0	6.4	320	81	29	100
27...	375	1060	8.0	13.0	6.2	--	--	--	--
27...	425	1060	7.9	13.0	5.8	320	81	29	100
27...	468	1060	7.9	13.0	5.3	--	--	--	--
AUG									
30...	.0	1060	8.6	28.5	8.4	320	77	32	110
30...	10	1080	8.4	26.5	8.4	--	--	--	--
30...	25	1100	8.4	26.0	7.8	--	--	--	--
30...	75	1080	7.8	20.5	3.0	340	83	31	110
30...	125	1080	7.8	16.0	5.2	--	--	--	--
30...	175	1080	7.8	14.5	6.5	340	83	31	100
30...	225	1070	7.8	13.5	6.6	--	--	--	--
30...	275	1060	7.8	13.0	6.6	330	82	30	100
30...	325	1060	7.8	13.0	6.4	--	--	--	--
30...	375	1060	7.7	13.0	6.1	--	--	--	--
30...	425	1060	7.8	13.0	5.6	--	--	--	--
30...	450	1060	7.7	13.0	4.8	330	82	30	100
30...	468	1060	7.7	13.0	4.4	--	--	--	--
SEP									
28...	.0	1100	8.5	25.5	9.0	330	80	32	110
28...	10	1110	8.7	25.0	9.0	330	--	--	--
28...	25	1080	8.5	25.0	8.4	330	--	--	--
28...	75	1080	8.0	21.0	1.9	340	83	31	100
28...	125	1070	7.8	18.0	3.8	340	--	--	--
28...	175	1070	7.8	15.5	5.4	340	--	--	--
28...	225	1070	8.1	14.5	6.2	340	--	--	--
28...	275	1060	8.0	13.5	6.4	330	83	30	99
28...	325	1060	7.7	13.0	6.1	330	--	--	--
28...	375	1060	7.9	13.0	5.8	330	--	--	--
28...	425	1060	7.8	13.0	5.3	330	--	--	--
28...	450	1060	7.8	13.0	4.5	330	82	30	98
28...	471	1060	7.8	13.0	3.8	330	--	--	--

COLORADO RIVER MAIN STEM

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09421000 LAKE MEAD AT HOOVER DAM, AZ-NV--Continued

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

DATE	SODIUM AD- SURP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
JUL								
27...	2.7	4.8	109	300	93	.4	8.0	690
27...	--	--	110	--	93	--	--	--
27...	--	--	110	--	93	--	--	--
27...	--	--	125	--	91	--	--	--
27...	2.4	4.7	130	290	90	.4	8.9	687
27...	--	--	131	--	88	--	--	--
27...	2.4	4.5	132	280	87	.4	9.1	673
27...	--	--	134	--	86	--	--	--
27...	2.4	4.3	135	270	86	.3	9.3	662
27...	--	--	135	--	85	--	--	--
27...	2.4	4.3	136	280	85	.3	9.4	671
27...	--	--	137	--	85	--	--	--
AUG								
30...	2.7	5.2	108	310	97	.3	9.0	706
30...	--	--	108	--	97	--	--	--
30...	--	--	108	--	97	--	--	--
30...	2.6	4.9	125	300	93	.2	8.0	706
30...	--	--	129	--	91	--	--	--
30...	2.4	4.8	130	290	90	.2	9.0	687
30...	--	--	132	--	90	--	--	--
30...	2.4	4.6	134	280	87	.2	9.0	674
30...	--	--	135	--	86	--	--	--
30...	--	--	136	--	86	--	--	--
30...	--	--	137	--	86	--	--	--
30...	2.4	4.5	138	270	86	.2	9.0	665
30...	--	--	131	--	87	--	--	--
SEP								
28...	2.6	4.9	112	320	96	.3	8.6	719
28...	--	--	112	--	96	--	--	--
28...	--	--	112	--	95	--	--	--
28...	2.4	4.7	124	300	92	.2	8.4	694
28...	--	--	129	--	91	--	--	--
28...	--	--	130	--	89	--	--	--
28...	--	--	130	--	89	--	--	--
28...	2.4	4.3	133	280	87	.2	9.3	673
28...	--	--	134	--	86	--	--	--
28...	--	--	135	--	85	--	--	330
28...	--	--	133	--	87	--	--	--
28...	2.4	4.3	136	280	85	.2	9.8	672
28...	--	--	139	--	85	--	--	--

DATE	TRANSPARENCY, SECCHI DISK (FEET)
OCT. 27	18
DEC. 7	38
JAN. 4	42
JAN. 30	27
MAR. 7	53
MAR. 30	19
APR. 27	60
JUNE 2	12
JUNE 29	54
JULY 27	20
AUG. 30	10

COLORADO RIVER MAIN STEM

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV
(National stream-quality accounting network station)

LOCATION.--Lat 36°00'55", long 114°44'16", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, or SW¼NE¼ sec.29, T.22 S., R.65 E., Mount Diablo meridian, Mohave-Clark Counties, Hydrologic Unit 15030101, in powerhouse at downstream side of Hoover Dam.

DRAINAGE AREA.--171,700 mi² (444,700 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year (prior to April 1934, monthly discharge only, published in WSP 1313). Published as "near Willow Beach" 1933-39 and as "below Boulder Dam" 1939-45.

GAGE.--Totalizing flowmeters on each turbine in Hoover Dam powerhouse. Prior to Nov. 1, 1939, water-stage recorder at site 9 mi (14 km) downstream at datum 594.8 ft (181.30 m) National Geodetic Vertical Datum of 1929. Nov. 1, 1939, to June 30, 1958, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 600.35 ft (182.987 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by Lake Mead since Feb. 1, 1935. Many diversions above station for irrigation, industrial, and municipal use.

COOPERATION.--Records furnished by Bureau of Reclamation.

AVERAGE DISCHARGE.--44 years (water years 1935-78), 13,210 ft³/s (374.1 m³/s), 9,571,000 acre-ft/yr (11,800 hm³/yr), unadjusted for storage in Lake Mead.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 36,000 ft³/s (1,020 m³/s) Jan. 28, 1942; no flow at Hoover Dam part of Feb. 10, 1935; minimum daily, 152 ft³/s (4.30 m³/s) Feb. 10, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 22,300 ft³/s (632 m³/s) May 4; minimum daily, 1,560 ft³/s (44.2 m³/s) Jan. 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	6990	5000	11500	2180	6160	15900	7010	19100	11700	7500	15400	15200
2	5090	6900	11100	2820	3720	14600	6160	16500	10200	5600	13300	10200
3	9160	6480	4310	8530	3780	10700	14300	19500	4850	8600	11500	9660
4	8740	7850	3300	7980	3060	6700	16100	22300	3630	7430	14900	6280
5	7800	4360	10000	6370	3630	5180	16900	18400	14500	12700	12500	8900
6	8750	3930	10400	3670	5010	5200	19600	8120	16700	16400	6260	7240
7	11600	6100	12300	2290	8450	8460	19200	4650	11800	17300	15700	10500
8	5210	6570	14000	1670	5950	9250	12100	19700	13900	12300	18700	10800
9	3950	10400	16000	3780	8820	8920	6240	21100	15000	9570	13600	6430
10	11900	9540	6240	3510	6320	9300	16100	19300	4360	15700	16900	4640
11	9720	6760	5100	4270	4820	7500	19500	15100	5150	13600	13200	10700
12	9560	2600	12200	3910	5210	7650	18100	19500	12900	14200	10100	9050
13	6250	2380	11400	3630	7700	13700	18900	12700	13900	15300	6470	9180
14	10000	7930	14900	3760	5640	13400	18500	4090	13300	16800	12800	10300
15	6420	6060	15300	3260	5380	16400	8990	13800	10900	8870	19400	16400
16	3570	8010	10800	7690	5160	18400	6770	14000	11600	7120	16800	10100
17	9360	10800	6410	4330	6550	15400	17100	13400	7570	13400	19800	6840
18	10300	11100	4600	3870	4260	10800	19700	16500	6280	17600	21500	13700
19	9110	7580	13900	3170	2810	7780	16700	15100	14800	16600	14200	12500
20	8540	5910	12700	1800	2900	14700	19200	6490	13600	17200	9930	14800
21	8640	10800	10700	2170	9650	14200	21400	8620	13200	14000	17500	15200
22	1640	11800	10300	1700	16100	15100	12300	13900	12300	10000	17400	16800
23	2450	12000	6090	2810	17800	15900	7300	14800	14900	11500	16900	11200
24	7480	3600	4330	2450	15400	12700	20600	15100	8280	19000	14600	12900
25	10500	10500	3740	4860	8370	8880	18600	17200	4560	18600	16500	16400
26	3770	5530	3830	4460	9440	5940	18800	15400	10500	20900	6110	16600
27	4010	5110	9360	4930	17400	17900	21500	9480	9560	18600	6340	13900
28	4690	12700	10600	1560	18500	14000	20700	7800	11900	17100	17200	17600
29	2270	11400	7230	1610	---	16300	11300	7960	12900	10300	16800	15600
30	1980	13500	5440	4820	---	14700	4920	11700	15000	8100	17000	7410
31	6550	---	3640	4620	---	17700	---	12200	---	16900	20500	---
TOTAL	216000	233200	283720	118430	216390	373260	454590	433510	329740	418790	449810	347030
MEAN	6968	7773	9152	3820	7728	12040	15150	13980	10990	13510	14510	11570
MAX	11900	13500	16000	8530	18500	18400	21500	22300	16700	20900	21500	17600
MIN	1640	2380	3300	1560	2810	5180	4920	4090	3630	5600	6110	4640
AC-FT	428400	462600	562800	234900	429200	740400	901700	859900	654000	830700	892200	688300
CAL YR 1977 TOTAL	3969260			MEAN 10870	MAX 25000	MIN 1390	AC-FT 7873000					
WTR YR 1978 TOTAL	3874470			MEAN 10610	MAX 22300	MIN 1560	AC-FT 7685000					

COLORADO RIVER MAIN STEM

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09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

WATER-QUALITY RECORDS

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

CHEMICAL ANALYSES: October 1939 to September 1944, once-daily (composited); October 1944 to July 1946 and November 1948 to July 1950, occasional (composited); October 1950 to September 1957, once-daily (composited); October 1957 to September 1962, twice-monthly (composited); October 1963 to September 1967, three times per month (composited); October 1967 to March 1970, once-daily (composited); April 1970 to current year, monthly.

SPECIFIC CONDUCTANCES: October 1939 to July 1957, once-daily; August 1957 to September 1962 and October 1963 to March 1970, variable frequency of measurement; April 1970 to current year, monthly.

BIOLOGICAL DATA: November 1974 to September 1977, monthly; October 1977 to current year, monthly (seasonal).

MICROBIOLOGICAL DATA: November 1974 to current year, monthly.

WATER TEMPERATURES: October 1941 to July 1957, once-daily; August 1957 to March 1970, variable frequency of measurement; April 1970 to current year, monthly.

SEDIMENT DATA: August 1975 to current year, monthly.

REMARKS.--Samples collected 0.3 mi (0.5 km) downstream from gaging station in Hoover Dam powerhouse.

EXTREMES MEASURED FOR PERIOD OF RECORD SINCE OCTOBER 1970.--

SPECIFIC CONDUCTANCES: Maximum, 1,230 micromhos Jan. 18, 1972; minimum, 1,000 micromhos June 19, 1972.

PHYTOPLANKTON: Maximum, 3,800 cells/mL Nov. 5, 1974; minimum, 5 cells/mL Aug. 9, 1977.

FECAL STREPTOCOCCI: Maximum, 45 colonies/100 mL Mar. 9, 1977; minimum, 1 colony/100 mL several times during period of record.

WATER TEMPERATURES: Maximum, 18.5°C April 21, 1970; minimum, 9.0°C Feb. 12, 1975, Jan. 10, 1978.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 6 mg/L Mar. 7, 1978; minimum, 0 mg/L on several days in 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
04...	0800	3920	1060	6.9	12.5	1	--	--	--	--	--
05...	0800	4220	--	--	13.5	--	--	6.6	--	1	1
NOV											
08...	0900	3870	1060	8.0	12.0	1	--	9.1	--	--	--
09...	0800	2770	--	--	--	--	--	--	--	1	1
DEC											
06...	0800	7980	1050	8.0	12.0	1	--	7.1	--	--	--
07...	0800	11600	--	--	12.5	--	--	--	--	2	1
JAN											
10...	0800	3370	1040	7.9	13.0	1	--	8.2	--	--	--
11...	0800	2050	--	--	12.5	--	--	--	--	3	1
FEB											
07...	0830	7090	1060	8.1	12.0	1	--	6.5	--	--	--
08...	0830	4850	--	--	12.0	--	--	--	--	1	1
MAR											
07...	0815	9600	1080	8.2	12.5	1	--	8.5	--	--	--
08...	0800	1870	--	--	--	--	--	--	--	1	5
APR											
11...	0800	19900	1080	7.9	12.0	1	--	6.5	--	--	--
12...	0800	18000	--	--	--	--	--	--	--	1	1
MAY											
09...	0800	29400	1060	8.1	13.0	0	--	7.3	--	--	--
10...	0730	21400	--	--	12.5	--	--	--	--	1	1
JUN											
13...	0730	10900	1070	8.0	13.0	--	.40	7.7	35	--	--
14...	0715	7760	--	--	13.0	--	--	--	--	1	1
JUL											
11...	0800	9090	1080	8.0	13.0	--	.40	7.8	9	--	--
12...	0800	9910	--	--	13.0	--	--	--	--	3	1
AUG											
08...	0800	10800	1070	7.7	13.5	--	.25	7.3	95	--	--
09...	0800	8920	--	--	13.0	--	--	--	--	1	3
SEP											
12...	0800	4580	1080	8.4	13.0	--	1.3	7.2	3	--	--
13...	0800	5480	--	--	13.0	--	--	--	--	2	1

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

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

[illegible][illegible]

COLORADO RIVER MAIN STEM

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09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

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

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
NOV 08...	0900	6	6	400	300	160	130	<10	1	4
FEB 07...	0830	3	3	200	100	180	130	2	3	10
MAY 09...	0800	3	4	0	0	220	130	--	--	0
AUG 08...	0800	3	3	300	100	160	150	--	--	0

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
NOV 08...	5	<50	0	<10	2	0	10	<100	15	4
FEB 07...	0	0	0	4	1	10	0	6	30	10
MAY 09...	10	0	0	4	0	30	20	--	--	10
AUG 08...	0	2	1	5	2	20	20	--	--	10

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 08...	4	.0	.0	5	0	<10	0	30	10
FEB 07...	0	.0	.0	5	5	0	0	20	20
MAY 09...	10	.1	.0	1	2	0	0	40	10
AUG 08...	0	.0	.0	2	3	0	0	20	20

COLORADO RIVER MAIN STEM

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

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

PHYTOPLANKTON

DATE TIME	NOV 8,77 0900	FEB 7,78 0830	MAY 9,78 0800	JUN 13,78 0730	JUL 11,78 0800					
TOTAL CELLS/ML	42	450	78	22	1900					
DIVERSITY: DIVISION	0.5	0.0	0.0	0.0	0.1					
..CLASS	0.5	0.0	0.0	0.0	0.1					
..URDEN	1.4	0.0	0.0	0.0	0.1					
...FAMILY	2.2	0.0	0.9	0.0	0.1					
....GENUS	2.2	0.0	0.9	0.0	0.1					
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
..CHLOROCOCCALES										
...UCYSTACEAE										
....TETRAEDRON	5	11	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	14#	33	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	22	1
...CUCONEIS	5	11	--	-	--	-	--	-	--	-
..FRAGILARIACEAE										
....SYNEDRA	9#	22	--	-	26#	33	--	-	--	-
...NAVICULACEAE										
....NAVICULA	9#	22	--	-	52#	67	22#	100	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...HORMOGONALES										
...OSCILLATORIACEAE	--	-	450#	100	--	-	--	-	--	-
...OSCILLATORIA	--	-	--	-	--	-	--	-	1900#	99

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
04...	0800	3920	1	4.8	68
NOV					
08...	0900	3870	1	23	65
DEC					
06...	0800	7980	2	51	62
JAN					
10...	0800	3370	1	11	65
FEB					
07...	0830	7090	1	19	50
MAR					
07...	0815	9600	6	156	88
APR					
11...	0800	19900	3	161	31
MAY					
09...	0800	29400	2	159	89
JUN					
13...	0730	10900	1	29	76
JUL					
11...	0800	9090	3	74	86
AUG					
08...	0800	10800	1	29	100
SEP					
12...	0800	4580	1	12	100

09422500 LAKE MOHAVE AT DAVIS DAM, AZ-NV

LOCATION.--Lat 35°11'50", long 114°34'07", in SW¼SW¼ sec.18, T.21 N., R.21 W., Gila and Salt River meridian, Mohave County, Hydrologic Unit 15030101, on forebay structure on Arizona side of Davis Dam on Colorado River, 29 mi (47 km) west of Kingman, Ariz., and 67 mi (108 km) downstream from Hoover Dam.

DRAINAGE AREA.--173,300 mi² (448,800 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

PERIOD OF RECORD.--January 1950 to current year.

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

REMARKS.--Reservoir is formed by earthfill and rockfill dam; dam completed in April 1949 and storage began Jan. 17, 1950. Usable capacity, 1,810,000 acre-ft (2,230 hm³) between elevations 533.39 ft (162.577 m)—lowest point of penstock outlet—and 647.0 ft (197.21 m)—top of spillway gates. A small amount of additional storage is available through use of splashboards on the spillway gates. Dead storage, 8,530 acre-ft (10.5 hm³) below elevation 533.39 ft (162.577 m). Lake is used for power development, re-regulation for irrigation demand, and to satisfy requirements of the Treaty of 1944 with Mexico. Figures given herein represent usable contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,811,000 acre-ft (2,230 hm³) May 24, 1958, May 29, 1963; maximum elevation, 647.04 ft (197.218 m) May 29, 1963; minimum contents (since 1952), 1,168,000 acre-ft (1,440 hm³) Sept. 8, 1953, elevation, 622.15 ft (189.631 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,744,000 acre-ft (2,150 hm³) May 26, elevation, 644.64 ft (196.486 m); minimum contents, 1,347,000 acre-ft (1,660 hm³) Aug. 15, elevation 629.55 ft (191.887 m).

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

629	1,334,000	641	1,644,000
632	1,409,000	644	1,726,000
635	1,486,000	647	1,810,000
638	1,564,000		

CONTENTS, IN ACRF-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	1441000	1434000	1503000	1636000	1682000	1675000	1599000	1621000	1716000	1494000	1390000	1452000
2	1456000	1434000	1509000	1631000	1686000	1699000	1589000	1629000	1711000	1478000	1386000	1447000
3	1458000	1432000	1503000	1637000	1687000	1716000	1583000	1644000	1696000	1459000	1382000	1446000
4	1458000	1434000	1497000	1644000	1684000	1721000	1584000	1663000	1680000	1443000	1383000	1437000
5	1455000	1430000	1499000	1650000	1685000	1723000	1583000	1676000	1681000	1437000	1378000	1434000
6	1467000	1426000	1503000	1652000	1686000	1724000	1593000	1667000	1688000	1439000	1365000	1428000
7	1481000	1425000	1512000	1650000	1690000	1725000	1600000	1655000	1692000	1442000	1363000	1425000
8	1476000	1427000	1524000	1646000	1695000	1722000	1592000	1668000	1698000	1433000	1370000	1421000
9	1470000	1431000	1540000	1647000	1699000	1710000	1585000	1684000	1702000	1426000	1372000	1408000
10	1481000	1437000	1538000	1651000	1698000	1701000	1583000	1704000	1697000	1421000	1376000	1397000
11	1483000	1434000	1534000	1655000	1694000	1688000	1586000	1717000	1666000	1419000	1376000	1396000
12	1492000	1426000	1546000	1659000	1693000	1686000	1590000	1732000	1662000	1419000	1369000	1391000
13	1496000	1418000	1553000	1660000	1694000	1687000	1596000	1732000	1663000	1423000	1359000	1387000
14	1503000	1418000	1566000	1659000	1692000	1684000	1598000	1717000	1662000	1425000	1353000	1390000
15	1497000	1416000	1583000	1662000	1688000	1685000	1583000	1714000	1652000	1411000	1359000	1397000
16	1488000	1420000	1585000	1646000	1678000	1696000	1574000	1721000	1644000	1401000	1362000	1394000
17	1491000	1430000	1581000	1678000	1672000	1692000	1574000	1725000	1631000	1394000	1375000	1389000
18	1496000	1439000	1581000	1683000	1652000	1682000	1575000	1736000	1618000	1394000	1387000	1394000
19	1499000	1442000	1596000	1685000	1639000	1676000	1574000	1740000	1612000	1396000	1387000	1400000
20	1500000	1442000	1607000	1684000	1616000	1671000	1576000	1726000	1605000	1399000	1397000	1408000
21	1500000	1448000	1613000	1684000	1607000	1663000	1588000	1720000	1602000	1395000	1403000	1419000
22	1484000	1456000	1618000	1683000	1612000	1657000	1581000	1719000	1601000	1381000	1408000	1431000
23	1477000	1465000	1626000	1683000	1617000	1652000	1573000	1721000	1599000	1378000	1414000	1428000
24	1475000	1461000	1635000	1682000	1621000	1647000	1583000	1726000	1581000	1383000	1414000	1438000
25	1482000	1468000	1639000	1687000	1611000	1634000	1591000	1736000	1566000	1388000	1419000	1444000
26	1475000	1465000	1640000	1688000	1611000	1625000	1599000	1744000	1549000	1401000	1406000	1453000
27	1467000	---	1626000	1686000	1625000	1626000	1612000	1737000	1535000	1410000	1397000	1460000
28	1462000	1473000	1625000	1679000	1647000	1622000	1625000	1730000	1527000	1414000	1406000	1475000
29	1451000	1482000	1635000	1673000	---	1621000	1622000	1723000	1521000	1415000	1415000	1487000
30	1443000	1494000	1640000	1672000	---	1619000	1611000	1723000	1517000	1420000	1426000	1484000
31	1442000	---	1638000	1676000	---	1618000	---	1721000	---	1393000	1443000	---
MAX	1503000	---	1640000	1688000	1699000	1725000	1625000	1744000	1716000	1494000	1443000	1487000
MIN	1442000	---	1497000	1631000	1607000	1618000	1573000	1621000	1517000	1378000	1353000	1387000
†	633.30	635.34	640.78	642.16	641.10	640.00	639.75	643.80	636.20	631.80	633.35	634.95
‡	-23,000	+52,000	+144,000	+38,000	-29,000	-29,000	-7,000	+110,000	-204,000	-124,000	+50,000	+41,000
CAL YR 1977	MAX 1,793,000	MIN 1,385,000	± -78,000									
WTR YR 1978	MAX 1,744,000	MIN 1,353,000	± +19,000									

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

COLORADO RIVER MAIN STEM

09423000 COLORADO RIVER BELOW DAVIS DAM, AZ-NV

LOCATION.--Lat 35°11'30", long 114°34'17", in SE¼NE¼ sec.1, T.32 S., R.66 E., Mount Diablo meridian, in Nevada, Clark County, Hydrologic Unit 15030101, on right bank 0.5 mi (0.8 km) downstream from Davis Dam, 29 mi (47 km) west of Kingman, Ariz., and 68 mi (109 km) downstream from Hoover Dam.

DRAINAGE AREA.--173,300 mi² (448,800 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1905 to September 1907 (published as "at Hardyville"), March 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft (152.40 m) National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. 1905-7, nonrecording gage at site 4.8 mi (7.7 km) downstream at datum about 13.4 ft (4.1 m) lower. Mar. 16 to May 3, 1949, water-stage recorder at site 0.5 mi (0.8 km) downstream at present datum. May 4, 1949, to Feb. 24, 1956, water-stage recorder at site 400 ft (120 m) upstream at present datum.

REMARKS.--Records excellent. Flow regulated by Lake Mead since Feb. 1, 1935, and by Lake Mohave since Jan. 17, 1950. Many diversions upstream for irrigation, industrial, and municipal uses.

AVERAGE DISCHARGE.--29 years (water years 1950-78), 12,450 ft³/s (352.6 m³/s), 9,020,000 acre-ft/yr (11,100 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--1905-7: Maximum daily discharge, 116,000 ft³/s (3,290 m³/s) June 20, 1906; minimum daily, 2,850 ft³/s (80.7 m³/s) Jan. 5, 1906.

1949-78: Maximum discharge, 31,200 ft³/s (884 m³/s) Apr. 22, 1952, elevation, 513.91 ft (156.640 m); no flow at Davis Dam parts of several days July to September 1950 and Dec. 27, 1950, when gates in dam were closed; minimum daily discharge, 285 ft³/s (8.07 m³/s) Aug. 3, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,900 ft³/s (733 m³/s) Mar. 23, elevation, 505.52 ft (154.082 m); minimum daily discharge, 2,150 ft³/s (60.9 m³/s) Jan. 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	8830	8820	7630	4450	2210	4150	17700	13800	14900	18600	16700	14500
2	8030	7870	7750	5540	2220	2280	12400	12400	13900	13100	16000	12400
3	8890	7460	7960	4920	3690	2320	18100	11500	13400	19200	15800	11000
4	9100	7120	6320	4730	4300	5410	16900	12600	12400	16300	13100	11400
5	9080	6540	9120	3550	3360	5500	16700	12400	14600	16300	16400	10300
6	3310	6320	8200	3890	4020	5520	14300	12700	13500	15700	14200	12000
7	4900	7140	7960	3440	4250	8170	16600	12200	11200	16000	16100	12200
8	7260	6710	7300	3460	4560	11200	16700	14200	10900	18000	16200	13000
9	7410	7110	8170	3860	6770	16500	11900	12600	12800	13200	12600	13600
10	6970	6110	8260	2460	7900	14600	17200	9750	16900	19500	14900	11100
11	7950	7980	6360	2270	6980	15500	17500	10700	12800	16100	15400	11900
12	5260	7730	7240	2160	5610	9320	17100	12600	15600	15100	14900	11100
13	4260	6360	8400	3200	8690	13900	16800	13000	14500	13800	12200	11600
14	7020	7500	8140	4190	6760	14800	17100	11600	15000	17900	15400	10700
15	8730	7430	8440	2230	9210	16300	18500	16700	16200	17400	15700	12000
16	8680	5800	9320	2170	8890	11900	12100	12000	17100	13400	14400	11800
17	8750	5340	8610	2170	10500	17400	18400	10800	15100	18300	13200	10800
18	7830	5950	6440	2190	14700	17100	19000	11200	13000	18400	13600	11000
19	8310	6730	7340	2150	9770	11300	19600	13500	18100	17700	14200	10800
20	7390	6180	7390	2150	15800	17300	18400	14500	17200	15800	11400	9390
21	9440	6820	7060	2220	14900	18400	17300	12000	14900	16900	14400	9010
22	9800	7550	6870	2160	12700	19200	17600	14600	13200	18300	15900	9830
23	6460	7770	10000	3600	16200	19900	12400	14300	15900	14300	15600	13000
24	8560	6830	9780	2170	13400	17400	16900	12200	17200	16800	15000	7890
25	7650	5950	5650	2200	14800	16200	14700	12800	12800	16900	14700	13300
26	7740	6270	4960	4520	9640	11200	15100	11700	19300	14700	14600	11700
27	8290	5430	2510	5470	10200	16800	15500	13700	16500	14300	12700	10600
28	7790	6960	2390	5340	7000	16800	15000	11700	16200	15900	13200	9990
29	8380	6980	2360	4870	---	16800	14500	12100	15100	15700	12400	9390
30	6360	6910	2920	5560	---	16800	12100	13800	17000	13200	12100	8780
31	7740	---	4600	2230	---	18000	---	13300	---	16300	12300	---
TOTAL	236170	205670	215450	105520	239030	407870	484100	392950	447200	503100	445300	336080
MEAN	7618	6856	6950	3404	8537	13160	16140	12680	14910	16230	14360	11200
MAX	9800	8820	10000	5560	16200	19800	19600	16700	19300	19500	16700	14500
MIN	3310	5340	2360	2150	2210	2280	11900	9750	10900	13100	11400	7890
AC-FT	468400	407900	427300	209300	474100	809000	960200	779400	887000	997900	883300	666600

CAL YR 1977 TOTAL 4121570 MEAN 11290 MAX 20600 MIN 2160 AC-FT 8181000

WTR YR 1978 TOTAL 4018440 MEAN 11010 MAX 19800 MIN 2150 AC-FT 7971000

COLORADO RIVER MAIN STEM

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09423000 COLORADO RIVER BELOW DAVIS DAM, AZ-NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1949 to October 1969, April 1970 to current year.

CHEMICAL ANALYSES AND SPECIFIC CONDUCTANCES: July to October 1969 and April 1970 to current year, monthly.

WATER TEMPERATURES: March 1949 to June 1969, variable frequency of measurement; July to October 1969 and April 1970 to current year, monthly.

EXTREMES MEASURED FOR PERIOD OF RECORD SINCE JULY 1969.--

SPECIFIC CONDUCTANCES: Maximum, 1,290 micromhos Jan. 12, 1971; minimum, 900 micromhos Dec. 14, 1970.

WATER TEMPERATURES: Maximum, 21.5°C Sept. 21, 1969; minimum, 8.5°C Feb. 1, 1973.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
OCT 03...	1200	10100	1070	7.9	19.0	330	78	32	100	2.4	4.8
NOV 01...	1425	13400	1080	7.8	16.0	340	84	31	110	2.6	5.0
DEC 01...	1400	5170	1080	7.6	14.0	340	83	32	98	2.3	5.2
JAN 03...	1000	5650	1070	7.8	12.0	330	82	30	100	2.4	4.9
FEB 01...	0920	2160	1080	7.9	12.0	340	84	32	96	2.3	4.9
MAR 01...	0930	9630	1070	8.0	12.0	340	83	31	100	2.4	4.8
APR 03...	1130	24800	1080	7.7	14.5	340	88	30	100	2.3	5.4
MAY 01...	1250	14200	1070	7.8	16.0	320	78	31	100	2.4	5.1
JUN 01...	1340	19500	1070	8.0	19.0	330	84	28	100	2.4	5.5
JUL 03...	0845	23300	1080	7.7	21.0	330	82	30	100	2.4	4.9
AUG 01...	0705	15300	1070	7.7	20.5	340	83	31	99	2.4	4.9
SEP 01...	1100	14300	1070	7.5	19.5	320	82	29	100	2.4	4.9

DATE	ALKA- LINEITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 03...	120	300	92	.3	8.7	695	690	19000	--	140	10
NOV 01...	120	300	93	.4	8.8	697	706	25200	--	140	0
DEC 01...	130	310	87	.4	8.8	707	703	9870	--	160	10
JAN 03...	120	310	89	.3	10	709	700	10800	--	140	0
FEB 01...	130	280	89	.4	8.8	694	674	4050	--	140	0
MAR 01...	130	290	89	.4	8.4	707	686	18400	--	140	10
APR 03...	140	270	93	.3	9.0	690	680	46200	--	140	10
MAY 01...	130	280	87	.3	9.0	700	669	26800	--	140	0
JUN 01...	130	280	92	.3	8.4	703	677	37000	--	140	0
JUL 03...	120	290	92	.3	8.9	706	683	44400	.17	130	30
AUG 01...	130	290	94	.3	9.0	703	691	29000	.23	130	0
SEP 01...	130	290	91	.3	9.3	716	687	27600	.26	150	30

10244720 FRANKLIN RIVER NEAR ARTHUR, NV

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 60 ft³/s (1.699 m³/s) and maximum (*):

Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
May 15	1700	64	1.81	2.41	0.735
May 22	2100	69	1.95	2.43	0.741
June 6	2000	*91	2.58	2.58	0.786
June 13	2000	71	2.01	2.37	0.722

Minimum discharge, 1.2 ft³/s (0.034 m³/s) Oct. 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	2.3	1.6	1.4	1.6	1.6	1.8	14	22	50	28	5.5	2.0
2	2.0	1.6	1.5	1.5	1.6	1.8	12	22	52	26	5.3	1.8
3	1.6	1.5	1.6	1.5	1.6	1.9	10	23	52	25	5.0	1.8
4	1.6	1.5	1.8	1.5	1.6	1.9	9.9	22	55	22	4.6	1.8
5	1.6	1.6	1.6	1.6	1.5	1.9	9.4	21	61	21	4.3	3.7
6	1.5	1.7	1.5	1.7	1.5	2.0	9.4	20	70	21	4.0	8.9
7	1.6	1.5	1.5	1.6	1.6	2.1	9.4	19	76	21	3.9	4.1
8	1.7	1.7	1.4	1.6	1.7	2.0	9.1	19	78	20	3.9	3.3
9	1.7	1.8	1.4	1.6	1.7	1.8	10	20	56	19	3.8	2.8
10	1.7	1.6	1.4	1.6	1.8	2.0	12	24	50	19	3.5	4.6
11	1.7	1.4	1.5	1.6	1.9	2.0	16	26	43	17	3.3	4.0
12	1.8	1.4	1.6	1.6	1.8	2.0	17	27	45	15	3.4	3.6
13	1.7	1.3	1.6	1.7	1.7	2.0	16	32	56	11	4.4	3.3
14	1.6	1.3	1.6	1.6	1.7	2.1	15	41	61	10	3.8	3.3
15	1.7	1.3	1.5	1.7	1.8	2.3	15	54	57	9.6	3.6	3.2
16	1.9	1.3	1.5	1.7	1.8	2.2	15	53	49	9.0	3.2	3.0
17	1.7	1.3	1.6	1.6	1.8	2.4	13	46	44	8.1	3.2	3.3
18	1.7	1.3	1.7	1.7	1.8	3.0	13	38	42	6.3	3.2	3.8
19	1.9	1.5	1.6	1.7	1.8	3.9	14	37	40	7.0	3.1	4.1
20	1.9	1.6	1.5	1.8	1.8	5.5	15	41	41	9.9	2.9	4.1
21	1.8	1.5	1.6	1.7	1.8	5.7	15	48	42	9.7	2.6	4.4
22	1.9	1.6	1.6	1.6	2.0	7.2	14	58	41	8.6	2.4	4.7
23	1.9	1.4	1.7	1.5	2.0	7.7	13	60	38	7.9	2.5	4.9
24	1.9	3.1	1.7	1.4	1.9	6.6	14	52	36	7.6	2.3	4.7
25	1.8	4.2	1.6	1.6	1.9	7.2	16	46	33	7.5	2.2	4.4
26	1.7	2.8	1.6	1.6	1.8	8.2	18	41	30	7.2	2.2	4.0
27	1.6	2.4	1.6	1.6	1.8	9.1	19	39	28	7.7	2.2	3.8
28	1.6	1.9	1.6	1.6	1.8	11	22	42	29	8.5	2.1	3.7
29	1.5	1.7	1.6	1.5	---	13	23	52	29	7.6	2.0	3.7
30	1.5	1.6	1.7	1.5	---	15	22	54	28	6.6	1.9	3.7
31	1.5	---	1.6	1.6	---	16	---	49	---	5.8	1.9	---
TOTAL	53.6	52.0	48.7	49.7	49.1	153.3	430.2	1148	1412	409.6	102.2	112.5
MEAN	1.73	1.73	1.57	1.60	1.75	4.95	14.3	37.0	47.1	13.2	3.30	3.75
MAX	2.3	4.2	1.8	1.8	2.0	16	23	60	78	28	5.5	8.9
MIN	1.5	1.3	1.4	1.4	1.5	1.8	9.1	19	28	5.8	1.9	1.8
AC=FT	106	103	97	99	97	304	853	2280	2800	812	203	223
CAL YR 1977	TOTAL	2129.39	MEAN	5.83	MAX 55	MIN .70	AC=FT 4220					
WTR YR 1978	TOTAL	4020.90	MEAN	11.0	MAX 78	MIN 1.3	AC=FT 7980					

LOCATION.--Lat 47°27'30", long 115°23'30", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.23, T.30 N., R.58 E., Elko County, Hydrologic Unit 16060007, on left bank at mouth of canyon, 0.1 mi (0.2 km) upstream from Humboldt National Forest boundary, 2.2 mi (3.6 km) north of Ruby Valley Post Office, and 32 mi (51 km) southeast of Elko.

PERIOD OF RECORD.--April to November 1917, March to June 1918, September 1918 (fragmentary), August 1959 to September 1967, October 1967 to September 1976 (operated as a partial-record site), October 1976 to current year.

REMARKS.--Records good except those for winter months, which are fair. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 152 ft³/s (4.30 m³/s) June 11, 1962, gage height, 2.23 ft (0.680 m); maximum gage height, 3.31 ft (1.009 m) Jan. 13, 1963 (backwater from ice); minimum discharge, 0.4 ft³/s (0.011 m³/s) Dec. 25, 1962, but may have been less during periods of ice effects.

Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
May 15	1600	74	2.10	1.74	0.530
May 22	1700	72	2.04	1.73	0.527
June 8	1900	*134	3.79	1.99	0.607

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	1.3	1.3	1.5	1.9	2.0	3.2	16	19	50	39	8.8	3.4
2	1.3	1.3	1.5	1.9	2.0	3.4	14	19	51	39	8.7	3.3
3	1.2	1.2	1.7	1.9	2.0	3.6	13	21	54	37	9.3	3.3
4	1.3	1.2	2.1	1.9	2.1	3.6	11	21	58	32	9.2	3.5
5	1.3	1.3	1.8	1.9	2.1	3.6	11	20	64	28	7.8	5.1
6	1.4	1.4	1.7	2.0	2.2	3.7	11	18	76	26	6.5	12
7	1.3	1.4	1.7	1.9	2.2	3.8	11	17	98	26	6.3	6.9
8	1.3	1.3	1.6	1.8	2.3	3.9	11	17	112	27	5.7	5.8
9	1.3	1.4	1.6	1.8	2.2	3.8	11	17	105	27	5.0	5.2
10	1.3	1.4	1.7	1.8	2.2	3.9	13	19	85	28	4.8	7.2
11	1.4	1.3	1.8	1.7	2.1	4.1	16	21	70	27	4.0	6.3
12	1.3	1.3	1.8	1.8	2.0	4.1	17	23	66	24	3.9	5.9
13	1.3	1.2	1.9	1.8	1.9	3.9	17	28	76	22	4.4	5.6
14	1.2	1.2	2.0	1.7	2.1	3.8	16	43	82	22	4.0	5.4
15	1.2	1.2	1.8	1.8	2.0	3.7	16	61	75	24	3.6	5.1
16	1.2	1.2	1.8	1.8	2.0	4.1	16	56	64	24	3.5	4.8
17	1.2	1.2	1.9	1.8	2.1	4.9	14	47	54	22	3.9	4.9
18	1.3	1.2	2.0	1.7	2.1	5.9	14	40	53	20	4.0	5.2
19	1.3	1.3	2.0	1.8	2.1	7.3	14	37	51	20	3.8	5.1
20	1.3	1.5	2.1	1.8	2.2	9.0	15	40	51	16	3.6	5.1
21	1.3	1.5	2.2	1.8	2.3	10	14	47	53	15	3.4	5.5
22	1.4	1.5	2.2	1.7	2.5	11	13	61	53	14	3.3	5.6
23	1.4	1.4	2.2	1.6	2.8	10	13	69	50	13	3.3	5.5
24	1.4	2.4	2.2	1.7	3.1	10	14	60	48	12	3.0	5.2
25	1.4	2.9	2.0	1.9	3.1	11	16	49	47	12	2.9	5.0
26	1.4	2.0	1.9	1.8	3.1	11	16	42	41	12	2.8	4.7
27	1.4	1.7	2.1	1.7	3.2	12	16	40	38	12	3.0	4.5
28	1.3	1.6	2.1	1.7	3.2	14	17	42	38	12	3.0	4.3
29	1.2	1.7	2.1	1.7	---	16	18	52	39	11	3.0	4.2
30	1.3	1.6	2.1	1.8	---	19	18	59	38	11	3.0	4.1
31	1.3	---	2.0	2.0	---	19	---	56	---	9.2	3.4	---
TOTAL	40.5	44.1	59.1	55.9	65.2	230.3	432	1161	1840	663.2	144.9	157.7
MEAN	1.31	1.47	1.91	1.80	2.33	7.43	14.4	37.5	61.3	21.4	4.67	5.26
MAX	1.4	2.9	2.2	2.0	3.2	19	18	69	112	39	9.3	12
MIN	1.2	1.2	1.5	1.6	1.9	3.2	11	17	38	9.2	2.8	3.3
AC-FT	80	87	117	111	129	457	857	2300	3650	1320	287	313
CAL YR 1977	TOTAL	2300.8	MEAN	6.30	MAX	58	MIN	1.2	AC-FT	4560		
WTR YR 1978	TOTAL	4893.9	MEAN	13.4	MAX	112	MIN	1.2	AC-FT	9710		

STEPTOE VALLEY BASIN

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10244950 STEPTOE CREEK NEAR ELY, NV
(Hydrologic bench-mark station)

LOCATION.--Lat 39°12'05", long 114°41'15", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.32, T.16 N., R.65 E., White Pine County, Hydrologic Unit 16060008, in Humboldt National Forest, on left bank 0.1 mi (0.2 km) downstream from Clear Creek, 0.8 mi (1.3 km) upstream from Cave Creek, and 11 mi (18 km) east-southeast of Ely.

DRAINAGE AREA.--11.1 mi² (28.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage and thermograph recorders. Altitude of gage is 7,440 ft (2,268 m), from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--12 years, 8.85 ft³/s (0.251 m³/s) 4,990 acre-ft/yr (6.15 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37 ft³/s (1.05 m³/s) June 16, 1978, gage height, 2.69 ft (0.820 m); maximum gage height, 2.73 ft (0.832 m) June 19, 1967; minimum discharge, 2.0 ft³/s (0.057 m³/s) Dec. 22, 1966, Mar. 3, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37 ft³/s (1.05 m³/s) June 16, gage height, 2.69 ft (0.820 m); minimum, 2.2 ft³/s (0.062 m³/s) Jan. 22-25, Feb. 11, 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	3.4	3.2	2.9	2.4	2.4	2.7	5.6	12	28	22	9.8	8.6
2	3.4	3.3	3.0	2.6	2.4	2.7	5.5	12	28	21	9.8	8.3
3	3.4	3.3	3.0	2.7	2.5	2.7	5.2	12	28	21	9.7	8.2
4	3.4	3.1	2.9	2.7	2.5	2.7	4.8	13	27	20	9.9	8.1
5	3.4	3.2	2.9	2.6	2.5	2.7	4.8	14	28	19	9.7	8.2
6	3.5	3.3	2.8	2.6	2.5	2.7	4.7	13	27	18	9.9	8.1
7	3.5	3.2	2.8	2.5	2.5	2.6	4.4	13	27	17	9.7	7.8
8	3.4	3.1	2.7	2.6	2.5	2.7	4.7	13	28	17	9.8	7.8
9	3.4	3.0	2.7	2.6	2.5	2.7	4.7	14	29	16	9.6	7.4
10	3.4	3.1	2.7	2.6	2.4	2.8	5.0	15	31	16	9.5	7.4
11	3.4	3.3	2.8	2.6	2.2	2.8	5.9	16	31	15	9.7	7.4
12	3.4	3.1	2.8	2.6	2.3	2.8	6.9	17	30	15	9.6	7.4
13	3.4	3.1	2.8	2.5	2.4	2.8	7.6	22	32	14	10	7.1
14	3.4	3.1	2.8	2.5	2.5	2.8	7.8	27	32	14	9.7	7.2
15	3.4	3.1	2.8	2.6	2.5	2.7	8.0	30	34	13	9.8	7.0
16	3.4	3.1	2.6	2.6	2.5	2.7	8.2	33	35	13	9.7	6.8
17	3.4	3.1	2.7	2.6	2.6	2.7	7.9	30	36	13	9.9	6.7
18	3.4	3.1	2.7	2.5	2.5	2.9	7.8	25	34	13	9.7	6.8
19	3.4	3.0	2.7	2.6	2.6	3.1	8.3	24	33	12	9.9	6.7
20	3.4	2.9	2.7	2.5	2.6	3.1	9.1	23	31	12	9.7	6.3
21	3.4	2.9	2.7	2.4	2.6	3.2	9.6	24	31	12	9.9	6.2
22	3.3	3.1	2.8	2.4	2.6	3.4	9.3	26	30	11	9.7	6.1
23	3.3	3.1	2.8	2.2	2.6	3.4	9.3	27	29	11	9.9	6.0
24	3.3	3.0	2.8	2.2	2.6	3.4	9.5	27	28	11	9.7	5.8
25	3.3	3.0	2.7	2.2	2.7	3.4	10	25	27	10	9.7	5.8
26	3.3	3.0	2.7	2.3	2.7	3.7	10	23	26	10	9.4	5.7
27	3.3	3.0	2.7	2.4	2.7	4.0	10	23	25	10	9.3	5.5
28	3.3	2.9	2.7	2.5	2.6	4.1	11	23	24	10	9.3	5.5
29	3.3	2.9	2.6	2.5	---	4.5	11	25	24	10	9.1	5.5
30	3.3	3.0	2.7	2.5	---	5.0	11	27	23	9.9	8.8	5.4
31	3.3	---	2.6	2.5	---	5.5	---	28	---	9.9	8.7	---
TOTAL	104.6	92.6	85.6	77.6	70.5	99.0	227.6	656	876	435.8	298.6	206.8
MEAN	3.37	3.09	2.76	2.50	2.52	3.19	7.59	21.2	29.2	14.1	9.63	6.89
MAX	3.5	3.3	3.0	2.7	2.7	5.5	11	33	36	22	10	8.6
MIN	3.3	2.9	2.6	2.2	2.2	2.6	4.4	12	23	9.9	8.7	5.4
AC-FT	207	184	170	154	140	196	451	1300	1740	864	592	410
CAL YR 1977	TOTAL	1342.1	MEAN 3.68	MAX 9.8	MIN 2.5	AC-FT 2660						
WTR YR 1978	TOTAL	3230.7	MEAN 8.85	MAX 36	MIN 2.2	AC-FT 6410						

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1966 to current year.

CHEMICAL ANALYSES AND SPECIFIC CONDUCTANCES: March 1968 to current year, monthly.

BIOLOGICAL DATA: May 1975 to August 1977, twice-yearly; April to September 1978, monthly.

MICROBIOLOGICAL DATA: October 1974 to current year, monthly.

WATER TEMPERATURES: October 1966 to current year, continuous.

SEDIMENT DATA: February 1968 to September 1975, monthly; October 1975 to September 1977, occasionally (at times of noticeable turbidity or high discharge); October 1977 to current year, monthly.

INSTRUMENTATION.--Temperature recorder since October 1966.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 403 micromhos May 18, 1975; minimum, 218 micromhos June 22, 1978.

PHYTOPLANKTON: Maximum, 480 cells/mL May 20, 1976; minimum, 0 cells/mL May 19, 1978.

FECAL STREPTOCOCCI: Maximum, 1,400 colonies/100 mL (non-ideal colony count) Feb. 23, 1977; minimum, less than 1 colony/100 mL Apr. 21, Dec. 22, 1976.

WATER TEMPERATURES: Maximum, 11.0°C on several days in May 1968 and from July 31 to Sept. 9, 1969; minimum, 2.5°C Dec. 9, 1972.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 810 mg/L May 18, 1975; minimum, 3 mg/L Aug. 21, 1973, Aug. 20, 1974, Oct. 1, 1974.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

WATER TEMPERATURES: Maximum, 9.5°C May 13, Aug. 21; minimum, 3.0°C Jan. 22.

REVISIONS.--Microbiological results reported as "0 colonies/100 mL" in previous years should be corrected to "less than 1 colony/100 mL."

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)
OCT 19...	1520	3.4	298	--	8.0	--	--	--	500	2	--
DEC 21...	0955	2.6	309	8.6	4.5	1	--	--	220	<2	--
JAN 20...	1015	2.5	312	8.6	5.0	1	--	--	--	1	--
FEB 27...	1420	2.7	301	8.5	4.5	2	--	9.8	--	<2	--
APR 03...	1215	5.3	347	8.6	7.0	4	--	9.4	--	1	--
20...	1510	9.4	373	8.6	8.0	10	--	9.6	K600	--	1
MAY 19...	0950	23	352	8.5	5.5	--	29	--	K620	--	<2
JUN 22...	1030	30	218	8.1	6.0	--	.90	9.7	24	--	<2
JUL 25...	1420	10	300	8.4	9.0	--	1.6	9.4	K58	--	K4
AUG 24...	0935	9.9	311	--	7.0	--	2.9	9.4	K80	--	K4

DATE	STREP- TOCUCCI FECAL, (COLS. PER 100 ML)	STREP- TOCUCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 19...	14	--	--	--	--	--	--	--	--	--
DEC 21...	20	--	180	53	11	1.2	.0	.5	150	6.6
JAN 20...	61	--	180	52	11	1.5	.1	.6	160	8.7
FEB 27...	17	--	180	51	12	1.0	.0	.5	160	8.5
APR 03...	11	--	210	67	10	1.5	.0	.7	180	12
20...	--	63	220	70	10	1.9	.1	.6	170	20
MAY 19...	--	25	220	73	8.4	3.1	.1	.8	170	19
JUN 22...	--	58	180	58	7.5	3.0	.1	.5	160	8.6
JUL 25...	--	K54	170	53	9.6	1.9	.1	.5	140	9.1
AUG 24...	--	K34	170	50	10	1.9	.1	.5	140	11

K: NON-IDEAL COLONY COUNT.

STEPTOE VALLEY BASIN

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10244950 STEPTOE CREEK NEAR ELY, NV--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)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT 19...	--	--	--	--	--	--	.05	.01	.06	--
DEC 21...	1.1	.1	7.0	182	169	1.28	--	--	.28	.02
JAN 20...	1.3	.1	7.1	159	177	1.07	--	--	.20	.01
FEB 27...	1.1	.0	6.2	144	174	1.05	--	--	.09	.00
APR 03...	1.7	.1	8.1	195	210	2.74	.24	.01	.25	.01
20...	1.8	.1	8.3	207	216	5.25	.01	.01	.02	.03
MAY 19...	2.1	.2	7.2	215	224	13.8	.24	.01	.25	.00
JUN 22...	1.3	.1	7.3	177	183	14.5	.14	.01	.15	.00
JUL 25...	1.0	.1	6.8	156	166	4.42	--	--	.11	.00
AUG 24...	1.3	.1	7.3	166	166	4.44	.15	.00	.15	.00

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 19...	--	--	--	--	--	.01	--	--	--	--
DEC 21...	--	--	--	.27	--	.01	.00	--	--	--
JAN 20...	--	.04	--	.05	.25	.01	.01	--	--	--
FEB 27...	--	.25	--	.12	.34	.00	.00	2.5	--	--
APR 03...	--	.26	--	.19	.52	.02	.00	--	1.6	--
20...	--	.38	--	.34	.43	.10	.02	--	3.2	.9
MAY 19...	--	--	--	--	--	.00	.00	--	3.1	.2
JUN 22...	--	.04	--	.90	.24	.02	.01	1.7	--	--
JUL 25...	--	.05	--	.06	.16	.01	.00	1.1	--	--
AUG 24...	.01	.21	.36	.37	.36	.01	.01	--	3.1	--

STEPTOE VALLEY BASIN

10244950 STEPTOE CREEK NEAR ELY, NV--Continued

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

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)
DEC 21...	0955	2	1	100	0	<10	1	0	0	0
APR 03...	1215	2	1	200	100	1	0	0	0	2
MAY 19...	0950	3	2	0	0	--	--	10	0	0
AUG 24...	0935	2	2	100	100	--	--	0	0	0

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC 21...	0	10	4	40	10	30	4	20	0
APR 03...	0	2	1	260	0	5	3	10	0
MAY 19...	0	8	1	1300	20	--	--	50	10
AUG 24...	0	4	0	0	10	--	--	0	0

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
DEC 21...	.0	.0	0	0	<10	0	10	10	--
APR 03...	.0	.2	0	0	0	0	10	10	--
MAY 19...	1.1	.4	0	0	0	0	30	20	.00
AUG 24...	.0	.0	0	0	0	0	10	10	.00

DATE	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JAN 20...	.00	.00	.00	0	--	.00	.00	.00	.00
FEB 27...	--	--	--	--	0	--	--	--	--

STEPTOE VALLEY BASIN

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10244950 STEPTOE CREEK NEAR ELY, NV--Continued

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

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
JAN 20...	1015	<2.3	<.4	.7	<.4	.6	<.4	.16	--
25...	1230	5.4	<.4	1.6	<.4	1.5	<.4	.07	.72

DATE	TIME	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
JAN 20...	1015	.0	--	.00	.00	--	.0	--	.00	--
FEB 27...	1420	--	0	--	--	.0	--	0	--	.0

DATE	TIME	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	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)	ENDU- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)
JAN 20...		.00	--	.00	--	.00	.00	--	.00	.00
FEB 27...		--	.0	--	.0	--	--	.0	--	--

DATE	TIME	ENDRIN, TOTAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)
JAN 20...		--	.00	.00	--	.00	.00	--	.00	.00
FEB 27...		.0	--	--	.0	--	--	.0	--	--

DATE	TIME	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THIUN (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JAN 20...		.00	.00	.00	0	--	.00	.00	.00	.00
FEB 27...		--	--	--	--	0	--	--	--	--

STEPTOE VALLEY BASIN

10244950 STEPTOE CREEK NEAR ELY, NV--Continued

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

PHYTOPLANKTON

DATE TIME	APR 3,78 0000	MAY 19,78 0950	JUN 22,78 1030	JUL 25,78 1420	AUG 29,78 0935
TOTAL CELLS/ML	60	0	160	190	140
DIVERSITY: DIVISION	0.0	0.0	0.0	0.0	0.7
..CLASS	0.0	0.0	0.0	0.0	0.7
...ORDER	0.0	0.0	0.0	0.0	0.7
...FAMILY	0.0	0.0	1.8	1.5	1.5
....GENUS	0.0	0.0	1.8	1.5	1.9

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										
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CARTERIA	--	-	--	-	--	-	--	-	23#	17
CHRYSTOPHYTA										
..BACILLARIOPHYCEAE										
...PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	46#	29	93#	50	46#	33
...CUCCONEIS	--	-	--	-	--	-	--	-	23#	17
...DIATOMACEAE										
....DIATOMA	--	-	--	-	69#	43	46#	25	--	-
...FRAGILARIACEAE										
...SYNEORA	--	-	--	-	--	-	--	-	46#	33
...NAVICULACEAE										
...NAVICULA	60#	100	--	-	23	14	46#	25	--	-
...SURIRELLACEAE										
....SURIRELLA	--	-	--	-	23	14	--	-	--	-

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT				
19...	1520	3.4	19	.17
FEB				
27...	1420	2.7	20	.15
APR				
03...	1215	5.3	44	.63
20...	1510	9.4	115	2.9
MAY				
19...	0950	23	206	13
JUN				
22...	1030	30	24	2.0
JUL				
25...	1420	10	16	.45
AUG				
24...	0935	9.9	6	.16

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

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	6.0	7.5	5.0	7.5	5.5	7.5	6.5	8.0	6.5	9.0	6.5	
2	6.5	6.0	8.0	5.0	7.0	6.0	7.5	6.0	9.0	7.0	8.0	7.0	
3	7.5	5.5	7.5	5.5	8.0	5.5	7.5	6.0	9.0	7.0	8.5	7.0	
4	6.5	5.5	7.5	4.5	8.0	5.5	7.5	6.					

LITTLE SMOKY (NORTHERN PART) AND NEWARK VALLEYS

10245800 NEWARK VALLEY TRIBUTARY NEAR HAMILTON, NV

LOCATION.--Lat 39°25'00", long 115°37'52", in S½NE¼ sec.23, T.18 N., R.56 E., White Pine County, Hydrologic Unit 16060006, on left bank above culvert on U.S. Highway 50, 3.5 mi (5.6 km) east of Pancake Summit, 14 mi (23 km) northwest of Hamilton, and 19 mi (31 km) east of Eureka.

DRAINAGE AREA.--157 mi² (407 km²).

PERIOD OF RECORD.--Water year 1962 (annual maximum), August 1962 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 6,120 ft (1,865 m), from topographic map. October 1961 to August 1962, crest-stage gage at same site and datum.

REMARKS.--Records of flow poor.

AVERAGE DISCHARGE.--16 years, 0.115 ft³/s (0.0032 m³/s), 83 acre-ft/yr (102,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 238 ft³/s (6.74 m³/s) July 31, 1968, gage height, 4.55 ft (1.387 m), by slope-area measurement of peak flow; no flow most of the time

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 52 ft³/s (1.47 m³/s) at 0530 hours, Sept. 6, gage height, 2.42 ft (0.738 m), no other peak above base of 10 ft³/s (0.28 m³/s); no flow most of 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	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.40
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.5
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.90
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.33
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.5
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	20

CAL YR 1977 TOTAL 22.30 MEAN .061 MAX 19 MIN .00 AC-FT 44
WTR YR 1978 TOTAL 9.90 MEAN .027 MAX 9.5 MIN .00 AC-FT 20

MONITOR VALLEY

95

10245900 PINE CREEK NEAR BELMONT, NV

LOCATION.--Lat 38°47'50", long 116°51'13", in NW¼SE¼ sec.13, T.16 N., R.45 E., Nye County, Hydrologic Unit 16060005, on right bank, 2.9 mi (4.7 km) west of Pine Creek Ranch, and 7.2 mi (11.6 km) north of Belmont, NV.

DRAINAGE AREA.--12.2 mi² (31.6 km²).

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

GAGE.--Water-stage recorder. Altitude of gage 7,560 ft (2,304 m) from topographic map.

REMARKS.--Records good. No diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 155 ft³/s (4.39 m³/s) June 9, 1978, gage height 2.75 ft (0.838 m); minimum daily 0.56 ft³/s (0.016 m³/s) Nov. 20, 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	2.1	1.8	1.3	.89	1.7	1.8	3.2	4.8	47	28	7.5	3.0
2	2.1	1.8	1.3	1.3	1.7	1.8	2.9	4.8	48	27	7.4	2.9
3	2.1	1.8	1.3	1.5	1.7	1.9	2.6	5.2	48	25	7.1	2.7
4	2.1	1.8	1.2	1.5	1.7	1.9	2.5	5.8	52	22	6.8	2.7
5	2.2	1.8	1.3	1.5	1.7	1.9	2.3	6.0	58	21	6.8	3.9
6	2.2	1.8	1.2	1.6	1.7	1.9	2.4	5.5	66	18	7.0	4.9
7	2.2	1.7	1.2	1.4	1.7	2.0	2.3	5.4	72	18	6.8	3.9
8	2.2	1.4	1.2	1.4	1.7	2.0	2.4	5.6	92	18	6.5	3.6
9	2.2	1.2	1.2	1.5	1.9	2.0	2.3	6.4	76	17	6.3	3.3
10	2.2	1.7	1.2	1.6	1.4	2.0	2.6	7.3	67	17	6.3	3.3
11	2.2	1.7	1.2	1.6	1.7	2.0	3.1	8.4	66	16	5.9	3.3
12	2.2	1.7	1.2	1.5	1.8	1.9	3.7	9.6	62	15	6.0	3.3
13	2.2	1.7	1.2	1.5	1.9	1.8	4.0	13	66	14	5.9	3.3
14	2.2	1.6	1.2	1.6	1.7	1.8	4.1	17	78	14	5.6	3.9
15	2.1	1.7	1.2	1.8	1.7	1.8	4.1	23	64	14	5.5	3.9
16	2.1	1.6	1.1	1.8	1.7	1.9	4.1	26	53	14	5.2	3.6
17	2.1	1.6	1.2	1.8	1.7	2.1	3.8	24	50	13	5.2	3.6
18	2.0	1.6	1.2	1.8	1.6	2.2	4.0	21	49	12	5.2	3.3
19	2.0	1.2	.84	1.8	1.6	2.1	4.0	19	47	11	4.8	3.3
20	2.0	.56	.75	1.8	1.7	2.3	4.2	20	50	10	4.5	3.3
21	1.9	1.2	1.3	1.8	1.8	2.4	4.3	25	50	10	4.4	3.3
22	1.9	1.5	1.3	1.8	1.9	2.6	4.2	32	50	9.5	4.2	3.3
23	1.9	1.5	1.3	1.6	1.9	2.7	4.1	35	50	9.1	4.0	3.0
24	1.9	1.5	1.0	1.0	1.9	2.7	4.3	27	41	8.8	3.7	3.0
25	2.0	1.5	1.0	1.2	1.9	2.6	4.6	19	35	8.4	3.8	3.0
26	1.9	1.4	1.1	1.6	1.9	2.6	4.6	16	33	8.1	3.6	3.0
27	1.8	1.4	1.3	1.6	1.9	2.7	4.6	15	31	8.7	3.3	3.0
28	1.8	1.4	1.3	1.6	1.9	2.7	4.7	16	30	10	3.3	3.0
29	1.8	1.4	1.4	1.7	---	2.9	5.0	22	28	8.8	3.3	3.5
30	1.8	1.4	1.4	1.7	---	3.1	5.0	41	28	8.4	3.2	3.6
31	1.8	---	1.3	1.7	---	3.2	---	52	---	7.9	3.0	---
TOTAL	63.2	45.96	37.19	48.49	49.1	69.3	110.0	537.8	1587	441.7	162.1	100.7
MEAN	2.04	1.53	1.20	1.56	1.75	2.24	3.67	17.3	52.9	14.2	5.23	3.36
MAX	2.2	1.8	1.4	1.8	1.9	3.2	5.0	52	92	28	7.5	4.9
MIN	1.8	.56	.75	.89	1.4	1.8	2.3	4.8	28	7.9	3.0	2.7
AC-FT	125	91	74	96	97	137	218	1070	3150	876	322	200

WTR YR 1978 TOTAL 3252.54 MEAN 8.91 MAX 92 MIN .56 AC-FT 6450

MONITOR VALLEY

10245910 MOSQUITO CREEK NEAR BELMONT, NV

LOCATION.—Lat 38°48'22", long 116°40'43", in NW¼SW¼ sec.10, T.11 N., R.47 E., Nye County, Hydrologic Unit 16060005, 27.4 miles (44.1 km) east of Carvers on State Highway 8A, 59 miles (95 km) northeast of Tonopah, and 17.9 miles (28.8 km) northeast of Belmont.

DRAINAGE AREA.—15.1 mi² (39.1 km²).

PERIOD OF RECORD.—October 1977 to September 1978.

GAGE.—Water-stage recorder. Elevation of gage is 7200 ft (2195 m), from topographic map.

REMARKS.—Records good except for flows above 10 ft³/s (.283 m³/s), which are poor.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge 92 ft³/s (2.61 m³/s) June 7, 1978, gage height, 3.55 ft (1.082 m), minimum daily, .09 ft³/s (.003 m³/s) Dec. 20, 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	.24	.23	.18	.11	.27	.41	3.2	6.2	44	12	2.9	1.4
2	.24	.23	.20	.24	.27	.42	3.0	7.1	42	10	2.7	1.4
3	.24	.23	.20	.24	.27	.39	2.9	8.0	43	9.6	2.8	1.4
4	.25	.23	.20	.22	.27	.41	2.9	8.4	45	9.3	2.7	1.4
5	.25	.24	.20	.21	.27	.44	2.7	8.2	49	8.8	2.7	2.2
6	.25	.25	.19	.21	.25	.46	2.6	8.0	55	8.6	2.7	3.3
7	.25	.25	.20	.22	.25	.46	2.5	7.3	65	8.2	2.4	2.1
8	.25	.22	.16	.24	.24	.46	2.3	6.9	79	7.7	2.3	1.9
9	.25	.15	.17	.25	.25	.46	2.2	7.3	71	7.1	2.2	1.8
10	.25	.22	.16	.24	.26	.46	2.4	7.7	66	6.9	2.2	1.8
11	.25	.21	.18	.23	.25	.46	3.0	8.4	60	6.7	2.1	1.8
12	.25	.21	.17	.23	.11	.45	3.9	9.3	54	6.7	2.2	1.7
13	.24	.21	.17	.24	.32	.41	4.5	10	48	6.2	2.2	1.7
14	.24	.21	.18	.27	.34	.45	4.5	12	45	5.8	2.2	2.0
15	.25	.21	.18	.27	.32	.46	4.1	14	39	5.6	2.0	2.1
16	.25	.22	.12	.27	.35	.54	3.9	15	42	5.2	2.0	1.9
17	.25	.23	.20	.27	.37	.59	3.5	15	37	4.8	2.1	1.7
18	.25	.21	.18	.26	.21	.66	3.4	16	31	4.6	2.1	1.7
19	.23	.15	.15	.25	.33	.70	3.5	17	30	4.4	2.0	1.7
20	.23	.10	.09	.25	.35	.75	3.9	18	28	4.0	1.9	1.7
21	.24	.17	.20	.26	.40	.84	3.9	18	25	4.0	1.8	1.7
22	.25	.21	.20	.30	.42	.99	3.4	18	22	3.8	1.9	1.7
23	.25	.21	.20	.27	.45	1.3	3.6	21	21	3.5	1.8	1.6
24	.25	.21	.20	.14	.42	1.7	3.9	21	20	3.6	1.8	1.6
25	.25	.20	.19	.30	.41	1.7	4.2	21	19	3.4	1.7	1.5
26	.25	.20	.19	.30	.40	1.8	4.4	29	18	3.2	1.7	1.5
27	.25	.20	.21	.28	.37	1.7	4.2	25	17	3.4	1.6	1.4
28	.25	.18	.21	.28	.37	1.9	4.4	26	15	3.6	1.6	1.4
29	.23	.18	.20	.29	---	2.4	5.2	28	15	3.1	1.5	1.4
30	.23	.20	.18	.28	---	2.6	5.6	35	13	3.0	1.5	1.3
31	.23	---	.19	.27	---	3.6	---	44	---	3.0	1.5	---
TOTAL	7.59	6.17	5.65	7.69	8.79	30.37	107.7	495.8	1158	179.8	64.8	51.8
MEAN	.24	.21	.18	.25	.31	.98	3.59	16.0	38.6	5.80	2.09	1.73
MAX	.25	.25	.21	.30	.45	3.6	5.6	44	79	12	2.9	3.3
MIN	.23	.10	.09	.11	.11	.39	2.2	6.2	13	3.0	1.5	1.3
AC-FT	15	12	11	15	17	60	214	983	2300	357	129	103

WTR YR 1978 TOTAL 2124.16 MEAN 5.82 MAX 79 MIN .09 AC-FT 4210

97

LOCATION.--Lat 39°08'24", long 116°36'05", in SE 1/4 sec 18, T.15 N., R.47 E., Nye County, Hydrologic Unit 1606005, on left bank 2 mi (3.2 km) southwest of Monitor Ranch and 42 mi (68 km) north of Belmont.

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

REMARKS.--Records good except for periods of no gage height record, March 30 to May 31 and Aug. 22 to Sept. 26, which are poor.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12 ft³/s (0.34 m³/s) June 9, 1978, gage height 1.86 ft (0.567 m); minimum, 0.13 ft³/s (0.004 m³/s) Dec. 19, 20, 1977, Jan. 11, 1978.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.20	.17	.18	.28	.26	.28	.58	9.8	3.2	1.3	.49
2	.22	.20	.17	.19	.28	.26	.28	.70	10	2.7	1.3	.48
3	.23	.20	.17	.19	.28	.25	.27	.83	9.6	3.2	1.2	.49
4	.23	.20	.17	.19	.26	.27	.27	1.0	9.8	3.4	1.1	.55
5	.25	.20	.17	.21	.27	.26	.27	1.3	9.7	3.4	1.1	.65
6	.23	.20	.17	.21	.27	.26	.27	1.2	9.9	3.5	1.1	.78
7	.24	.20	.16	.21	.26	.26	.27	1.1	9.9	2.8	1.1	.70
8	.24	.20	.16	.20	.26	.27	.27	1.2	10	2.5	1.0	.66
9	.24	.19	.16	.22	.27	.27	.28	1.4	11	2.5	.99	.68
10	.23	.20	.16	.21	.27	.26	.30	1.5	11	2.2	.96	.70
11	.24	.20	.16	.21	.26	.26	.29	1.7	10	2.1	.88	.70
12	.24	.19	.15	.23	.25	.25	.30	2.0	8.9	2.1	.87	.70
13	.24	.18	.15	.23	.25	.26	.33	2.5	8.1	2.4	.89	.70
14	.24	.18	.15	.23	.26	.25	.30	3.3	7.4	2.5	.88	.72
15	.24	.18	.15	.23	.25	.25	.27	4.5	7.0	2.4	.81	.72
16	.24	.18	.14	.25	.25	.25	.24	5.4	6.9	2.1	.79	.71
17	.24	.19	.14	.25	.25	.26	.21	5.0	6.5	2.1	.75	.70
18	.22	.19	.14	.25	.25	.26	.20	4.4	5.8	2.0	.70	.69
19	.22	.18	.15	.27	.25	.26	.20	4.0	5.3	1.7	.69	.69
20	.22	.17	.15	.27	.25	.26	.20	4.3	4.8	1.6	.63	.69
21	.22	.19	.15	.26	.25	.27	.20	5.2	4.4	1.5	.60	.69
22	.21	.19	.16	.26	.26	.27	.20	6.6	4.6	1.4	.55	.66
23	.21	.19	.16	.27	.26	.27	.20	7.2	4.8	1.4	.52	.65
24	.22	.19	.16	.27	.26	.27	.22	6.2	4.6	1.3	.52	.65
25	.22	.17	.16	.27	.25	.27	.24	4.2	4.4	1.2	.54	.65
26	.22	.17	.17	.27	.25	.27	.29	3.5	4.4	1.2	.52	.63
27	.22	.17	.17	.27	.24	.27	.32	3.2	4.0	1.9	.50	.62
28	.22	.17	.18	.27	.24	.27	.37	3.5	3.6	3.0	.49	.63
29	.22	.17	.19	.27	---	.27	.42	4.5	3.1	1.8	.49	.63
30	.21	.17	.18	.27	---	.28	.48	8.5	3.4	1.5	.49	.62
31	.20	---	.18	.27	---	.28	---	10	---	1.4	.49	---
TOTAL	7.02	5.61	5.00	7.38	7.23	8.17	8.24	110.51	212.7	68.0	24.75	19.63
MEAN	.23	.19	.16	.24	.26	.26	.27	3.56	7.09	2.19	.80	.65
MAX	.25	.20	.19	.27	.28	.28	.48	10	11	3.5	1.3	.78
MIN	.20	.17	.14	.18	.24	.25	.20	.58	3.1	1.2	.49	.48
AC-FT	14	11	9.9	15	14	16	16	219	422	135	49	39
WTR YR 1978	TOTAL 484.24		MEAN 1.33		MAX 11	MIN .14	AC-FT 960					

HOT CREEK AND RAILROAD (NORTHERN PART) VALLEYS

10246846 LITTLE CURRANT CREEK NEAR CURRANT, NV

LOCATION.--Lat 38°50'50", long 115°22'00", in NE¼NW¼ sec.5, T.11 N., R.59 E., Nye County, Hydrologic Unit 16060012, in Humboldt National Forest, on right bank 0.2 mi (0.3 km) upstream from reservoir diversion, 2.5 mi (4.0 km) upstream from mouth, and 9 mi (14 km) northeast of Currant.

DRAINAGE AREA.--12.9 mi² (33.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft (2,042 m), from topographic map.

REMARKS.--Records good except those for winter months, which are fair. No diversion above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--14 years, 3.20 ft³/s (0.0906 m³/s), 2,320 acre-ft/yr (2.86 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 366 ft³/s (10.4 m³/s) Dec. 6, 1966, gage height, 4.1 ft (1.25 m), from floodmarks, from rating curve extended above 60 ft³/s (1.70 m³/s) on basis of slope-area measurement of peak flow; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 74 ft³/s (2.10 m³/s) May 14, gage height, 2.41 ft (0.735 m); minimum, 0.04 ft³/s (0.001 m³/s) Nov. 20, result of freezeup.

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	.64	.44	.29	.16	.22	.82	36	35	29	12	4.4	2.5
2	.63	.43	.30	.20	.23	1.1	33	36	29	11	4.3	2.5
3	.60	.41	.30	.22	.24	1.1	29	38	29	11	4.2	2.5
4	.60	.39	.29	.21	.24	1.2	25	38	30	11	4.1	2.4
5	.58	.41	.29	.20	.24	1.3	21	36	30	10	4.2	3.0
6	.67	.46	.28	.18	.34	1.4	19	32	33	9.4	4.1	2.2
7	.65	.43	.30	.14	.28	1.4	18	29	37	8.6	4.0	7.5
8	.64	.39	.27	.16	.29	1.4	16	29	37	8.2	3.9	5.9
9	.64	.29	.22	.20	.32	1.6	16	30	35	8.0	3.8	6.1
10	.63	.38	.28	.21	.30	1.7	17	36	32	7.7	3.6	5.9
11	.56	.40	.31	.20	.25	1.8	21	41	26	7.6	3.6	5.7
12	.55	.37	.28	.16	.16	1.9	25	41	26	7.8	3.7	5.4
13	.53	.37	.27	.16	.30	1.9	28	48	28	7.6	3.8	5.0
14	.51	.38	.27	.20	.27	1.9	31	61	27	7.3	3.7	5.3
15	.49	.38	.24	.18	.24	2.0	32	67	25	7.1	3.6	5.1
16	.49	.36	.22	.20	.30	2.1	31	56	22	6.8	3.4	5.0
17	.49	.36	.23	.20	.35	2.2	28	39	20	6.6	3.4	5.0
18	.49	.34	.18	.22	.34	3.1	27	37	19	6.4	3.3	5.4
19	.49	.27	.11	.25	.39	5.1	27	38	18	6.1	3.4	5.4
20	.50	.20	.10	.24	.46	7.8	27	39	17	5.9	3.4	5.2
21	.51	.26	.13	.24	.52	11	25	42	17	6.0	3.2	5.1
22	.50	.27	.16	.23	.52	15	25	43	16	5.8	3.2	4.9
23	.49	.23	.28	.22	.52	16	25	41	16	5.7	3.1	4.7
24	.46	.22	.24	.18	.60	17	25	37	15	5.4	3.0	4.6
25	.45	.24	.21	.18	.67	19	31	31	15	5.2	3.0	4.4
26	.43	.24	.20	.20	.67	21	34	28	14	5.1	3.0	4.4
27	.45	.28	.23	.25	.67	21	33	25	14	5.0	2.9	4.1
28	.46	.29	.24	.24	.74	23	34	27	13	4.8	2.8	4.0
29	.43	.28	.24	.24	---	32	36	32	12	4.8	2.8	3.9
30	.45	.30	.24	.24	---	44	35	35	12	4.7	2.6	3.7
31	.46	---	.22	.24	---	41	---	32	---	4.6	2.5	---
TOTAL	16.47	10.07	7.42	6.35	10.67	302.82	810	1179	693	223.2	108.0	156.6
MEAN	.53	.34	.24	.20	.38	9.77	27.0	38.0	23.1	7.20	3.48	5.22
MAX	.67	.46	.31	.25	.74	44	36	67	37	12	4.4	2.2
MIN	.43	.20	.10	.14	.16	.82	16	25	12	4.6	2.5	2.4
AC-FT	33	20	15	13	21	601	1610	2340	1370	443	214	311

CAL YR 1977 TOTAL 509.73 MEAN 1.40 MAX 19 MIN .09 AC-FT 1010
WTR YR 1978 TOTAL 3523.60 MEAN 9.65 MAX 67 MIN .10 AC-FT 6990

STONE CABIN VALLEY

99

10249190 WILLOW CREEK NEAR WARM SPRINGS, NV

LOCATION.--Lat 38°34'35", long 116°35'05", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T.8 N., R.43 E., Nye County, Hydrologic Unit 16060011, in Toiyabe National Forest, on left bank about 3 mi (5 km) north of Toiyabe National Forest boundary and 30 mi (48 km) northwest of Warm Springs.

DRAINAGE AREA.--16.4 mi² (42.5 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,800 ft (2,070 m), from topographic map.

REMARKS.--Records fair except for period of no gage height record, Jan. 24 to Mar. 8, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 92 ft³/s (2.61 m³/s) Mar. 31, 1978, gage height, 2.70 ft (0.823 m); no flow Oct. 1, 1977 to Feb. 17, 1978.

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	1.5	54	38	8.4	1.5	.30	.09
2	.00	.00	.00	.00	.00	1.5	36	40	7.4	1.5	.27	.08
3	.00	.00	.00	.00	.00	1.6	27	43	6.7	1.5	.27	.07
4	.00	.00	.00	.00	.00	1.6	21	46	6.1	1.5	.25	.06
5	.00	.00	.00	.00	.00	1.6	16	37	6.1	1.4	.25	.19
6	.00	.00	.00	.00	.00	1.7	15	25	5.6	1.3	.25	1.0
7	.00	.00	.00	.00	.00	1.7	14	21	5.3	1.2	.27	.45
8	.00	.00	.00	.00	.00	1.7	12	20	4.8	1.2	.27	.35
9	.00	.00	.00	.00	.00	1.9	15	21	4.4	1.2	.25	.30
10	.00	.00	.00	.00	.00	1.8	22	23	4.2	.96	.21	.25
11	.00	.00	.00	.00	.00	1.7	33	22	3.9	.96	.21	.23
12	.00	.00	.00	.00	.00	1.5	42	22	3.6	.90	.30	.17
13	.00	.00	.00	.00	.00	1.5	43	22	3.4	.83	.38	.12
14	.00	.00	.00	.00	.00	1.5	51	23	3.2	.72	.38	.27
15	.00	.00	.00	.00	.00	1.5	56	24	3.2	.72	.32	.25
16	.00	.00	.00	.00	.00	2.1	42	22	3.1	.72	.27	.25
17	.00	.00	.00	.00	.00	3.6	31	18	2.9	.67	.27	.15
18	.00	.00	.00	.00	.10	4.4	24	16	2.8	.62	.30	.17
19	.00	.00	.00	.00	.20	6.2	37	15	2.6	.53	.30	.25
20	.00	.00	.00	.00	.20	11	37	14	2.3	.53	.27	.25
21	.00	.00	.00	.00	.50	19	32	14	2.2	.53	.27	.19
22	.00	.00	.00	.00	.50	27	30	14	2.2	.49	.23	.15
23	.00	.00	.00	.00	.50	22	32	14	2.1	.45	.23	.11
24	.00	.00	.00	.00	.50	20	32	13	2.0	.42	.21	.09
25	.00	.00	.00	.00	.80	22	35	11	1.8	.38	.19	.07
26	.00	.00	.00	.00	1.0	23	35	10	1.8	.38	.17	.06
27	.00	.00	.00	.00	1.0	24	36	9.9	1.8	.35	.15	.05
28	.00	.00	.00	.00	1.3	25	36	9.1	1.7	.35	.14	.05
29	.00	.00	.00	.00	---	30	41	9.1	1.6	.35	.12	.05
30	.00	.00	.00	.00	---	34	41	8.4	1.6	.35	.11	.05
31	.00	---	.00	.00	---	49	---	8.4	---	.35	.11	---
TOTAL	.00	.00	.00	.00	6.60	346.6	978	632.9	108.8	24.86	7.52	5.82
MEAN	.000	.000	.000	.000	.24	11.2	32.6	20.4	3.63	.80	.24	.19
MAX	.00	.00	.00	.00	1.3	49	56	46	8.4	1.5	.38	1.0
MIN	.00	.00	.00	.00	.00	1.5	12	8.4	1.6	.35	.11	.05
AC-FT	.00	.00	.00	.00	13	687	1940	1260	216	49	15	12

WTR YR 1978 TOTAL 2111.10 MEAN 5.78 MAX 56 MIN .00 AC-FT 4190

10249300 SOUTH TWIN RIVER NEAR ROUND MOUNTAIN, NV
(Hydrologic bench-mark station)

LOCATION.--Lat 38°53'15", long 117°14'40", in SW₁/4 sec.22, T.12 N., R.42 E., Nye County, Hydrologic Unit 16060004, in Toiyabe National Forest, on right bank 600 ft (180 m) upstream from diversion, 3 mi (5 km) west of State Highway 8A, and 15 mi (24 km) northwest of Round Mountain.

DRAINAGE AREA.--20 mi² (52 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1964 (miscellaneous site), 1965 (low-flow, partial-record site), August 1965 to current year.

GAGE.--Water-stage recorder with thermograph attachment. Altitude of gage is 6,400 ft (1,951 m), from topographic map.

REMARKS.--Records good. No diversions above station.

AVERAGE DISCHARGE.--13 years, 6.32 ft³/s (0.179 m³/s), 4,580 acre-ft/yr (5.65 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 128 ft³/s (3.62 m³/s) June 3, 1975, gage height, 3.69 ft (1.125 m); minimum, 0.11 ft³/s (0.003 m³/s) Sept. 4, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 20 ft³/s (0.57 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)
April 11	2200	28	0.79	2.50	0.762
May 15	0800	*94	2.66	3.19	0.972
Sept. 5	2100	32	0.91	2.48	0.756

Minimum discharge, 0.82 ft³/s (0.02 m³/s) Feb. 10.

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	2.0	2.2	2.1	1.8	2.0	4.6	17	21	57	15	5.1	2.4
2	2.0	2.1	2.1	1.7	2.0	4.9	15	20	56	15	4.5	2.4
3	1.9	2.1	2.1	2.2	2.0	4.9	13	22	55	14	4.4	2.4
4	2.0	2.0	2.1	2.1	2.0	5.3	12	26	55	14	4.3	2.5
5	2.0	2.1	2.1	2.1	2.0	5.8	9.9	27	56	12	4.1	12
6	2.2	2.2	2.0	2.1	1.9	5.8	9.6	25	57	12	4.0	11
7	2.3	2.1	2.0	1.7	2.0	6.2	9.3	22	60	12	3.9	6.2
8	2.3	2.0	2.0	1.9	1.9	6.2	9.2	20	62	11	3.7	4.9
9	2.2	1.9	2.0	2.1	2.0	6.1	11	24	61	10	3.6	4.5
10	2.2	1.9	1.9	2.1	1.3	5.9	16	32	56	9.8	3.4	4.2
11	2.2	2.0	2.0	2.1	1.1	5.7	25	40	49	9.2	3.4	4.0
12	2.1	2.0	2.0	2.0	1.1	5.4	27	45	44	9.2	3.6	3.9
13	2.2	2.1	2.0	2.0	1.4	4.9	25	54	43	8.7	3.8	3.7
14	2.2	2.1	2.0	2.1	1.7	4.7	22	73	41	8.3	3.7	6.2
15	2.1	2.1	2.2	2.1	1.9	4.4	21	89	39	8.0	3.5	6.2
16	2.1	2.1	1.9	2.1	2.1	4.5	20	82	35	7.8	3.2	5.3
17	2.1	2.1	2.2	2.1	2.4	5.4	19	64	30	7.4	3.3	4.9
18	2.1	2.1	1.9	2.1	2.5	6.2	20	49	28	7.2	3.3	4.9
19	2.2	1.6	1.6	2.1	2.6	6.6	23	45	27	7.0	3.1	4.8
20	2.2	1.5	1.5	2.1	3.0	7.1	23	50	25	6.6	3.0	4.4
21	2.2	1.8	1.9	1.6	3.7	8.9	22	60	24	6.4	2.9	4.2
22	2.2	1.9	2.2	2.0	4.8	11	19	67	23	6.2	2.8	3.9
23	2.2	1.9	2.2	1.4	5.3	11	18	68	22	5.8	2.8	3.6
24	2.2	2.0	2.1	1.3	5.8	11	18	58	20	5.8	2.7	3.5
25	2.2	2.1	2.0	1.6	5.5	9.9	19	46	19	5.6	2.7	3.5
26	2.2	2.1	2.1	2.0	5.2	10	20	37	18	5.6	2.6	3.4
27	2.2	2.2	2.3	2.1	5.0	10	18	32	16	6.8	2.6	3.2
28	2.3	2.2	2.3	2.1	4.7	10	19	33	16	7.2	2.5	3.2
29	2.2	2.2	2.3	2.1	---	12	20	42	16	5.8	2.5	3.1
30	2.2	2.2	2.2	2.1	---	13	22	54	15	5.4	2.4	3.1
31	2.2	---	1.7	2.2	---	17	---	61	---	5.1	2.5	---
TOTAL	66.9	60.9	63.0	61.1	78.9	234.4	542.0	1388	1125	269.9	103.9	135.5
MEAN	2.16	2.03	2.03	1.97	2.82	7.56	18.1	44.8	37.5	8.71	3.35	4.52
MAX	2.3	2.2	2.3	2.2	5.8	17	27	89	62	15	5.1	12
MIN	1.9	1.5	1.5	1.3	1.1	4.4	9.2	20	15	5.1	2.4	2.4
AC-FT	133	121	125	121	156	465	1080	2750	2230	535	206	269
CAL YR 1977	TOTAL	1888.5	MEAN	5.17	MAX	61	MIN	1.5	AC-FT	3750		
WTR YR 1978	TOTAL	4129.5	MEAN	11.3	MAX	89	MIN	1.1	AC-FT	8190		

10249300 SOUTH TWIN RIVER NEAR ROUND MOUNTAIN, NV--Continued

WATER-QUALITY RECORDS

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

CHEMICAL ANALYSES AND SPECIFIC CONDUCTANCES: October 1967 and March 1968 to current year, monthly.

BIOLOGICAL DATA: July 1970 to July 1973, once- or twice-yearly (24-hr studies); May 1975 to August 1977, twice-yearly; December 1977 to current year, monthly (seasonal).

MICROBIOLOGICAL DATA: October 1974 to current year, monthly.

WATER TEMPERATURES: July 1965 to April 1966, monthly; May 1966 to September 1968, continuous; October 1968 to December 1969, monthly; January 1970 to September 1977, continuous; October 1977 to August 1978, monthly; September 1978, continuous.

SEDIMENT DATA: October 1967 to September 1975, monthly; October 1975 to September 1977, occasionally (at times of noticeable turbidity or high discharge); October 1977 to current year, monthly.

INSTRUMENTATION.--Temperature recorder since April 1966.

REMARKS.--Temperature recorder malfunctioned from Oct. 1 to Sept. 8.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 158 micromhos May 8, 1975; minimum, 75 micromhos June 16, 1971.

PHYTOPLANKTON: Maximum, 3,400 cells/mL Aug. 22, 1977; minimum, 26 cells/mL Aug. 17, 1976.

FECAL STREPTOCOCCI: Maximum, 1,500 colonies/100 mL (non-ideal colony count) Feb. 21, 1977; minimum, less than 1 colony/100 mL several times during period of record.

WATER TEMPERATURES: Maximum, 17.5°C July 11, 1976; minimum, freezing point on several days in many years.

SUSPENDED--SEDIMENT CONCENTRATIONS: Maximum, 1,970 mg/L June 5, 1975; minimum, 0 mg/L July 26, 1973, Aug. 23, 1973.

REVISIONS.--Microbiological results reported as "0 colonies/100 mL" in previous years should be corrected to "less than 1 colony/100 mL."

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCTI- ANCE (MICHO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, TOTAL, IMMED. PER 100 ML	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)
OCT											
17...	1530	2.1	138	--	9.5	--	--	--	54	<2	--
DEC											
08...	0910	2.0	135	8.0	2.0	1	--	10.6	16	1	--
JAN											
25...	1230	1.5	139	8.0	.5	1	--	11.8	69	<2	--
FEB											
22...	1310	4.0	128	7.6	3.0	2	--	11.2	--	--	--
MAR											
24...	1110	10	135	7.4	4.0	--	--	10.3	11	<2	--
APR											
27...	0915	19	150	8.5	6.0	1	--	10.1	25	--	3
MAY											
25...	1100	49	99	7.8	4.0	--	4.6	9.8	K2	--	<2
JUN											
27...	1140	17	86	7.4	8.5	--	1.0	9.0	27	--	1
JUL											
31...	1740	5.4	129	7.9	14.5	--	.80	8.0	40	--	12
SEP											
08...	1145	5.4	139	7.8	7.5	--	.60	9.4	K240	--	K3

DATE	STREP- TOCUCCI FECAL, (COLS. PER 100 ML)	STREP- TOCUCCI FECAL, AF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT										
17...	26	--	--	--	--	--	--	--	--	--
DEC										
08...	11	--	58	20	1.9	6.4	.4	.8	57	6.2
JAN										
25...	14	--	57	20	1.7	6.3	.4	.8	58	6.9
FEB										
22...	--	--	57	20	1.6	5.9	.3	.7	53	6.2
MAR										
24...	3	--	59	21	1.7	6.0	.3	.9	59	6.8
APR										
27...	--	2	64	22	2.2	6.4	.3	.9	64	8.7
MAY										
25...	--	K30	37	13	1.1	5.8	.4	1.0	39	4.9
JUN										
27...	--	25	33	11	1.3	5.2	.4	.7	34	4.8
JUL										
31...	--	K120	43	15	1.3	5.3	.4	.9	44	3.9
SEP										
08...	--	68	57	20	1.7	5.7	.3	.9	58	7.2

K: NON-IDEAL COLONY COUNT.

BIG SMOKY VALLEY

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10249300 SOUTH TWIN RIVER NEAR ROUND MOUNTAIN, NV--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)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
OCT 17...	--	--	--	--	--	--	.01	.00	.01	--
DEC 08...	2.0	.2	19	92	91	.50	.11	.01	.12	.04
JAN 25...	2.5	.1	19	91	92	.32	--	--	.04	.02
FEB 22...	2.3	.1	17	78	86	.84	--	--	.09	.03
MAR 24...	2.8	.2	15	91	90	2.56	.14	.01	.15	--
APR 27...	3.0	.1	18	100	100	5.13	.09	.01	.10	.01
MAY 25...	2.6	.2	17	73	69	9.66	.16	.01	.17	.01
JUN 27...	1.4	.1	19	65	64	2.98	.04	.00	.04	.00
JUL 31...	1.4	.1	20	75	74	1.09	.01	.01	.02	.03
SEP 08...	2.1	.1	20	89	93	1.30	.06	.00	.06	.00

DATE	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)
OCT 17...	--	--	--	--	--	.02	--	--	--	--
DEC 08...	.00	.00	.05	.05	.12	.01	.01	.6	--	--
JAN 25...	--	.30	--	.28	.36	.01	.01	.9	--	--
FEB 22...	--	.02	--	.03	.14	.02	.01	1.9	--	--
MAR 24...	--	--	--	--	--	.02	--	--	--	--
APR 27...	--	.31	--	.19	.42	.00	.00	--	2.5	.6
MAY 25...	--	--	--	.02	--	.01	.01	3.0	--	--
JUN 27...	--	.26	--	.26	.30	.01	.00	--	2.2	.5
JUL 31...	--	.11	--	.05	.16	.00	.00	--	--	--
SEP 08...	.01	.86	.27	.28	.92	.01	.01	--	1.9	.1

BIG SMOKY VALLEY

10249300 SOUTH TWIN RIVER NEAR ROUND MOUNTAIN, NV--Continued

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

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)
DEC 08...	0910	3	3	--	--	14	0	0	0	0
APR 27...	0915	4	4	0	0	<10	3	0	0	0
MAY 25...	1100	4	2	0	100	--	--	5	0	0
JUN 27...	1140	3	3	200	200	--	--	10	0	3
SEP 08...	1145	4	3	0	0	--	--	0	0	0

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC 08...	0	15	0	270	0	240	0	10
APR 27...	0	<10	0	160	30	--	--	0
MAY 25...	0	7	1	490	70	--	--	20
JUN 27...	2	6	0	160	30	--	--	10
SEP 08...	0	4	3	60	30	--	--	0

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
DEC 08...	.1	.0	0	0	--	--	40	0	--
APR 27...	.0	.0	0	0	0	0	0	0	--
MAY 25...	.1	.0	0	0	0	0	20	10	--
JUN 27...	.0	.0	0	0	0	0	10	0	.00
SEP 08...	.0	.0	0	0	0	0	10	50	--

DATE	TIME	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
FEB 22...	1310	0	.0	0	.0	.0	.0	.0	.0	.0	.0	0

10249300 SOUTH TWIN RIVER NEAR ROUND MOUNTAIN, NV--Continued

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

PHYTOPLANKTON

DATE TIME	DEC 8,77 1220	MAY 25,78 1100	JUN 27,78 1140	JUL 31,78 1740	SEP 8,78 1145	
TOTAL CELLS/ML	56	110	160	56	430	
DIVERSITY: DIVISION	0.0	0.0	0.0	0.0	0.9	
..CLASS	0.0	0.0	0.0	0.0	0.9	
...ORDER	0.8	0.0	0.0	0.0	0.9	
...FAMILY	2.0	1.0	1.4	1.4	1.5	
....GENUS	2.0	1.5	1.4	1.4	1.6	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHRYSTOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINODISCEAE						
....MELUSIRA	14# 25	-- -	-- -	-- -	-- -	
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	-- -	-- -	69# 43	-- -	14 3	
...CUCCONEIS	14# 25	-- -	-- -	11# 20	57 13	
...CYMBELLACEAE						
....CYMBELLA	14# 25	45# 40	69# 43	34# 60	29 7	
...FRAGILARIACEAE						
....FRAGILARIA	-- -	22# 20	-- -	-- -	-- -	
...HANNAEA	-- -	45# 40	-- -	-- -	-- -	
...SYNEDRA	14# 25	-- -	-- -	-- -	-- -	
...GOMPHONEMACEAE						
....GOMPHONEMA	* 0	-- -	-- -	-- -	14 3	
...NAVICULACEAE						
....NAVICULA	-- -	-- -	-- -	11# 20	29 7	
...NITZSCHACEAE						
....NITZSCHIA	-- -	-- -	23 14	-- -	-- -	
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROCOCCALES						
...CHROCOCCACEAE						
....ANACYSTIS	-- -	-- -	-- -	-- -	290# 67	

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

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

PERIPHYTON

Retrieval Date	Length of exposure Polyethylene strip (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)
		Dry weight	Ash weight		
July 31	34	5.91	1.02	1.67	0.290

SMITH CREEK VALLEY

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10249411 CAMPBELL CREEK TRIBUTARY NEAR EASTGATE, NV

LOCATION.--Lat 39°15'58", long 117°41'56", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.9, T.16 N., R.38 E., Lander County, Hydrologic Unit 16060002, on left bank just upstream from culvert on State Highway 2, 1.5 mi (2.4 km) east of Lander County line, and 10 mi (16 km) east of Eastgate.

DRAINAGE AREA.--2.14 mi² (5.54 km²).

PERIOD OF RECORD.--Water years 1961-63 (annual maximum), October 1963 to current year.

GAGE.--Water-stage recorder with rain-gage attachment, and crest-stage gage. Altitude of gage is 6,950 ft (2,118 m), from topographic map. Oct. 1, 1960, to Sept. 30, 1963, crest-stage gage at same site and datum.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--15 years, 0.057 ft³/s (0.0016 m³/s), 41 acre-ft/yr (50,550 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 179 ft³/s (5.07 m³/s) Aug. 24, 1961, gage height, 8.2 ft (2.50 m), from floodmarks, on basis of computations of flow through culvert; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 0.98 ft³/s (0.028 m³/s) June 28, gage height, 1.32 ft (0.402 m); no flow most of 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	.16	.98	.40	.45	.06	.03
2	.00	.00	.00	.00	.00	.00	.13	.98	.40	.26	.06	.04
3	.00	.00	.00	.00	.00	.00	.13	.98	.40	.16	.06	.06
4	.00	.00	.00	.00	.00	.00	.10	.98	.30	.10	.04	.10
5	.00	.00	.00	.00	.00	.00	.13	.98	.30	.10	.04	.08
6	.00	.00	.00	.00	.00	.00	.13	.98	.30	.10	.04	.01
7	.00	.00	.00	.00	.00	.00	.13	1.1	.30	.13	.06	.01
8	.00	.00	.00	.00	.00	.00	.16	1.1	.30	.13	.04	.01
9	.00	.00	.00	.00	.00	.00	.19	1.1	.26	.13	.04	.02
10	.00	.00	.00	.00	.00	.00	.26	1.1	.22	.10	.03	.02
11	.00	.00	.00	.00	.00	.00	.26	.98	.22	.10	.03	.02
12	.00	.00	.00	.00	.00	.00	.30	.98	.22	.13	.03	.02
13	.00	.00	.00	.00	.00	.00	.35	.98	.22	.19	.03	.06
14	.00	.00	.00	.00	.00	.00	.40	.90	.22	.19	.03	.06
15	.00	.00	.00	.00	.00	.00	.45	.90	.22	.16	.03	.03
16	.00	.00	.00	.00	.00	.00	.50	.82	.19	.13	.03	.03
17	.00	.00	.00	.00	.00	.00	.45	.75	.19	.13	.03	.03
18	.00	.00	.00	.00	.00	.00	.56	.75	.19	.08	.03	.03
19	.00	.00	.00	.00	.00	.00	.56	.68	.19	.08	.03	.03
20	.00	.00	.00	.00	.00	.00	.62	.68	.16	.08	.03	.02
21	.00	.00	.00	.00	.00	.04	.62	.68	.16	.08	.03	.02
22	.00	.00	.00	.00	.00	.03	.62	.68	.13	.06	.03	.02
23	.00	.00	.00	.00	.00	.04	.56	.62	.10	.06	.04	.01
24	.00	.00	.00	.00	.00	.03	.62	.62	.10	.06	.04	.01
25	.00	.00	.00	.00	.00	.06	.68	.60	.10	.06	.04	.01
26	.00	.00	.00	.00	.00	.06	.68	.56	.08	.08	.04	.01
27	.00	.00	.00	.00	.00	.06	.75	.56	.10	.10	.03	.01
28	.00	.00	.00	.00	.00	.08	.75	.56	.50	.08	.03	.01
29	.00	.00	.00	.00	---	.13	.82	.45	.45	.08	.03	.01
30	.00	.00	.00	.00	---	.13	.90	.45	.40	.06	.03	.01
31	.00	---	.00	.00	---	.19	---	.40	---	.06	.03	---
TOTAL	.00	.00	.00	.00	.00	.85	12.97	24.88	7.32	3.71	1.14	.83
MEAN	.000	.000	.000	.000	.000	.027	.43	.80	.24	.12	.037	.028
MAX	.00	.00	.00	.00	.00	.19	.90	1.1	.50	.45	.06	.10
MIN	.00	.00	.00	.00	.00	.00	.10	.40	.08	.06	.03	.01
AC-FT	.00	.00	.00	.00	.00	1.7	26	49	15	7.4	2.3	1.6
CAL YR 1977	TOTAL	1.00	MEAN .003	MAX .30	MIN .00	AC-FT	2.0					
WTR YR 1978	TOTAL	51.70	MEAN .14	MAX 1.1	MIN .00	AC-FT	103					

FISH LAKE VALLEY AND COLUMBUS SALT MARSH

10249900 CHIATOVICH CREEK NEAR DYER, NV
(National stream-quality accounting network station)

LOCATION.--Lat 37°50'00", long 118°12'10", in NE 1/4 sec. 28, T.1 S., R.34 E., Esmeralda County, Hydrologic Unit 16060010, on left bank 300 ft (90 m) downstream from Middle Creek, 5 mi (8 km) west of State Highway 3A, and 10 mi (16 km) northwest of Dyer.

DRAINAGE AREA.--37.3 mi² (96.6 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 6,350 ft (1,935 m), from topographic map.

REMARKS.--Records good except for winter months and period of no gage height record. July 31 to Sept. 7, which are fair. No diversions above station.

AVERAGE DISCHARGE.--18 years, 8.60 ft³/s (0.244 m³/s), 6,230 acre-ft/yr (7.68 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 527 ft³/s (14.9 m³/s) July 31, 1965, gage height, about 5.0 ft (1.52 m), on basis of slope-area measurement of peak flow; minimum, 1.0 ft³/s (0.028 m³/s) Feb. 18, 1961, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34 ft³/s (0.96 m³/s) July 27, gage height, 1.79 ft (0.546 m), no other peak above base of 20 ft³/s (0.57 m³/s); minimum, 2.9 ft³/s (0.082 m³/s) Feb. 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	8.0	7.5	7.4	6.9	6.7	6.5	8.1	7.1	8.4	12	22	17
2	8.0	7.5	7.4	7.2	6.7	6.5	7.8	6.9	8.4	12	22	16
3	7.9	7.5	7.4	7.2	6.4	6.4	7.8	7.0	8.7	13	22	16
4	7.8	7.5	7.4	7.1	6.7	6.7	7.0	7.1	8.7	13	22	16
5	7.8	7.5	7.3	7.1	6.7	6.7	7.0	6.9	8.7	12	22	16
6	7.7	7.4	7.2	7.2	7.0	6.7	7.0	6.7	9.0	12	21	16
7	7.8	7.2	7.2	7.1	6.4	6.7	7.0	7.0	9.0	12	21	16
8	7.8	7.4	7.1	7.1	6.4	7.0	7.0	7.1	9.0	13	21	16
9	7.8	7.2	7.0	7.1	6.7	6.7	7.0	7.4	9.4	13	21	16
10	7.8	7.4	7.1	7.1	6.4	6.6	7.2	7.5	9.7	13	20	16
11	7.8	7.4	7.1	7.0	6.2	6.6	7.5	7.5	9.7	13	20	16
12	7.5	7.7	7.1	7.0	7.0	6.7	7.8	7.7	9.7	14	20	16
13	7.5	7.7	7.3	7.1	7.0	6.7	7.2	8.0	10	14	20	16
14	7.5	7.6	7.2	7.1	6.2	6.7	7.0	8.4	10	14	20	18
15	7.5	7.7	7.3	7.3	6.7	6.7	7.1	8.4	10	14	19	17
16	7.5	7.6	6.4	7.2	6.4	7.0	6.7	8.3	10	15	19	16
17	7.5	7.7	7.2	7.3	5.9	7.2	6.6	8.0	10	15	19	16
18	7.5	7.6	6.8	7.2	6.2	7.2	6.7	8.0	10	15	19	15
19	7.5	6.1	6.2	7.2	5.9	7.5	6.7	8.0	10	15	19	15
20	7.5	6.8	9.0	7.2	6.2	7.8	6.7	8.1	11	15	18	15
21	7.5	8.7	8.0	7.1	6.0	8.1	6.4	8.6	11	19	18	15
22	7.5	7.7	7.2	7.1	6.3	8.1	6.2	8.6	11	21	18	15
23	7.5	7.5	7.4	6.5	6.2	7.8	6.3	8.4	12	22	18	14
24	7.5	7.8	7.2	9.4	6.2	7.5	6.5	8.1	12	22	18	14
25	7.5	7.6	7.3	8.1	6.2	7.8	6.9	7.8	12	21	18	14
26	7.5	7.6	7.3	7.2	6.2	7.5	6.5	7.8	12	22	17	13
27	7.5	7.5	7.4	6.7	6.2	7.2	6.3	7.8	14	25	17	13
28	7.5	7.4	7.5	7.2	6.3	7.5	6.5	7.9	13	27	17	13
29	7.5	7.5	7.3	6.7	---	7.8	6.5	8.0	13	24	17	14
30	7.5	7.5	7.2	7.0	---	7.8	6.9	8.2	12	24	17	14
31	7.5	---	7.2	6.7	---	9.4	---	8.3	---	23	17	---
TOTAL	236.2	224.8	225.1	222.4	179.4	223.1	207.9	240.6	311.4	519	599	460
MEAN	7.62	7.49	7.26	7.17	6.41	7.20	6.93	7.76	10.4	16.7	19.3	15.3
MAX	8.0	8.7	9.0	9.4	7.0	9.4	8.1	8.6	14	27	22	18
MIN	7.5	6.1	6.2	6.5	5.9	6.4	6.2	6.7	8.4	12	17	13
AC-FT	469	446	446	441	356	443	412	477	618	1030	1190	912
CAL YR 1977 TOTAL	2553.7			MEAN 7.00	MAX 11	MIN 5.3	AC-FT 5070					
WTR YR 1978 TOTAL	3648.9			MEAN 10.0	MAX 27	MIN 5.9	AC-FT 7240					

10249900 CHIATOVICH CREEK NEAR DYER, NV--Continued

WATER-QUALITY RECORDS

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

CHEMICAL ANALYSES: October 1974 to current year, monthly.

SPECIFIC CONDUCTANCES: October 1974 to March 1975, monthly; April 1975 to current year, once-daily.

BIOLOGICAL DATA: January 1975 to September 1977, monthly; October 1977 to current year, monthly (seasonal).

MICROBIOLOGICAL AND SEDIMENT DATA: January 1975 to current year, monthly.

WATER TEMPERATURES: September 1960 to March 1975, monthly; April 1975 to current year, once-daily.

REMARKS.--Daily sampling and temperature measurement are done approximately 100 ft upstream from State Highway 3A, in NW¼SW¼ sec.28, T.1 S, R.35 E. Water temperatures at daily site are as much as 4.0°C greater than those at gage (on basis of monthly data for March 1975 to September 1976); greatest differences occur during summer. Specific conductance is not significantly different at the two sites.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 82 micromhos Mar. 21, 1977; minimum, 51 micromhos July 14, 1975.

PHYTOPLANKTON: Maximum, 3,200 cells/mL Sept. 18, 1975; minimum, 19 cells/mL Dec. 8, 1977.

FECAL STREPTOCOCCI: Maximum, 600 colonies/100 mL Sept. 18, 1975; minimum, 1 colony/100 mL Feb. 24, 1976.

WATER TEMPERATURES: Maximum, 36.5°C July 14, 1965; minimum, freezing point on several days during winter months.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 195 mg/L June 27, 1978; minimum, 13 mg/L Feb. 6, 1975, Dec. 18, 1975, Feb. 13, 1977.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

SPECIFIC CONDUCTANCES: Maximum, 80 micromhos May 25; minimum, 53 micromhos Aug. 14.

WATER TEMPERATURES: Maximum, 19.5°C June 8; minimum, freezing point on several days during winter months.

REVISIONS.--Microbiological results reported as "0 colonies/100 mL" in previous years should be corrected to "less than 1 colony/100 mL."

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
18...	1110	7.8	57	7.4	7.5	3	--	--	<1	--
DEC										
07...	1220	7.3	55	7.9	3.5	2	--	--	4	--
JAN										
24...	1300	8.7	63	--	.0	2	--	11.4	23	--
FEB										
23...	0935	6.2	60	7.5	1.5	2	--	10.7	28	--
MAR										
22...	1145	7.3	65	--	6.0	2	--	9.9	K6	--
APR										
26...	1120	6.6	63	--	5.0	2	--	10.0	--	6
MAY										
24...	1030	8.0	63	7.9	5.0	--	1.8	9.7	--	5
JUN										
27...	1700	14	62	8.2	8.5	--	19	8.8	--	480
JUL										
31...	1240	22	54	7.6	15.0	--	3.9	7.8	--	K78
SEP										
07...	1230	17	59	7.2	9.5	--	1.6	8.8	--	49

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT										
18...	61	--	21	7.1	.7	3.2	.3	.9	25	5.0
DEC										
07...	17	--	22	7.3	.8	3.4	.3	.8	25	2.9
JAN										
24...	420	--	20	7.2	.6	3.6	.3	1.5	26	4.3
FEB										
23...	26	--	23	7.7	.8	3.5	.3	.9	25	2.9
MAR										
22...	K80	--	26	9.0	.8	3.7	.3	1.0	27	4.6
APR										
26...	--	25	25	8.8	.8	3.7	.3	.9	29	6.3
MAY										
24...	--	180	22	8.2	.4	4.0	.4	1.0	27	3.3
JUN										
27...	--	K150	22	7.1	1.0	3.3	.3	1.3	22	--
JUL										
31...	--	250	18	6.4	.6	2.4	.2	.9	21	2.3
SEP										
07...	--	49	23	8.1	.7	3.5	.3	.9	25	3.3

K: NON-IDEAL COLONY COUNT.

FISH LAKE VALLEY AND COLUMBUS SALT MARSH

10249900 CHIATOVICH CREEK NEAR DYER, NV--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)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT 18...	.5	.3	18	47	51	.99	.03	.01	.04	.06
DEC 07...	1.2	.2	18	44	50	.87	.08	.00	.08	.10
JAN 24...	1.1	.3	17	52	51	1.22	--	--	.13	.02
FEB 23...	1.1	.2	16	43	48	.72	--	--	.08	.02
MAR 22...	1.3	.2	15	49	52	.98	--	--	.06	.01
APR 26...	1.4	.3	18	48	58	.86	--	--	.11	.01
MAY 24...	1.0	.3	16	44	50	.95	.04	.01	.05	.01
JUN 27...	1.1	.2	14	47	--	1.88	.04	.00	.04	.01
JUL 31...	.6	.2	15	40	41	2.41	.04	.01	.05	.03
SEP 07...	.9	.2	16	--	49	2.50	.05	.00	.05	.00

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 18...	.02	.12	.01	.03	.22	.02	.00	1.6	--	--
DEC 07...	--	.02	--	--	.20	.00	--	--	--	--
JAN 24...	--	.03	--	.05	.18	.06	.02	--	3.2	.4
FEB 23...	--	.02	--	.01	.12	.03	.01	1.9	--	--
MAR 22...	--	.35	--	.20	.42	.04	.05	3.8	--	--
APR 26...	--	.43	--	.44	.55	.04	.01	--	3.5	1.7
MAY 24...	--	--	--	.15	--	.01	.01	2.7	--	--
JUN 27...	--	.86	--	.12	.91	.09	.01	12	--	--
JUL 31...	.01	.32	.10	.11	.40	.04	.00	3.7	--	--
SEP 07...	--	.48	--	.41	.53	.03	.01	3.4	--	--

FISH LAKE VALLEY AND COLUMBUS SALT MARSH

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10249900 CHIATOVICH CREEK NEAR DYER, NV--Continued

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

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 18...	1110	1	0	--	--	30	0	0	0
JAN 24...	1300	1	1	100	0	<10	0	0	0
APR 26...	1120	1	1	0	100	--	--	20	0
JUN 27...	1700	0	0	300	300	--	--	0	0
JUL 31...	1240	1	0	100	10	--	--	0	0

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CU)	COBALT, DIS- SOLVED (UG/L AS CO)	CUPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	CUPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 18...	<50	0	<10	1	400	70	<100	0	8
JAN 24...	0	1	10	0	340	70	<10	1	10
APR 26...	<10	0	<10	3	460	70	--	--	10
JUN 27...	1	1	10	1	3200	80	--	--	120
JUL 31...	4	<1	4	0	950	90	--	--	40

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 18...	0	.0	.0	0	0	--	--	10	2
JAN 24...	0	.1	.0	0	0	<10	0	60	10
APR 26...	0	.0	--	0	0	0	0	10	0
JUN 27...	0	.0	.0	0	0	0	0	20	10
JUL 31...	3	.0	.0	0	0	0	0	20	<3

FISH LAKE VALLEY AND COLUMBUS SALT MARSH

10249900 CHIATOVICH CREEK NEAR DYER, NV--Continued

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

PHYTOPLANKTON

DATE TIME	DEC 7,77 0910	MAR 22,78 1145	MAY 24,78 1030	JUN 27,78 1700	JUL 31,78 1240	SEP 7,78 1230		
TOTAL CELLS/ML	19	270	400	3100	150	340		
DIVERSITY: DIVISION	0.0	0.0	0.5	1.0	0.0	1.1		
..CLASS	0.0	0.0	0.5	1.0	0.0	1.1		
..ORDER	0.0	0.0	0.5	1.0	0.0	1.8		
...FAMILY	0.9	1.6	2.0	2.6	1.3	2.8		
....GENUS	0.9	2.7	2.4	2.9	1.7	2.9		
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	--	-	30	9
..ZYGNEMATALES								
...DESMIDIACEAE								
....STAURASTRUM	--	-	--	-	23	1	--	-
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCEACEAE								
....CYCLOTELLA	--	-	--	-	--	-	100#	30
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	6#	33	57#	21	420	13	34#	23
...COCCONEIS	--	-	57#	21	160	5	22#	15
...RHODICOSPHENIA	--	-	57#	21	120	4	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	14	5	67#	17	11	8
...EPITHEMIA	--	-	--	-	22	6	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	69	2	--	-
...HANNAEA	--	-	14	5	--	-	--	-
...SYNEDRA	--	-	--	-	--	-	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	14	5	140	4	--	-
...NAVICULACEAE								
....NAVICULA	12#	67	43#	16	510#	16	78#	54
...PINNULARIA	--	-	14	5	--	-	--	-
...NITZSCHIA								
...DENTICULA	--	-	--	-	46	1	--	-
...NITZSCHIA	--	-	--	-	300	10	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCOCCALES								
...CHROCOCCACEAE								
....ANACYSTIS	--	-	--	-	--	-	30	9
...HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	69	2	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	1000#	33	--	-
EUGLENOPHYTA (EUGLENUIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	--	-	--	-	45	11	--	-

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

PERIPHYTON

Retrieval Date	Length of exposure Polyethylene strip (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)
		Dry weight	Ash weight		
Dec. 07	50	5.04	2.83	10.0	0.000
Feb. 23	30	--	--	0.000	0.000
May 24	38	2.83	1.02	4.35	0.430

FISH LAKE VALLEY AND COLUMBUS SALT MARSH

10249900 CHIATOVICH CREEK NEAR DYER, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
SEP 21...	1430	8.5	24	.55

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 18...	1110	7.8	18	.38
DEC 07...	1220	7.3	15	.30
JAN 24...	1300	8.7	54	1.3
FEB 23...	0935	6.2	16	.27
MAR 22...	1145	7.3	21	.42
APR 26...	1120	6.6	38	.68
MAY 24...	1030	8.0	35	.76
JUN 27...	1700	14	195	7.8
JUL 31...	1240	22	71	4.3
SEP 07...	1230	17	122	5.7

FISH LAKE VALLEY AND COLUMBUS SALT MARSH

10249900 CHIATOVICH CREEK NEAR DYER, NV--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	---	60	58	59	61	63	73	69	---	57	60	56
2	60	---	58	58	61	64	71	69	67	---	55	57
3	59	59	60	59	61	64	71	69	60	---	56	60
4	60	59	58	59	60	62	71	69	64	55	---	57
5	59	59	60	59	63	64	71	70	60	55	---	68
6	60	---	59	59	60	---	71	65	---	58	---	58
7	60	59	57	59	62	64	69	---	---	57	56	57
8	60	58	63	59	60	64	69	69	59	55	55	---
9	60	58	60	---	60	66	70	68	59	56	56	58
10	59	---	58	59	58	64	70	71	58	55	59	57
11	---	59	58	59	---	63	69	68	60	55	55	---
12	59	58	58	58	64	64	70	---	60	55	55	56
13	58	58	57	59	60	63	69	67	60	56	---	62
14	58	---	57	59	60	---	70	67	56	55	53	58
15	59	---	58	59	60	64	70	67	60	55	60	58
16	60	---	62	58	60	---	70	67	---	---	56	58
17	---	60	---	59	59	66	69	66	59	54	---	58
18	59	---	58	59	60	65	70	66	58	54	---	57
19	59	---	---	59	61	66	70	---	---	---	---	---
20	60	71	---	---	61	66	70	---	---	---	55	57
21	60	62	57	58	61	67	70	---	---	---	54	56
22	---	---	61	59	61	67	70	66	---	---	58	56
23	---	---	56	60	63	67	70	66	---	---	57	57
24	59	59	57	66	---	67	70	---	---	59	---	58
25	60	58	58	58	---	---	70	80	---	54	---	---
26	59	60	---	57	---	---	70	---	60	55	---	58
27	60	58	58	59	62	67	69	---	60	55	---	58
28	59	59	59	59	62	67	---	---	57	56	57	58
29	60	58	58	60	---	67	68	---	56	55	57	---
30	---	58	58	60	---	67	68	---	58	---	57	59
31	59	---	58	60	---	72	---	65	---	55	56	---
MEAN	59	60	58	59	61	65	70	68	60	56	56	58
MAX	60	71	63	66	64	72	73	80	67	59	60	68
MTN	58	58	56	57	58	62	68	65	56	54	53	56
WTR YR 1978	MEAN	61	MAX	80	MIN	53						

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	---	7.0	3.5	---	---	7.0	9.0	11.5	---	---	9.0	9.0
2	12.0	---	4.5	---	---	7.0	8.0	14.0	13.0	---	11.0	5.5
3	12.0	7.0	5.5	---	---	7.0	10.0	15.0	17.0	---	10.0	5.0
4	11.0	6.5	5.0	---	---	5.0	7.0	13.0	16.5	8.0	---	8.0
5	13.0	5.5	5.0	---	---	7.0	9.0	10.0	17.5	7.0	---	8.0
6	12.0	---	4.0	---	5.0	---	7.5	---	---	6.0	---	9.5
7	11.0	4.0	4.5	---	4.5	7.0	3.0	---	---	7.0	10.5	8.0
8	11.0	3.5	4.0	---	4.0	7.0	6.0	14.0	19.5	10.0	12.5	5.0
9	11.5	3.0	3.0	---	4.0	6.5	10.5	14.0	14.5	10.0	9.5	7.0
10	11.0	---	3.0	---	1.5	7.5	13.0	17.0	13.0	10.0	10.0	10.0
11	---	5.0	1.0	---	---	3.0	14.0	---	10.5	8.0	9.0	---
12	11.0	5.5	---	---	.0	4.5	13.0	---	10.0	10.0	9.0	5.5
13	12.0	5.0	3.0	---	.0	6.5	10.0	16.0	9.0	10.5	---	6.0
14	11.0	5.0	2.0	---	.5	---	10.0	17.0	10.5	---	9.5	9.5
15	11.0	5.0	1.0	---	.0	10.5	7.5	12.0	9.0	---	9.0	9.5
16	11.0	5.0	5.0	---	.0	8.5	9.0	12.0	---	---	9.0	9.0
17	---	5.5	4.5	---	1.0	7.5	10.0	12.0	8.5	10.5	---	8.5
18	12.0	6.0	---	---	4.0	10.0	11.5	14.0	9.5	9.0	---	6.0
19	10.5	---	---	---	4.5	10.0	13.0	15.0	---	---	---	---
20	10.5	---	---	---	5.0	8.5	12.5	---	---	---	1.0	9.0
21	10.0	---	---	---	6.0	10.5	10.0	---	9.0	---	1.0	10.0
22	---	---	---	---	7.0	10.5	10.5	15.0	---	---	1.5	8.0
23	---	---	---	---	7.0	10.0	14.0	12.0	---	---	2.0	5.0
24	10.5	5.0	---	---	---	---	12.0	---	---	9.0	---	8.5
25	10.5	5.0	.0	---	---	---	7.5	13.0	---	9.5	---	---
26	10.0	5.0	---	---	---	9.5	7.0	---	5.0	11.5	---	5.5
27	10.0	5.0	.5	---	5.5	12.0	10.5	---	3.0	11.0	---	9.0
28	7.0	4.5	3.0	---	5.5	11.5	---	---	7.5	9.5	4.5	8.0
29	7.5	4.5	2.0	---	---	10.0	10.5	---	8.0	11.0	5.0	---
30	---	5.0	1.0	---	---	8.0	7.5	15.0	9.5	---	5.0	5.5
31	7.0	---	.0	---	---	---	---	15.0	---	11.5	5.0	---
MEAN	10.5	5.0	3.0	---	3.5	8.0	10.0	14.0	11.0	9.5	7.0	7.5
MAX	13.0	7.0	5.5	---	7.0	12.0	14.0	17.0	19.5	11.5	12.5	10.0
MTN	7.0	3.0	.0	---	.0	3.0	3.0	10.0	3.0	6.0	1.0	5.0
WTR YR 1978	MEAN	8.0	MAX	19.5	MIN	.0						

PAHRUMP VALLEY

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10251890 PEAK SPRING CANYON CREEK NEAR CHARLESTON PEAK, NV

LOCATION.--Lat 36°14'40", long 115°43'09", in SW¹/₄NE¹/₄ sec.6, T.20 S., R.56 E., Clark County, Hydrologic Unit 16060015, on left bank 200 ft (61 m) upstream of Carpenter Road, 11 mi (18 km) east of State Highway 16, and 14.5 mi (23.3 km) east of Pahrump.

DRAINAGE AREA.--3.09 mi² (8.00 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,900 ft (2,100 m), from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 28 ft³/s (0.793 m³/s) May 14, 1978, gage height, 8.11 ft (2.472 m); minimum 0.20 ft³/s (0.006 m³/s) Dec. 21, 1977, Jan. 26, 1978.

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		---	.35	.35	.76	3.7	13	14	15	5.4	2.8	1.6
2		---	.35	.32	.73	4.0	10	14	15	5.3	2.7	1.6
3		---	.35	.33	.80	3.1	8.3	15	15	5.3	2.6	1.6
4		---	.35	.32	.92	3.9	7.8	17	15	5.2	2.5	1.5
5		---	.34	.31	.95	3.3	7.2	19	14	5.2	2.5	1.5
6		---	.33	.31	.93	2.6	7.0	17	14	5.1	2.4	1.5
7		---	.31	.27	.80	2.7	6.7	15	15	5.0	2.4	1.5
8		---	.31	.29	.73	2.9	6.6	16	14	4.9	2.3	1.4
9		---	.31	.33	1.4	2.9	6.4	19	14	4.8	2.3	1.4
10		---	.31	.35	1.9	2.6	6.8	22	12	4.7	2.3	1.4
11		---	.27	.31	1.2	2.5	8.0	23	11	4.6	2.3	1.3
12		---	.27	.35	1.1	2.3	11	24	11	4.5	2.2	1.3
13		---	.26	.39	1.0	2.1	14	25	10	4.4	2.2	1.3
14		---	.26	.59	.94	2.1	14	26	9.5	4.4	2.2	1.3
15		---	.29	.58	.95	2.5	14	26	8.8	4.3	2.1	1.3
16		---	.42	.45	.94	3.0	13	22	7.7	4.2	2.1	1.2
17		---	.40	.41	.94	3.6	12	18	7.3	4.1	2.1	1.2
18		.35	.48	.40	.98	4.3	11	18	7.1	4.1	2.1	1.2
19		.39	2.2	.44	1.1	4.3	12	18	7.1	4.0	2.0	1.2
20		.50	1.9	.40	1.5	5.0	13	18	6.8	3.9	2.0	1.1
21		.35	.31	.39	2.1	5.2	14	17	6.7	3.8	2.0	1.1
22		.35	.35	.43	2.4	5.2	14	16	6.6	3.7	2.0	1.1
23		.35	.35	1.3	2.5	4.5	14	16	6.4	3.6	1.9	1.1
24		.35	.35	1.7	2.7	4.8	15	14	6.3	3.5	1.9	1.0
25		.35	.35	1.5	2.6	6.5	16	13	6.2	3.4	1.9	1.0
26		.35	.42	.60	2.5	8.1	16	13	6.0	3.3	1.8	1.0
27		.35	.46	.66	2.3	8.6	15	12	5.8	3.2	1.8	1.0
28		.35	.64	.73	2.3	9.3	16	14	5.7	3.1	1.8	1.0
29		.35	.49	.80	---	11	16	16	5.6	3.1	1.7	1.0
30		.35	.46	.90	---	12	15	17	5.5	3.0	1.7	.98
31		---	.38	.83	---	15	---	17	---	2.9	1.7	---
TOTAL	---	---	14.62	17.34	39.97	153.6	352.8	551	290.1	130.0	66.3	37.68
MEAN	---	---	.47	.56	1.43	4.95	11.8	17.8	9.67	4.19	2.14	1.26
MAX	---	---	2.2	1.7	2.7	15	16	26	15	5.4	2.8	1.6
MIN	---	---	.26	.27	.73	2.1	6.4	12	5.5	2.9	1.7	.98
AC-FT	---	---	29	34	79	305	700	1090	575	258	132	75

WALKER LAKE BASIN

10288500 WALKER LAKE NEAR HAWTHORNE, NV

LOCATION.--Lat 38°35'05", long 118°42'15", in NE 1/4 sec. 2, T. 8 N., R. 29 E., Mineral County, Hydrologic Unit 16050304, 5.5 mi (8.8 km) northwest of Hawthorne.

PERIOD OF RECORD.--August 1928 to current year. Occasional readings prior to August 1928.

DRAINAGE AREA.--4,050 mi² (10,500 km²), approximately.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Coast and Geodetic Survey bench mark at U.S. Naval Depot).

REMARKS.--Elevations determined from reference points referred to U.S.C. and G.S. bench mark. Elevations are given to the nearest 0.1 ft and contents to 4 significant figures in order to reflect trends of change. Any single observation, however, may be affected by wind and seiche movements on the lake surface.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 6,955,000 acre-ft (8.58 km³) Mar. 13, 1928, elevation, 4,051.8 ft (1,234.99 m), Indian Service; minimum observed, 2,520,000 acre-ft (3.11 km³) Sept. 28, 1978, elevation, 3,957.1 ft (1,206.12 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 4,078.0 ft (1,242.97 m), adjustment of 1912, was observed Sept. 27, 1908, by Geological Survey (contents, 8,622,000 acre-ft or 10.6 km³, table now in use).

MONTHEND ELEVATIONS AND TOTAL CONTENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-ft)	Change in contents (acre-ft)
Sep. 30.	3,960.8	2,653,000	
Oct. 31.	3,960.5	2,642,000	-11,000
Nov. 31.	3,960.6	2,645,000	+3,000
Dec. 31.	3,960.7	2,649,000	+4,000
CAL YR 1977.	--	--	-95,000
Jan. 31.	3,960.6	2,645,000	-4,000
Feb. 28.	3,959.9	2,620,000	-25,000
Mar. 31.	3,959.4	2,602,000	-18,000
Apr. 30.	3,959.3	2,598,000	-4,000
May 31.	3,959.3	2,598,000	0
June 30.	3,959.1	2,591,000	-7,000
July 31.	3,958.9	2,584,000	-7,000
Aug. 31.	3,957.8	2,545,000	-39,000
Sep. 30.	3,957.1	2,520,000	-25,000
WTR YR 1977-78	--	--	-133,000

NOTE.--Monthend elevations are interpolated from readings made during the month.

WALKER LAKE BASIN

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10290300 UPPER TWIN LAKE NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°09'15", long 119°20'58", in NW¼NE¼ sec.5, T.3 N., R.24 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at outlet of upper lake dam on Robinson Creek and 10 mi (16 km) southwest of Bridgeport.

DRAINAGE AREA.--29.5 mi² (76.4 km²).

PERIOD OF RECORD.--December 1961 to February 1964, September 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (project datum of U.S. Indian Irrigation Service).

REMARKS.--Contents regulated by dam at outlet. Figures given herein represent usable contents. Usable contents, 2,070 acre-ft (2.55 hm³) between elevations 7,200 ft (2,194.6 m) natural rim, and 7,207 ft (2,196.7 m), spillway crest.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 2,900 acre-ft (3.58 hm³) June 22, July 5, 6, 1967, elevation, 7,209.58 ft (2,197.480 m); minimum observed, 62 acre-ft (76,400 m³) Oct. 31, Nov. 1, 1964, elevation, 7,200.22 ft (2,194.627 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--No contents observed Oct. 17, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,790 acre-ft (3.44 hm³) June 9, elevation, 7,208.23 ft (2,197.373 m); minimum, 235 acre-ft (0.290 hm³) Oct. 24 to Nov. 10, elevation, 7,200.84 ft (2,194.816 m).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-ft)	Change in contents (acre-ft)
Sep. 30	--	g283	--
Oct. 31	7,200.84	235	-48
Nov. 30	7,201.76	493	+258
Dec. 31	7,204.26	1,210	+717
CAL YR 1977.	--	--	+728
Jan. 31	7,206.48	1,900	+690
Feb. 28	7,206.85	2,020	+120
Mar. 31	7,207.27	2,160	+140
Apr. 30	7,207.71	2,300	+140
May 31	7,208.63	2,590	+290
June 30	7,208.67	2,600	+10
July 31	7,208.65	2,600	0
Aug. 31	7,207.74	2,310	-290
Sep. 30	7,207.51	2,230	-80
WTR YR 1977-78	--	--	+1,947

g Interpolated.

WALKER LAKE BASIN

10290400 LOWER TWIN LAKE NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°10'05", long 119°19'33", in NE¼NE¼ sec.33, T.4 N., R.24 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at outlet of lower lake dam on Robinson Creek and 8 mi (13 km) southwest of Bridgeport.

DRAINAGE AREA.--38.9 mi² (100.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (project datum of U.S. Indian Irrigation Service).

REMARKS.--Contents regulated by dam at outlet and by Upper Twin Lake. Figures given herein represent usable contents. Usable contents, 4,010 acre-ft (4.94 hm³) between elevations 7,190 ft (2,192 m) natural rim, and 7,200 ft (2,195 m), spillway crest. One transarea diversion out of Tamarack Creek into Summers Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 5,490 acre-ft (6.77 hm³) June 6, 1969, elevation, 7,203.51 ft (2,195.630 m); no contents Nov. 17, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 5,030 acre-ft (6.20 hm³) June 10, elevation, 7,202.39 ft (2,195.288 m); minimum interpolated, 570 acre-ft (0.703 hm³) Nov. 30, elevation 7,191.42 ft. (2,191.945 m).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-ft)	Change in contents (acre-ft)
Sep. 30	7,192.10	840	--
Oct. 31	--	g575	-265
Nov. 30	--	g570	-5
Dec. 31	7,192.23	892	+322
CAL YR 1977	--	--	-72
Jan. 31	7,193.06	1,220	+328
Feb. 28	7,195.46	2,180	+960
Mar. 31	7,198.20	3,280	+1,100
Apr. 30	7,198.81	3,520	+240
May 31	7,201.28	4,550	+1,030
June 30	7,201.61	4,690	+140
July 31	7,201.66	4,710	+20
Aug. 31	7,200.63	4,280	-430
Sep. 30	7,200.39	4,170	-110
WTR YR 1977-78	--	--	+3,330

g Interpolated.

LOCATION.—Lat 38°14'20", long 119°19'30", in NE1/4 sec.4, T.4 N., R.24 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, on right bank at Buckeye Hot Springs, 0.6 mi (1.0 km) downstream from Eagle Creek, and 5.5 mi (8.8 km) southwest of Bridgeport.

PERIOD OF RECORD.--November 1910 to September 1914 (fragmentary), October 1953 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 6,900 ft (2,103 m), from topographic map. November 1910 to September 1914, non-recording gage at site 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE.--26 years (1911-12, 1953-78), 57.9 ft³/s (1.640 m³/s), 41.950 acre-ft/yr (51.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 947 ft³/s (26.8 m³/s) Feb. 1, 1963, gage height, 4.41 ft (1.344 m), from rating curve extended above 360 ft³/s (10.2 m³/s) on basis of slope-area measurement at gage height 4.00 ft (1.219 m); minimum, 3.3 ft³/s (0.094 m³/s) Dec. 12, 1959, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 21, 1911, reached an observed stage of 4.8 ft (1.46 m), discharge not determined, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
May 15	0100	269	7.62	3.05	0.930
May 22	0200	242	6.85	2.97	0.905
June 14	2400	*372	10.5	3.32	1.012
July 10	0100	324	9.18	3.19	0.972
Sept. 5	1130	170	4.81	2.71	0.826

Minimum discharge, 4.3 ft³/s (0.12 m³/s) Jan. 15, result of freezeup.

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	7.5	8.1	9.2	10	11	13	39	55	240	249	151	49
2	7.5	8.1	9.2	10	11	13	34	61	242	241	142	48
3	7.3	8.3	9.2	10	11	13	32	79	233	217	141	49
4	7.3	8.2	9.8	10	11	13	31	99	240	206	138	52
5	7.3	10	9.8	10	11	13	30	102	276	217	134	99
6	7.4	9.7	9.5	9.8	10	13	29	89	302	239	127	94
7	7.5	12	9.5	10	6.4	13	27	89	323	251	123	80
8	7.5	13	9.5	11	12	14	26	103	328	243	131	68
9	7.5	15	9.5	11	11	14	26	127	331	246	127	59
10	7.5	13	9.5	11	9.5	14	29	145	308	267	137	89
11	7.5	10	9.2	11	9.0	14	37	145	262	254	116	72
12	7.5	9.1	9.2	11	9.5	14	45	155	298	230	108	61
13	7.5	8.6	9.8	11	9.5	13	49	191	325	228	100	56
14	7.4	10	11	11	11	13	44	222	333	243	91	55
15	7.3	9.6	19	8.3	12	13	42	220	316	260	83	56
16	7.1	9.1	13	6.2	12	15	38	160	267	246	79	51
17	7.1	9.1	10	10	12	17	37	140	239	214	76	48
18	7.2	8.6	10	13	12	18	34	145	260	209	72	47
19	7.4	12	10	12	12	19	36	162	254	198	68	45
20	7.4	13	10	11	12	21	37	182	259	186	65	43
21	7.2	25	10	11	12	23	34	200	267	179	63	42
22	7.1	35	10	12	12	23	33	215	280	179	62	40
23	7.2	23	10	11	13	23	37	200	271	183	60	39
24	7.2	14	10	11	13	22	43	152	274	182	57	38
25	7.0	12	10	11	14	23	56	133	258	182	55	37
26	7.5	11	10	11	14	28	48	130	234	194	53	37
27	8.2	10	10	11	14	29	52	145	235	191	50	36
28	7.8	9.5	10	11	14	34	58	175	200	175	50	35
29	7.4	9.5	10	11	---	40	55	206	202	165	49	35
30	7.8	9.2	9.8	11	---	45	58	235	231	154	49	34
31	8.2	---	10	11	---	48	---	240	---	154	50	---
TOTAL	230.3	362.7	315.7	329.3	320.9	628	1176	4702	8088	6582	2807	1594
MEAN	7.43	12.1	10.2	10.6	11.5	20.3	39.2	152	270	212	90.5	53.1
MAX	8.2	35	19	13	14	48	58	240	333	267	151	99
MIN	7.0	8.1	9.2	6.2	6.4	13	26	55	200	154	49	34
AC=FT	457	719	626	653	637	1250	2330	9330	16040	13060	5570	3160
CAL YR 1977	TOTAL	6765.3	MEAN	18.5	MAX	118	MIN	7.0	AC=FT	13420		
WTR YR 1978	TOTAL	27135.9	MEAN	74.3	MAX	333	MIN	6.2	AC=FT	53820		

WALKER LAKE BASIN

10292500 BRIDGEPORT RESERVOIR NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°19'30", long 119°12'40", in SE 1/4 sec. 34, T. 6 N., R. 25 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at Bridgeport Dam on East Walker River, 4.5 mi (7.2 km) north of Bridgeport.

DRAINAGE AREA.--358 mi² (927 km²).

PERIOD OF RECORD.--March 1926 to current year. Monthend contents only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1180: 1949. WSP 1927: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (project datum).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1923. Dam completed in November 1924. Capacity, 42,460 acre-ft (52.4 hm³) between elevations 6,415 ft (1,955.3 m), approximate elevation of bottom of reservoir, and 6,461 ft (1,969.3 m), crest of spillway is at elevation 6,460.75 ft (1,969.237 m), however, there are four siphons that became operative prior to reaching this spillway. Elevation of sill of outlet gate, 6,412 ft (1,954.4 m). No dead storage. Figures given herein represent total contents. Water is used for irrigation by Walker River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 44,880 acre-ft (55.3 hm³) June 16, 1974, elevation, 6,460.78 ft (1,969.246 m); no contents during fall of 1929, 1930, 1960, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 43,220 acre-ft (53.3 hm³) Aug. 10, elevation, 6,460.26 ft (1,969.087 m); minimum, no contents Oct. 1 to Nov. 3, elevation, 6,415.00 ft (1,955.292 m).

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

6,415	0	6,439	5,440
6,418	20	6,441	7,120
6,421	115	6,443	9,100
6,424	269	6,445	11,380
6,427	539	6,447	13,990
6,430	1,130	6,449	17,060
6,433	2,050	6,451	20,620
6,435	2,920	6,455	29,160
6,437	4,050	6,461	45,490

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	0	1880	5260	8540	12260	25430	20160	12190	32840	42610	30360
2	0	0	1960	5370	8640	12440	25980	19700	12440	33220	42760	29880
3	0	0	2030	5480	8740	12630	26640	19150	12830	33600	42760	29400
4	0	10	2110	5560	8840	12900	26980	18520	13310	34110	42760	28820
5	0	50	2190	5680	9000	13110	27440	18180	13790	34380	42920	28470
6	0	100	2250	5760	9100	13310	27550	17660	14510	34640	42920	28240
7	0	140	2330	5800	9270	13510	27660	17060	15400	34770	42920	28240
8	0	180	2390	5920	9380	13720	27780	16580	16340	35040	43070	28240
9	0	230	2450	6080	9600	13990	27900	16190	17320	35440	43070	28240
10	0	280	2520	6160	9700	14290	28010	15790	18350	35960	43220	28240
11	0	320	2640	6280	9820	14510	28010	15320	19330	36360	42920	28360
12	0	370	2700	6370	9870	14730	27900	14950	20160	36760	42610	28470
13	0	420	2800	6500	10040	15030	27900	14730	21110	37180	42170	28580
14	0	460	2900	6590	10140	15250	27660	14730	22090	37590	41880	28700
15	0	500	3060	6770	10260	15470	27550	14510	23100	38010	41440	28930
16	0	550	3130	6900	10380	15710	27200	14360	24040	38290	41000	29160
17	0	618	3420	6980	10500	16030	26750	14140	24990	38570	40420	29160
18	0	658	3600	7080	10730	16260	26310	13850	25760	38980	39830	29280
19	0	626	3660	7260	10850	16580	25870	13650	26530	39120	39120	29520
20	0	602	3750	7360	10970	16980	25320	13380	27200	39400	38290	29640
21	0	737	3870	7500	11140	17490	24880	13240	27900	39400	37730	29760
22	0	1070	4020	7650	11200	17920	24350	13110	28470	39400	36900	29880
23	0	1160	4120	7700	11320	18440	23930	13040	29040	39690	36100	30000
24	0	1260	4250	7790	11500	18960	23310	12900	29520	39980	35570	30120
25	0	1360	4380	7880	11630	19520	22890	12630	30000	39980	34640	30120
26	0	1480	4510	7980	11760	20160	22480	12380	30240	40420	34110	30120
27	0	1560	4640	8070	11940	20620	22090	12070	30970	40850	33600	30120
28	0	1650	4820	8160	12130	21310	21700	11880	31700	41290	33090	30120
29	0	1780	4970	8260	---	22190	21210	11760	32080	41730	32330	30120
30	0	1810	5080	8350	---	23100	20620	11760	32590	42170	31450	30000
31	0	---	5150	8440	---	24560	---	11940	---	42460	30970	---
MAX	.00	1810	5150	8440	12130	24560	28010	20160	32590	42460	43220	30360
MIN	.00	.00	1880	5260	8540	12260	20620	11760	12190	32840	30970	28240
†	6415.00	6432.30	6438.61	6442.36	6445.58	6452.93	6451.02	6445.44	6456.38	6460.02	6455.73	6455.37
‡	0	+1810	+3340	+3290	+3690	+12,430	-3940	-8680	+20,650	+9870	-11,490	-970

CAL YR 1977 MAX 14580 MIN .00 ‡ - 3,800
WTR YR 1978 MAX 43220 MIN .00 ‡ +30,000

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

LOCATION.—Lat 38°19'40", long 119°12'50", in SW 1/4 sec.34, T.6 N., R.25 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, on right bank 1,500 ft (500 m) downstream from Bridgeport Reservoir, 5 mi (8 km) north of Bridgeport, and 10 mi (16 km) upstream from Sweetwater Creek.

WATER DISCHARGE RECORDS

REVISÉD RECORDS.--WSP 1927: Drainage area.

GAGE.—Water-stage recorder. Altitude of gage is 6,400 ft (1,951 m) from topographic map. Prior to Oct. 1, 1921, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum. Oct. 1, 1921, to Feb. 21, 1924, water-stage recorder at site 1 mi (2 km) downstream at different datum. Feb. 22, 1924, to Sept. 30, 1931, water-stage recorder, and Oct. 1, 1931, to May 25, 1939, nonrecording gage at present site at datum 2.34 ft (0.713 m) lower.

AVERAGE DISCHARGE.—55 years (1922-24, 1925-78), 136 ft³/s (3.852 m³/s), 98,530 acre-ft/yr (121 hm³/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft³/s (39.4 m³/s) June 19, 1963, gage height, 4.64 ft (1.414 m); maximum gage height, 4.95 ft (1.509 m) Jan. 22, 1943 (top of surge); minimum daily discharge, 0.2 ft²/s (0.006 m³/s) Nov. 2-29, Dec. 1-22, 25-28, 1955. Jan. 17-25, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 514 ft³/s (14.6 m³/s) May 3, gage height, 2.76 ft (0.841 m); minimum daily, 2.3 ft³/s (0.07 m³/s) Feb 21.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	30	5.3	5.3	4.0	2.8	69	381	341	283	259	341
2	23	25	5.3	5.3	3.4	2.7	69	394	332	281	294	342
3	22	24	5.3	9.3	3.4	2.7	69	454	302	281	294	339
4	23	24	5.5	13	3.2	2.6	69	475	300	281	294	337
5	23	25	5.6	13	3.2	2.7	88	456	288	289	295	320
6	23	27	5.6	12	3.2	2.7	109	455	243	317	295	264
7	24	27	5.4	8.0	3.0	2.7	109	457	194	335	297	229
8	28	27	5.4	8.0	3.4	2.7	128	456	195	309	305	213
9	27	27	5.3	8.0	3.2	2.9	168	455	214	301	338	190
10	27	27	5.3	8.0	3.2	2.9	199	456	216	296	349	177
11	27	25	5.4	8.0	2.7	3.0	233	456	216	287	379	163
12	26	25	5.3	8.1	2.7	3.1	249	453	218	288	373	123
13	29	25	5.3	8.2	2.7	3.2	282	437	211	296	373	123
14	31	25	5.4	8.4	2.7	3.4	297	424	202	308	370	123
15	30	24	5.5	8.4	3.0	3.4	330	421	190	309	370	116
16	29	23	5.6	8.4	2.7	3.4	355	409	190	319	370	98
17	31	24	5.6	8.4	2.7	3.4	394	409	192	313	370	98
18	29	24	5.3	8.4	2.7	3.7	390	409	191	308	390	98
19	29	24	5.1	8.4	2.5	10	339	406	198	308	437	98
20	26	24	4.9	8.5	2.5	15	337	431	210	302	453	98
21	7.6	24	5.0	8.9	2.3	15	348	444	210	282	450	98
22	20	25	5.0	8.9	2.5	16	378	437	217	264	450	97
23	36	25	5.3	8.9	2.4	16	377	403	234	266	444	97
24	36	17	5.1	8.9	2.4	16	376	403	249	261	421	97
25	35	7.9	5.2	8.9	2.7	16	362	400	278	253	421	104
26	35	7.6	5.3	8.9	2.7	19	341	392	286	245	412	125
27	34	7.6	5.3	8.9	2.7	25	341	389	308	247	394	125
28	34	7.4	5.3	9.1	2.7	30	341	384	299	240	390	124
29	34	7.2	5.3	9.3	---	48	349	381	284	220	393	131
30	34	6.4	5.3	6.4	---	60	382	367	282	230	389	147
31	34	---	5.3	4.0	---	63	---	336	---	242	384	---
TOTAL	869.6	641.1	164.8	264.2	80.5	403.0	7878	13030	7290	8761	11453	5035
MEAN	28.1	21.4	5.32	8.52	2.88	13.0	263	420	243	283	369	168
MAX	36	30	5.6	13	4.0	63	394	475	341	335	453	342
MIN	7.6	6.4	4.9	4.0	2.3	2.6	69	336	190	220	259	97
AC=FT	1720	1270	327	524	160	799	15630	25840	14460	17380	22720	9990
CAL YR 1977	TOTAL	15377.0	MEAN	42.1	MAX	237	MIN	2.9	AC=FT	30500		
WTR YR 1978	TOTAL	55870.2	MEAN	153	MAX	475	MIN	2.3	AC=FT	110800		

WALKER LAKE BASIN

10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1949 to November 1952, March 1960 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)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)
OCT								
12...	1240	25	231	--	13.5	--	--	--
NOV								
28...	1145	7.6	505	--	9.0	--	--	--
JAN								
06...	1100	13	516	--	1.5	--	--	--
31...	1530	4.0	539	--	5.0	--	--	--
MAR								
28...	1130	25	520	--	5.0	--	--	--
APR								
* 11...	1420	249	300	7.9	6.0	8	9.3	80
MAY								
25...	1430	397	219	--	13.5	--	--	--
JUN								
21...	1425	210	124	--	17.0	--	--	--
AUG								
29...	1215	387	157	--	17.5	--	--	--
SEP								
* 13...	1030	122	149	7.6	14.5	2	7.6	54
26...	1230	123	148	--	12.5	--	--	--

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- SURP- TION RATIO	ALKA- LITY (MG/L AS CaCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT							
12...	--	--	--	--	--	--	--
NOV							
28...	--	--	--	--	--	--	--
JAN							
06...	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--
MAR							
28...	--	--	--	--	--	--	--
APR							
* 11...	24	49	29	.8	99	5.4	204
MAY							
25...	--	--	--	--	--	--	--
JUN							
21...	--	--	--	--	--	--	--
AUG							
29...	--	--	--	--	--	--	--
SEP							
* 13...	16	4.6	8.5	.5	74	.0	98
26...	--	--	--	--	--	--	--

* DATA FROM CALIF. DEPT. OF WATER RESOURCES.

WALKER LAKE BASIN

123

10293050 EAST WALKER RIVER BELOW SWEETWATER CREEK, NEAR BRIDGEPORT, CA

LOCATION.--Lat 38°26'27", long 119°06'18", in NW¼NW¼ sec.29, T.7 N., R.26 E., Lyon County, Hydrologic Unit 16050301, in Toiyabe National Forest, on left bank, 10 ft (3 m) downstream from bridge, 1.8 mi (2.9 km) downstream from Sweetwater Creek, and about 16 mi (26 km) north-northeast of Bridgeport.

DRAINAGE AREA.--467 mi² (1,210 km²).

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,760 ft (1,760 m), from topographic map.

REMARKS.--Records good except for period of no gage-height record, May 16 to Sept. 1, which are fair. Diversions for irrigation above station. Flow regulated by Bridgeport Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft³/s (29.5 m³/s) Aug. 5, 1974, gage height, 7.43 ft (2.265 m); minimum daily, 5.2 ft³/s (0.15 m³/s) Mar. 8, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 582 ft³/s (16.5 m³/s) May 4, gage height, 6.48 ft (1.975 m); minimum daily, 8.5 ft³/s (0.24 m³/s) Oct. 22, Dec. 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	28	9.7	12	10	20	82	443	372	351	288	375
2	25	20	9.7	13	10	24	78	460	360	351	326	359
3	25	19	9.4	12	10	21	76	506	335	355	318	364
4	25	19	9.4	16	10	31	76	551	320	351	310	368
5	25	19	9.4	17	12	28	84	502	300	342	310	359
6	25	20	9.7	18	14	26	116	492	260	395	320	288
7	25	20	10	16	14	24	116	496	250	375	330	247
8	25	21	10	16	13	29	130	492	250	365	350	221
9	25	21	9.7	15	14	31	184	499	260	360	380	198
10	25	22	10	13	15	28	237	521	265	360	400	177
11	25	23	9.7	13	14	27	267	555	267	360	410	172
12	24	22	10	14	16	24	288	510	267	364	420	130
13	25	22	10	14	14	21	322	488	260	359	420	130
14	27	21	8.8	14	12	22	342	457	255	386	420	135
15	28	22	9.1	17	14	23	390	457	243	386	420	130
16	28	22	8.5	16	14	24	430	460	240	380	420	109
17	27	21	13	17	14	26	457	460	235	370	420	107
18	26	21	12	15	13	28	474	460	230	370	450	111
19	26	23	12	15	12	30	390	460	230	365	490	111
20	27	29	13	15	13	40	381	460	230	350	510	115
21	16	26	13	14	14	48	390	455	230	330	510	113
22	8.5	29	13	14	15	48	450	450	234	310	500	115
23	20	25	13	13	14	42	443	445	240	320	490	116
24	26	22	12	13	15	39	435	440	250	310	480	118
25	27	12	12	13	15	38	424	435	299	300	470	120
26	28	11	12	12	17	38	386	435	303	300	460	135
27	28	10	12	12	16	34	390	430	359	290	440	132
28	28	10	13	11	16	34	390	435	390	270	430	135
29	28	9.7	12	11	---	51	400	440	347	275	430	137
30	28	9.7	12	10	---	81	447	424	351	285	430	157
31	28	---	11	10	---	82	---	377	---	288	430	---
TOTAL	778.5	599.4	338.1	431	380	1062	9075	14495	8432	10573	12782	5484
MEAN	25.1	20.0	10.9	13.9	13.6	34.3	303	468	281	341	412	183
MAX	28	29	13	18	17	82	474	555	390	395	510	375
MIN	8.5	9.7	8.5	10	10	20	76	377	230	270	288	107
AC-FT	1540	1190	671	855	754	2110	18000	28750	16720	20970	25350	10880
CAL YR 1977 TOTAL	16151.9			44.3	220	5.2	AC-FT	32040				
WTR YR 1978 TOTAL	64430.0			177	555	8.5	AC-FT	127800				

WALKER LAKE BASIN

10293500 EAST WALKER RIVER ABOVE STROSNIDER DITCH, NEAR MASON, NV

LOCATION.--Lat 38°48'45", long 119°02'50", in NW¼SW¼ sec.14, T.11 N., R.26 E., Lyon County, Hydrologic Unit 16050303, on right bank 0.9 mi (1.4 km) upstream from head of Strosnider ditch, 12 mi (19 km) southeast of Mason, and 13.5 mi (21.7 km) southeast of Yerington.

DRAINAGE AREA.--1,100 mi² (2,849 km²), approximately.

PERIOD OF RECORD.--January 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,574.10 ft (1,394.186 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 24, 1957, near present site at datum 0.56 ft (0.171 m) higher. Oct. 24, 1957, to Apr. 3, 1974, at site 400 ft (120 m) downstream at same datum.

REMARKS.--Records good. Diversions for irrigation above station. Flow regulated by Bridgeport Reservoir. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--31 years, 142 ft³/s (4.021 m³/s), 102,900 acre-ft/yr (127 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,380 ft³/s (67.4 m³/s) Feb. 1, 1963, gage height, 7.60 ft (2.316 m); minimum daily, 2.3 ft³/s (0.065 m³/s) Mar. 12, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 570 ft³/s (16.1 m³/s) May 4, gage height, 4.32 ft (1.32 m); minimum daily, 5.3 ft³/s (0.150 m³/s) 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	20	23	12	15	12	19	90	423	371	267	188	335
2	20	23	14	15	12	20	81	419	369	266	201	308
3	22	20	14	15	12	23	77	436	363	270	220	307
4	22	16	14	16	12	23	73	516	341	274	225	307
5	23	14	14	17	16	27	71	535	338	275	231	316
6	22	14	13	18	20	30	75	519	310	277	238	298
7	23	16	12	19	20	27	102	512	265	314	251	259
8	21	17	14	17	17	24	113	522	218	336	259	218
9	22	17	14	19	18	26	124	523	213	300	288	198
10	23	16	15	20	23	32	161	531	218	291	318	178
11	25	19	16	19	23	32	197	538	234	265	340	167
12	25	17	18	18	20	33	235	537	239	247	354	158
13	24	14	19	18	18	31	248	534	235	250	352	144
14	23	16	18	20	19	28	284	517	227	252	357	140
15	23	16	18	21	18	26	297	505	210	251	362	139
16	23	17	18	21	18	26	355	484	200	252	358	133
17	23	19	20	21	18	26	354	445	190	262	357	119
18	23	20	23	21	18	27	393	428	189	268	355	116
19	23	18	22	20	17	29	376	421	186	262	377	118
20	23	20	15	20	17	31	341	418	196	261	412	122
21	24	22	16	20	16	40	331	449	205	256	429	124
22	23	29	18	20	16	50	341	463	197	234	426	122
23	16	28	19	18	16	54	376	428	206	225	429	120
24	14	25	21	18	17	50	384	402	207	218	409	117
25	20	21	17	18	17	45	394	412	217	212	385	115
26	21	18	17	16	18	45	393	420	237	209	386	117
27	21	16	17	14	18	47	373	408	261	204	381	131
28	21	14	17	14	18	46	383	398	292	215	366	135
29	23	12	17	14	---	48	376	406	278	197	353	134
30	23	12	17	12	---	60	392	410	269	188	347	138
31	23	---	16	12	---	83	---	392	---	187	339	---
TOTAL	682	549	515	546	484	1108	7790	14351	7481	7785	10293	5333
MEAN	22.0	18.3	16.6	17.6	17.3	35.7	260	463	249	251	332	178
MAX	25	29	23	21	23	83	394	538	371	336	429	335
MIN	14	12	12	12	12	19	71	392	186	187	188	115
AC-FT	1350	1090	1020	1080	960	2200	15450	28470	14840	15440	20420	10580
CAL YR 1977	TOTAL	13656.2	MEAN	37.4	MAX	182	MIN	2.3	AC-FT	27090		
WTR YR 1978	TOTAL	56917.0	MEAN	156	MAX	538	MIN	12	AC-FT	112900		

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	7.5	8.3	11	11	14	53	69	197	183	100	31
2	5.7	7.7	8.0	11	11	15	44	71	193	178	95	29
3	5.5	7.6	8.3	11	11	14	41	83	195	166	94	30
4	6.1	7.3	8.6	11	10	15	38	93	200	154	96	32
5	7.6	9.6	8.6	12	11	14	37	88	218	161	91	50
6	7.6	8.9	8.6	11	11	15	36	78	239	175	86	52
7	7.2	11	8.6	11	10	16	33	79	262	195	86	52
8	7.4	12	8.6	12	10	17	32	87	275	194	90	46
9	7.4	14	8.6	13	10	17	37	98	292	201	92	42
10	7.2	12	8.3	12	10	17	40	109	260	218	90	51
11	7.2	8.4	8.3	12	10	17	50	112	225	211	79	44
12	7.2	8.2	8.5	11	10	16	57	120	242	190	74	41
13	7.2	7.0	8.6	11	11	16	63	145	268	185	69	39
14	7.0	9.3	9.0	11	11	17	59	171	267	197	64	41
15	6.7	8.3	15	11	11	18	54	163	256	215	59	41
16	6.6	8.1	12	11	11	18	50	132	212	203	56	37
17	6.5	8.0	13	12	12	19	45	120	192	174	54	35
18	6.6	6.6	12	12	12	20	43	121	200	162	51	34
19	7.0	10	12	12	12	24	45	127	192	150	49	34
20	6.6	11	12	12	13	26	45	141	198	140	48	33
21	6.4	25	13	12	13	30	41	154	202	136	46	33
22	6.4	31	13	12	13	35	42	166	207	133	44	32
23	6.7	18	13	12	13	40	47	160	206	134	43	30
24	6.6	12	12	12	12	35	61	128	209	137	40	30
25	6.2	11	11	12	13	38	78	111	198	137	39	29
26	6.5	10	11	12	13	42	64	106	185	147	38	29
27	7.6	10	12	12	13	47	69	115	206	145	37	28
28	7.2	10	12	12	13	52	71	131	164	131	37	27
29	6.4	9.9	12	11	---	57	69	152	158	120	34	27
30	7.0	8.3	11	11	---	66	66	176	174	113	33	27
31	7.6	---	11	11	---	74	---	189	---	110	32	---
TOTAL	210.6	327.7	325.9	359	321	861	1510	3795	6492	5095	1946	1086
MEAN	6.79	10.9	10.5	11.6	11.5	27.8	50.3	122	216	164	62.8	36.2
MAX	7.6	31	15	13	13	74	78	189	292	218	100	52
MTN	5.5	6.6	8.0	11	10	14	32	69	158	110	32	27
AC-FT	418	650	646	712	637	1710	3000	7530	12880	10110	3860	2150
CAL YR 1977	TOTAL	4826.9	MEAN	13.2	MAX	75	MIN	2.6	AC-FT	9570		
WTR YR 1978	TOTAL	22329.2	MEAN	61.2	MAX	292	MIN	5.5	AC-FT	44290		

WALKER LAKE BASIN

10296000 WEST WALKER RIVER BELOW LITTLE WALKER RIVER, NEAR COLEVILLE, CA

LOCATION.--Lat 38°22'47", long 119°26'57", in NE¼SE¼ sec.9, T.6 N., R.23 E., Mono County, Hydrologic Unit 16050302, in Toiyabe National Forest, on right bank 150 ft (50 m) downstream from Little Walker River 60 ft (20 m) upstream from bridge on U.S. Highway 395, and 13 mi (21 km) southeast of Coleville.

DRAINAGE AREA.--180 mi² (466 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1938 to current year. Prior to October 1958, published as "below East Fork."

REVISED RECORDS.--WSP 1927: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,591.39 ft (2,009.056 m) National Geodetic Vertical Datum of 1929, supplementary adjustment of 1958. Oct. 1, 1939, to Sept. 30, 1969, at site 100 ft (30 m) upstream at same datum. Prior to Oct. 1, 1939, at site 25 ft (8 m) downstream at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Station is above diversions except for a few small ranch ditches. Flow slightly regulated by Poor Lake Reservoir (capacity, unknown) 7 mi (11 km) upstream.

AVERAGE DISCHARGE.--40 years, 254 ft³/s (7.193 m³/s), 184,000 acre-ft/yr (227 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,220 ft³/s (176 m³/s) Nov. 20, 1950, gage height, 8.10 ft (2.469 m), from rating curve extended above 1,900 ft³/s (53.8 m³/s) on basis of slope-area measurement of peak flow; minimum, 4.0 ft³/s (0.11 m³/s) Nov. 18, 1948, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed prior to 1938, 5,800 ft³/s (164 m³/s) Dec. 11, 1937, by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,120 ft³/s (31.7 m³/s) and maximum (*).

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 15	0200	1,520 43.0	4.42 1.347
June 14	0100	*2,010 56.9	4.92 1.500
July 10	0200	1,310 37.1	4.11 1.253

Minimum daily discharge, 14 ft³/s (0.40 m³/s) Oct. 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	15	18	25	41	38	54	300	349	1270	1050	511	117
2	15	18	24	42	38	57	266	361	1310	1020	467	111
3	14	18	25	38	38	55	239	454	1270	900	455	107
4	15	18	26	38	39	64	225	563	1260	827	478	120
5	17	21	26	31	40	63	207	584	1450	868	474	270
6	16	21	26	40	39	60	206	492	1590	1010	421	467
7	16	20	26	36	26	61	186	473	1700	1090	407	365
8	17	20	26	40	30	69	176	532	1690	1060	447	278
9	17	20	26	45	39	73	177	661	1740	1040	432	213
10	17	21	25	38	42	73	192	749	1550	1150	490	317
11	17	21	25	38	46	73	241	753	1280	1100	382	277
12	17	20	26	40	46	70	296	782	1450	939	342	215
13	17	20	26	43	49	68	337	963	1720	889	308	181
14	16	20	27	43	50	69	327	1150	1750	976	279	173
15	16	21	45	36	51	71	308	1050	1520	1080	246	172
16	16	20	35	36	51	76	268	617	1210	1010	236	153
17	16	21	40	40	52	86	250	532	1060	819	221	139
18	16	20	37	40	52	94	244	549	1170	786	205	130
19	16	16	37	40	53	103	249	603	1170	730	189	123
20	17	16	37	40	54	120	247	694	1170	674	176	117
21	17	25	37	41	56	131	228	795	1210	652	170	113
22	17	37	37	40	56	144	221	890	1220	663	163	106
23	17	34	41	39	56	156	233	810	1220	691	156	101
24	17	28	35	40	56	149	276	555	1230	693	146	96
25	17	25	36	40	54	155	368	452	1150	712	139	93
26	17	25	33	43	53	177	333	522	1020	781	132	90
27	18	26	41	41	55	197	338	702	998	741	130	88
28	18	25	42	40	51	228	377	902	825	655	128	86
29	18	25	42	38	---	264	356	1110	803	598	123	85
30	18	25	41	38	---	308	367	1280	957	541	121	83
31	18	---	41	38	---	348	---	1280	---	541	122	---
TOTAL	515	665	1016	1223	1310	3716	8038	22209	38963	26286	8696	4986
MFAN	16.6	22.2	32.8	39.5	46.8	120	268	716	1299	848	281	166
MAX	18	37	45	45	56	348	377	1280	1750	1150	511	467
MIN	14	16	24	31	26	54	176	349	803	541	121	83
AC-FT	1020	1320	2020	2430	2600	7370	15940	44050	77280	52140	17250	9890
CAL YR 1977 TOTAL	23026.5			MEAN 63.1		MAX 445	MIN 9.7	AC-FT 45670				
WTR YR 1978 TOTAL	117623.0			MEAN 322		MAX 1750	MIN 14	AC-FT 233300				

WALKER LAKE BASIN

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10296000 WEST WALKER RIVER BELOW LITTLE WALKER RIVER NEAR COLEVILLE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1958 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)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)
APR 11...	1315	230	103	7.4	9.0	1	10.9	38
SEP 13...	1330	216	139	7.7	6.0	0	9.6	33

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	ALKA- LINEITY (MG/L AS CACO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
APR 11...	11	2.6	6.0	.4	42	.2	56
SEP 13...	9.7	2.1	16	1.2	51	2.7	94

* DATA FROM CALIF. DEPT. OF WATER RESOURCES.

10296500 WEST WALKER RIVER NEAR COLEVILLE, CA

LOCATION.--Lat 38°30'55", long 119°27'15", in NW¼NE¼ sec.28, T.8 N., R.23 E., Mono County, Hydrologic Unit 16050302, in Toiyabe National Forest, on left bank 0.2 mi (0.3 km) downstream from Rock Creek and 5 mi (8 km) southeast of Coleville.

DRAINAGE AREA.--271 mi² (702 km²).

PERIOD OF RECORD.--October 1902 to July 1908 (published as West Fork of Walker River near Coleville 1903, 1905-8 and as Walker River (West Fork) near Coleville 1904), March 1909 to September 1910, June 1915 to March 1938, May 1957 to current year. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORDS.--WSP 880: 1917 (runoff in acre-ft). WSP 1514: 1918, 1923. WSP 1927: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,520 ft (1,682 m), from topographic map. Prior to July 31, 1908, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum. Mar. 1, 1909, to Aug. 31, 1910, nonrecording gage, and June 18, 1915, to Aug. 15, 1919, water-stage recorder near present site at different datums. Aug. 16, 1919, to Mar. 31, 1938, water-stage recorder at site 1,000 ft (300 m) upstream at different datum. May 26, 1957, to Sept. 10, 1963, water-stage recorder at site 10 ft (3 m) downstream at datum 0.38 ft (0.116 m) lower.

REMARKS.--Records good except those for winter periods, which are fair. Station is above diversions except for a few small ranch ditches. Flow slightly regulated by Poor Lake Reservoir (capacity, unknown) 17 mi (27 km) upstream. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--49 years (1902-7, 1909-10, 1915-37, 1957-78), 270 ft³/s (7.646 m³/s), 195,600 acre-ft/yr (241 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft³/s (184 m³/s) Dec. 11, 1937, from slope-area measurement of peak flow; minimum, 5 ft³/s (0.14 m³/s) Dec. 3, 1924, Aug. 27, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges, above base of 1,120 ft³/s (31.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 15	0200	1600 45.3	3.39 1.03
May 22	0500	1430 40.5	3.19 0.972
May 30	0300	1480 41.9	3.32 1.01
June 9	0500	1900 53.8	3.82 1.16
June 14	0600	*1910 54.1	3.83 1.17
July 10	0400	1320 37.4	3.17 0.966

Minimum discharge, 12 ft³/s (0.34 m³/s) Nov. 19.

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	20	24	30	45	56	70	321	375	1310	1040	464	143
2	20	24	30	45	57	74	292	379	1330	1030	421	135
3	20	23	31	43	53	73	264	469	1280	886	421	131
4	20	23	31	43	52	87	249	595	1270	784	430	140
5	21	25	31	43	57	83	220	640	1420	814	449	259
6	20	25	30	43	56	80	227	525	1530	982	393	474
7	21	24	31	52	43	78	199	494	1670	1090	379	394
8	21	25	30	54	41	87	189	551	1660	1060	421	314
9	21	24	30	59	52	93	189	704	1700	1010	393	248
10	21	25	30	54	58	92	199	804	1540	1160	479	325
11	21	26	30	52	58	92	245	825	1250	1120	370	318
12	21	25	30	55	63	91	301	858	1370	938	335	253
13	21	25	32	58	64	87	354	1090	1630	850	309	216
14	22	24	32	58	64	87	343	1300	1720	944	284	205
15	22	26	52	53	63	89	332	1410	1580	1070	260	206
16	21	25	38	50	64	93	284	979	1250	1020	245	183
17	21	24	38	59	59	103	263	821	1080	791	238	167
18	21	24	37	58	61	113	244	846	1230	746	227	158
19	22	18	36	56	59	119	243	918	1190	681	213	147
20	22	22	37	56	59	136	260	1050	1170	617	199	141
21	22	31	39	56	61	149	241	1170	1210	592	193	133
22	22	48	44	54	64	163	234	1300	1220	599	186	125
23	22	32	53	54	66	180	238	1240	1180	632	183	117
24	22	32	47	54	69	173	276	862	1200	638	173	112
25	22	31	45	61	68	176	384	685	1130	640	161	107
26	22	30	43	65	71	197	348	644	1010	747	158	105
27	23	30	49	59	69	216	348	750	983	704	152	105
28	24	30	52	58	69	246	402	975	794	612	154	105
29	23	30	51	53	---	276	379	1190	743	557	148	103
30	23	30	52	54	---	319	393	1350	927	484	146	104
31	24	---	48	55	---	376	---	1340	---	484	146	---
TOTAL	668	805	1189	1659	1676	4298	8461	27139	38577	25322	8730	5673
MFAN	21.5	26.8	38.4	53.5	59.9	139	282	875	1286	817	282	189
MAX	24	48	53	65	71	376	402	1410	1720	1160	479	474
MIN	20	18	30	43	41	70	189	375	743	484	146	103
AC-FT	1320	1600	2360	3290	3320	8530	16780	53830	76520	50230	17320	11250

CAL YR 1977	TOTAL	25805	MEAN	70.7	MAX	463	MIN	14	AC-FT	51180
WTR YR 1978	TOTAL	124197	MEAN	340	MAX	1720	MIN	18	AC-FT	246300

10297000 TOPAZ LAKE NEAR TOPAZ, CA

LOCATION.--Lat 38°41'35", long 119°31'10", in NW 1/4 sec. 33, T.10 N., R.22 E., Douglas County, Hydrologic Unit 16050301, at outlet works of Topaz Lake on West Walker River, 5.5 mi (8.8 km) north of Topaz.

PERIOD OF RECORD.--December 1921 to September 1931 (monthly contents only published in WSP 1734), October 1931 to current year.

GAGE.--Float and nonrecording gages read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Walker River Irrigation District).

REMARKS.--Topaz Lake, formerly known as Alkali Lake and Topaz Reservoir, was formed by the diversion of water from West Walker River through a feeder canal and the construction of an outlet tunnel through a low saddle in rim of lake. Storage began about December 1921. Usable capacity, 59,440 acre-ft (73.3 hm³) between elevations 4,972.3 ft (1,515.56 m) lowest practical elevation for diversion through tunnel (bottom of outlet tunnel at elevation, 4,970 ft or 1,515 m) and 5,005 ft (1,526 m), 3 ft (0.9 m) below top of levee. Usable capacity of reservoir was increased from about 45,000 acre-ft (55.5 hm³) to 59,440 acre-ft (73.3 hm³) in October 1937 by an earthfill, rock-faced levee at south end. Figures given herein represent usable contents. There is 65,000 acre-ft (80.1 hm³) of lake volume below the point of controllable storage. Water is used for irrigation in Walker River Irrigation District.

COOPERATION.--Elevations furnished by Walker River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 60,310 acre-ft (74.4 hm³) June 23, 1974, elevation, 5,005.38 ft (1,525.640 m); no contents Oct. 31, 1924, Sept. 22, 24-30, Oct. 1-15, 1960, Aug. 19 to Dec. 23, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 58,500 acre-ft (72.1 hm³) July 17, elevation, 5,004.60 ft (1,525.402 m). No contents Oct. 1 to Dec. 23.

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

4,972.3	0	4,985	20,390
4,973	1,080	4,990	28,970
4,975	4,180	4,995	38,100
4,977	7,320	5,000	48,350
4,979	10,520	5,005	59,440
4,981	13,760		

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	0	0	0	1140	5430	10800	18900	10300	22100	54200	55700	33900
2	0	0	0	1290	5460	10900	19600	9970	23400	54500	55200	33510
3	0	0	0	1380	5620	11000	19900	9650	24600	54600	54600	32900
4	0	0	0	1410	5770	11100	20200	9520	25700	54600	53900	32300
5	0	0	0	1570	5810	11300	20400	9580	26700	54500	53500	31900
6	0	0	0	1810	5850	11500	20500	9680	28100	54500	52800	31500
7	0	0	0	1810	5900	11700	20500	9650	30600	54800	52200	31700
8	0	0	0	1880	5960	11900	20400	9620	32700	55400	51700	31800
9	0	0	0	2000	6090	12100	20300	9620	34900	55800	51000	31900
10	0	0	0	2280	6250	12300	20200	9870	37100	56300	50700	31800
11	0	0	0	2370	6500	12500	20200	10200	38700	56900	50400	31900
12	0	0	0	2430	7940	12700	19900	10800	40200	57300	49900	32000
13	0	0	0	2590	8150	12900	20400	11400	41900	57600	49200	32000
14	0	0	0	2620	8310	13200	20400	12200	43800	57700	48600	32000
15	0	0	0	2990	8530	13400	19800	13300	45700	57900	47800	32000
16	0	0	0	3050	8660	13600	19100	14200	47400	58400	47000	32000
17	0	0	0	3210	8820	13800	18500	14700	48500	58500	46300	31900
18	0	0	0	3650	8940	14000	17900	14900	49300	58500	45600	31900
19	0	0	0	3930	9150	14200	17100	15100	50200	58400	44800	31800
20	0	0	0	3990	9330	14400	16600	15500	50900	58100	44000	31700
21	0	0	0	4080	9490	14800	15900	16000	51700	57700	43300	31700
22	0	0	0	4240	9680	15000	15200	16700	52100	57500	42100	31600
23	0	0	0	4390	9840	15300	14400	17700	52600	57300	41100	31600
24	0	0	120	4490	10000	15700	13700	18200	53100	57200	40300	31500
25	0	0	280	4640	10200	16000	12900	18400	53900	57100	39500	31400
26	0	0	340	4770	10300	16300	12400	18300	54000	57000	38600	31300
27	0	0	460	4910	10500	16700	11900	18200	54000	57100	37700	31200
28	0	0	670	4990	10600	17100	11400	18400	54400	57000	37100	31100
29	0	0	670	5120	---	17500	10900	19000	54200	56800	36300	30900
30	0	0	770	5210	---	17900	10600	19900	54100	56400	35800	30700
31	0	---	950	5330	---	18300	---	21000	---	56100	34700	---
MAX	.00	.00	.950	5330	10600	18300	20500	21000	54400	58500	55700	33900
MIN	.00	.00	.00	1140	5430	10800	10600	9520	22100	54200	34700	30700
†	4971.13	4971.12	4972.92	4975.74	4979.06	4983.75	4979.02	4985.38	5002.63	5003.52	4993.23	4990.96
‡	0	0	†950	+4380	+5270	+7700	-7700	+10400	+33100	+2000	-21400	-4000
CAL YR 1977	MAX	13400	MIN	.00	† -	7260						
WTR YR 1978	MAX	58500	MIN	.00	† +	30700						

† Elevation, in feet NGVD, at end of month.

‡ Change in contents, in acre-feet.

WALKER LAKE BASIN

10297500 WEST WALKER RIVER AT HOYE BRIDGE, NEAR WELLINGTON, NV

LOCATION.--Lat 38°43'40", long 119°25'40", in NE¼ sec.17, T.10 N., R.23 E., Douglas County, Hydrologic Unit 16050302, on left bank 20 ft (6 m) upstream from Hoyer Bridge, 2 mi (3 km) upstream from head of Saroni Canal, and 4 mi (6 km) southwest of Wellington.

DRAINAGE AREA.--533 mi² (1,380 km²).

PERIOD OF RECORD.--May to August 1910 (published as West Walker River near Wellington), July 1920 to September 1923, March 1924 to August 1925, October 1925 to September 1932, October 1957 to current year. Monthly discharge only for some periods published in WSP 1314.

REVISED RECORDS.--WSP 2127: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,980 ft (1,518 m), from topographic map. May to August 1910, nonrecording gage at same site at different datum. July 1, 1920, to Sept. 30, 1923, water-stage recorder at site 3 mi (5 km) downstream, 1 mi (2 km) downstream from Saroni Canal, at different datum, and supplemental nonrecording gage at Saroni Canal 1 mi (2 km) downstream from head. Mar. 1, 1924, to Sept. 30, 1932, water-stage recorder at same site at different datum.

REMARKS.--Records good. Flow regulated by off-channel storage in Topaz Lake since Jan. 30, 1922. Diversions for irrigation of about 10,500 acres (42.5 km²) above station. Records include releases from Topaz Lake and all return flow from Antelope Valley. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--31 years (1920-23, 1925-32, 1957-78), 229 ft³/s (6.485 m³/s), 165,900 acre-ft/yr (205 hm³/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,180 ft³/s (61.7 m³/s) June 6, 1922; minimum observed, 4.8 ft³/s (0.14 m³/s) Jan. 5, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 860 ft³/s (24.4 m³/s) June 24, gage height, 5.94 ft (1.811 m); minimum 7.6 ft³/s (0.22 m³/s) Oct. 10.

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	20	16	27	19	18	15	82	379	723	737	584	330
2	17	16	29	18	18	14	88	362	750	738	601	298
3	14	16	30	18	18	14	114	351	726	744	618	302
4	13	18	30	19	19	15	116	353	676	742	615	299
5	16	19	27	20	19	14	125	367	713	741	613	299
6	16	19	25	21	19	15	162	380	696	732	608	295
7	14	19	25	17	20	14	205	384	484	702	609	251
8	11	17	24	16	20	13	206	384	535	711	603	244
9	9.0	17	23	16	33	14	207	397	617	707	576	222
10	8.2	17	23	16	40	16	179	423	668	720	571	204
11	8.6	19	24	16	32	15	150	457	591	707	535	201
12	9.4	19	25	16	29	16	155	468	644	655	511	183
13	8.6	19	25	16	26	15	198	514	762	691	491	151
14	8.6	19	24	16	26	16	349	584	739	702	496	150
15	8.2	19	26	18	25	15	464	662	657	705	519	153
16	9.4	19	23	17	25	12	459	591	615	717	498	155
17	11	19	29	24	22	12	441	564	607	712	467	133
18	11	19	53	21	20	12	403	625	656	687	469	136
19	12	19	41	18	19	12	436	625	685	672	489	133
20	12	18	30	17	18	13	426	650	738	673	489	130
21	12	22	24	15	18	14	422	686	757	657	486	129
22	13	24	22	14	17	14	457	670	808	609	483	135
23	14	37	20	12	17	14	483	679	815	608	489	138
24	14	33	19	12	17	14	466	683	835	605	461	135
25	14	33	18	11	17	15	458	660	796	598	454	136
26	14	32	18	11	17	15	444	660	780	609	442	133
27	14	30	19	16	16	16	427	641	774	631	410	134
28	14	29	20	19	14	28	411	635	806	630	405	157
29	15	28	19	18	---	42	400	666	756	607	402	185
30	15	27	19	18	---	71	390	719	761	599	399	203
31	15	---	19	18	---	77	---	740	---	583	390	---
TOTAL	391.0	668	780	523	599	602	9323	16959	21170	20931	15783	5754
MEAN	12.6	22.3	25.2	16.9	21.4	19.4	311	547	706	675	509	192
MAX	20	37	53	24	40	77	483	740	835	744	618	330
MTN	8.2	16	18	11	14	12	82	351	484	583	390	129
AC-FT	776	1320	1550	1040	1190	1190	18490	33640	41990	41520	31310	11410
CAL YR 1977 TOTAL	21625.4			59.2	MAX 401	MIN 8.2	AC-FT 42890					
WTR YR 1978 TOTAL	93483.0			256	MAX 835	MIN 8.2	AC-FT 185400					

WALKER LAKE BASIN

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10300000 WEST WALKER RIVER NEAR HUDSON, NV

LOCATION.--Lat 38°48'35", long 119°13'35", in SE¼SW¼ sec.18, T.11 N., R.25 E., Lyon County, Hydrologic Unit 16050302, on left bank 0.5 mi (0.8 km) upstream from Wilson Canyon and 3 mi (5 km) southeast of Hudson.

DRAINAGE AREA.--964 mi² (2,497 km²).

PERIOD OF RECORD.--August 1914 to March 1925, January 1947 to current year. August 1914 to May 1921 published as "at Hudson."

GAGE.--Water-stage recorder. Altitude of gage is 4,650 ft (1,417 m), from topographic map. Prior to May 1921, nonrecording gage at site 2.5 mi (4.0 km) upstream at different datum. May 1921 to March 1925, water-stage recorder at approximately same site at different datum.

REMARKS.--Records good except those for winter months, which are fair. Flow regulated by off-channel storage in Topaz Lake since Jan. 30, 1922. Many diversions above station for irrigation. Station is below return flow from irrigated areas in Smith Valley. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--41 years (1914-24, 1947-78), 187 ft³/s (5.296 m³/s), 135,5500 acre-ft/yr (167 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s (76.5 m³/s) Dec. 24, 1955, gage height, 7.42 ft (2.262 m), from floodmarks; minimum, 3.8 ft³/s (0.11 m³/s) Jan. 22, 1962, but may have been less during periods of ice effect.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 554 ft³/s (15.7 m³/s) June 28, gage height, 2.85 ft (0.869 m); minimum, 19 ft³/s (0.54 m³/s) Oct. 4-6.

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	33	22	28	28	26	28	99	170	365	442	347	172
2	25	22	30	28	26	27	99	149	361	424	335	144
3	22	22	31	28	26	27	103	122	372	422	339	136
4	20	22	31	28	26	27	88	113	314	422	334	133
5	19	23	29	29	29	26	84	104	319	441	334	132
6	19	23	26	29	28	27	99	110	325	428	345	130
7	20	23	26	29	28	27	138	115	241	401	351	127
8	21	23	25	28	29	28	159	118	212	401	355	133
9	21	23	24	28	34	27	162	118	233	409	355	138
10	21	23	24	28	43	27	159	132	318	408	351	144
11	20	22	25	27	43	26	112	147	294	406	298	140
12	21	22	26	27	37	27	81	157	266	411	279	135
13	20	22	26	28	36	27	62	172	425	433	259	113
14	20	22	25	28	34	26	108	211	457	412	251	116
15	22	22	26	29	32	26	339	294	430	405	265	115
16	21	22	26	30	32	30	362	300	366	417	234	131
17	21	22	35	32	32	30	354	238	352	429	221	112
18	20	22	52	32	31	30	294	255	338	405	229	103
19	20	22	44	31	30	31	287	277	358	378	228	94
20	20	22	39	30	29	31	267	300	401	344	219	92
21	21	23	35	29	28	32	233	331	391	355	215	98
22	21	30	31	29	28	34	267	366	421	345	211	95
23	22	39	35	28	28	33	287	361	431	340	216	89
24	23	38	32	26	29	32	284	334	491	340	198	81
25	25	34	30	27	29	33	277	309	494	335	190	82
26	24	34	29	27	27	33	264	309	497	335	206	86
27	23	32	30	26	27	32	250	296	489	353	232	75
28	23	31	31	27	27	32	223	286	529	355	210	75
29	22	30	31	27	---	35	200	293	480	336	190	84
30	22	29	29	26	---	49	180	333	471	339	191	90
31	22	---	28	26	---	78	---	366	---	339	199	---
TOTAL	674	766	939	875	854	978	5921	7186	11441	12010	8187	3395
MEAN	21.7	25.5	30.3	28.2	30.5	31.5	197	232	381	387	264	113
MAX	33	39	52	32	43	78	362	366	529	442	355	172
MIN	19	22	24	26	26	26	62	104	212	335	190	75
AC-FT	1340	1520	1860	1740	1690	1940	11740	14250	22690	23820	16240	6730
CAL YR 1977 TOTAL	19570			53.6	242	19	AC-FT	38820				
WTR YR 1978 TOTAL	53226			146	529	19	AC-FT	105600				

LOCATION.--Lat 38°55'11", long 119°11'20", in SW 1/4 sec.9, T.12 N., R.25 E., Lyon County, Hydrologic Unit 16050303, on right bank 50 ft (15 m) downstream from bridge, 2 mi (3 km) south of Mason, and 5 mi (8 km) south-southwest of Yerington.

PERIOD OF RECORD.--May 1974 to current year.

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

REMARKS.--Records good. Many diversions for irrigation above station. Flow regulated by Bridgeport Reservoir and Topaz Reservoir, combined capacity, 101,900 acre-ft (126 hm³). Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft³/s (43.9 m³/s) June 9, 1975, gage height, 8.10 ft (2.469 m); minimum daily, 19 ft³/s (0.54 m³/s) Oct. 13-17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 648 ft³/s (18.4 m³/s) Apr. 16, gage height, 6.30 ft (1.920 m); minimum daily, 19 ft³/s (0.54 m³/s) Oct. 13-17.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	22	35	37	36	38	177	326	388	343	370	237
2	40	25	35	36	40	39	195	295	360	330	370	194
3	37	26	35	35	53	39	205	274	385	330	370	66
4	36	27	35	35	53	43	200	301	350	326	370	206
5	26	26	36	34	46	42	195	382	330	343	370	206
6	24	26	36	34	43	41	155	385	330	369	380	248
7	23	26	36	34	42	42	140	363	242	343	380	240
8	22	26	37	35	40	44	165	369	173	385	380	219
9	21	32	37	35	39	46	205	375	143	363	400	201
10	20	34	37	34	39	48	240	391	201	346	448	198
11	20	34	43	31	39	67	265	407	211	353	401	184
12	20	36	42	28	39	67	254	398	175	343	388	186
13	19	34	42	28	38	66	251	398	298	385	379	173
14	19	35	42	29	38	64	268	411	385	357	369	191
15	19	36	43	30	38	64	506	444	363	346	369	198
16	19	36	46	31	37	64	607	458	283	350	320	186
17	19	37	68	34	37	62	615	357	280	366	274	168
18	20	38	62	34	36	57	560	336	248	363	265	151
19	21	39	54	32	36	59	522	350	286	366	289	145
20	22	32	50	29	36	61	437	360	310	336	353	137
21	24	28	48	28	36	67	353	417	307	346	379	155
22	25	29	47	28	36	83	357	458	310	320	372	166
23	26	30	47	29	35	91	382	475	310	301	375	162
24	25	31	46	34	36	96	404	391	343	292	366	157
25	21	32	42	38	36	87	414	379	363	300	317	149
26	22	35	40	37	36	87	401	385	369	320	346	135
27	22	35	40	36	37	85	360	375	346	340	394	121
28	22	35	40	36	37	89	340	372	420	350	360	121
29	21	35	40	37	---	85	289	369	388	360	307	126
30	21	35	39	37	---	91	274	394	346	360	277	128
31	21	---	37	35	---	135	---	411	---	360	245	---
TOTAL	743	952	1317	1030	1094	2049	9736	11806	9243	10692	10983	5154
MEAN	24.0	31.7	42.5	33.2	39.1	66.1	325	381	308	345	354	172
MAX	46	39	68	38	53	135	615	475	420	385	448	248
MIN	19	22	35	28	35	38	140	274	143	292	245	66
AC-FT	1470	1890	2610	2040	2170	4060	19310	23420	18330	21210	21780	10220
CAL YR 1977	TOTAL	23951	MEAN	65.6	MAX	251	MIN	19	AC-FT	47510		
WTR YR 1978	TOTAL	64799	MEAN	178	MAX	615	MIN	19	AC-FT	128500		

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LOCATION.--Lat 39°09'10", long 119°05'50", in SE 1/4 sec. 20, T.15 N., R.26 E., Lyon County, Hydrologic Unit 16050303, on left bank 600 ft (180 m) upstream from timber bridge at Julian Ranch, 1.8 mi (2.9 km) downstream from Southern Pacific Railroad bridge, 4.6 mi (7.4 km) east of Wabuska, and 16 mi (26 km) upstream from Weber Dam.

WATER-DISCHARGE RECORDS

REVISED RECORDS.--WSP 1314: 1923 (M). WSP 1634: 1904.

REMARKS.--Records good. Many diversions for irrigation above station. Flow regulated by Bridgeport Reservoir and Topaz Reservoir, combined capacity, 101,900 acre-ft (126 hm³).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 3,280 ft³/s (92.9 m³/s) July 10, 11, 1906, gage height, 5.90 ft (1.798 m), site and datum then in use; no flow at times in 1924, 1925, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 415 ft³/s (11.8 m³/s) Apr. 17, gage height, 5.14 ft (1.567 m); minimum, 0.58 ft³/s (0.02 m³/s) Nov. 18.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	1.3	1.2	6.4	11	19	30	33	59	45	62	54
2	20	1.2	1.3	6.3	11	20	52	44	54	37	52	60
3	14	1.0	1.4	5.6	11	19	67	20	40	39	44	51
4	12	1.1	1.4	5.3	10	23	59	18	46	45	50	46
5	8.8	.95	1.4	6.3	9.5	22	39	35	52	43	54	58
6	6.3	.84	1.8	6.2	12	21	21	36	67	51	46	79
7	3.8	.84	1.4	5.1	13	24	20	19	72	45	42	129
8	3.5	2.0	1.4	5.1	16	27	33	17	55	33	61	133
9	3.4	2.4	2.2	5.5	17	29	50	24	35	70	55	123
10	3.1	2.9	2.7	5.3	24	28	72	24	23	70	52	137
11	2.5	3.6	3.0	4.9	32	32	100	35	23	56	79	133
12	1.5	2.2	3.6	4.9	28	40	102	34	31	59	65	112
13	1.1	2.0	4.5	4.7	30	39	75	31	35	38	49	103
14	1.2	1.9	4.9	4.6	29	37	55	31	49	44	42	60
15	1.2	2.0	4.2	5.1	27	36	79	40	122	45	47	69
16	1.1	1.6	3.6	6.3	26	32	313	44	135	45	56	84
17	1.0	1.1	3.9	7.9	25	29	397	45	80	44	51	94
18	1.1	.84	6.0	7.7	24	21	334	27	50	56	38	72
19	1.3	1.1	12	7.3	23	19	256	30	35	77	33	72
20	.91	1.8	16	6.7	23	17	192	46	32	112	29	62
21	.84	1.3	18	4.9	22	19	93	44	38	113	44	55
22	.84	1.4	15	4.2	21	18	43	45	35	142	43	69
23	.70	2.0	12	5.6	21	22	42	65	20	120	27	86
24	.70	2.6	11	9.3	20	16	76	54	19	113	43	100
25	.76	2.7	8.9	10	20	13	89	43	19	109	42	85
26	.95	2.3	7.8	12	19	11	106	48	20	98	32	75
27	1.2	2.8	9.2	13	19	14	82	63	22	83	103	39
28	1.1	2.3	8.1	12	19	13	55	57	40	92	166	29
29	.94	1.5	7.7	11	---	11	48	58	94	99	178	38
30	.86	1.5	7.3	12	---	8.1	29	57	65	83	114	51
31	.98	---	6.8	11	---	9.0	---	68	---	73	71	---
TOTAL	131.68	53.07	189.7	222.2	562.5	688.1	3009	1235	1467	2179	1870	2358
MEAN	4.25	1.77	6.12	7.17	20.1	22.2	100	39.8	48.9	70.3	60.3	78.6
MAX	34	3.6	18	13	32	40	397	68	135	142	178	137
MIN	.70	.84	1.2	4.2	9.5	8.1	20	17	19	33	27	29
AC-FT	261	105	376	441	1120	1360	5970	2450	2910	4320	3710	4680
CAL YR 1977	TOTAL	7979.75	MEAN	21.9	MAX	150	MIN	.70	AC-FT	15830		
WTR YR 1978	TOTAL	13965.25	MEAN	38.3	MAX	397	MIN	.70	AC-FT	27700		

WALKER LAKE BASIN

10301500 WALKER RIVER NEAR WABUSKA, NV--Continued

WATER-QUALITY RECORDS

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

CHEMICAL ANALYSES: October 1968 to September 1969, daily (composited) and monthly; October 1969 to current year, monthly.

SPECIFIC CONDUCTANCES: October 1968 to September 1976, once-daily; October 1976 to current year, monthly.

BIOLOGICAL DATA: October 1974 to September 1977, monthly; October 1977 to current year, monthly (seasonal).

MICROBIOLOGICAL DATA: October 1974 to current year, monthly.

WATER TEMPERATURES: February 1960 to September 1963, occasional; October 1963 to September 1968, monthly; October 1968 to September 1976, once-daily; October 1976 to current year, monthly.

SEDIMENT DATA: October 1973 to current year, monthly.

REMARKS.--Inflow from two drainage ditches enters stream less than a mile (1.6 km) above sampling site. Because inflow and stream-flow differ in quality, and because the waters do not mix thoroughly above sampling site, flow at site is not homogenous either chemically or thermally. This doubtless was responsible for some of the variation shown by daily specific-conductance and temperature data during water years 1969-76. Detailed sampling information is available from U.S. Geol. Survey office, Carson City, Nev.

COOPERATION.--Pesticide analyses by U.S. Environmental Protection Agency.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 792 micromhos Dec. 12, 1972; minimum, 183 micromhos June 26, 1969.

PHYTOPLANKTON: Maximum, 120,000 cells/mL Mar. 27, 1975; minimum, 590 cells/mL Nov. 17, 1977.

FECAL STREPTOCOCCI: Maximum, 1,600 colonies/100 mL (non-ideal colony count) Dec. 23, 1977; minimum, 16 colonies/100 mL Mar. 9, 1976.

WATER TEMPERATURES: Maximum, 36.5°C July 28, 1961; minimum, freezing point on several days during winter months of most years.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 1,720 mg/L Mar. 27, 1975; minimum, 10 mg/L Nov. 17, 1977.

REVISIONS.--Microbiological results reported as "0 colonies/100 mL" in previous years should be corrected to "less than 1 colony/100 mL."

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
04...	1000	12	687	--	10.0	--	--	--	--	--
17...	0955	.93	576	--	10.5	15	--	--	<2	--
NOV										
17...	1040	1.0	673	8.2	7.5	8	--	--	47	--
DEC										
02...	1020	1.2	711	--	5.0	--	--	--	--	--
23...	1000	13	611	8.4	2.0	90	--	--	110	--
JAN										
30...	1045	12	673	8.0	4.5	25	--	11.2	3	--
MAR										
02...	1010	20	648	8.2	8.5	40	--	--	150	--
31...	1040	8.2	673	8.4	12.0	30	--	9.8	62	--
APR										
25...	1010	85	634	8.1	12.0	95	--	10.0	--	290
MAY										
31...	1040	63	383	8.2	16.0	45	--	8.7	--	150
JUN										
28...	1015	35	449	7.9	19.0	--	6.9	8.1	--	72
AUG										
04...	1305	52	368	8.1	27.0	--	17	7.0	--	60
SEP										
12...	1320	111	396	8.4	17.5	--	3.2	8.9	--	19

10301500 WALKER RIVER NEAR WABUSKA, NV--Continued

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

DATE	STREP- TOCUCCI FECAL, (COLS. PER 100 ML)	STREP- TOCUCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SU4)
OCT 04...	--	--	--	--	--	--	--	--	--	--
17...	74	--	140	42	9.6	69	2.5	--	--	--
NOV 17...	90	--	160	47	10	90	3.1	--	--	--
DEC 02...	--	--	--	--	--	--	--	--	--	--
23...	K1600	--	150	43	11	74	2.6	5.7	170	100
JAN 30...	180	--	170	48	12	81	2.7	5.5	190	110
MAR 02...	130	--	160	46	12	77	2.6	5.8	180	100
31...	160	--	170	48	12	83	2.8	6.1	190	120
APR 25...	--	420	100	28	7.4	36	1.6	4.8	120	40
MAY 31...	--	200	110	30	7.6	39	1.6	5.5	130	42
JUN 28...	--	170	130	36	9.6	50	1.9	6.2	140	55
AUG 04...	--	160	100	30	6.7	36	1.5	5.6	130	37
SEP 12...	--	98	120	34	7.4	38	1.5	4.6	140	44

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 CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT 04...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	.01	.01	.02	.01
NOV 17...	--	--	--	--	--	--	.01	.01	.02	.01
DEC 02...	--	--	--	--	--	--	--	--	--	--
23...	29	1.0	26	379	394	14.1	.27	.03	.30	.04
JAN 30...	28	1.1	30	430	450	14.4	--	--	.06	.02
MAR 02...	27	.8	28	408	406	22.0	--	--	.04	.01
31...	34	.9	23	412	441	9.12	--	--	.05	.03
APR 25...	12	.6	16	217	219	49.8	--	--	.09	.11
MAY 31...	16	.7	20	248	240	42.2	.02	.01	.03	.09
JUN 28...	18	.8	20	291	280	27.5	.02	.00	.02	.00
AUG 04...	12	.5	21	--	--	--	.04	.00	.04	.05
SEP 12...	13	.6	21	247	247	74.0	.08	.01	.09	.11

K: NON-IDEAL COLONY COUNT.

10301500 WALKER RIVER NEAR WABUSKA, NV--Continued

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
17...	--	.24	--	--	.27	.12	--	--	--	--
NOV										
17...	--	.24	--	--	.27	.14	--	--	--	--
DEC										
02...	--	--	--	--	--	--	--	--	--	--
23...	.09	.50	.44	.53	.84	.26	.10	5.4	--	--
JAN										
30...	--	.35	--	.63	.43	.16	.05	3.0	--	--
MAR										
02...	--	.40	--	.29	.45	.07	.05	--	3.9	--
31...	--	.56	--	.30	.64	.09	.08	--	3.5	1.4
APR										
25...	--	.81	--	.49	1.0	.37	.08	--	--	--
MAY										
31...	--	.77	--	.54	.89	.19	.08	6.0	--	--
JUN										
28...	--	.52	--	.51	.54	.14	.09	--	7.0	.5
AUG										
04...	--	.49	--	--	.58	.18	.12	5.4	--	--
SEP										
12...	.00	.64	.36	.36	.84	.13	.09	--	12	.2

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHROMIUM, DIS- SOLVED (UG/L AS CR)
DEC										
23...	1000	14	13	--	--	--	<10	1	0	0
MAR										
31...	1040	20	15	100	0	610	<10	5	0	0
JUN										
28...	1015	19	17	300	200	430	--	--	10	0
SEP										
12...	1320	14	14	200	200	270	--	--	10	0

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOV- ERABLE (UG/L AS MN)
DEC									
23...	<10	0	30	2	4700	20	60	13	210
MAR									
31...	<10	2	<10	2	1500	10	30	10	260
JUN									
28...	3	2	12	4	1200	30	--	--	130
SEP									
12...	0	0	7	2	650	30	--	--	60

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC									
23...	70	.2	.0	0	0	--	--	40	0
MAR									
31...	140	.0	.0	0	0	<10	0	20	0
JUN									
28...	20	.0	.0	0	0	1	0	20	0
SEP									
12...	0	.0	.2	0	0	0	0	10	10

10301500 WALKER RIVER NEAR WABUSKA, NV--Continued

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

DATE	TIME	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ATRA- ZINE, TOTAL (UG/L)	ATRA- ZINE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDU, TOTAL (UG/L)
NOV 17...	1040	ND	ND	ND	ND	--	ND	ND	ND	ND
MAR 31...	1040	ND	--	ND	--	ND	--	ND	--	ND
MAY 31...	1040	ND	ND	ND	ND	ND	--	ND	ND	ND
SEP 12...	1320	ND	--	ND	--	--	--	ND	--	ND

DATE	DDU, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)
NOV 17...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 31...	--	ND	--	ND	--	ND	--	ND	--	ND
MAY 31...	ND	ND	ND	ND	ND	--	ND	ND	ND	ND
SEP 12...	--	ND	--	ND	--	ND	--	ND	--	ND

DATE	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 17...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 31...	--	ND	--	ND	--	ND	ND	--	ND	--
MAY 31...	ND	--	ND	ND	ND	ND	ND	ND	--	ND
SEP 12...	--	ND	--	ND	--	ND	ND	--	ND	--

DATE	METH- OXY- CHLOR, TOTAL (UG/L)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 17...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 31...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 31...	ND	ND	--	ND	--	ND	--	ND	ND	ND
SEP 12...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	TOTAL TRI- THION (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	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)	SIMA- ZINE TOTAL COUL- SON COND. (UG/L)	SIMA- ZINE IN BOTTOM MATERI- AL (UG/ KG DRY SOLIDS)
NOV 17...	ND	ND	ND	ND	ND	ND	ND	ND	--	ND
MAR 31...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 31...	--	ND	--	--	--	--	--	--	ND	--
SEP 12...	ND	--	--	--	--	--	--	--	--	--

ND: NONE DETECTED.

10301500 WALKER RIVER NEAR WABUSKA, NV--Continued

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

PHYTOPLANKTON

DATE TIME	NOV 17,77 1040	MAR 31,78 1040	MAY 31,78 1040	JUN 28,78 1015	AUG 4,78 1305	SEP 12,78 1305				
TOTAL CELLS/ML	590	3400	11000	4000	4800	1400				
DIVERSITY: DIVISION	1.3	0.1	1.4	1.1	1.5	0.8				
..CLASS	1.3	0.1	1.4	1.1	1.5	0.8				
..ORDER	1.4	0.3	1.6	1.6	1.9	0.9				
...FAMILY	2.6	2.6	2.8	3.2	3.2	2.4				
....GENUS	2.8	2.9	3.1	3.5	3.6	2.5				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....CHARACIACEAE										
....SCHRUEDERIA	--	-	--	-	--	-	31	1	47	1
....COELASTRACEAE										
....COELASTRUM	--	-	--	-	450	4	--	-	--	-
....HYDRODICTYACEAE										
....PEDIASSTRUM	--	-	--	-	600	6	--	-	--	-
....OOCYSTACEAE										
....ANKISTROUESMUS	--	-	--	-	--	-	160	4	47	1
....CHODATELLA	--	-	--	-	--	-	250	6	*	0
....KIRCHNERIELLA	--	-	--	-	--	-	63	2	*	0
....ODCYSTIS	--	-	--	-	--	-	63	2	--	-
....SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	--	-	--	-	330	7
....SCENEDESMUS	26	4	--	-	300	3	63	2	380	8
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	36	1	--	-	31	1	120	2
CHRYSDOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
....COSCINODISCACEAE										
....CYCLOTELLA	13	2	110	3	75	1	440	11	170	3
....MELOSIRA	--	-	--	-	530	5	--	-	120	2
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	*	0	31	1	47	1
....COCONEIS	13	2	140	4	150	1	160	4	450	9
....RHOICOSPHEA	--	-	--	-	110	1	--	-	--	-
....CYMBELLACEAE										
....CYMBELLA	6	1	36	1	*	0	63	2	71	1
....EPITHEMIA	6	1	72	2	*	0	--	-	71	1
....DIATOMACEAE										
....DIATOMA	--	-	180	5	--	-	31	1	--	-
....FRAGILARIACEAE										
....FRAGILARIA	71	12	--	-	2600#	24	750#	19	780#	16
....SYNEDRA	65	11	430	13	*	0	--	-	*	0
....GOMPHONEMACEAE										
....GOMPHONEMA	13	2	180	5	150	1	190	5	140	3
....NAVICULACEAE										
....CALONEIS	--	-	--	-	110	1	--	-	--	-
....GYROSIGMA	--	-	--	-	--	-	--	-	--	-
....NAVICULA	13	2	1200#	36	1100	10	660#	16	310	6
....PINNULARIA	--	-	180	5	150	1	--	-	*	0
....NITZSCHACEAE										
....DENTICULA	--	-	--	-	*	0	--	-	47	1
....NITZSCHIA	84	14	610#	18	980	9	690#	17	280	6
....SURIPELLACEAE										
....SURIPELLA	45	8	210	6	75	1	63	2	*	0
....TABELLARIACEAE										
....TABELLARIA	--	-	--	-	--	-	--	-	71	1
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONIDALES										
....CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	94	2	--	-

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

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

10301500 WALKER RIVER NEAR WABUSKA, NV--Continued

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

PHYTOPLANKTON

DATE TIME	NOV 17,77 1040	MAR 31,78 1040	MAY 31,78 1040	JUN 28,78 1015	AUG 4,78 1305	SEP 12,78 1305
TOTAL CELLS/ML	590	3400	11000	4000	4800	1400
DIVERSITY: DIVISION	1.3	0.1	1.4	1.1	1.5	0.8
..CLASS	1.3	0.1	1.4	1.1	1.5	0.8
..ORDER	1.4	0.3	1.6	1.6	1.9	0.9
...FAMILY	2.6	2.6	2.8	3.2	3.2	2.4
....GENUS	2.8	2.9	3.1	3.5	3.6	2.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)												
..CYANOPHYCEAE												
...CHROCOCCALES												
....CHROCOCCACEAE												
.....ANACYSTIS	--	-	--	-	--	-	190	5	--	-	--	-
...HORMOGONALES												
....NOSTOCACEAE												
.....ANABAENA	230#	38	--	-	--	-	--	-	--	-	--	-
....APHANIZOMENON	--	-	--	-	3300#	30	--	-	--	-	--	-
...OSCILLATORIA												
....LYNGBYA	--	-	--	-	--	-	--	-	--	-	120	8
...OSCILLATORIA	--	-	--	-	--	-	--	-	1200#	24	--	-
...RIVULARIACEAE	--	-	--	-	--	-	--	-	--	-	--	-
....RAPHIDIOPSIS	--	-	--	-	--	-	--	-	--	-	58	4
EUGLENOPHYTA (EUGLENOIDS)												
..EUGLENOPHYCEAE												
...EUGLENALES												
....EUGLENACEAE												
.....EUGLENA	6	1	--	-	--	-	--	-	*	0	--	-

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

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

PERIPHYTON

Retrieval Date	Length of exposure Polyethylene strip (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)
		Dry weight	Ash weight		
Jan. 30	38	4.72	1.26	0.230	0.000
Apr. 25	26	0.394	0.079	0.020	0.000
July 31	38	1.89	1.89	1.34	0.330
Oct. 24	42	9.61	5.98	7.25	0.000

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
SEP 08...	0940	23	233	14	50	70	84

DATE	TIME	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	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
SEP 08...	93	94	95	96	98	99	100	

WALKER LAKE BASIN

10301500 WALKER RIVER NEAR WABUSKA, NV--Continued

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

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (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
OCT							
17...	0955	.93	22	.06	--	--	--
NOV							
17...	1040	1.0	10	.03	--	--	--
DEC							
23...	1000	13	128	4.8	97	98	100
JAN							
30...	1045	12	66	2.2	--	--	--
MAR							
02...	1010	20	199	11	--	--	--
31...	1040	8.2	84	1.9	--	--	--
APR							
25...	1010	85	298	68	--	--	--
MAY							
31...	1040	63	128	22	--	--	--
JUN							
28...	1015	35	46	4.3	--	--	--
AUG							
04...	1305	52	36	5.1	--	--	--
SEP							
12...	1320	111	43	13	--	--	--

WALKER LAKE BASIN

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10301600 WALKER RIVER ABOVE WEBER RESERVOIR NEAR SCHURZ, NV

LOCATION.--Lat 39°06'12", long 118°55'42", in NW¼SE¼ sec.2, T.14 N., R.27 E., Lyon County, Hydrologic Unit 16050303, on left bank, 5.5 mi (8.8 km) upstream from Weber Dam, about 11 mi (18 km) downstream from gage near Wabuska, and 12 mi (19 km) northwest of Schurz.

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

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 4,215 ft (1,285 m) from topographic map.

REMARKS.--Records good except for periods of no gage height record, Apr. 12-27 and Aug. 29 to Sept. 14, which are poor. Many diversions for irrigation above station. Flow regulated by Bridgeport Reservoir and Topaz Reservoir, combined capacity, 101,900 acre-ft (126 hm³).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 490 ft³/s (13.9 m³/s) Apr. 16, 1978, gage height, 6.65 ft (2.027 m); no flow July 16-18, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 490 ft³/s (13.9 m³/s) Apr. 16, gage height, 6.65 ft (2.027 m) minimum, 0.01 ft³/s (0.0003 m³/s) Oct. 29 to Nov. 1.

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	32	.01	.03	4.2	11	14	11	30	62	37	47	60
2	26	.03	.05	4.2	13	16	36	37	56	26	41	48
3	15	.03	.04	4.0	11	16	54	32	44	24	35	50
4	10	.03	.05	4.7	10	17	57	18	44	31	42	43
5	7.8	.03	.05	4.2	11	20	49	18	47	28	45	40
6	4.2	.02	.07	5.3	11	19	34	33	58	33	42	50
7	2.6	.02	.06	4.5	12	19	22	22	66	36	33	70
8	1.9	.03	.05	4.0	14	24	27	13	66	24	47	112
9	1.5	.02	.06	4.2	18	26	36	13	45	40	52	110
10	1.2	.03	.06	4.2	22	27	51	18	34	56	43	106
11	.93	.03	.06	4.0	31	26	69	21	27	42	60	114
12	.74	.02	.10	3.7	33	33	94	26	30	43	61	110
13	.42	.03	.86	4.5	34	37	80	27	36	31	44	100
14	.14	.03	1.3	4.0	32	36	60	24	37	28	38	82
15	.09	.03	1.4	4.2	32	34	100	25	80	33	41	61
16	.08	.03	1.1	4.7	27	32	290	34	101	33	48	66
17	.06	.04	1.4	6.2	30	31	350	37	72	30	50	81
18	.05	.03	1.5	7.0	27	26	280	32	47	38	38	78
19	.03	.02	3.6	7.0	23	19	220	24	34	50	32	66
20	.03	.12	6.0	6.6	22	16	160	30	28	64	32	66
21	.03	.04	15	5.6	20	17	80	39	27	74	34	55
22	.02	.05	21	4.5	20	18	38	36	28	88	54	55
23	.02	.03	13	3.1	19	18	40	42	22	100	35	68
24	.02	.03	11	3.5	18	21	64	59	20	85	36	85
25	.02	.03	8.4	4.0	16	15	80	43	18	80	47	89
26	.02	.03	6.6	7.7	15	12	90	45	18	72	34	88
27	.02	.03	7.3	13	15	11	70	51	21	60	44	65
28	.02	.04	6.6	15	14	12	60	56	22	59	65	41
29	.02	.03	6.2	13	---	12	51	53	43	66	140	34
30	.01	.03	5.3	12	---	10	39	56	60	62	150	41
31	.01	---	4.7	13	---	8.4	---	57	---	53	100	---
TOTAL	104.98	.97	122.94	189.8	561	642.4	2692	1051	1293	1526	1610	2134
MEAN	3.39	.032	3.97	6.12	20.0	20.7	89.7	33.9	43.1	49.2	51.9	71.1
MAX	32	.12	21	15	34	37	350	59	101	100	150	114
MIN	.01	.01	.03	3.1	10	8.4	11	13	18	24	32	34
AC-FT	208	1.9	244	376	1110	1270	5340	2080	2560	3030	3190	4230
WTR YR 1978	TOTAL	11928.09	MEAN	32.7	MAX	350	MIN	.01	AC-FT	23660		

WALKER LAKE BASIN

10301600 WALKER RIVER ABOVE WEBER RESERVOIR NEAR SCHURZ, NV--Continued

WATER-QUALITY RECORDS

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

CHEMICAL ANALYSES: June 1977 to current year, monthly.

SPECIFIC CONDUCTANCES AND WATER TEMPERATURES: June to October 1977, twice-monthly; November 1977 to current year, monthly.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 705 micromhos Jan. 30, 1978; minimum, 365 micromhos April 25, 1978.

WATER TEMPERATURES: Maximum, 26.0°C July 22, Aug. 11, 1977; minimum, 4.0°C Dec. 23, 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	BORON, DIS- SOLVED (UG/L AS B)
OCT										
04...	1145	11	591	13.5	--	--	--	--	--	--
17...	1120	.06	400	15.0	130	37	9.8	53	2.0	430
NOV										
17...	1220	.03	423	10.5	120	34	8.9	43	1.7	320
DEC										
02...	1105	.05	435	8.0	--	--	--	--	--	--
23...	1140	14	607	4.0	150	42	10	72	2.6	530
JAN										
30...	1310	7.2	705	5.0	170	48	12	85	2.8	590
MAR										
02...	1215	17	648	8.5	160	45	12	77	2.6	570
31...	1320	7.9	650	12.5	170	48	12	79	2.6	580
APR										
25...	1250	89	365	13.5	100	30	7.0	35	1.5	320
MAY										
31...	1250	60	414	18.0	120	33	8.1	44	1.8	350
JUN										
28...	0855	21	490	15.5	140	40	9.2	53	2.0	430
AUG										
04...	1100	41	420	24.0	120	34	7.9	43	1.7	350
SEP										
12...	1145	110	400	15.0	120	37	7.5	41	1.6	270

WALKER LAKE BASIN

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10301750 WALKER RIVER AT DIVERSIONS ABOVE SCHURZ, NV

LOCATION.--Lat 39°00'51", long 118°51'37", in SE¼SW¼ sec.4, T.13 N., R.28 E., Lyon County, Hydrologic Unit 16050303, at diversions approximately 2 mi (3 km) downstream from Weber Reservoir and approximately 5 mi (8 km) northwest of Schurz.

DRAINAGE AREA.--2,900 mi² (7,500 km²), approximately.

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

CHEMICAL ANALYSES: June 1977 to current year, monthly.

SPECIFIC CONDUCTANCES: May 1977 to October 1977, twice-monthly; November 1977 to current year, monthly.

WATER TEMPERATURES: June to October 1977, twice-monthly; November 1977 to current year, monthly.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 743 micromhos Sept. 8, 1977; minimum, 473 micromhos, Sept. 12, 1978.

WATER TEMPERATURES: Maximum, 27.0°C Aug. 1, 1977; minimum, 4.0°C Dec. 23, 1977, Jan. 30, 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)	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	BORON, DIS- SOLVED (UG/L AS B)
OCT										
04...	1315	.06	603	17.0	--	--	--	--	--	--
17...	1245	10	609	14.0	150	42	11	74	2.6	620
NOV										
17...	1330	E.50	668	6.5	160	45	12	88	3.0	630
DEC										
02...	1250	E.50	671	6.0	--	--	--	--	--	--
23...	1330	.90	664	4.0	160	46	11	86	3.0	560
JAN										
30...	1425	.70	664	4.0	160	46	10	87	3.0	540
MAR										
02...	1320	.70	662	10.0	160	45	11	85	2.9	540
31...	1420	1.0	698	14.0	150	43	11	100	3.5	580
APR										
25...	1400	45	647	12.0	150	40	12	78	2.8	580
MAY										
31...	1425	72	582	19.5	150	42	11	70	2.5	490
JUN										
28...	0650	26	571	16.0	150	42	11	65	2.3	490
AUG										
04...	0915	70	509	23.0	140	39	9.3	57	2.1	450
SEP										
12...	0925	39	473	14.5	130	38	8.6	49	1.9	380

E: ESTIMATED.

CARSON RIVER BASIN

10308200 EAST FORK CARSON RIVER BELOW MARKLEEVILLE CREEK, NEAR MARKLEEVILLE, CA

LOCATION.--Lat 38°42'50", long 119°45'50", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.15, T.10 N., R.20 E., Alpine County, Hydrologic Unit 16050201, on right bank 0.5 mi (0.8 km) downstream from Markleeville Creek and 1.5 mi (2.4 km) north-northeast of Markleeville.

DRAINAGE AREA.--276 mi² (715 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,400 ft (1,646 m), from topographic map. Prior to Oct. 1, 1967, at present site at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good. A few small diversions for irrigation above station. Flow slightly regulated by several small reservoirs, total capacity, about 5,000 acre-ft (6.16 hm³). Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--18 years, 343 ft³/s (9.71 m³/s), 248,500 acre-ft/yr (306 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft³/s (428 m³/s) Jan. 31, 1963, gage height, 10.21 ft (3.112 m), present datum; minimum, 9.5 ft³/s (0.27 m³/s) Nov. 19, 1977.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 14	2300	*2390 67.7	5.59 1.704
May 21	2300	1940 54.9	5.18 1.579
June 7	2300	2250 63.7	5.46 1.664

Minimum discharge, 9.5 ft³/s (0.27 m³/s) Nov. 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	26	26	40	82	87	146	544	565	1540	853	261	142
2	26	26	40	87	90	166	453	562	1570	823	241	139
3	25	27	39	80	87	160	409	752	1570	749	229	139
4	24	27	40	77	90	289	385	908	1610	693	265	136
5	24	34	41	77	112	292	343	905	1780	693	273	164
6	22	32	39	75	121	227	340	717	1850	721	233	232
7	22	28	40	70	121	221	310	728	1940	764	225	214
8	23	28	39	85	109	268	290	862	1930	728	214	172
9	24	28	40	118	158	264	284	1080	1970	721	206	151
10	24	30	39	112	121	253	317	1230	1740	742	206	249
11	24	33	39	95	109	235	427	1230	1510	700	181	203
12	24	30	39	85	106	208	510	1270	1680	625	175	141
13	24	29	42	87	107	187	536	1530	1870	574	171	128
14	23	28	44	121	97	181	502	1830	1850	593	164	134
15	23	29	185	151	101	182	479	1820	1590	612	175	160
16	23	29	77	151	97	207	428	1180	1310	580	168	138
17	23	29	249	158	95	253	387	1050	1180	512	164	122
18	23	29	124	124	98	268	373	1120	1220	483	151	116
19	24	28	77	119	99	272	387	1250	1170	450	142	115
20	23	20	85	111	112	310	404	1380	1140	417	139	111
21	23	63	77	101	128	363	366	1560	1140	396	133	102
22	23	103	75	100	145	372	342	1680	1120	383	127	99
23	23	46	145	88	156	372	348	1470	1090	376	133	96
24	23	45	87	86	159	341	421	1070	1080	364	130	93
25	23	48	75	114	152	356	590	903	1000	358	133	90
26	23	47	70	93	148	409	525	918	890	364	155	87
27	26	50	112	87	143	463	563	1080	899	346	148	85
28	28	47	124	87	137	517	654	1290	823	325	142	84
29	26	43	115	84	---	574	589	1540	778	304	133	82
30	26	42	118	86	---	625	638	1680	823	282	130	82
31	26	---	90	90	---	684	---	1570	---	273	142	---
TOTAL	744	1104	2446	3081	3285	9665	13144	36730	41663	16804	5489	4006
MEAN	24.0	36.8	78.9	99.4	117	312	438	1185	1389	542	177	134
MAX	28	103	249	158	159	684	654	1830	1970	853	273	249
MIN	22	20	39	70	87	146	284	562	778	273	127	82
AC-FT	1480	2190	4850	6110	6520	19170	26070	72850	82640	33330	10890	7950
CAL YR 1977 TOTAL	31186			MEAN 85.4	MAX 455	MIN 16	AC-FT 61860					
WTR YR 1978 TOTAL	138161			MEAN 379	MAX 1970	MIN 20	AC-FT 274000					

CARSON RIVER BASIN

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10308800 BRYANT CREEK NEAR GARDNERVILLE, NV

LOCATION.--Lat 38°47'38", long 119°40'18", in NE¼NW¼ sec.30, T.11 N., R.21 E., Douglas County, Hydrologic Unit 16050201 on right bank 500 ft (152 m) upstream from Doud Springs, 1.7 mi (2.7 km) upstream from mouth, and 11 mi (18 km) southeast of Gardnerville.

DRAINAGE AREA.--31.5 mi² (81.6 km²).

PERIOD OF RECORD.--May 1961 to September 1969, October 1977 to September 1978; October 1969 to September 1973 (annual maximum).

GAGE.--Water-stage recorder. Datum of gage is 5,449.70 ft (1,661.07 m) National Geodetic Vertical Datum of 1929, releveled 1940 (levels by Bureau of Reclamation). Prior to July 22, 1963, at same site at datum 0.04 ft (0.012 m) higher.

REMARKS.--Records fair. No diversions above station.

AVERAGE DISCHARGE.--9 years (water years 1962-69, 1978), 8.14 ft³/s (0.231 m³/s), 5,900 acre-ft/yr (7.27 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 975 ft³/s (27.6 m³/s) Jan. 31, 1963, gage height 6.40 ft (1.951 m), datum then in use, from floodmarks, from rating curve extended above 63 ft³/s (1.78 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.90 ft³/s (0.025 m³/s) Feb. 26, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19.9 ft³/s (0.56 m³/s) March 25, gage height 1.35 ft (0.411 m); minimum daily, 1.9 ft³/s (0.054 m³/s) Nov. 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	2.8	2.7	3.0	3.5	4.1	7.5	16	16	8.7	3.6	2.7	2.8
2	2.9	2.7	3.0	3.9	4.2	8.4	15	16	8.3	3.6	2.7	2.7
3	2.9	2.7	3.0	3.8	4.3	8.2	14	18	8.1	3.5	2.8	2.7
4	2.9	2.7	3.0	3.7	4.4	12	13	18	7.6	3.5	2.9	2.8
5	2.9	3.0	3.0	3.9	4.8	13	13	17	7.4	3.4	2.9	3.2
6	2.8	2.8	2.9	3.9	5.1	11	12	16	7.0	3.3	2.8	3.2
7	2.9	2.6	3.0	3.5	5.1	11	12	14	6.7	3.4	2.9	3.7
8	2.9	2.6	2.7	3.8	5.0	12	12	13	6.4	3.2	2.8	3.1
9	2.9	2.6	2.8	4.2	7.5	12	12	13	6.1	3.1	2.9	3.1
10	2.8	2.8	2.9	4.1	6.5	12	12	13	5.9	3.1	2.9	3.1
11	2.8	2.8	2.9	3.9	5.9	12	13	13	5.9	3.1	2.8	3.1
12	2.8	2.7	2.9	3.8	5.9	11	14	13	5.6	3.0	2.8	3.1
13	2.8	2.8	3.2	3.8	5.9	10	14	13	5.5	3.0	2.8	3.1
14	2.8	2.7	3.0	4.2	5.6	10	14	13	5.3	3.0	2.9	3.4
15	2.8	2.8	4.7	4.8	5.7	10	14	14	5.2	3.0	2.8	3.3
16	2.8	2.8	3.2	6.2	5.2	11	14	14	5.0	3.0	2.8	3.1
17	2.8	2.8	5.4	6.5	5.2	12	14	13	4.9	3.0	3.1	3.0
18	2.8	2.8	3.6	5.6	5.4	13	14	13	4.6	2.9	3.0	3.1
19	2.9	1.9	2.8	5.3	5.4	13	14	13	4.5	2.9	2.9	3.1
20	3.0	2.1	3.2	5.0	6.0	15	14	13	4.2	2.9	2.9	3.1
21	3.0	3.9	3.8	4.7	7.1	16	14	12	4.0	2.9	2.9	3.1
22	3.0	4.8	3.9	4.6	7.9	16	14	12	3.9	2.8	2.9	3.0
23	3.0	3.2	4.7	3.7	8.2	16	14	12	3.9	2.8	3.0	3.0
24	3.0	3.4	3.9	3.9	8.1	15	14	12	3.7	2.8	2.9	3.0
25	2.9	3.2	3.7	4.7	7.4	16	15	12	3.8	2.8	2.8	3.0
26	3.0	3.2	3.7	4.7	7.3	16	15	11	3.7	2.9	2.8	2.9
27	3.0	3.2	4.4	4.4	7.3	16	16	10	4.2	2.8	2.8	2.9
28	3.2	3.2	4.2	4.4	7.1	17	16	10	4.1	2.8	2.8	2.8
29	2.8	3.0	4.1	4.2	---	17	16	9.6	3.9	2.7	2.8	2.9
30	2.9	3.2	3.9	4.2	---	17	16	9.3	3.7	2.8	2.8	2.9
31	2.8	---	3.5	4.2	---	17	---	8.9	---	2.7	2.8	---
TOTAL	89.6	87.7	108.0	135.1	167.6	403.1	420	404.8	161.8	94.3	88.4	91.3
MEAN	2.89	2.82	3.48	4.36	5.99	13.0	14.0	13.1	5.39	3.04	2.85	3.04
MAX	3.2	4.8	5.4	6.5	8.2	17	16	18	8.7	3.6	3.1	3.7
MIN	2.8	1.9	2.7	3.5	4.1	7.5	12	8.9	3.7	2.7	2.7	2.7
AC-FT	178	174	214	268	332	800	833	803	321	187	175	181
WTR YR 1978	TOTAL	2251.7	MEAN	6.17	MAX	18	MIN	1.9	AC-FT	4470		

CARSON RIVER BASIN

10309000 EAST FORK CARSON RIVER NEAR GARDNERVILLE, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1949, April 1950 to April 1952, June 1953 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)	WATER TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT						
27...	1055	33	--	4.0	6	.53
NOV						
28...	1145	54	--	5.5	8	1.2
DEC						
30...	1415	131	--	3.0	16	5.7
JAN						
30...	1500	90	231	4.5	6	1.5
FEB						
27...	1430	174	--	7.5	15	7.0
MAR						
29...	1130	653	124	7.0	--	--
APR						
27...	1300	562	--	9.5	46	70
MAY						
05...	1155	994	--	4.5	220	590
15...	1300	1980	--	--	474	2530
JUN						
07...	1005	1810	48	7.0	400	1960
JUL						
24...	1010	357	79	19.0	7	6.7
AUG						
29...	1030	131	132	15.0	5	1.8

LOCATION.—Lat 38°46'10", long 119°49'55", in NW¼SE¼ sec.34, T.11 N., R.19 E., Alpine County, Hydrologic Unit 16050201, in Toiyabe National Forest, on left bank 0.3 mi (0.5 km) downstream from bridge on State Highway 88-89, 0.6 mi (1.0 km) southwest of Woodfords, and 3.8 mi (6.1 km) downstream from Willow Creek.

WATER-DISCHARGE RECORDS

REVISÉD RECORDS.--WSP 1927: Drainage area.

REMARKS.--Records fair. One small diversion above station for irrigation. Flow slightly regulated by several small reservoirs, total capacity, about 1,500 acre-ft (1.85 hm³).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,890 ft³/s (138 m³/s) Feb. 1, 1963, gage height, 9.0 ft (2.74 m), on basis of slope-area measurement of peak flow; minimum, about 5 ft³/s (0.14 m³/s) Dec. 23, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
May 14	2100	*884	25.0	3.75	1.143
May 30	0100	529	15.0	3.15	0.960

Minimum daily, 8.9 ft³/s (0.25 m³/s) Oct. 5, 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	12	12	17	22	24	31	144	202	380	183	86	65
2	10	12	17	21	24	33	123	248	375	182	90	33
3	9.2	12	18	19	24	33	114	321	378	167	95	23
4	9.2	12	18	19	24	35	111	356	387	154	94	21
5	8.9	14	19	16	26	33	99	304	418	152	65	27
6	8.9	14	18	16	24	33	102	245	425	160	44	73
7	9.2	14	17	17	22	34	97	280	440	173	42	73
8	9.6	14	16	18	21	36	89	333	429	166	40	53
9	9.6	14	15	21	24	37	87	408	426	161	38	47
10	9.6	14	16	19	23	37	112	435	384	162	34	100
11	9.6	15	16	20	22	37	162	426	311	157	32	49
12	9.6	14	15	20	24	37	182	430	346	142	30	68
13	9.6	14	17	20	23	36	192	495	404	123	30	69
14	10	13	21	22	27	37	189	608	407	125	33	67
15	10	14	42	21	21	38	167	560	344	133	62	36
16	10	14	29	20	24	40	146	352	270	129	83	30
17	10	14	33	19	23	44	136	322	244	114	87	28
18	10	14	24	20	22	47	132	315	248	106	87	28
19	10	11	28	21	22	52	144	330	235	100	50	28
20	11	14	22	21	23	58	146	370	227	92	27	27
21	11	19	22	21	25	71	128	410	229	88	25	26
22	11	20	20	22	26	77	124	440	224	85	24	25
23	11	17	20	22	27	86	134	370	222	79	24	24
24	11	18	19	18	28	83	162	290	222	77	23	22
25	11	21	19	23	28	90	210	270	212	74	23	22
26	11	22	19	23	28	104	197	270	195	80	22	42
27	12	24	21	23	29	118	242	294	189	73	22	42
28	12	21	20	22	29	139	239	356	184	64	21	41
29	12	19	23	22	---	155	210	417	176	60	43	40
30	12	18	24	23	---	162	224	434	179	54	63	40
31	12	---	22	24	---	172	---	404	---	62	69	---
TOTAL	322.0	468	647	635	682	2025	4544	11295	9110	3677	1508	1269
MEAN	10.4	15.6	20.9	20.5	24.4	65.3	151	364	304	119	48.6	42.3
MAX	12	24	42	24	29	172	242	608	440	183	95	100
MIN	8.9	11	15	16	21	31	87	202	176	54	21	21
AC-FT	639	928	1280	1260	1350	4020	9010	22400	18070	7290	2990	2520
CAL YR 1977	TOTAL	9530.4	MEAN	26.1	MAX	146	MIN	5.3	AC-FT	18900		
WTR YR 1978	TOTAL	36182.0	MEAN	99.1	MAX	608	MIN	8.9	AC-FT	71770		

CARSON RIVER BASIN

10310000 WEST FORK CARSON RIVER AT WOODFORDS, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July, September, and December 1949, March 1950 to March 1952, November 1952, March 1960 to July 1961, February 1962 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)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)
OCT								
27...	1000	9.0	97	--	6.0	--	--	--
NOV								
25...	1220	17	81	--	4.0	--	--	--
DEC								
30...	1020	22	83	--	.5	--	--	--
JAN								
30...	1420	22	79	--	2.0	--	--	--
FEB								
27...	1235	28	81	--	4.0	--	--	--
MAR								
28...	1050	137	56	--	3.0	--	--	--
APR								
* 11...	1115	151	57	7.2	4.5	2	10.4	22
27...	0910	254	51	--	4.0	--	--	--
JUN								
01...	1000	357	43	--	5.0	--	--	--
JUL								
28...	1400	67	52	--	16.5	--	--	--
AUG								
30...	1200	67	71	--	12.0	--	--	--
SEP								
* 13...	1500	67	59	7.3	8.5	0	9.2	23
26...	1130	44	79	--	12.5	--	--	--

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	ALKA- LINITY (MG/L AS CACO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT							
27...	--	--	--	--	--	--	--
NOV							
25...	--	--	--	--	--	--	--
DEC							
30...	--	--	--	--	--	--	--
JAN							
30...	--	--	--	--	--	--	--
FEB							
27...	--	--	--	--	--	--	--
MAR							
28...	--	--	--	--	--	--	--
APR							
* 11...	6.0	1.7	4.0	.4	24	.0	38
27...	--	--	--	--	--	--	--
JUN							
01...	--	--	--	--	--	--	--
JUL							
28...	--	--	--	--	--	--	--
AUG							
30...	--	--	--	--	--	--	--
SEP							
* 13...	6.1	1.9	2.5	.2	26	.0	48
26...	--	--	--	--	--	--	--

* DATA FROM CALIF. DEPT. OF WATER RESOURCES.

CARSON RIVER BASIN

151

10310400 DAGGETT CREEK NEAR GENOA, NV

LOCATION.—Lat 38°57'55", long 119°50'55", in SW 1/4 sec. 28, T.13 N., R.19 E., Douglas County, Hydrologic Unit 16050201, on left bank in Haines Canyon, 0.55 mi (0.88 km) upstream from Foothill Road, and 3.5 mi (5.6 km) south-southwest of Genoa.

DRAINAGE AREA.—3.82 mi² (9.89 km²).

PERIOD OF RECORD.—1964 (miscellaneous site), 1965 (low-flow, partial-record site), October 1965 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 5,100 ft (1,554 m), from topographic map.

REMARKS.—Records good. No diversions above station. Intermittent pumping of effluent from Lake Tahoe basin by Douglas County Sewer Improvement District No. 1, occurred from February 1969 to November 1971.

AVERAGE DISCHARGE.—13 years, 2.02 ft³/s (0.0572 m³/s), 1,460 acre-ft/yr (1.80 hm³/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 63 ft³/s (1.78 m³/s) Aug. 5, 1971, gage height, 2.78 ft (0.847 m), from floodmarks, from rating curve extended above 6 ft³/s (0.17 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.50 ft³/s (0.014 m³/s) July 6, 1973.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 16 ft³/s (0.45 m³/s) June 27, gage height, 1.19 ft (0.363 m) maximum gage height, 1.26 ft (0.384 m) Nov. 21, backwater from ice; minimum daily, 0.59 ft³/s (0.017 m³/s) Aug. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.98	1.1	1.1	1.1	1.1	1.4	2.0	1.5	2.1	1.2	.72	.65
2	.98	1.1	1.1	1.1	1.1	1.4	1.9	1.5	2.1	1.2	.72	.65
3	.98	1.1	1.1	1.1	1.1	1.5	1.7	1.6	2.1	1.1	.72	.65
4	.98	1.2	1.1	1.1	1.1	2.5	1.7	1.6	2.3	1.1	.80	.72
5	1.1	1.2	1.1	1.2	1.2	2.3	1.7	1.6	2.5	1.1	.80	.82
6	1.2	1.2	1.0	1.2	1.2	1.8	1.7	1.6	2.5	1.1	.72	.78
7	1.1	1.2	1.0	1.2	1.5	1.7	1.6	1.6	3.0	1.1	.72	.86
8	1.1	1.2	1.1	1.2	1.2	1.7	1.6	1.5	2.7	1.1	.72	.83
9	1.0	1.2	1.1	1.3	1.4	1.8	1.6	1.4	2.3	1.0	.72	.84
10	1.0	1.2	1.1	1.2	1.3	1.8	1.5	1.5	2.1	1.0	.72	.91
11	1.0	1.2	1.0	1.2	1.2	1.7	1.7	1.5	2.1	1.1	.72	.84
12	1.0	1.2	1.1	1.2	1.2	1.7	1.7	1.5	1.9	1.1	.72	.84
13	.98	1.2	1.1	1.2	1.2	1.6	1.7	1.6	1.7	1.1	.65	1.0
14	.95	1.2	1.0	1.6	1.1	1.6	1.6	1.7	1.7	1.1	.72	1.4
15	.93	1.2	.90	1.4	1.1	1.4	1.6	1.8	1.7	1.2	.65	1.1
16	.95	1.1	1.2	1.9	1.1	1.5	1.5	1.5	1.6	.98	.65	1.0
17	.99	1.1	4.6	1.7	1.1	1.6	1.4	1.4	1.6	.98	.72	1.0
18	1.0	1.2	1.7	1.4	1.1	1.6	1.4	1.6	1.6	.98	.72	1.1
19	1.0	1.2	1.4	1.4	1.2	1.7	1.4	1.7	1.6	.98	.72	1.1
20	1.1	1.2	1.3	1.3	1.2	1.8	1.6	1.6	1.4	.89	.72	1.1
21	1.1	5.6	1.3	1.3	1.2	2.3	1.6	1.7	1.6	.92	.72	1.1
22	1.2	2.5	1.3	1.3	1.3	2.0	1.5	1.7	1.6	.94	.72	1.0
23	1.1	1.2	1.4	1.2	1.3	1.9	1.4	1.7	1.4	.96	.72	1.0
24	1.1	1.2	1.2	1.2	1.3	1.7	1.5	1.6	1.4	.97	.72	1.0
25	1.1	1.1	1.1	1.2	1.3	1.7	1.6	1.5	1.4	.89	.72	1.0
26	1.2	1.1	1.1	1.2	1.3	1.8	1.5	1.5	1.6	.95	.72	1.0
27	1.2	1.1	1.3	1.1	1.3	1.9	1.6	1.6	1.9	.72	.72	1.0
28	1.1	1.1	1.2	1.1	1.3	1.9	1.6	1.7	1.6	.72	.72	1.0
29	1.1	1.1	1.3	1.1	---	2.0	1.5	1.9	1.3	.72	.65	1.0
30	1.1	1.1	1.2	1.1	---	2.0	1.5	1.9	1.3	.72	.59	1.0
31	1.1	---	1.2	1.1	---	2.8	---	1.9	---	.72	.65	---
TOTAL	32.72	40.6	39.70	38.9	34.0	56.1	47.9	50.0	55.7	30.64	22.00	28.29
MEAN	1.06	1.35	1.28	1.25	1.21	1.81	1.60	1.61	1.86	.99	.71	.94
MAX	1.2	5.6	4.6	1.9	1.5	2.8	2.0	1.9	3.0	1.2	.80	1.4
MTN	.93	1.1	.90	1.1	1.1	1.4	1.4	1.4	1.3	.72	.59	.65
AC-FT	65	81	79	77	67	111	95	99	110	61	44	56

CAL YR 1977 TOTAL 387.78 MEAN 1.06 MAX 5.6 MIN .65 AC-FT 769
WTR YR 1978 TOTAL 476.55 MEAN 1.31 MAX 5.6 MIN .59 AC-FT 945

CARSON RIVER BASIN

10310405 CARSON RIVER AT GENOA, NV

LOCATION.--Lat 38°59'52", long 119°49'21", in SW¼SW¼ sec.11, T.13 N., R.19 E., Douglas County, Hydrologic Unit 16050201, on right bank just downstream from bridge on State Route 57 and 1.2 mi (1.9 km) southeast of Genoa.

DRAINAGE AREA.--570 mi² (1,480 km²), approximately.

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,660 ft (1,420 m), from topographic map.

REMARKS.--Records good. Many diversions for irrigation above station. Flow slightly regulated by several small reservoirs on tributaries. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,350 ft³/s (66.6 m³/s) June 7, 1975, gage height, 9.45 ft (2.880 m); minimum, 1.1 ft³/s (0.03 m³/s) Aug. 31 to Sept. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,740 ft³/s (49.3 m³/s) May 15, gage height, 8.02 ft (2.444 m); minimum, 2.2 ft³/s (0.06 m³/s) Oct 1, 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	2.5	18	17	100	60	101	530	309	997	509	36	14
2	2.5	14	15	102	59	134	430	253	1000	499	23	12
3	2.8	16	14	104	61	150	384	324	1030	461	22	9.8
4	3.4	17	13	97	60	231	358	453	1030	423	21	9.5
5	3.8	18	14	138	65	546	320	544	1150	411	40	9.2
6	3.4	21	13	172	101	309	314	440	1240	411	30	14
7	3.4	30	10	118	116	222	296	382	1300	437	37	25
8	3.8	31	10	107	132	236	265	440	1300	427	41	23
9	4.2	30	12	118	240	269	240	583	1340	395	38	25
10	3.8	25	14	190	204	251	245	771	1290	435	29	27
11	3.1	21	17	143	140	244	299	939	1060	402	25	67
12	3.4	22	22	118	105	215	401	904	1080	336	22	47
13	3.4	24	21	111	98	183	423	1050	1200	282	18	28
14	3.1	25	15	114	96	183	391	1280	1270	244	18	25
15	3.1	25	95	255	93	167	370	1540	1180	174	20	40
16	5.1	21	150	200	88	171	340	1090	989	170	18	65
17	4.2	22	204	362	78	192	286	773	856	223	16	55
18	3.8	25	368	200	71	224	251	812	832	178	14	40
19	5.1	24	137	143	68	211	232	921	806	142	21	55
20	5.1	20	86	124	72	245	236	939	754	127	20	58
21	6.1	33	69	106	88	286	215	1040	751	111	13	53
22	7.9	93	84	96	101	325	192	1180	726	110	15	52
23	10	65	173	88	114	322	148	1190	680	116	17	49
24	13	16	146	65	121	301	137	873	650	103	21	56
25	10	11	97	59	114	288	249	680	621	84	20	47
26	20	24	84	79	109	331	282	595	562	94	19	38
27	33	24	92	71	105	363	249	647	530	90	21	36
28	21	28	158	68	98	413	316	786	544	75	24	36
29	21	28	146	65	---	479	299	957	481	58	17	38
30	21	20	139	61	---	522	327	1130	499	56	14	38
31	18	---	121	63	---	606	---	1180	---	52	13	---
TOTAL	254.0	791	2556	3837	2857	8720	9025	25005	27748	7635	703	1091.5
MEAN	8.19	26.4	82.5	124	102	281	301	807	925	246	22.7	36.4
MAX	33	93	368	362	240	606	530	1540	1340	509	41	67
MIN	2.5	11	10	59	59	101	137	253	481	52	13	9.2
AC-FT	504	1570	5070	7610	5670	17300	17900	49600	55040	15140	1390	2160
CAL YR 1977 TOTAL	9346.8			MEAN 25.6	MAX 368	MIN 1.1	AC-FT 18540					
WTR YR 1978 TOTAL	90222.5			MEAN 247	MAX 1540	MIN 2.5	AC-FT 179000					

CARSON RIVER BASIN

153

10311000 CARSON RIVER NEAR CARSON CITY, NV

LOCATION.--Lat 39°06'30", long 119°42'40", in SW 1/4 sec. 2, T.14 N., R.20 E., Carson City, Hydrologic Unit 16050201, on left bank 2 mi (3 km) downstream from Clear Creek, 3 mi (5 km) upstream from Lloyd Bridge on road to Mexican Dam, and 5 mi (8 km) southeast of Carson City Post Office.

DRAINAGE AREA.--876 mi² (2,269 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 4,620.48 ft (1,408.322 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 23, 1955, water-stage recorder on right bank at datum 1.0 ft (0.305 m) higher. Dec. 23, 1955, to Mar. 13, 1956, nonrecording gage at present site at datum 1.0 ft (0.305 m) higher. Mar. 14, 1956, to Sept. 30, 1963, water-stage recorder at present site at datum 1.0 ft (0.305 m) higher.

REMARKS.--Records good. Many diversions above station for irrigation. Flow slightly regulated by several small reservoirs on tributaries.

AVERAGE DISCHARGE.--39 years, 391 ft³/s (11.07 m³/s), 283,300 acre-ft/yr (349 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s (850 m³/s) Dec. 24, 1955, gage height, 16.0 ft (4.88 m), present datum, from floodmarks, from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of slope-area measurements at gage heights 9.40 ft (2.865 m) and 16.0 ft (4.88 m), computation of flow over dam at gage height 12.40 ft (3.780 m), and float measurement at gage height 10.60 ft (3.231 m), all at present datum; minimum daily, 1.6 ft³/s (0.04 m³/s) Aug. 29, 30, Sept. 7, 8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1600 ft³/s (45.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
May 15	1400	*2420	68.5	5.50	1.676
May 23	1300	1940	54.9	5.00	1.524
May 30	1800	1890	53.5	4.94	1.506
June 9	1600	2340	66.3	5.41	1.649
June 14	1400	2160	61.2	5.24	1.597

Minimum daily, 2.4 ft³/s (0.07 m³/s) Oct. 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	2.4	21	56	129	151	226	904	604	1610	711	61	20
2	2.5	20	53	117	146	256	704	504	1570	688	43	23
3	2.5	17	51	125	149	275	611	567	1620	628	33	19
4	2.6	17	50	118	149	303	561	760	1650	556	26	16
5	2.8	20	49	133	153	852	515	922	1780	526	39	13
6	2.5	21	50	310	206	670	487	900	2020	514	57	16
7	2.6	23	47	241	239	445	487	750	2100	558	48	30
8	2.9	26	45	158	334	418	435	790	2170	543	77	40
9	2.9	28	45	168	335	450	385	934	2170	491	82	43
10	3.3	28	47	277	504	458	385	1180	2110	534	68	52
11	3.0	28	51	249	339	442	435	1340	1740	526	54	80
12	3.0	28	58	194	289	396	592	1350	1630	449	41	105
13	3.0	31	64	169	260	357	690	1470	1810	369	28	91
14	3.8	28	60	167	271	327	677	1800	2000	308	27	81
15	3.5	30	94	316	257	321	630	2240	1940	300	28	90
16	3.6	30	281	365	262	311	611	1940	1620	328	28	128
17	3.8	28	234	561	237	328	509	1320	1330	281	24	150
18	5.8	30	679	450	223	375	429	1240	1220	247	20	142
19	6.5	28	333	301	212	380	396	1360	1190	197	38	125
20	7.3	36	174	260	203	403	380	1420	1100	169	35	145
21	8.2	41	130	230	212	465	401	1540	1080	167	21	141
22	7.9	162	130	206	230	538	335	1770	1030	153	23	124
23	10	212	179	194	242	521	277	1860	977	143	31	127
24	13	99	306	167	253	498	245	1550	933	143	39	109
25	14	61	161	153	253	466	344	1200	869	125	34	103
26	15	59	129	172	237	498	544	983	808	118	31	84
27	19	65	125	172	226	561	476	997	748	131	38	72
28	22	63	173	162	219	637	521	1170	775	113	51	72
29	20	61	198	163	---	733	592	1380	682	93	40	73
30	19	56	174	157	---	795	567	1680	681	84	29	79
31	20	---	154	154	---	904	---	1770	---	75	24	---
TOTAL	238.4	1397	4380	6738	6791	14609	15125	39291	42963	10268	1218	2393
MEAN	7.69	46.6	141	217	243	471	504	1267	1432	331	39.3	79.8
MAX	22	212	679	561	504	904	904	2240	2170	711	82	150
MIN	2.4	17	45	117	146	226	245	504	681	75	20	13
AC-FT	473	2770	8690	13360	13470	28980	30000	77930	85220	20370	2420	4750

CAL YR 1977	TOTAL	21994.8	MEAN	60.3	MAX	679	MIN	1.6	AC-FT	43630
WTR YR 1978	TOTAL	145411.4	MEAN	398	MAX	2240	MIN	2.4	AC-FT	288400

CARSON RIVER BASIN

10311000 CARSON RIVER NEAR CARSON CITY, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1949, December 1949 to November 1950, June to October 1951, January and February 1952, March 1960 to June 1961, February 1962 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)	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
OCT 27...	1540	19	549	13.0	--	--	--	--	--	--
NOV 28...	1430	64	370	9.5	--	--	--	--	--	--
DEC 29...	1440	20	335	5.5	--	--	--	--	--	--
FEB 27...	1100	22	301	7.5	--	--	--	--	--	--
MAR 30...	1200	805	148	9.0	--	--	--	--	--	--
APR 24...	1430	239	251	--	--	--	--	--	--	--
JUN 06...	1350	2080	85	14.0	--	--	--	--	--	--
21...	1430	1180	102	--	35	10	2.5	6.2	.5	1.7
JUL 24...	1400	143	275	24.5	--	--	--	--	--	--
AUG 29...	1330	42	481	20.0	--	--	--	--	--	--

[illegible]

CARSON RIVER BASIN

155

10311100 KINGS CANYON CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°09'14", long 119°48'24", in NW¼NW¼ sec.23, T.15 N., R.19 E., Carson City, Hydrologic Unit 16050201, 2 mi (3.2 km) west of Carson Street off Kings Canyon Road.

DRAINAGE AREA.--4.06 mi² (10.52 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,180 ft (1,580 m), from topographic map.

REMARKS.--Records fair. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10 ft³/s (0.283 m³/s) Mar. 4, 1978, gage height, 4.33 ft (1.320 m); maximum gage height, 4.38 ft (1.335 m) Jan. 7, 30, 1977 (backwater from ice); minimum daily, 0.16 ft³/s (0.005 m³/s) June 12, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 10 ft³/s (0.283 m³/s) Mar. 4, gage height, 4.33 ft (1.320 m); minimum daily, 0.37 ft³/s (0.010 m³/s) Nov. 3-17.

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	.49	.44	.45	.37	.69	1.4	1.5	.77	.86	1.8	1.4	1.2
2	.55	.44	.45	.37	.69	1.4	1.2	.77	.86	1.8	1.4	1.0
3	.55	.37	.45	.44	.77	1.0	1.2	.95	.86	1.8	1.5	.95
4	.49	.37	.45	.44	.77	4.9	.95	.95	1.0	2.0	1.6	.95
5	.49	.37	.45	.77	1.2	2.8	.95	.86	1.4	2.0	1.6	1.0
6	.49	.37	.44	.69	1.2	1.5	.95	.77	1.5	2.0	1.5	1.0
7	.44	.37	.44	.49	2.1	1.2	.86	.77	1.5	2.0	1.5	1.0
8	.44	.37	.44	.49	1.8	1.2	.86	.86	1.6	2.0	1.6	1.0
9	.44	.37	.44	.62	2.4	1.2	.77	.86	1.5	1.5	1.5	1.0
10	.44	.37	.44	.55	2.4	1.2	.86	.95	1.6	1.6	1.5	1.0
11	.44	.37	.55	.49	1.2	1.4	.95	.95	1.5	1.6	1.6	1.0
12	.44	.37	.49	.44	1.0	1.2	.95	.95	1.6	1.6	1.4	1.0
13	.44	.37	.49	.55	1.2	.95	1.0	.95	1.8	1.8	1.2	1.0
14	.49	.37	.69	1.4	1.0	.95	1.0	1.0	1.8	1.8	1.2	1.2
15	.44	.37	.86	1.0	1.0	.95	1.0	1.0	1.6	1.6	1.4	1.0
16	.49	.37	.55	1.8	1.0	.95	.95	.77	1.6	1.6	1.4	.95
17	.44	.37	3.0	1.6	.95	.95	.86	.77	1.6	1.6	1.2	.95
18	.49	.44	.77	.95	.95	.95	.86	.77	1.5	1.8	1.4	.95
19	.49	.44	.55	.77	1.4	1.0	.86	.86	1.5	1.8	1.4	.95
20	.44	.44	.55	.62	1.5	1.0	.86	.77	1.6	1.8	1.2	1.0
21	.44	.44	.62	.55	1.8	1.5	1.2	.77	1.6	1.8	1.2	1.0
22	.49	1.5	.62	.50	2.1	1.2	.95	.86	1.8	1.8	1.2	.95
23	.44	.45	1.4	.48	1.8	1.2	.86	.86	1.8	1.6	1.2	1.0
24	.44	.45	.62	.48	1.5	1.0	.86	.77	1.8	1.5	1.2	.95
25	.44	.45	.55	.49	1.4	1.0	.86	.77	1.6	1.5	1.2	1.0
26	.44	.45	.49	.62	1.2	1.0	.86	.69	1.6	1.5	1.2	1.0
27	.49	.45	.62	.62	1.2	1.0	.95	.77	1.8	1.5	1.0	1.0
28	.44	.45	.55	.69	1.0	1.0	.86	.86	2.0	1.5	1.2	1.2
29	.49	.45	.77	.69	---	1.2	.77	.86	1.8	1.5	1.2	1.4
30	.49	.45	.69	.77	---	1.4	.77	.86	1.8	1.2	1.2	1.5
31	.49	---	.44	.69	---	1.8	---	.86	---	1.2	1.2	---
TOTAL	14.51	13.29	20.32	21.43	37.22	41.40	28.33	26.23	46.38	52.1	41.5	31.10
MEAN	.47	.44	.66	.69	1.33	1.34	.94	.85	1.55	1.68	1.34	1.04
MAX	.55	1.5	3.0	1.8	2.4	4.9	1.5	1.0	2.0	2.0	1.6	1.5
MIN	.44	.37	.44	.37	.69	.95	.77	.69	.86	1.2	1.0	.95
AC-FT	29	26	40	43	74	82	56	52	92	103	82	62
CAL YR 1977	TOTAL	191.05	MEAN	.52	MAX	3.0	MIN	.16	AC-FT	379		
WTR YR 1978	TOTAL	373.81	MEAN	1.02	MAX	4.9	MIN	.37	AC-FT	741		

CARSON RIVER BASIN

10311200 ASH CANYON CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°10'35", long 119°48'16", in NW¼SW¼ sec.12, T.15 N., R.19 E., Carson City, Hydrologic Unit 16050201, on left bank 2 mi (3.2 km) west of intersection of Carson and Bath Streets.

DRAINAGE AREA.--5.20 mi² (13.47 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,080 ft (1548 m), from topographic map.

REMARKS.--Records fair. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 7.1 ft³/s (0.201 m³/s) Oct. 1, 1976, gage height, 1.47 ft (0.448 m); minimum daily, 0.80 ft³/s (0.023 m³/s) Aug. 15, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 6.5 ft³/s (0.184 m³/s) May 14, gage height, 1.45 ft (0.442 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Oct. 2-7.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.5	1.5	2.0	1.7	2.1	3.3	3.1	4.4	2.8	2.1	1.9
2	1.2	1.5	1.5	2.0	1.8	2.3	3.2	3.3	4.4	2.8	2.1	1.8
3	1.2	1.5	1.5	2.0	1.8	2.2	3.1	3.6	4.3	2.8	2.1	1.8
4	1.2	1.5	1.5	2.0	1.8	2.4	3.0	3.7	4.0	2.7	2.1	1.8
5	1.2	1.5	1.5	2.2	1.9	2.4	3.0	3.4	3.7	2.7	2.1	1.8
6	1.2	1.5	1.5	2.1	1.9	2.1	2.9	3.1	3.5	2.6	2.1	1.8
7	1.2	1.5	1.5	2.0	2.0	2.3	2.8	3.3	3.5	2.7	2.1	1.8
8	1.3	1.5	1.4	2.0	1.9	2.2	2.8	3.6	3.6	2.6	2.1	1.8
9	1.3	1.5	1.4	2.1	2.0	2.4	2.8	3.9	4.1	2.6	2.1	1.8
10	1.3	1.5	1.4	2.1	1.9	2.4	3.2	4.1	3.8	2.4	2.0	1.8
11	1.3	1.5	1.5	2.1	1.8	2.3	3.4	4.4	3.5	2.4	2.0	1.8
12	1.3	1.5	1.5	2.1	1.9	2.2	3.6	4.4	3.5	2.5	2.0	1.8
13	1.3	1.5	1.6	2.1	1.8	2.1	3.6	4.7	3.4	2.6	2.1	1.8
14	1.3	1.5	1.6	2.2	1.8	2.2	3.5	5.1	3.3	2.5	2.1	2.5
15	1.3	1.5	2.7	2.3	1.8	2.4	3.3	4.4	3.9	2.5	2.0	2.0
16	1.3	1.5	2.1	2.6	1.8	2.8	3.0	3.9	3.2	2.4	2.0	1.8
17	1.3	1.5	2.1	2.4	1.8	2.9	2.9	3.9	3.2	2.3	2.0	1.8
18	1.3	1.5	2.1	2.4	1.8	3.0	2.9	4.2	3.2	2.4	2.0	1.9
19	1.4	1.5	2.1	2.3	1.8	3.0	3.0	4.0	3.4	2.3	2.0	2.0
20	1.4	1.5	2.1	2.2	1.8	3.0	3.0	4.1	3.4	2.3	2.0	2.0
21	1.4	1.5	2.1	2.2	1.9	3.0	2.8	4.9	3.4	2.2	2.0	1.9
22	1.4	2.0	2.1	2.2	2.0	2.9	2.9	4.9	3.4	2.1	2.0	1.8
23	1.4	1.5	2.4	2.1	2.1	2.9	2.9	3.9	3.4	2.1	2.0	1.8
24	1.4	1.5	2.1	2.0	2.1	2.9	3.0	3.5	3.4	2.0	2.0	1.8
25	1.4	1.5	2.0	1.9	2.0	2.9	3.0	3.5	3.2	2.0	2.0	1.7
26	1.4	1.5	2.0	1.8	2.0	3.0	3.1	3.4	3.2	2.1	1.9	1.7
27	1.5	1.5	2.1	1.7	2.0	3.0	3.3	3.7	3.2	2.2	1.9	1.6
28	1.5	1.5	2.1	1.7	2.0	3.2	3.3	3.9	3.1	2.2	1.9	1.7
29	1.5	1.5	2.2	1.8	---	3.5	3.2	4.0	2.9	2.2	1.9	1.7
30	1.5	1.5	2.2	1.8	---	3.5	3.2	4.0	2.8	2.2	1.9	1.7
31	1.5	---	2.1	1.8	---	3.4	---	4.2	---	2.1	1.9	---
TOTAL	41.5	45.5	57.5	64.2	52.9	82.9	93.0	122.1	105.3	74.3	62.5	54.9
MEAN	1.34	1.52	1.85	2.07	1.89	2.67	3.10	3.94	3.51	2.40	2.02	1.83
MAX	1.5	2.0	2.7	2.6	2.1	3.5	3.6	5.1	4.4	2.8	2.1	2.5
MIN	1.2	1.5	1.4	1.7	1.7	2.1	2.8	3.1	2.8	2.0	1.9	1.6
AC-FT	82	90	114	127	105	164	184	242	209	147	124	109

CAL YR 1977 TOTAL 589.99 MEAN 1.62 MAX 3.0 MIN .77 AC-FT 1170
WTR YR 1978 TOTAL 856.60 MEAN 2.35 MAX 5.1 MIN 1.2 AC-FT 1700

CARSON RIVER BASIN

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10312000 CARSON RIVER NEAR FORT CHURCHILL, NV
(National stream-quality accounting network station)

LOCATION.--Lat 39°17'30", long 119°18'40", in SW¼SE¼ sec.32, T.17 N., R.24 E., Lyon County, Hydrologic Unit 16050202, on right bank 400 ft (122 m) downstream from Buckland ditch, 2 mi (3 km) west of Fort Churchill, and 4.5 mi (7.2 km) upstream from Weeks Bridge on U.S. Highway 95 alternate.

DRAINAGE AREA.--1,450 mi² (3,760 km²), approximately.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1514: 1917.

GAGE.--Water-stage recorder. Datum of gage is 4,214.70 ft (1,284.641 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 25, 1924, nonrecording gage at site 7.8 mi (12.6 km) upstream at different datum. Apr. 25, 1924, to Dec. 31, 1933, water-stage recorder at site 8 mi (13 km) upstream at different datum. Jan. 1, 1934, to Sept. 30, 1957, water-stage recorder at present site at datum 1.36 ft (0.414 m) higher (levels by Truckee-Carson Irrigation District).

REMARKS.--Records good. Many diversions for irrigation above station, including diversions for irrigation of 720 acres (2.91 km²) between present site and sites used prior to Jan. 1, 1934. Buckland ditch diverts 400 ft (122 m) upstream for irrigation below station.

AVERAGE DISCHARGE.--67 years, 359 ft³/s (10.17 m³/s), 260,100 acre-ft/yr (325 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,300 ft³/s (433 m³/s) Feb. 2, 1963, gage height, 10.83 ft (3.301 m); maximum gage height, about 11 ft (3.35 m) in December 1955, present datum, from floodmarks (discharge unknown); no flow during some periods in nearly every year since 1923.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1400 ft³/s (39.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
May 16	0900	*2370	67.1	5.26	1.603
June 9	0400	2180	61.7	5.13	1.564

No flow Oct. 1 to 29, Nov. 1-16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	27	188	149	242	928	437	1560	604	45	2.6
2	.00	.00	24	168	154	242	783	432	1440	610	37	2.6
3	.00	.00	22	154	152	264	640	351	1460	586	32	2.6
4	.00	.00	21	160	157	286	569	418	1550	514	26	2.5
5	.00	.00	20	154	157	386	514	575	1560	480	22	2.7
6	.00	.00	19	194	162	818	472	742	1780	460	19	3.2
7	.00	.00	20	317	203	581	462	665	1910	500	17	3.3
8	.00	.00	18	249	264	447	432	558	2010	480	17	2.8
9	.00	.00	18	191	326	437	390	634	2050	450	16	2.9
10	.00	.00	16	197	418	472	351	837	2050	470	18	4.4
11	.00	.00	14	271	442	472	338	1090	1890	450	17	4.8
12	.00	.00	16	253	351	452	364	1230	1550	400	15	4.9
13	.00	.00	22	209	305	409	498	1240	1590	340	14	9.9
14	.00	.00	32	188	282	368	558	1510	1770	280	12	18
15	.00	.00	36	188	290	346	536	1910	1860	280	12	22
16	.00	.00	39	309	274	334	509	2220	1730	290	11	24
17	.00	.10	124	355	274	330	472	1480	1380	260	10	36
18	.00	.10	232	525	256	351	381	1100	1170	230	9.1	60
19	.00	.20	457	395	242	390	317	1180	1120	180	7.7	63
20	.00	.10	267	301	232	386	290	1290	1040	160	6.3	58
21	.00	.42	179	264	229	413	282	1330	982	150	5.6	66
22	.00	1.8	146	242	232	483	286	1520	935	140	5.5	66
23	.00	17	146	219	246	530	249	1740	897	130	5.0	58
24	.00	74	197	206	256	519	222	1700	853	120	4.3	54
25	.00	57	267	188	260	493	197	1230	810	110	3.9	49
26	.00	40	185	173	260	462	267	941	762	100	3.8	42
27	.00	30	157	182	246	514	377	831	696	90	3.5	33
28	.00	28	157	182	239	569	342	918	658	80	3.0	26
29	.00	28	197	179	---	628	413	1150	646	70	2.6	23
30	.02	28	225	168	---	709	432	1390	586	60	2.7	23
31	.04	---	203	154	---	810	---	1630	---	54	2.8	---
TOTAL	.06	304.72	3503	7123	7058	14143	12871	34279	40295	9128	405.8	770.2
MEAN	.002	10.2	113	230	252	456	429	1106	1343	294	13.1	25.7
MAX	.04	74	457	525	442	818	928	2220	2050	610	45	66
MIN	.00	.00	14	154	149	242	197	351	586	54	2.6	2.5
AC-FT	.1	604	6950	14130	14000	28050	25530	67990	79930	18110	805	1530
CAL YR 1977 TOTAL	12975.88			MEAN 35.6	MAX 457	MIN .00	AC-FT 25740					
WTR YR 1978 TOTAL	129880.78			MEAN 356	MAX 2220	MIN .00	AC-FT 257600					

CARSON RIVER BASIN

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1960 to current year (published as Carson River near Silver Springs, sta. no. 10312020, October 1962 to September 1970).

CHEMICAL ANALYSES: October 1962 to April 1967, once-daily (composited); May 1967 to September 1969, once-daily (composited) and monthly; October 1969 to current year, monthly.

SPECIFIC CONDUCTANCES: October 1962 to June 1970, once-daily; July 1970 to January 1972, monthly; February 1972 to current year, once-daily.

BIOLOGICAL DATA: January 1975 to September 1977, monthly; October 1977 to current year, monthly (seasonal).

MICROBIOLOGICAL DATA: January 1975 to current year, monthly.

WATER TEMPERATURES: April 1960 to September 1962, monthly; October 1962 to June 1970, once-daily; July 1970 to January 1972, monthly; February 1972 to current year, once-daily.

SEDIMENT DATA: January to June 1974, occasional; January 1975 to current year, monthly.

REMARKS.--Monthly water-quality data are collected from Buckland Ditch, which leaves river 400 ft (120 m) upstream from gage, or from river at gage, depending on discharge. Detailed sampling information is available from U.S. Geol. Survey office, Carson City, NV. Discharge data do not include ditch flow. Daily water-quality data are collected from Buckland Ditch, in SE $\frac{1}{4}$ sec.34, T.17 N., R.24 E., about 2 mi (3 km) downstream from gaging station.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 840 micromhos Sept. 13, 1973; minimum, 81 micromhos July 3, 1967.

PHYTOPLANKTON: Maximum, 41,000 cells/mL Aug. 31, 1977; minimum, 660 cells/mL May 4, 1977.

FECAL STREPTOCOCCI: Maximum, 660 colonies/100 mL (non-ideal colony count) Dec. 1, 1977; minimum, 4 colonies/100 mL (non-ideal colony count) Jan. 2, 1975.

WATER TEMPERATURES: Maximum, 29.0°C Aug. 7, 1972; minimum, freezing point on many days during winter months of most years.

SUSPENDED--SEDIMENT CONCENTRATIONS: Maximum, 676 mg/L June 3, 1975; minimum, 4 mg/L Jan. 2, 1975, Dec. 1, 1976.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

SPECIFIC CONDUCTANCES: Maximum, 744 micromhos Nov. 18; minimum, 86 micromhos June 11.

WATER TEMPERATURES: Maximum, 21.0°C on several days during July and August; minimum, freezing point Nov. 20, Jan. 24, 25.

REVISIONS.--Microbiological results reported as "0 colonies/100 mL" in previous years should be corrected to "less than 1 colony/100 mL."

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)
OCT										
03...	1155	2.0	650	7.8	14.0	20	--	--	--	--
DEC										
01...	1200	26	632	8.2	5.0	2	--	--	11	--
JAN										
04...	1230	160	394	7.8	2.5	5	--	10.9	<2	--
FEB										
01...	1145	150	397	8.1	5.0	4	--	10.9	3	--
MAR										
03...	1200	265	355	8.2	9.5	--	--	9.6	14	--
APR										
03...	1230	666	177	7.8	11.0	35	--	9.4	K42	--
MAY										
08...	1425	582	177	--	16.0	25	--	8.6	--	63
JUN										
06...	0950	1780	99	7.2	15.0	45	--	8.5	--	130
21...	1830	E912	144	--	--	--	--	--	--	--
JUL										
07...	1035	E500	196	7.9	20.0	--	5.5	7.6	--	66
AUG										
03...	1215	32	596	8.2	25.0	--	4.4	8.0	--	K22
SEP										
11...	1015	4.7	635	7.8	13.0	--	2.4	8.3	--	K22

E: ESTIMATED.

K: NON-IDEAL COLONY COUNT.

CARSON RIVER BASIN

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10312000 CARSON RIVER NEAR FORT CHURCHILL, NV--Continued

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

DATE	STREP- TUCUCCI FECAL, (COLS. PER 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (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 AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SU4)
OCT 03...	90	--	220	63	15	60	1.8	5.5	150	170
DEC 01...	K660	--	--	--	--	--	--	--	--	--
JAN 04...	120	--	120	36	8.4	35	1.4	4.7	98	79
FEB 01...	150	--	130	37	8.4	34	1.3	4.0	110	75
MAR 03...	115	--	120	33	8.0	29	1.2	3.5	90	64
APR 03...	240	--	60	17	4.3	13	.7	2.0	53	28
MAY 08...	--	K39	61	18	4.0	13	.7	2.6	57	27
JUN 06...	--	220	36	9.8	2.7	6.6	.5	1.6	37	9.6
21...	--	--	47	14	2.8	8.5	.5	1.9	41	16
JUL 07...	--	91	71	20	5.1	--	--	2.7	56	26
AUG 03...	--	42	160	48	10	43	1.5	5.1	130	110
SEP 11...	--	350	210	64	13	56	1.7	5.1	150	160

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 CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT 03...	20	.3	24	448	447	2.42	.01	.00	.01	.08
DEC 01...	--	--	--	--	--	--	.34	.00	.34	.08
JAN 04...	14	.6	22	272	259	118	--	--	.73	--
FEB 01...	17	.5	21	256	261	104	--	--	.38	.03
MAR 03...	12	.3	20	229	224	164	--	--	.16	.01
APR 03...	5.5	.2	19	135	121	243	--	--	.39	.03
MAY 08...	4.7	.2	18	119	122	187	.17	.01	.18	.01
JUN 06...	2.1	.1	15	65	70	312	.04	.01	.05	.01
21...	3.6	.1	17	--	89	219	--	--	--	--
JUL 07...	4.8	.1	19	126	--	E95.3	.23	.01	.24	.01
AUG 03...	13	.5	29	343	337	29.6	.01	.00	.01	.00
SEP 11...	13	.6	29	438	431	5.56	.01	.00	.01	.02

E: ESTIMATED.

K: NON-IDEAL COLONY COUNT.

CARSON RIVER BASIN

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV--Continued

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHURUS, TOTAL (MG/L AS P)	PHOS- PHURUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 03...	.01	.35	.04	.05	.44	.16	.03	2.8	--	--
DEC 01...	--	.27	--	--	.69	.24	--	--	--	--
JAN 04...	--	--	--	.70	--	.38	.18	--	3.5	.6
FEB 01...	--	.51	--	.26	.92	.34	.12	4.1	--	--
MAR 03...	--	.60	--	.37	.77	.34	.11	4.5	--	--
APR 03...	--	.86	--	.43	1.3	.11	.09	6.0	--	--
MAY 08...	--	.66	--	.51	.85	.28	.12	--	5.4	.8
JUN 06...	--	.48	--	.74	.54	.23	.04	8.8	--	--
21...	--	--	--	--	--	--	--	--	--	--
JUL 07...	--	.47	--	.23	.72	.20	.14	4.0	--	--
AUG 03...	.00	.36	.27	.27	.37	.17	.12	4.4	--	--
SEP 11...	--	.32	--	.43	.35	.10	.08	3.5	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 03...	1155	5	5	--	--	10	0	10	0
JAN 04...	1230	8	7	100	0	<10	0	0	10
MAY 08...	1425	9	7	0	0	--	--	10	0
AUG 03...	1215	9	9	200	80	--	--	0	0

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 03...	<50	1	<10	1	1300	20	<100	1	680
JAN 04...	<10	0	10	2	440	70	10	2	100
MAY 08...	<10	1	10	7	2900	80	--	--	180
AUG 03...	1	<1	7	1	440	10	--	--	100

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 03...	--	--	.0	0	0	--	--	20	0
JAN 04...	40	.2	.0	0	0	0	0	20	10
MAY 08...	10	1.5	.0	0	0	0	0	20	0
AUG 03...	50	.2	.3	0	0	0	0	10	<3

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV--Continued

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

PHYTOPLANKTON

DATE TIME	OCT 3,77 1155	DEC 1,77 1200	MAR 3,78 1200	MAY 8,78 1425
TOTAL CELLS/ML	7500	1300	7300	6100
DIVERSITY: DIVISION	1.1	1.3	1.3	0.5
..CLASS	1.2	1.3	1.3	0.5
..ORDER	1.3	2.0	1.8	0.7
...FAMILY	2.1	2.4	3.0	2.2
....GENUS	2.1	2.4	3.5	2.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...OOCYSTACEAE								
....EUTETRAMORUS	110	1	--	-	--	-	--	-
...COELASTRACEAE								
...COELASTRUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	--	-	--	-
...MICRACTINIUM	2500#	33	--	-	170	2	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	*	0	--	-	--	-	--	-
...CHLORELLA	*	0	--	-	--	-	--	-
...KIRCHNERIELLA	*	0	--	-	--	-	--	-
...OOCYSTIS	--	-	--	-	--	-	--	-
...SELENASTRUM	--	-	--	-	100	1	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	--	-	--	-
...SCENEDESMUS	970	13	--	-	*	0	--	-
...TETRASTRUM	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CARTERIA	--	-	--	-	*	0	--	-
...CHLAMYDOMONAS	--	-	99	8	310	4	--	-
...PHACOTACEAE								
...PTEROMONAS	--	-	160	13	*	0	--	-
..ZYGNEMATALES								
...DESMIDIACEAE								
...STAUSTRUM	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCAEAE								
...CYCLOTELLA	110	1	570#	44	680	9	110	2
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	*	0	--	-	100	1	45	1
...COCCONEIS	--	-	--	-	*	0	89	1
...RHODOSPHENIA	--	-	--	-	--	-	67	1
...CYMBELLACEAE								
....AMPHORA	--	-	--	-	*	0	45	1
...CYMBELLA	*	0	--	-	68	1	130	2
...EPITHEMIA	--	-	--	-	*	0	110	2
...RHODALODIA	--	-	--	-	--	-	*	0
...DIATOMACEAE								
....DIATOMA	--	-	--	-	100	1	110	2
...FRAGILARIACEAE								
....FRAGILARIA	3300#	43	49	4	980	13	3400#	55
...HANNAEA	--	-	--	-	--	-	*	0
...SYNEDRA	--	-	--	-	780	11	130	2
...GOMPHONEMACEAE								
....GOMPHONEMA	--	-	--	-	470	7	340	5
...MERIDIONACEAE								
....MERIDION	--	-	--	-	--	-	*	0
...NAVICULACEAE								
....CALONEIS	--	-	--	-	*	0	*	0
...NAVICULA	55	1	--	-	340	5	540	9
...NEIDIUM	*	0	--	-	--	-	--	-
...PINNULARIA	--	-	--	-	--	-	--	-
...NITZSCHACEAE								
....NITZSCHIA	140	2	250#	19	640	9	130	2
...SURIPELLACEAE								
...CYMATOPLEURA	--	-	--	-	--	-	67	1
...SURIELLA	--	-	--	-	100	1	*	0
..CHRYSOPHYCEAE								
...CHRYSONOMADALES								
...CHROMULINACEAE								
...CHROMULINA	140	2	--	-	--	-	--	-

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

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

CARSON RIVER BASIN

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV--Continued

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

PHYTOPLANKTON

DATE TIME	OCT 3,77 1155	DEC 1,77 1200	MAR 5,78 1200	MAY 8,78 1425
TOTAL CELLS/ML	7500	1300	7300	6100
DIVERSITY: DIVISION	1.1	1.3	1.3	0.5
..CLASS	1.2	1.3	1.3	0.5
..ORDER	1.3	2.0	1.8	0.7
...FAMILY	2.1	2.4	3.0	2.2
....GENUS	2.1	2.4	3.5	2.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONIDAE								
....CRYPTOCHRYSIDACEAE								
.....CHROOMONAS	--	-	12	1	--	-	--	-
.....RHODOMONAS	*	0	--	-	--	-	--	-
...CRYPTOMONODACEAE								
....CRYPTOMONAS	--	-	62	5	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCOCCALES								
....CHROCOCCACEAE								
.....ANACYSTIS	--	-	--	-	--	-	--	-
...HORMOGONALES								
....OSCILLATORIA								
.....LYNGBYA	--	-	--	-	2000#	27	--	-
....OSCILLATORIA	--	-	--	-	240	3	760	12
...RIVULARIACEAE								
....RAPHIDIOPSIS	*	0	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
.....EUGLENA	*	0	86	7	--	-	--	-
....PHACUS	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	*	0	--	-

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

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

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV--Continued

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

PHYTOPLANKTON

DATE TIME	JUN 6,78 0950	JUL 7,78 1035	AUG 3,78 1215	SEP 11,78 1015
TOTAL CELLS/ML	3300	4500	4600	2000
DIVERSITY: DIVISION	0.0	0.8	1.3	0.9
..CLASS	0.0	0.8	1.3	0.9
...ORDER	0.2	1.2	1.5	1.8
....FAMILY	2.6	3.0	3.0	2.7
.....GENUS	3.0	3.1	3.5	2.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....OOCYSTACEAE								
.....EUTETRAMORUS	--	-	--	-	--	-	--	-
.....COELASTRACEAE								
.....COELASTRUM	--	-	--	-	450	10	--	-
.....MICRACTINIACEAE								
.....GOLENKINIA	--	-	--	-	1100#	23	--	-
.....MICRACTINIUM	--	-	--	-	--	-	--	-
....OOCYSTACEAE								
.....ANKISTRODESMUS	--	-	--	-	280	6	100	5
.....CHLORELLA	--	-	--	-	--	-	--	-
.....KIRCHNERIELLA	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	140	3	15	1
.....SELENASTRUM	--	-	200	4	--	-	--	-
...SCENEDESMACEAE								
.....ACTINASTRUM	--	-	--	-	110	2	--	-
.....SCENEDESMUS	--	-	270	6	870#	19	210	11
.....TETRASTRUM	--	-	98	2	110	2	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CARTERIA	--	-	--	-	--	-	15	1
....CHLAMYDOMONAS	--	-	200	4	--	-	30	2
...PHACOTACEAE								
....PTEROMONAS	--	-	--	-	--	-	--	-
..ZYGNEMALES								
...DESMIDIACEAE								
....STAURASTRUM	--	-	--	-	--	-	15	1
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
....COSCINODISCACEAE								
.....CYCLOTELLA	98	3	200	4	360	8	880#	44
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	28	1	100	5
....COCCONEIS	200	6	200	4	--	-	75	4
....RHOICOSPHEINIA	25	1	--	-	28	1	--	-
...CYMBELLACEAE								
....AMPHORA	--	-	--	-	--	-	--	-
....CYMBELLA	98	3	170	4	--	-	--	-
....EPITHEMIA	98	3	49	1	28	1	--	-
....RHOPALODIA	--	-	--	-	--	-	30	2
...DIATOMACEAE								
....DIATOMA	150	5	150	3	28	1	--	-
...FRAGILARIACEAE								
....FRAGILARIA	980#	30	1800#	40	280	6	45	2
....HANNAEA	--	-	--	-	--	-	--	-
....SYNEDRA	74	2	--	-	170	4	--	-
...GOMPHONEMACEAE								
....GOMPHONEMA	200	6	420	9	--	-	45	2
...MERIDIONACEAE								
....MERIDION	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....CALONEIS	25	1	--	-	--	-	--	-
....NAVICULA	540#	17	300	7	250	5	150	8
....NEIDIUM	--	-	--	-	--	-	--	-
....PINNULARIA	74	2	--	-	--	-	--	-
...NITZSCHACEAE								
....NITZSCHIA	690#	21	390	9	--	-	210	11
...SURIPELLACEAE								
....CYMATOPLEURA	--	-	--	-	--	-	--	-
....SURIPELLA	25	1	25	1	--	-	--	-
..CHRYSTOPHYCEAE								
...CHRYSOMONADALES								
....CHROMULINACEAE								
.....CHROMULINA	--	-	--	-	--	-	--	-

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

CARSON RIVER BASIN

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV--Continued

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

PHYTOPLANKTON

DATE TIME	JUN 6,78 0950	JUL 7,78 1035	AUG 3,78 1215	SEP 11,78 1015
TOTAL CELLS/ML	3300	4500	4600	2000
DIVERSITY: DIVISION	0.0	0.8	1.3	0.9
..CLASS	0.0	0.8	1.3	0.9
...ORDER	0.2	1.2	1.5	1.8
...FAMILY	2.6	3.0	3.0	2.7
....GENUS	3.0	3.1	3.5	2.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONIDALES								
....CRYPTOCHRYSIDACEAE								
.....CHROOMONAS	--	-	--	-	--	-	--	-
.....RHODOMONAS	--	-	--	-	--	-	--	-
...CRYPTOMONODACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCOCCALES								
....CHROCOCCACEAE								
.....ANACYSTIS	--	-	--	-	280	6	--	-
...HORMOGONALES								
....OSCILLATORIA								
.....LYNGBYA	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-	--	-
...RIVULARIACEAE								
....RAPHIDIOPSIS	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
.....EUGLENA	--	-	--	-	28	1	--	-
.....PHACUS	--	-	--	-	28	1	--	-
....TRACHELOMONAS	--	-	74	2	110	2	60	3

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

PERIPHYTON

Retrieval Date	Length of exposure Polyethylene strip (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)
		Dry weight	Ash weight		
Nov. 11	39	--	--	0.780	0.310
Feb. 01	28	62.6	46.5	6.51	1.17
June 06	29	20.2	17.9	1.92	0.280
Sep. 11	39	15.4	14.5	3.79	0.710

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV--Continued
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT				
03...	1155	2.0	38	.21
DEC				
01...	1200	26	8	.56
JAN				
04...	1230	160	8	3.5
FEB				
01...	1145	150	16	6.5
MAR				
03...	1200	265	21	15
APR				
03...	1230	666	120	216
MAY				
08...	1425	582	105	165
JUN				
06...	0950	1780	358	1720
JUL				
07...	1035	E500	54	22
AUG				
03...	1215	32	16	1.4
SEP				
11...	1015	4.7	9	.11

E: ESTIMATED.

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	715	736	574	---	420	362	162	206	103	181	478	592
2	708	706	562	405	415	---	161	190	109	177	507	666
3	687	701	562	416	414	---	185	218	107	173	519	597
4	687	685	570	419	413	350	---	245	109	176	528	594
5	687	689	572	414	413	335	211	198	114	189	546	594
6	689	694	574	414	411	270	209	162	107	200	540	578
7	687	687	577	369	406	271	227	154	---	202	555	578
8	689	687	585	343	368	300	225	179	---	192	586	586
9	694	701	588	400	347	316	233	---	89	190	562	621
10	691	696	587	424	---	306	248	161	88	201	581	650
11	694	696	593	418	321	285	257	143	86	200	564	---
12	689	696	588	373	362	297	261	126	102	199	561	648
13	687	694	585	397	395	291	225	124	110	204	571	646
14	680	699	568	416	420	297	178	118	92	225	570	610
15	682	692	555	419	434	318	171	104	88	258	578	547
16	680	703	539	414	430	315	177	99	91	272	581	547
17	680	729	510	347	444	319	188	128	111	259	594	545
18	684	744	338	361	440	316	211	140	123	256	593	505
19	682	726	319	321	440	300	234	135	126	285	581	447
20	678	726	302	371	432	276	252	132	120	310	591	444
21	673	718	362	395	429	275	260	120	129	344	612	462
22	671	742	410	403	428	263	245	109	130	367	608	454
23	665	708	436	413	415	248	271	101	131	373	594	452
24	665	616	436	418	395	242	286	100	131	392	594	471
25	662	435	---	419	377	235	326	135	135	409	593	473
26	667	481	363	426	369	234	325	118	139	419	594	492
27	660	535	398	433	369	234	213	128	144	427	612	505
28	664	563	420	419	373	215	227	126	158	435	594	531
29	685	568	352	418	---	198	239	139	158	431	588	559
30	703	568	393	416	---	184	186	117	171	446	584	565
31	729	---	387	416	---	169	---	101	---	468	591	---
MEAN	684	667	487	401	403	277	227	142	118	286	573	550
MAX	729	744	593	433	444	362	326	245	171	468	612	666
MIN	660	435	302	321	321	169	161	99	86	173	478	444
WTR YR 1978	MEAN	404	MAX	744	MIN	86						

CARSON RIVER BASIN

10312000 CARSON RIVER NEAR FORT CHURCHILL, NV--Continued

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

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	6.0	5.0	4.0	---	3.5	8.5	10.0	10.0	12.5	16.0	19.5	17.5
2	7.0	6.0	5.0	2.5	3.5	---	9.0	11.5	12.0	15.0	19.5	18.0
3	7.0	6.0	4.5	1.0	4.0	---	14.0	12.0	13.5	14.5	20.0	17.0
4	7.0	8.5	5.5	1.5	4.5	9.5	---	12.0	14.5	15.5	20.5	18.0
5	8.0	8.0	6.5	3.0	6.0	9.5	12.0	10.0	14.0	16.0	19.5	16.5
6	15.0	5.0	4.5	3.0	5.0	9.5	7.5	9.5	15.0	19.5	20.0	15.5
7	7.0	3.0	5.0	2.0	5.5	7.5	6.5	9.5	---	20.0	21.0	14.0
8	9.0	3.5	2.5	3.0	3.0	10.0	5.5	11.5	---	18.5	21.0	13.5
9	8.0	3.0	1.5	4.0	5.0	9.0	8.5	---	14.5	19.5	20.5	14.0
10	8.0	3.0	2.5	3.0	---	9.0	10.0	15.0	13.5	19.5	19.0	12.5
11	7.0	4.0	3.0	4.0	2.5	8.5	12.5	12.0	12.0	18.5	18.5	---
12	7.5	7.5	3.5	5.5	2.0	7.0	13.0	10.5	14.5	17.0	18.0	18.0
13	9.0	3.0	4.0	4.0	3.0	9.0	12.0	14.5	14.5	19.5	16.0	13.0
14	8.0	3.0	7.5	4.0	3.0	9.0	12.0	14.5	15.5	19.5	15.5	12.0
15	9.0	4.0	6.5	3.5	4.0	7.0	11.0	12.5	14.0	19.0	16.5	11.0
16	9.5	5.0	3.5	4.0	2.5	9.0	8.5	10.0	13.5	18.0	17.0	14.0
17	8.0	5.0	4.0	4.0	2.5	9.5	7.5	12.0	14.0	18.5	15.0	16.0
18	8.5	5.0	2.0	4.0	4.5	10.5	9.5	14.0	14.5	19.0	14.0	9.5
19	11.0	1.0	.5	3.5	5.0	10.5	11.0	14.5	14.0	20.0	16.0	7.5
20	10.5	.0	.5	4.0	4.5	12.5	11.5	13.0	15.0	19.0	16.0	10.0
21	7.5	1.5	.5	4.0	5.0	11.5	8.5	13.0	15.0	18.5	16.0	11.0
22	6.0	6.0	1.5	4.0	5.5	11.0	10.0	13.0	15.0	18.0	16.0	12.0
23	8.5	4.0	3.0	3.0	5.5	10.0	10.5	11.5	15.5	20.0	15.0	14.0
24	9.0	5.5	2.5	.0	7.0	9.0	12.0	9.0	15.0	19.0	16.0	15.0
25	8.0	5.5	---	.0	8.0	10.0	12.0	8.5	14.0	21.0	15.0	14.0
26	8.5	6.0	2.0	1.5	5.5	10.5	11.0	9.5	15.0	21.0	15.0	17.0
27	9.5	7.0	2.0	2.0	6.5	12.0	14.5	12.5	14.5	21.0	16.5	15.5
28	7.0	5.0	3.0	3.0	6.0	11.0	12.0	15.5	14.5	19.5	19.5	15.0
29	7.0	4.0	4.0	2.5	---	13.0	10.5	16.0	15.0	20.0	17.0	13.0
30	6.5	5.0	3.5	3.0	---	14.0	10.5	15.0	15.5	21.0	18.0	13.0
31	6.0	---	3.0	3.5	---	11.5	---	12.0	---	21.0	16.5	---
MEAN	8.0	4.5	3.5	3.0	4.5	10.0	10.5	12.0	14.5	19.0	17.5	14.0
MAX	15.0	8.5	7.5	5.5	8.0	14.0	14.5	16.0	15.5	21.0	21.0	18.0
MIN	6.0	.0	.5	.0	2.0	7.0	5.5	8.5	12.0	14.5	14.0	7.5
WTR YR 1978 MEAN	10.0		MAX	21.0	MIN	.0						

10312100 LAHONTAN RESERVOIR NEAR FALLON, NV

LOCATION.--Lat 39°27'45", long 119°04'00", in SW¼SE¼ sec.33, T.19 N., R.26 E., Churchill County, Hydrologic Unit 16050202, in outlet control house on upstream side of Lahontan Dam on Carson River, 18 mi (29 km) west of Fallon.

DRAINAGE AREA.--1,950 m² (5,050 km²), approximately (not including inflow from Truckee Canal).

PERIOD OF RECORD.--January 1917 to current year. Monthly contents only for January 1917 to September 1960, published in WSP 1734.

GAGE.--Float tape with surface contact detector. Prior to 1956, float tape. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to 1966 at datum 3.73 ft (1.137 m) lower (Bureau of Reclamation datum).

REMARKS.--Reservoir is formed by earth and gravel-fill dam, constructed by U.S. Bureau of Reclamation. Storage began sometime between the completion of the dam in June 1915 and the beginning of the period of record, January 1917. Capacity, 295,100 acre-ft (364 hm³) between elevations, 4,060.0 ft (1,237.49 m), invert of outlet conduit, and 4,162.0 ft (1,268.58 m), spillway crest; includes 91 acre-ft (112,000 m³) of dead storage below elevation 4,070.0 ft (1,240.54 m). Surface area at spillway elevation, 12,120 acres (49.0 km²). Water is used for irrigation of 87,500 acres (354 km²) in Newland Project and for power. Figures given herein represent total contents and are computed from 0800 hour readings, based on capacity table dated 1972. Reservoir stores water from Carson River and from Truckee River via Truckee Canal at Derby Dam. Inflow is regulated by Lake Tahoe, Donner Lake, Prosser Creek, Stampede, Boca, and other Reservoirs, and Derby Dam. Extensive irrigation above reservoir in Carson and Truckee River basins.

COOPERATION.--Records of daily elevations furnished by Truckee-Carson Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed (20-inch flashboard on weir), 328,600 acre-ft (405 hm³) June 16, 1942, elevation, 4,164.43 ft (1,269.318 m); minimum observed, 91 acre-ft (112,000 m³) Sept. 7-9, 1929, elevation, 4,070.0 ft (1,240.54 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 279,000 acre-ft (344 hm³) June 20-24, 30, elevation, 4,160.60 ft (1,268.151 m); minimum observed, 21,600 acre-ft (26.6 hm³) Oct. 1, elevation, 4,104.80 ft (1,251.143 m).

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

4,104	20,510	4,130	82,700
4,105	21,840	4,135	103,500
4,110	29,460	4,140	127,800
4,115	39,080	4,145	155,440
4,120	50,890	4,150	187,200
4,125	65,300	4,155	225,600
		4,161	283,500

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	21600	25500	30200	45700	79400	115000	178000	212000	246000	276000	234000	175000
2	21700	25600	30300	46700	80400	116000	181000	212000	248000	276000	232000	175000
3	21800	25800	30500	47400	81300	118000	184000	213000	249000	275000	231000	173000
4	22000	25900	30700	48200	82200	119000	186000	214000	251000	274000	229000	172000
5	22100	26000	30900	49100	83100	120000	189000	213000	252000	274000	227000	170000
6	22300	26100	31100	49700	84100	122000	192000	214000	254000	274000	225000	170000
7	22500	26200	31200	50700	85100	124000	194000	214000	256000	273000	223000	169000
8	22600	26400	31400	51700	86400	127000	196000	215000	257000	273000	222000	168000
9	22800	26500	31600	52900	87900	129000	198000	215000	260000	272000	220000	168000
10	22900	26700	31700	54200	89400	131000	199000	215000	262000	271000	218000	168000
11	23100	26800	31900	54900	91100	133000	200000	216000	265000	269000	217000	168000
12	23200	26900	32100	56000	92900	135000	201000	217000	267000	268000	215000	168000
13	23300	27100	32300	57200	94600	136000	202000	218000	268000	267000	213000	167000
14	23400	27400	32600	58300	96100	137000	203000	220000	270000	265000	211000	167000
15	23500	27400	32800	59300	97600	139000	205000	221000	272000	263000	209000	167000
16	23600	27500	33000	60200	98900	142000	206000	223000	274000	262000	207000	167000
17	23700	27700	33300	61200	100000	143000	207000	225000	277000	260000	205000	167000
18	23800	27800	33800	62600	101000	145000	208000	227000	278000	258000	203000	167000
19	23900	28000	34300	64300	103000	148000	208000	229000	278000	257000	201000	167000
20	24100	28100	34800	66100	104000	150000	209000	230000	279000	255000	199000	167000
21	24200	28300	36000	67400	105000	152000	208000	232000	279000	253000	197000	167000
22	24500	28400	36900	68800	107000	154000	208000	233000	279000	251000	195000	167000
23	24700	28500	37700	70100	108000	156000	208000	234000	279000	249000	194000	167000
24	24800	28700	38500	71300	109000	159000	208000	235000	279000	247000	192000	167000
25	24800	28900	39300	72500	111000	161000	208000	237000	278000	245000	190000	167000
26	24900	29200	40100	73400	112000	163000	209000	240000	278000	244000	188000	166000
27	24900	29400	40900	74300	113000	166000	209000	241000	278000	243000	186000	166000
28	25100	29700	41700	75400	114000	168000	210000	241000	278000	241000	184000	166000
29	25200	29900	42700	76400	---	170000	210000	242000	278000	239000	182000	165000
30	25200	30000	43700	77300	---	173000	211000	243000	279000	237000	180000	163000
31	25400	---	44600	78400	---	175000	---	244000	---	236000	178000	---
MAX	25400	30000	44600	78400	114000	175000	211000	244000	279000	276000	234000	175000
MIN	21600	25500	30200	45700	79400	115000	178000	212000	246000	236000	178000	163000
+	4707.48	4110.31	4117.46	4128.85	4137.25	4148.19	4153.22	4157.09	4160.59	4156.20	4148.65	4146.27
†	+3910	+4600	+14600	+33800	+35600	+61000	+36000	+33000	+35000	-43000	-58000	-15000

CAL YR 1977 MAX 196000 MIN 18800 † -78200
WTR YR 1978 MAX 279000 MIN 21600 † +141510

+ Elevation, in feet at end of month.

† Change in contents, in acre-feet.

CARSON RIVER BASIN

10312150 CARSON RIVER BELOW LAHONTAN RESERVOIR, NEAR FALLON, NV

LOCATION.--Lat 39°27'50", long 119°02'45", in E $\frac{1}{2}$ SE $\frac{1}{4}$ sec.34, T.19 N., R.26 E., Churchill County, Hydrologic Unit 16050203, on left bank 1.1 mi (1.8 km) downstream from Lahontan Dam, and 15 mi (24 km) west of Fallon.

DRAINAGE AREA.--1,950 mi² (5,050 km²), approximately (not counting inflow from Truckee Canal).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,040 ft (1,231 m), from topographic map.

REMARKS.--Records good except for period of no gage-height record, Oct. 1 to April 8, which are fair. Flow regulated by Lahontan Reservoir, capacity 295,100 acre-ft (364 hm³) and other upstream regulations. One diversion, approximately 2,500 acre-ft per year (3.08 hm³) between gage and Lahontan Reservoir.

AVERAGE DISCHARGE.--12 years, 509 ft³/s (14.41 m³/s), 368,800 acre-ft/yr (455 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,300 ft³/s (65.1 m³/s) July 5, 6, 1967, gage height, 7.71 ft (2.350 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Oct. 25 to Nov. 7, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,280 ft³/s (36.2 m³/s), gage height, 5.03 ft (1.533 m) May 12; minimum daily discharge, 1.6 ft³/s (0.045 m³/s) Oct. 25 to Nov. 7.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.6	2.0	2.0	2.1	2.2	8.3	708	1150	1010	853	775
2	1.9	1.6	2.0	2.0	2.1	2.2	8.3	712	1160	1010	854	789
3	1.9	1.6	2.0	2.0	2.1	2.2	8.3	756	1160	1010	847	715
4	1.9	1.6	2.0	2.0	2.1	2.2	8.3	893	1160	928	845	644
5	1.9	1.6	2.0	2.0	2.1	2.2	8.3	973	1160	832	842	587
6	1.9	1.6	2.0	2.0	2.1	2.2	8.3	978	1150	814	838	461
7	1.9	1.6	2.0	2.0	2.1	2.2	8.3	987	1150	964	833	399
8	1.9	1.7	2.0	2.0	2.1	2.2	8.3	987	1150	997	885	397
9	1.8	1.7	2.0	2.0	2.1	2.2	228	1040	1140	1000	901	395
10	1.8	1.7	2.0	2.0	2.1	2.2	432	1060	1140	1000	894	392
11	1.8	1.7	2.0	2.0	2.1	2.2	442	1050	1140	1010	919	392
12	1.8	1.7	2.0	2.0	2.1	2.2	459	1020	1130	1060	940	391
13	1.8	1.7	2.0	2.0	2.1	2.2	462	1090	1140	1090	930	349
14	1.8	1.7	2.0	2.0	2.1	2.2	554	1100	1140	1100	921	343
15	1.8	1.7	2.0	2.0	2.2	2.2	591	1130	1110	1100	910	296
16	1.8	1.8	2.0	2.0	2.2	2.2	591	1130	1050	1100	903	293
17	1.7	1.8	2.0	2.0	2.2	2.2	595	1130	1040	1100	894	287
18	1.7	1.8	2.0	2.0	2.2	2.2	728	1130	1040	1100	885	287
19	1.7	1.8	2.0	2.0	2.2	2.2	781	1130	1040	1110	878	287
20	1.7	1.8	2.0	2.0	2.2	2.2	777	1130	1030	1110	870	287
21	1.7	1.8	2.0	2.1	2.2	2.2	880	1130	1040	1120	870	287
22	1.7	1.8	2.0	2.1	2.2	2.2	928	1140	1040	1100	879	334
23	1.7	1.8	2.0	2.1	2.2	2.2	937	1140	1040	1030	873	373
24	1.7	1.9	2.0	2.1	2.2	2.2	928	1140	1040	986	880	373
25	1.6	1.9	2.0	2.1	2.2	2.2	880	1140	1010	986	878	471
26	1.6	1.9	2.0	2.1	2.2	2.2	700	1150	1010	993	874	531
27	1.6	1.9	2.0	2.1	2.2	2.2	700	1140	1010	991	869	526
28	1.6	1.9	2.0	2.1	2.2	2.2	700	1140	1010	942	865	523
29	1.6	1.9	2.0	2.1	---	2.2	700	1150	1010	863	861	522
30	1.6	1.9	2.0	2.1	---	2.2	704	1150	1010	858	854	520
31	1.6	---	2.0	2.1	---	16	---	1160	---	858	793	---
TOTAL	54.4	52.5	62.0	63.1	60.2	82.0	14763.4	32714	32600	31172	27138	13266
MEAN	1.75	1.75	2.00	2.04	2.15	2.65	492	1087	1006	875	875	442
MAX	1.9	1.9	2.0	2.1	2.2	16	937	1160	1160	1120	940	789
MIN	1.6	1.6	2.0	2.0	2.1	2.2	8.3	708	1010	814	793	287
AC-FT	108	104	123	125	119	163	29280	64890	64660	61830	53830	26310

CAL YR 1977 TOTAL 104798.8 MEAN 287 MAX 1030 MIN 1.6 AC-FT 207900
WTR YR 1978 TOTAL 152027.6 MEAN 417 MAX 1160 MIN 1.6 AC-FT 301500

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1966 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)	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
OCT 03...	1005	1.9	529	13.0	--	--	--	--	--	--
NOV 04...	0935	1.6	568	9.0	--	--	--	--	--	--
DEC 01...	0920	2.0	575	6.0	--	--	--	--	--	--
JAN 04...	0935	2.0	591	4.0	--	--	--	--	--	--
FEB 01...	0925	2.1	539	5.0	--	--	--	--	--	--
MAR 03...	0930	2.2	517	8.5	--	--	--	--	--	--
APR 03...	0920	8.2	358	11.0	--	--	--	--	--	--
MAY 08...	0940	992	272	11.5	--	--	--	--	--	--
JUN 05...	0940	1170	280	14.5	--	--	--	--	--	--
21...	1725	1030	301	--	82	23	5.9	26	1.3	3.8
29...	1035	1020	276	17.5	--	--	--	--	--	--
AUG 03...	1000	848	272	19.5	--	--	--	--	--	--
SEP 07...	1100	406	263	17.0	--	--	--	--	--	--

[illegible]

CARSON RIVER BASIN

OUTFALL FROM NEWLANDS PROJECT INTO STILLWATER NATIONAL WILDLIFE REFUGE, NEAR FALLON, NV

The following five canals, which are equipped with water-stage recorders, combined with 10312280 Carson River below Fallon (see next page), measure the total outfall from Newlands Project into Stillwater Wildlife Management Area, Canvasback Gun Club, and Carson Sink. Records are poor.

10312210 STILLWATER DIVERSION CANAL NEAR FALLON, NV.--Lat 39°28'25", long 118°35'50", in NE¼NE¼ sec.34, T.19 N., R.30 E., Churchill County, Hydrologic Unit 16050203, on right bank 0.2 mi (0.6 km) downstream from a channel to Stillwater Slough and 10 mi (16 km) east of Fallon.

10312220 STILLWATER SLOUGH CUTOFF DRAIN NEAR STILLWATER, NV.--Lat 39°33'05", long 118°31'40", in SE¼SW¼ sec.32, T.20 N., R.31 E., Churchill County, Hydrologic Unit 16050203, on left bank 0.9 mi (1.4 km) downstream from Stillwater Slough and 2.3 mi (3.7 km) north-northeast of Stillwater.

10312260 INDIAN LAKES CANAL NEAR FALLON, NV.--Lat 39°34'30", long 118°41'30", in NW¼NE¼ sec.26, T.20 N., R.29 E., Churchill County, Hydrologic Unit 16050203, on right bank between 2 lakes 8 mi (13 km) northeast of Fallon.

10312265 INDIAN LAKES CANAL BELOW EAST LAKE, NV.--Lat 39°36'16", long 118°34'41", in NE¼ sec.14, T.20 N., R.30 E., Churchill County, Hydrologic Unit 16050203, on left bank 500 ft (152 m) downstream from East Lake and 6.1 mi (9.8 km) north-northwest of Stillwater. Established April 15, 1977.

10312270 PAIUTE DRAIN AT WILDLIFE ENTRANCE NEAR STILLWATER, NV.--Lat 39°36'33", long 118°33'19", in SW¼SW¼ sec.7, T.20 N., R.31 E., Churchill County, Hydrologic Unit 16050203, on left bank 6.1 mi (9.8 km) north-northwest of Stillwater. Established April 15, 1977.

REMARKS.--Records of monthly discharge of these canals, published as a group, are available from October 1966 to current year. Monthly measurements of specific conductance and water temperature for station numbers 10312210, 10312220, 10312260, 10312260, and 10312270 are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

OUTFALL, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Month	Stillwater Diversion Canal	Stillwater Slough Cutoff Drain	Indian Lakes Canal near Fallon	Indian Lakes Canal below East Lake	Paiute Drain near Stillwater
October	330	135	180	0	22
November	151	134	127	0	7.9
December	116	109	147	0	0
CAL YR 1977 . . .	6,930	6,800	2,770	—	—
January	129	--	122	0	0
February	137	--	105	0	0
March	120	--	102	0	0
April	723	--	714	0	131
May	2,980	--	897	619	1,360
June	3,070	--	959	306	966
July	3,360	2,460	477	82	686
August	2,540	2,630	922	295	693
September	2,400	1,590	1,260	580	995
WTR YR 1977-78	16,060	--	6,010	1,880	4,860

10316500 LAMOILLE CREEK NEAR LAMOILLE, NV

LOCATION.--Lat 40°41'30", long 115°28'30", in NE¼ sec.6, T.32 N., R.58 E., Elko County, Hydrologic Unit 16040101, in Humboldt National Forest, on left bank 600 ft (180 m) upstream from Lamoille Creek bridge, at mouth of canyon, upstream from McDermitt ditch, and 3 mi (5 km) south of Lamoille.

DRAINAGE AREA.--25 mi² (65 km²), approximately.

PERIOD OF RECORD.--May 1915 to June 1923, October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Concrete control since Oct. 30, 1950. Altitude of gage is 6,240 ft (1,902 m), from topographic map.

Prior to Oct. 1, 1943, nonrecording gages at various sites nearby at different datums. Oct. 1 to Jan. 16, 1975, water-stage recorder at site 600 ft (183 m) downstream at datum 4.28 ft (1.305 m) lower.

REMARKS.--Records good except those for winter months, which are fair. Records are now obtained upstream from McDermitt ditch and therefore include that flow, which as previously combined with these figures to give total flow. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--42 years (1915-22, 1943-78) 43.5 ft³/s (1.232 m³/s), 31,520 acre-ft/yr (38.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 794 ft³/s (22.5 m³/s) June 4, 1957, caused by failure of diversion dam 200 ft (60 m) upstream, but may have been exceeded in June 1917, when gage washed out; minimum, 0.10 ft³/s (0.003 m³/s) Feb. 24, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 400 ft³/s (11.3 m³/s) June 8 (2000 hrs) gage height, 4.89 ft (1.490 m), no other peak above base of 310 ft³/s (8.78 m³/s); minimum daily 3.4 ft³/s (0.096 m³/s) Nov. 19, 20.

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	6.4	3.8	4.1	4.0	3.8	4.5	21	32	174	195	35	7.7
2	5.8	3.8	4.1	4.1	3.8	4.7	21	34	180	192	31	7.6
3	5.3	3.8	4.1	4.2	3.8	5.1	20	37	186	167	27	7.4
4	5.3	3.8	4.2	4.2	3.8	5.0	20	39	199	140	26	7.0
5	5.1	3.9	4.3	4.2	3.8	5.0	19	38	230	136	24	10
6	5.1	4.3	4.2	4.2	3.8	5.1	19	37	263	138	23	53
7	5.1	4.0	4.2	4.2	4.1	4.8	19	36	313	141	22	25
8	5.1	3.7	4.1	4.0	4.2	4.8	18	35	343	144	21	19
9	5.1	3.5	4.0	4.2	4.3	5.1	18	36	353	147	20	16
10	5.1	3.8	4.1	4.2	4.3	5.5	18	42	296	154	18	27
11	5.0	3.8	3.9	4.2	4.1	5.5	19	48	242	139	17	24
12	5.0	3.6	4.2	4.2	4.0	5.5	19	51	268	123	17	21
13	5.0	3.6	4.2	4.2	4.2	5.4	20	66	313	117	20	20
14	5.0	3.5	4.2	4.2	4.2	5.3	20	95	325	117	18	20
15	5.1	3.5	4.0	4.2	4.2	5.2	20	139	301	125	16	20
16	5.1	3.5	4.0	4.2	4.1	5.3	22	133	256	113	14	19
17	5.1	3.5	4.2	4.2	4.1	5.5	21	103	233	97	14	20
18	5.1	3.5	4.2	4.1	4.1	5.7	21	90	228	86	13	21
19	5.1	3.4	3.9	4.1	4.2	6.1	21	90	217	81	13	21
20	5.1	3.4	3.9	4.1	4.0	6.6	22	107	228	73	11	21
21	5.1	4.0	4.1	4.1	4.1	7.3	23	132	241	66	11	22
22	4.8	4.1	4.3	4.1	4.2	8.1	22	164	237	59	10	24
23	4.1	3.9	4.5	4.0	4.2	9.0	22	184	225	55	10	26
24	4.0	4.3	4.5	3.9	4.2	9.2	23	164	222	51	9.5	28
25	3.9	4.7	4.3	4.0	4.2	9.2	26	140	211	51	9.4	27
26	3.9	4.2	4.0	4.0	4.2	9.9	30	119	187	50	9.0	25
27	3.8	4.2	4.3	4.0	4.3	11	30	113	178	49	8.6	24
28	3.8	4.2	4.3	4.0	4.4	12	31	123	190	48	8.4	23
29	3.8	4.1	4.4	3.9	---	13	31	160	194	45	8.3	22
30	3.9	4.1	4.5	3.9	---	16	32	174	190	41	8.1	21
31	3.8	---	4.1	3.9	---	19	---	169	---	39	7.9	---
TOTAL	148.9	115.5	129.4	127.0	114.7	229.4	668	2930	7223	3179	500.2	628.7
MEAN	4.80	3.85	4.17	4.10	4.10	7.40	22.3	94.5	241	103	16.1	21.0
MAX	6.4	4.7	4.5	4.2	4.4	19	32	184	353	195	35	53
MIN	3.8	3.4	3.9	3.9	3.8	4.5	18	32	174	39	7.9	7.0
AC-FT	295	229	257	252	228	455	1320	5810	14330	6310	992	1250

CAL YR 1977 TOTAL 9231.1 MEAN 25.3 MAX 285 MIN 3.4 AC-FT 18310
WTR YR 1978 TOTAL 15993.8 MEAN 43.8 MAX 353 MIN 3.4 AC-FT 31720

HUMBOLDT RIVER BASIN

10317400 NORTH FORK HUMBOLDT RIVER NEAR NORTH FORK, NV

LOCATION.--Lat 41°34'30", long 115°54'40", in NW¼SE¼ sec.32, T.43 N., R.54 E., Elko County, Hydrologic Unit 16040102, on right bank above all diversions, 0.7 mi (1.1 km) downstream from Fry Canyon, 1 mi (2 km) upstream from Doheny Ranch, and 9 mi (14 km) north-west of North Fork.

DRAINAGE AREA.--11 mi² (28 km²), approximately.

PERIOD OF RECORD.--Occasional low-flow measurements, water year 1965, August 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft (2,042 m), from topographic map.

REMARKS.--Records good. No diversion above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--13 years, 10.9 ft³/s (0.309 m³/s), 7,900 acre-ft/yr (9.74 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 170 ft³/s (4.81 m³/s) June 7, 1975, gage height, 4.10 ft (1.250 m); maximum gage height, 4.43 ft (1.350 m) Jan. 22, 1970; minimum discharge, no flow at times in Aug. to Oct. 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 72 ft³/s (2.04 m³/s) May 14 (1900 hrs), gage height, 3.12 ft (0.951 m), no other peak above base of 65 ft³/s (1.84 m³/s); no flow at times in Oct.

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	.21	1.6	1.1	1.3	3.3	34	44	30	8.7	2.3	.69
2	.08	.15	1.5	1.1	1.3	3.3	26	42	30	8.6	2.2	.67
3	.02	.15	1.7	1.1	1.3	3.4	20	42	29	9.0	2.1	.62
4	.01	.12	1.9	1.0	1.3	3.3	18	41	30	9.0	2.1	.61
5	.09	.11	1.5	1.0	1.5	3.2	15	35	33	7.3	2.0	1.3
6	.11	.11	1.6	1.0	1.5	3.3	14	29	37	6.7	1.9	1.6
7	.13	.08	1.4	.93	1.6	3.2	14	26	41	6.8	1.8	1.3
8	.06	.05	.77	.95	1.5	3.6	14	25	40	7.0	1.8	1.1
9	.01	.05	.81	.96	1.8	3.6	16	29	39	6.2	1.7	.89
10	.00	.06	.90	1.0	1.9	3.7	20	38	37	5.7	1.7	2.0
11	.00	.18	1.0	.93	1.4	4.0	24	44	30	5.5	1.5	1.8
12	.00	.15	.97	.97	1.4	4.0	24	45	26	5.0	1.5	1.4
13	.00	.10	1.4	1.0	1.5	3.6	24	51	27	4.6	1.6	1.2
14	.00	.10	3.9	1.0	1.6	3.4	23	62	28	4.4	1.6	1.1
15	.01	.08	5.7	1.1	1.3	3.3	24	64	25	4.1	1.5	1.0
16	.00	.06	3.7	1.2	1.5	3.6	24	51	22	3.9	1.6	.94
17	.00	.15	2.9	1.2	1.7	4.6	21	40	19	3.9	1.7	.95
18	.00	.17	2.1	1.1	1.6	7.0	19	31	18	3.7	1.6	1.3
19	.07	.31	1.4	1.3	1.7	11	20	28	17	3.5	1.4	1.4
20	.04	.23	1.0	1.2	1.9	15	21	30	17	3.5	1.2	1.9
21	.06	.34	1.4	1.1	2.0	18	20	38	17	3.3	1.1	2.6
22	.13	.76	1.4	1.2	2.3	23	19	45	16	3.2	1.1	2.6
23	.13	.72	1.4	1.1	2.7	24	18	46	14	3.0	1.1	2.3
24	.03	1.6	1.5	1.2	3.2	22	18	40	13	3.0	1.0	2.0
25	.00	2.8	1.5	1.4	3.3	20	26	32	12	2.9	.96	1.7
26	.06	3.3	1.3	1.4	3.5	23	39	28	11	2.8	.94	1.5
27	.15	2.8	1.2	1.3	3.5	26	40	26	10	3.2	.91	1.3
28	.19	2.0	1.2	1.3	3.3	29	48	27	9.7	3.6	.89	1.2
29	.19	2.0	1.1	1.4	---	33	51	31	9.3	2.8	.79	1.1
30	.27	1.9	1.2	1.3	---	40	48	33	8.9	2.7	.71	1.1
31	.24	---	1.1	1.3	---	40	---	32	---	2.5	.73	---
TOTAL	2.23	20.84	52.05	35.14	54.4	391.4	742	1175	695.9	150.1	45.03	41.17
MEAN	.072	.69	1.68	1.13	1.94	12.6	24.7	37.9	23.2	4.84	1.45	1.37
MAX	.27	3.3	5.7	1.4	3.5	40	51	64	41	9.0	2.3	2.6
MIN	.00	.05	.77	.93	1.3	3.2	14	25	8.9	2.5	.71	.61
AC-FT	4.4	41	103	70	108	776	1470	2330	1380	298	89	82

CAL YR 1977 TOTAL 1490.65 MEAN 4.08 MAX 32 MIN .00 AC-FT 2960
WTR YR 1978 TOTAL 3405.26 MEAN 9.33 MAX 64 MIN .00 AC-FT 6750

10317500 NORTH FORK HUMBOLDT RIVER AT DEVILS GATE, NEAR HALLECK, NV

LOCATION.--Lat 41°10'50", long 115°29'35", in SE $\frac{1}{4}$ sec.13, T.38 N., R.57 E., Elko County, Hydrologic Unit 16040102, on right bank 500 ft (150 m) downstream from Devils Gate Canyon, 16 mi (26 km) north of Halleck, and 26 mi (42 km) upstream from mouth. Prior to Aug. 8, 1975, at site 500 ft (150 m) downstream.

DRAINAGE AREA.--830 mi² (2,150 km²), approximately.

PERIOD OF RECORD.--October 1913 to December 1921, October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1314: 1913 (M), 1946.

GAGE.--Water-stage recorder. Datum of gage is 5,370 ft (1,636.8 m) National Geodetic Vertical Datum of 1929 (Geological Survey planetable bench mark). November 1913 to September 1921 at site 0.1 mi (0.2 km) upstream at different datum. Oct. 16, 1943, to Mar. 20, 1970, at site 500 ft (150 m) downstream at datum 2.00 ft (0.610 m) lower. Mar. 21, 1970, to Oct. 11, 1973, at site 250 ft (80 m) downstream at datum 2.00 ft (0.610 m) lower. Oct. 12, 1973 to Aug. 7, 1975 at site 500 ft (150 m) downstream at datum 2.00 ft (0.610 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Many diversions for irrigation of 16,600 acres (67.2 km²), Humboldt Decree, above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--43 years, 73.3 ft³/s (2.076 m³/s), 53,110 acre-ft/yr (65.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s (295 m³/s) Feb. 11, 1962, gage height, 16.12 ft (4.913 m), from high-water mark in well, from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.1 ft³/s (0.031 m³/s) July 26, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 170 ft³/s (4.81 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar 30	0800	513 14.5	4.96 1.512
Apr 11	0100	459 13.0	4.87 1.484
Apr 27	2300	*580 16.4	5.20 1.585

Minimum daily discharge, 2.5 ft³/s (0.071 m³/s) Aug 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	7.9	12	14	23	23	25	381	290	86	24	4.3	7.1
2	7.9	11	14	24	24	28	343	275	92	22	3.5	7.2
3	7.9	12	14	25	23	36	304	262	93	21	3.0	7.3
4	7.5	13	15	26	22	50	283	255	99	21	2.9	7.2
5	7.5	13	15	25	24	41	262	249	106	21	3.0	12
6	7.7	14	15	24	24	43	238	240	91	21	2.8	19
7	7.7	14	15	23	27	45	253	230	89	20	2.9	15
8	7.5	14	15	22	29	45	265	226	90	19	2.9	13
9	7.5	13	15	23	30	48	376	203	81	23	2.8	14
10	7.9	12	15	22	29	57	414	188	97	27	2.8	19
11	7.9	11	15	23	29	69	382	170	112	23	2.6	19
12	7.9	11	17	22	27	68	270	148	131	19	2.5	17
13	9.8	11	17	23	29	61	234	159	130	15	2.8	18
14	7.9	12	17	23	28	46	223	157	107	12	2.8	19
15	7.9	12	18	25	29	40	221	151	82	13	2.7	17
16	7.5	11	18	25	27	42	234	157	78	13	3.0	16
17	7.5	11	18	25	25	46	253	184	83	11	3.1	14
18	7.5	12	18	25	24	66	245	197	85	9.1	3.2	15
19	7.5	11	17	28	27	100	217	174	81	9.0	3.5	15
20	7.5	9.8	17	26	27	136	197	155	69	8.5	3.7	16
21	7.1	10	19	26	26	164	188	142	53	8.1	3.7	15
22	7.1	10	22	24	26	226	188	125	41	8.2	3.8	15
23	7.1	12	24	23	26	362	187	124	37	7.9	4.0	16
24	7.3	15	25	22	26	377	177	141	33	7.5	3.8	14
25	7.5	18	25	21	26	359	165	185	30	6.4	4.2	14
26	9.4	20	24	24	27	325	242	181	28	6.1	5.7	14
27	10	19	23	26	27	352	446	160	32	5.8	5.2	14
28	11	16	25	27	26	400	433	135	32	5.8	5.7	13
29	10	15	27	25	---	404	343	110	27	5.8	6.3	13
30	11	15	28	24	---	413	312	94	24	5.7	6.8	12
31	10	---	26	23	---	397	---	84	---	5.2	7.1	---
TOTAL	253.4	389.8	587	747	737	4871	8276	5551	2219	424.1	117.1	426.8
MEAN	8.17	13.0	18.9	24.1	26.3	157	276	179	74.0	13.7	3.78	14.2
MAX	11	20	28	28	30	413	446	290	131	27	7.1	19
MIN	7.1	9.8	14	21	22	25	165	84	24	5.2	2.5	7.1
AC-FT	503	773	1160	1480	1460	9660	16420	11010	4400	841	232	847

CAL YR 1977 TOTAL 6095.4 MEAN 16.7 MAX 73 MIN 3.8 AC-FT 12090
WTR YR 1978 TOTAL 24599.2 MEAN 67.4 MAX 446 MIN 2.5 AC-FT 48790

HUMBOLDT RIVER BASIN

10318500 HUMBOLDT RIVER NEAR ELKO, NV

LOCATION.--Lat 40°56'00", long 115°38'00", in SE 1/4 sec. 11, T.35 N., R.56 E., Elko County, Hydrologic Unit 16040101, on right bank 1 mi (2 km) southwest of Ryndon, 1.5 mi (2.4 km) upstream from Jackson Creek, 5 mi (8 km) downstream from North Fork, and 10 mi (16 km) northeast of Elko.

DRAINAGE AREA.--2,800 mi² (7,252 km²), approximately.

PERIOD OF RECORD.--June 1895 to October 1902, October 1944 to current year.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,142.32 ft (1,567.379 m) National Geodetic Vertical Datum of 1929. June 1895 to October 1902, nonrecording gage at site 11 mi (18 km) downstream at different datum.

REMARKS.--Records good except those for winter months, which are fair. Diversions for irrigation of 95,800 acres (388 km²), Humboldt Decree, above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--41 years, 234 ft³/s (6.627 m³/s), 169,500 acre-ft/yr (209 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,070 ft³/s (200 m³/s) Feb. 13, 1962, gage height, 12.3 ft (3.75 m); no flow for many days in August and September 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 746 ft³/s (21.1 m³/s) June 16, gage height, 5.05 ft (1.539 m); minimum, 1.3 ft³/s (0.037 m³/s) Sept. 1-3.

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	1.5	4.7	34	29	59	119	580	541	337	256	26	1.4
2	1.6	5.0	34	36	61	123	590	492	331	242	22	1.4
3	1.6	5.1	33	38	68	152	580	495	322	225	19	1.4
4	1.6	5.4	34	43	65	202	571	475	322	229	15	1.4
5	1.6	5.6	34	47	89	218	551	475	333	217	10	2.4
6	1.6	5.9	34	47	87	227	544	423	358	209	8.6	2.8
7	1.8	5.6	36	46	98	236	544	446	381	219	7.3	2.4
8	1.8	5.4	29	44	102	232	577	443	425	213	5.9	2.5
9	1.8	5.0	26	43	119	216	587	431	503	195	5.0	3.9
10	1.8	4.5	24	42	119	227	634	403	555	174	4.5	4.8
11	1.9	5.6	25	47	120	247	648	342	604	161	3.9	5.6
12	2.2	6.0	39	51	104	252	587	297	658	145	3.5	7.3
13	2.5	6.1	43	48	91	247	517	275	669	131	3.0	13
14	2.7	6.3	43	54	98	240	484	275	662	117	2.7	16
15	3.2	7.3	40	64	93	225	470	261	658	107	2.4	15
16	3.5	9.0	36	73	82	211	462	261	709	98	2.4	12
17	3.3	11	33	73	75	199	470	302	676	89	2.1	10
18	3.3	13	29	67	78	189	462	362	672	83	2.0	12
19	3.5	14	25	70	94	189	449	403	648	76	1.9	13
20	3.7	16	29	71	92	207	413	396	604	73	1.9	17
21	3.7	17	32	76	95	229	386	393	548	70	1.8	27
22	3.8	19	34	64	97	275	362	398	494	61	1.6	31
23	3.7	20	34	49	96	329	355	384	454	55	1.5	30
24	3.9	28	33	45	99	438	340	372	410	49	1.5	29
25	4.0	36	31	49	109	481	322	391	374	46	1.5	28
26	4.1	39	31	55	115	478	320	449	352	44	1.5	28
27	4.2	39	33	58	118	478	391	467	337	39	1.5	29
28	4.6	38	33	57	116	517	523	443	320	37	1.5	28
29	4.6	39	33	57	---	561	558	413	295	37	1.4	26
30	4.6	34	32	55	---	571	527	374	274	33	1.4	26
31	4.5	---	31	54	---	577	---	353	---	29	1.4	---
TOTAL	92.2	455.5	1017	1652	2639	9092	14804	12235	14285	3759	165.7	427.3
MEAN	2.97	15.2	32.8	53.3	94.3	293	493	395	476	121	5.35	14.2
MAX	4.6	39	43	76	120	577	648	541	709	256	26	31
MIN	1.5	4.5	24	29	59	119	320	261	274	29	1.4	1.4
AC-FT	183	903	2020	3280	5230	18030	29360	24270	28330	7460	329	848

CAL YR 1977 TOTAL 19549.95 MEAN 53.6 MAX 417 MIN 1.4 AC-FT 38780
WTR YR 1978 TOTAL 40623.70 MEAN 166 MAX 709 MIN 1.4 AC-FT 120200

HUMBOLDT RIVER BASIN

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10320000 SOUTH FORK HUMBOLDT RIVER ABOVE DIXIE CREEK, NEAR ELKO, NV

LOCATION.--Lat 40°41'05", long 115°48'45", in NW¼SW¼ sec.5, T.32 N., R.55 E., Elko County, Hydrologic Unit 16040103, on left bank 1.5 mi (2.4 km) upstream from Dixie Creek and 10.5 mi (16.9 km) south of Elko.

DRAINAGE AREA.--1,150 mi² (2,978 km²), approximately.

PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1284: 1952 (M).

GAGE.--Water-stage recorder. Altitude of gage is 5,140 ft (1,567 m), from topographic map.

REMARKS.--Records good except those for winter months, which are poor. Diversions for irrigation of 36,200 acres (147 km²), Humboldt Decree, above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--30 years, 116 ft³/s (3.285 m³/s), 84,040 acre-ft/yr (104 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,760 ft³/s (78.2 m³/s) Feb. 11, 1962, gage height, 7.2 ft (2.19 m), from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.10 ft³/s (0.003 m³/s) Sept. 9, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11.3 m³/s) and maximum (*)

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 25	1500	416 11.8	3.73 1.137
June 11	0100	*823 23.3	4.31 1.314

Minimum daily discharge, 8.4 ft³/s (0.24 m³/s) Aug. 12-14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	12	20	20	26	40	206	228	335	284	38	9.2
2	9.6	12	20	20	25	53	218	240	345	280	34	8.9
3	9.9	12	19	21	26	91	211	243	355	281	27	9.2
4	10	12	20	22	29	124	191	249	366	269	22	9.2
5	10	12	21	23	30	123	180	250	386	240	20	9.6
6	9.8	14	21	23	36	144	165	250	424	223	17	17
7	9.2	15	20	23	44	137	155	246	496	200	15	26
8	9.3	15	21	22	45	119	167	224	617	199	13	26
9	9.6	14	21	22	45	103	180	216	734	195	12	24
10	9.6	16	20	22	48	129	156	217	802	188	11	22
11	10	16	20	23	39	123	145	222	800	181	8.8	26
12	10	16	23	23	37	123	143	220	712	171	8.4	29
13	10	16	23	23	35	126	144	219	658	159	8.4	30
14	10	16	23	25	34	113	149	242	678	143	8.4	30
15	10	16	22	28	31	102	155	293	690	141	8.8	29
16	10	16	21	28	29	89	162	329	687	134	8.8	27
17	10	16	22	28	29	83	168	337	612	128	8.8	25
18	10	15	20	29	28	83	169	324	556	116	8.9	25
19	10	15	19	31	29	86	164	287	539	106	9.2	28
20	10	18	20	31	32	95	156	265	485	96	9.2	29
21	10	22	21	31	34	106	147	252	461	93	9.2	30
22	10	28	22	29	33	126	148	262	460	91	9.2	32
23	10	24	22	27	33	157	149	299	450	83	9.2	32
24	10	24	21	25	34	173	145	366	412	76	9.5	34
25	10	25	20	28	41	167	138	406	389	68	9.2	34
26	10	24	20	30	44	155	157	388	377	61	9.2	33
27	11	22	20	24	43	152	182	327	345	59	9.2	33
28	12	21	20	23	40	156	206	286	317	58	9.0	33
29	12	20	21	25	---	164	207	276	296	56	9.2	31
30	12	20	21	27	---	174	214	304	287	51	9.2	30
31	12	---	21	28	---	187	---	325	---	45	9.2	---
TOTAL	315.6	524	645	784	979	3803	5077	8592	15071	4475	398.0	761.1
MEAN	10.2	17.5	20.8	25.3	35.0	123	169	277	502	144	12.8	25.4
MAX	12	28	23	31	48	187	218	406	802	284	38	34
MIN	9.2	12	19	20	25	40	138	216	287	45	8.4	8.9
AC-FT	626	1040	1280	1560	1940	7540	10070	17040	29890	8880	789	1510
CAL YR 1977 TOTAL	21725.5			59.5	MAX 685	MIN 6.4	AC-FT 43090					
WTR YR 1978 TOTAL	41424.7			MEAN 113	MAX 802	MIN 8.4	AC-FT 82170					

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LOCATION.--Lat 40°36'25", long 116°12'05", in SE¹₄ sec.35, T.32 N., R.51 E., Eureka County, Hydrologic Unit 16040101, on right bank 0.2 mi (0.3 km) downstream from Southern Pacific Railroad bridge, 0.5 mi (0.8 km) downstream from Palisade, and 0.8 mi (1.3 km) upstream from Pine Creek.

PERIOD OF RECORD.--October 1902 to October 1906, July 1911 to current year. Monthly discharge only for some periods published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 4,825.55 ft (1,470.828 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1939, nonrecording gages (water-stage recorder Apr. 22 to June 3, 1935) at several sites within half a mile of present site at various datums.

AVERAGE DISCHARGE.--71 years (1902-6, 1911-78) 368 ft³/s (10.42 m³/s), 266,600 acre-ft/yr (329 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,610 ft³/s (187 m³/s) Feb. 12, 1962, gage height, 10.0 ft (3.05 m); minimum, 2 ft³/s (0.06 m³/s) Aug. 25-28, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 17 ft (5.3 m), present datum, about Feb. 28, 1910, from old photographs and written statements of resident witnesses, discharge, about 17,000 ft³/s (481 m³/s), from rating curve extended above 7,000 ft³/s (198 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,260 ft³/s (35.7 m³/s) June 11, gage height, 4.58 ft (1.396 m); minimum, 20 ft³/s (0.57 m³/s) Nov. 20.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	34	68	72	100	174	994	1170	675	583	68	26
2	26	34	68	66	100	181	1020	1120	690	552	66	24
3	26	35	70	76	104	218	994	1070	685	538	59	26
4	26	35	70	85	106	274	964	1010	680	516	55	28
5	24	37	71	91	113	339	934	988	695	480	53	32
6	24	37	70	89	123	399	892	958	740	451	45	45
7	24	37	70	85	131	427	922	910	796	423	42	76
8	24	37	68	78	144	415	928	844	934	407	39	75
9	23	39	63	85	155	415	1010	790	1030	381	35	59
10	23	39	59	83	169	439	1000	760	1130	370	31	59
11	24	42	56	89	176	459	940	725	1210	353	31	59
12	24	45	66	87	171	455	946	695	1160	336	29	63
13	24	45	68	89	167	459	958	645	1130	307	31	66
14	23	45	70	91	157	439	922	620	1190	280	31	63
15	24	45	70	96	153	419	862	625	1210	259	29	59
16	26	47	71	104	144	399	844	690	1210	235	28	58
17	28	47	76	106	144	384	850	700	1170	210	29	59
18	29	47	80	109	135	395	808	695	1140	191	28	64
19	31	45	61	113	131	423	784	690	1130	181	28	66
20	32	40	50	117	139	463	755	675	1080	167	29	66
21	32	45	58	115	146	494	735	665	1020	153	28	66
22	31	51	70	115	148	620	705	660	976	148	28	66
23	31	71	82	115	150	802	675	660	922	142	26	64
24	31	73	78	92	150	832	640	725	850	131	26	68
25	32	71	68	91	153	814	615	784	784	115	26	71
26	32	71	61	113	157	844	745	796	750	104	26	73
27	34	70	75	111	167	862	970	766	705	98	24	73
28	34	70	78	102	169	874	988	730	670	92	28	73
29	32	68	80	100	---	880	1040	700	645	89	26	73
30	32	70	82	98	---	916	1140	690	610	83	26	73
31	32	---	76	100	---	958	---	685	---	75	26	---
TOTAL	866	1472	2153	2963	4002	16476	26580	24241	27617	8450	1076	1773
MEAN	27.9	49.1	69.5	95.6	143	531	886	782	921	273	34.7	59.1
MAX	34	73	82	117	176	958	1140	1170	1210	583	68	76
MIN	23	34	50	66	100	174	615	620	610	75	24	24
AC=FT	1720	2920	4270	5880	7940	32680	52720	48080	54780	16760	2130	3520
CAL YR 1977	TOTAL	43443	MEAN 119	MAX	850	MIN 14	AC=FT	86170				
WTR YR 1978	TOTAL	117669	MEAN 322	MAX	1210	MIN 23	AC=FT	233400				

HUMBOLDT RIVER BASIN

10323500 HUMBOLDT RIVER NEAR ARGENTA, NV

LOCATION.—Lat 40°40'45", long 116°38'45", in SE¼NW¼ sec.2, T.32 N., R.47 E., Lander County, Hydrologic Unit 16040105, on left bank 3 mi (5 km) east of Argenta, and 15.5 mi (24.9 km) east of Battle Mountain.

DRAINAGE AREA.—7,490 mi² (19,400 km²), approximately.

PERIOD OF RECORD.—February 1946 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 4,580 ft (1,396 m), from topographic map.

REMARKS.—Records good. Many diversions above station for irrigation. Records do not include flow in secondary channels or ditches, much of which is used for irrigation. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.—32 years, 327 ft³/s (9.261 m³/s), 236,900 acre-ft/yr (292 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 6,000 ft³/s (170 m³/s) Feb. 15, 1962, gage height, 10.78 ft (3.286 m), on basis of measured flow at adjacent sites (includes flow bypassing gage outside of main channel); maximum gage height, 11.08 ft (3.377 m) May 2, 1952; minimum daily discharge, 0.20 ft³/s (0.006 m³/s) Sept. 15 to Oct. 17, 1955.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 1,070 ft³/s (30.3 m³/s) Apr. 2, gage height, 6.36 ft (1.939 m); minimum, 0.62 ft³/s (0.018 m³/s) Oct. 5, 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	.79	7.3	40	56	94	161	927	1030	512	508	55	1.9
2	.79	8.1	41	59	94	167	982	1030	508	485	53	1.6
3	.79	8.5	41	63	96	182	986	1000	515	466	51	1.6
4	.79	8.9	42	71	99	224	968	954	515	447	46	1.3
5	.79	9.8	42	82	100	304	931	909	512	429	41	2.6
6	.89	11	44	84	102	340	900	874	522	405	40	3.2
7	.79	11	44	78	108	388	852	843	545	379	37	2.4
8	.79	12	42	74	116	402	904	796	587	346	36	1.9
9	.89	13	40	76	128	396	927	747	676	332	38	1.9
10	.89	13	40	79	140	411	1020	700	747	314	40	6.6
11	.89	14	42	79	152	451	1010	661	830	301	26	7.3
12	.99	14	47	81	156	476	900	620	891	289	22	6.6
13	.99	16	48	82	154	469	882	573	887	277	21	6.3
14	.99	17	52	82	152	460	874	535	878	260	20	6.6
15	.99	18	52	84	147	438	839	515	918	237	18	14
16	.99	18	52	88	147	410	796	522	945	222	16	14
17	1.1	19	59	94	138	390	763	552	940	203	15	12
18	1.1	19	55	97	137	375	751	563	922	180	14	14
19	1.1	18	45	103	133	375	723	552	904	167	13	15
20	2.1	16	40	105	132	390	676	539	900	158	12	16
21	2.6	20	46	106	135	420	631	522	856	149	10	21
22	3.4	26	55	106	143	470	605	508	809	140	9.4	24
23	3.9	26	67	105	149	560	580	502	768	128	8.9	26
24	4.7	33	66	102	151	640	539	518	723	123	8.1	28
25	5.0	37	58	103	151	710	515	563	665	117	7.7	28
26	5.3	38	56	100	151	755	563	595	627	105	7.7	29
27	5.0	40	58	108	154	788	763	602	631	81	7.3	30
28	5.3	40	63	103	160	839	882	580	598	72	7.0	31
29	5.9	40	68	99	---	830	891	549	570	67	5.9	31
30	6.3	40	66	96	---	835	959	525	542	62	3.7	32
31	6.6	---	60	96	---	878	---	515	---	57	2.4	---
TOTAL	73.44	611.6	1571	2741	3719	14934	24539	20494	21443	7506	692.1	416.8
MEAN	2.37	20.4	50.7	88.4	133	482	818	661	715	242	22.3	13.9
MAX	6.6	40	68	108	160	878	1020	1030	945	508	55	32
MIN	.79	7.3	40	56	94	161	515	502	508	57	2.4	1.3
AC-FT	146	1210	3120	5440	7380	29620	48670	40650	42530	14890	1370	827
CAL YR 1977	TOTAL	34368.94	MEAN	94.2	MAX	693	MIN	.59	AC-FT	68170		
WTR YR 1978	TOTAL	98740.94	MEAN	271	MAX	1030	MIN	.79	AC-FT	195900		

LOCATION.--Lat 40°49'30", long 116°34'45", in SW¹/₄ sec.17, T.34 N., R.48 E., Eureka County, Hydrologic Unit 16040106, on left bank at mouth of canyon, 22 mi (35 km) northeast of Battle Mountain.

PERIOD OF RECORD.--March to July 1896, March 1918 to September 1925 (fragmentary October 1923 to April 1925), March 1927 to May 1929 (fragmentary), October 1945 to current year. Monthly discharge only for some periods, published WSP 1314.

GAGE.—Water-stage recorder. Altitude of gage is 4,600 ft (1,402 m), estimated from nearby U.S. Coast and Geodetic Survey bench mark. Prior to Mar. 26, 1918, nonrecording gage at site about 11 mi (17.7 km) upstream at different datum. Mar. 26, 1918, to Oct. 28, 1970, water-stage recorder at site 0.4 mi (0.6 km) upstream, at the following datums: at different datum Mar. 26, 1918, to Jan. 3, 1946, at datum 9.45 ft (2.880 m) higher Jan. 4, 1946, to July 23, 1964, at datum 7.35 ft (2.240 m) higher July 23, 1964, to Oct. 31, 1968, and at datum 6.34 ft (1.932 m) higher Nov. 1, 1968, to Oct. 28, 1970.

REMARKS.—Records good except those for winter months, which are poor. Seven diversions for irrigation of 4,380 acres (17.7 km²), Humboldt Decree, in valleys upstream. Station is above all diversions in Boulder Flat and below all tributaries. Flow slightly affected by small reservoir in Squaw Valley, 30 mi (48 km) upstream, and by Willow Creek Reservoir, usable capacity, 18,000 acre-ft (22.2 hm³). Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s (136 m³/s) Feb. 11, 1962, gage height, 6.89 ft (2.100 m), from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of slope-area measurement of peak flow; no flow at times in July to October nearly every year.

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 10	0500	281	7.96	4.01	1.222	Apr 9	0800	556	15.7	4.64	1.414
Mar. 24	unknown	609	17.2	4.75	1.448	Apr 27	*1500	900	25.5	5.24	1.597
Apr. 2	1200	315	8.92	4.08	1.244						

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	1.9	3.1	3.3	5.4	31	221	582	37	10	.33	.28
2	.79	1.9	3.0	3.5	5.4	35	280	473	32	5.4	.33	.28
3	.72	2.0	3.1	3.4	4.4	71	210	433	31	3.9	.28	.49
4	.66	2.1	3.5	3.7	3.9	158	168	407	31	4.0	.24	2.1
5	.65	2.5	3.6	4.8	4.1	171	162	395	35	4.2	.24	1.9
6	.65	2.8	3.0	5.3	4.7	194	141	358	36	5.8	.16	1.2
7	.65	2.5	3.0	4.6	6.5	176	145	315	34	4.8	.13	.88
8	.69	2.4	2.7	4.0	7.2	142	183	275	33	6.5	.13	1.4
9	.72	2.2	2.5	5.4	16	144	416	232	31	5.1	.16	1.4
10	.72	2.2	2.9	5.6	21	250	318	210	30	3.8	.79	1.2
11	.75	2.4	2.9	5.0	19	194	256	191	33	2.3	.79	.97
12	.72	2.4	6.2	3.3	14	163	224	178	34	1.9	.79	.97
13	.75	2.5	5.7	4.0	13	124	202	169	32	2.1	.70	.88
14	.79	2.5	4.4	3.9	12	85	178	165	29	2.7	.79	.70
15	.84	2.6	4.0	4.7	11	66	161	168	27	2.7	.88	.88
16	.93	2.5	3.6	6.5	8.7	54	168	180	23	2.4	1.1	1.2
17	.92	2.4	4.0	8.2	8.1	59	181	165	18	2.5	1.3	.97
18	.91	2.3	3.5	6.6	7.9	116	163	140	17	1.9	1.3	.88
19	.97	2.3	3.0	7.4	8.5	145	143	115	15	1.7	1.3	.88
20	.97	2.4	3.0	6.5	11	150	124	93	15	1.5	1.2	.79
21	1.0	2.4	3.3	5.5	13	135	118	71	16	1.1	1.1	.79
22	.97	2.8	3.3	5.1	15	200	110	70	14	.89	1.2	.79
23	.97	5.1	3.6	4.4	18	270	103	81	13	.75	.97	.70
24	1.2	7.1	3.5	3.5	21	300	90	80	12	.66	.62	.70
25	1.4	5.7	3.3	3.2	31	240	91	73	11	.55	.43	.70
26	1.5	5.2	3.3	4.0	41	200	256	64	10	.51	.38	.70
27	1.6	4.9	3.6	4.4	48	180	673	61	10	.60	.33	.70
28	1.7	4.3	3.8	4.0	44	170	598	53	11	.74	.33	.70
29	1.8	3.7	4.2	4.0	---	190	469	46	11	.71	.33	.79
30	1.8	3.4	4.0	4.0	---	196	437	42	11	.57	.33	.79
31	1.9	---	3.7	4.9	---	201	---	40	---	.44	.28	---
TOTAL	31.40	91.4	110.3	146.7	422.8	4810	6989	5925	692	82.32	19.24	27.61
MEAN	1.01	3.05	3.56	4.73	15.1	155	233	191	23.1	2.66	.62	.92
MAX	1.9	7.1	6.2	8.2	48	300	673	582	37	10	1.3	2.1
MIN	.65	1.9	2.5	3.2	3.9	31	90	40	10	.44	.13	.28
AC=FT	62	181	219	291	839	9540	13860	11750	1370	163	38	55
CAL YR 1977	942.14		MEAN 2.58		MAX 18		MIN .00		AC=FT 1870			
WTR YR 1978	TOTAL 19347.77		MEAN 53.0		MAX 673		MIN .13		AC=FT 38380			

HUMBOLDT RIVER BASIN

10325000 HUMBOLDT RIVER AT BATTLE MOUNTAIN, NV

LOCATION.--Lat 40°40'00", long 116°55'50", in NE¼NW¼ sec.8, T.32 N., R.45 E., Lander County, Hydrologic Unit 16040105, 30 ft (9 m) downstream from bridge on State Highway 18A, on left bank 2 mi (3 km) north of Battle Mountain. Reese River enters Humboldt River several miles below station.

DRAINAGE AREA.--8,870 mi² (22,970 km²), approximately.

PERIOD OF RECORD.--May 1896 to December 1897, March 1921 to April 1924, October 1945 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1564: 1897-98, 1923.

GAGE.--Water-stage recorder. Altitude of gage is 4,500 ft (1,372 m), from topographic map. Prior to Mar. 1, 1921, nonrecording gage 1.3 mi (2.1 km) upstream and Mar. 1, 1921, to Apr. 19, 1924, nonrecording gage 0.8 mi (1.3 km) upstream, both at different datums. Oct. 1945, to Sept. 20, 1972, water-stage recorder at site 1.0 mi (1.6 km) upstream at datum 4.79 ft (1.460 m) higher.

REMARKS.--Records good. Records prior to 1969 (except the maximum for the period of record) do not always include flow in secondary channels or ditches at medium-high stages, much of which was used for irrigation. Many diversions above station for irrigation of 194,000 acres (785 km²) Humboldt Decree. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--36 years (1896-97, 1921-23, 1945-78), 339 ft³/s (9.600 m³/s), 245,600 acre-ft/yr (303 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,800 ft³/s (164 m³/s) May 3, 4, 1952 (includes flow bypassing gage outside of main channel); no flow Sept. 8 to Oct. 22, 1948, Sept. 21-26, 1949, Sept. 21-27, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,440 ft³/s (40.8 m³/s) May 4, gage height, 7.48 ft (2.280 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Oct. 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	1.8	8.4	42	63	86	151	944	1200	610	474	61	13
2	1.8	8.8	43	65	86	162	985	1300	590	450	58	12
3	1.9	9.0	44	66	86	168	1010	1390	575	431	53	11
4	1.9	11	45	68	86	185	1020	1430	553	415	49	10
5	2.1	12	43	69	88	239	1020	1380	533	397	46	10
6	1.6	13	44	75	91	300	985	1330	570	380	43	28
7	2.0	13	43	74	95	336	937	1290	586	365	40	18
8	2.2	13	43	74	103	381	984	1250	614	343	39	18
9	2.2	12	42	72	111	416	1010	1190	687	321	36	11
10	2.3	14	46	73	127	426	1030	1110	733	298	34	14
11	2.4	16	45	73	143	437	1090	1030	783	278	34	23
12	2.5	17	56	73	147	491	1100	936	834	261	31	16
13	2.6	18	56	74	142	495	1050	873	865	254	31	16
14	2.7	18	56	74	140	493	1040	834	906	255	29	16
15	2.3	18	54	76	143	473	982	760	914	246	29	16
16	2.3	18	54	77	138	439	935	710	900	221	27	20
17	2.5	19	57	83	135	415	900	690	906	204	27	22
18	2.4	23	64	87	129	394	873	700	893	184	25	20
19	2.4	22	66	93	128	391	861	730	867	169	25	20
20	2.4	18	61	95	127	410	847	740	849	156	24	22
21	2.5	20	44	96	136	452	825	720	772	148	23	22
22	3.3	28	56	98	129	497	796	690	672	140	22	25
23	4.6	27	55	98	135	565	763	670	674	129	21	27
24	4.8	32	81	94	138	713	733	640	676	121	20	28
25	4.8	34	85	95	140	796	702	620	645	114	18	30
26	5.9	38	57	91	141	850	733	630	616	107	17	30
27	6.9	41	61	91	143	862	856	650	594	95	16	30
28	6.9	41	64	94	146	875	993	680	574	83	17	31
29	7.1	42	61	92	---	899	1100	660	546	75	16	32
30	7.4	43	65	88	---	894	1160	640	519	70	16	32
31	8.3	---	62	86	---	908	---	630	---	65	15	---
TOTAL	106.8	647.2	1695	2527	3439	15513	28264	28103	21056	7249	942	623
MEAN	3.45	21.6	54.7	81.5	123	500	942	907	702	234	30.4	20.8
MAX	8.3	43	85	98	147	908	1160	1430	914	474	61	32
MIN	1.6	8.4	42	63	86	151	702	620	519	65	15	10
AC-FT	212	1280	3360	5010	6820	30770	56060	55740	41760	14380	1870	1240

CAL YR 1977 TOTAL 33776.78 MEAN 92.5 MAX 655 MIN .98 AC-FT 67000
WTR YR 1978 TOTAL 110165.00 MEAN 302 MAX 1430 MIN 1.6 AC-FT 218500

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LOCATION.--Lat 38°51'00", long 117°28'00", in NW¼ sec.3, T.11 N., R.40 E., Nye County, Hydrologic Unit 16040107, in Toiyabe National Forest, on right bank 2.5 mi (4.0 km) upstream from Indian Creek, 8 mi (13 km) southeast of Ione, and 58 mi (93 km) southwest of Austin.

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

GAGE.—Water-stage recorder and LANDSAT data collection platform with external memory unit. Concrete control since Oct. 3, 1956. Altitude of gage is 7,100 ft (2,164 m), from topographic map. Prior to Sept. 9, 1955, at site 200 ft (61 m) upstream at datum 2.85 ft (0.869 m) higher.

AVERAGE DISCHARGE.--27 years, 12.1 ft³/s (0.343 m³/s), 8.770 acre-ft/yr (10.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 512 ft³/s (14.5 m³/s) July 27, 1956, gage height, 4.86 ft (1.481 m), from rating curve extended above 45 ft³/s (1.27 m³/s) on basis of slope-area measurement of peak flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 233 ft³/s (6.60 m³/s) May 14 (1900 hrs), gage height, 2.59 ft (0.789 m), no other peak above base of 130 ft³/s (3.68 m³/s); minimum, 0.55 ft³/s (0.016 m³/s) Dec. 6.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	2.9	2.5	2.8	2.8	6.2	57	85	182	33	10	4.5
2	3.2	3.0	2.9	3.1	3.3	6.8	46	90	176	32	9.8	4.5
3	3.0	3.1	2.7	2.7	3.0	7.5	40	107	170	30	9.4	4.5
4	3.0	3.1	3.0	2.8	3.1	7.5	37	115	161	29	9.4	5.0
5	2.9	3.4	3.0	2.8	2.8	6.8	27	105	159	27	9.2	14
6	3.3	3.3	2.3	2.9	1.8	7.9	25	92	160	26	8.8	11
7	3.5	2.7	2.7	2.3	2.1	7.4	23	86	164	24	8.5	8.6
8	3.4	2.9	2.3	2.8	1.4	8.1	23	94	165	24	8.2	7.9
9	3.3	2.7	2.1	2.9	2.0	8.3	24	114	163	22	7.9	6.8
10	3.3	3.1	2.5	2.8	1.0	8.4	41	135	150	22	7.6	6.5
11	3.2	3.3	3.0	2.5	1.2	8.6	74	145	137	21	7.3	6.5
12	3.2	3.2	3.0	2.3	1.4	8.3	67	160	126	20	7.1	6.2
13	3.2	3.1	3.2	2.4	2.4	7.5	62	173	118	20	6.8	6.2
14	3.2	2.7	3.2	2.5	2.8	8.3	61	197	113	19	6.6	9.0
15	3.1	3.0	3.3	2.4	3.1	7.5	60	217	105	18	6.4	8.2
16	3.1	2.9	1.9	2.7	3.5	8.6	56	202	97	18	6.1	7.2
17	3.1	3.0	2.4	3.1	3.5	11	57	183	83	17	5.9	6.8
18	3.2	3.1	2.2	3.3	3.4	13	63	172	76	17	5.7	6.8
19	3.2	1.8	2.2	3.1	3.6	15	67	170	72	16	5.5	6.5
20	3.2	1.2	1.9	2.8	4.2	20	66	168	67	15	5.4	6.5
21	3.3	2.5	2.9	2.6	4.7	27	64	177	63	15	5.3	6.5
22	3.3	2.8	3.2	2.9	5.6	31	59	188	58	14	5.3	6.2
23	3.2	2.4	3.2	2.3	6.2	29	61	194	55	14	5.3	6.2
24	3.3	2.6	2.8	2.4	7.2	26	68	176	52	14	5.6	5.9
25	3.2	2.8	2.8	2.5	5.6	29	80	156	50	13	5.3	5.9
26	3.1	2.8	2.9	2.4	5.3	33	73	144	49	13	5.3	5.9
27	3.1	3.0	2.9	3.0	6.6	31	74	139	43	14	5.0	5.6
28	3.3	2.8	2.8	3.1	7.8	35	74	139	40	18	5.3	5.6
29	3.3	2.7	2.9	3.0	---	54	79	156	37	13	4.7	5.6
30	3.0	3.0	2.9	2.6	---	66	82	176	34	12	4.5	5.6
31	3.0	---	2.7	2.8	---	93	---	187	---	11	4.7	---
TOTAL	98.9	84.9	84.3	84.6	101.4	636.7	1690	4642	3125	601	207.9	202.2
MEAN	3.19	2.83	2.72	2.73	3.62	20.5	56.3	150	104	19.4	6.71	6.74
MAX	3.5	3.4	3.3	3.3	7.8	93	82	217	182	33	10	14
MIN	2.9	1.2	1.9	2.3	1.0	6.2	23	85	34	11	4.5	4.5
AC=FT	196	168	167	168	201	1260	3350	9210	6200	1190	412	401
CAL YR 1977	TOTAL	3635.9	MEAN	9.96	MAX	112	MIN	1.2	AC=FT	7210		
WTR YR 1978	TOTAL	11558.9	MEAN	31.7	MAX	217	MIN	1.0	AC=FT	22930		

HUMBOLDT RIVER BASIN

10326800 FISH CREEK NEAR BATTLE MOUNTAIN, NV

LOCATION.--Lat 40°10'16", long 117°12'23", in NW¼, sec. 36, T.27 N., R.42 E., Lander County, Hydrologic Unit 16040107 on left bank, about 4 mi (6.4 km) upstream from the confluence with Reese River, and 36 mi (58 km) southwest of Battle Mountain.

DRAINAGE AREA.--64.7 mi² (167.6 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft (1,520 m), from topographic map.

REMARKS.--Records poor. No gage-height record, Dec. 31 to Jan. 30 and April 24 to June 2. No diversion above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31 ft³/s (0.878 m³/s) Apr. 19, 1978, gage height, 2.76 ft (0.841 m); minimum daily, 0.15 ft³/s (0.004 m³/s) Nov. 20, 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	.70	.74	1.2	.80	.82	.76	12	15	15	1.4	.96	1.0
2	.68	.76	1.5	.90	.99	.80	10	15	16	1.5	.96	1.0
3	.70	.76	.93	.90	1.0	.90	7.3	16	16	1.5	.96	1.0
4	.70	.70	1.3	.90	1.0	1.0	6.4	16	14	1.5	.96	1.0
5	.70	.70	1.4	.90	1.1	1.0	6.0	17	12	1.5	.89	1.4
6	.70	.64	1.2	.90	1.1	1.1	4.2	14	12	1.5	.89	3.0
7	.73	.56	1.2	.90	1.1	1.0	3.9	13	11	1.5	.89	3.0
8	.81	.51	1.2	.80	1.1	1.0	4.8	13	11	1.5	.88	3.0
9	.82	.48	1.3	.90	1.4	1.0	8.9	14	11	1.5	.89	2.6
10	.76	.53	1.4	.80	1.4	1.2	11	16	11	1.5	.89	.96
11	.79	.55	1.2	.75	1.3	1.4	11	18	11	1.5	.89	.96
12	.76	.57	1.3	.65	2.2	1.5	12	18	9.1	1.5	.89	.96
13	.76	.54	1.4	.80	.89	1.5	10	19	9.4	1.4	.89	.96
14	.76	.48	1.5	.80	.89	1.4	9.8	21	9.4	1.1	.89	.96
15	.76	.49	1.4	.80	.89	1.3	12	23	9.4	1.1	.89	.96
16	.93	.49	.91	.80	.60	1.5	11	19	7.6	1.1	.89	.96
17	.99	.50	1.2	.90	.70	1.7	9.8	17	7.3	1.1	.89	1.0
18	.81	.47	1.1	.80	.76	1.7	11	16	7.3	1.1	.89	1.1
19	.82	.32	.98	.75	.76	2.3	15	15	4.7	1.1	.93	1.1
20	.82	.15	1.1	.85	.70	3.3	14	16	4.3	1.0	.96	1.1
21	.82	.30	1.2	.90	.64	3.6	10	16	4.5	1.0	.96	1.1
22	.85	.60	1.4	.90	.64	6.6	12	17	4.3	1.0	.96	1.1
23	.89	.75	1.4	.80	.70	5.1	14	18	3.0	1.0	.96	1.1
24	.81	.84	1.4	.75	.70	5.5	12	19	3.2	1.0	.96	1.1
25	.76	.58	1.0	.80	.70	5.6	10	19	3.4	1.0	.96	1.1
26	.76	.61	1.2	.80	.76	7.3	11	17	3.4	1.0	.96	1.1
27	.75	.84	1.3	.75	.70	6.1	13	15	3.4	1.0	.96	1.1
28	.70	.82	.96	.75	.70	7.3	15	14	3.4	.96	.96	1.1
29	.70	.76	.89	.80	---	8.9	16	15	3.4	.96	.96	1.2
30	.70	.76	.76	.75	---	12	16	16	3.2	.96	.96	1.2
31	.70	---	.85	.78	---	15	---	16	---	.96	1.0	---
TOTAL	23.94	17.80	37.08	25.58	26.24	110.36	319.1	513	243.7	37.74	28.78	39.22
MEAN	.77	.59	1.20	.83	.94	3.56	10.6	16.5	8.12	1.22	.93	1.31
MAX	.99	.84	1.5	.90	2.2	15	16	23	16	1.5	1.0	3.0
MIN	.68	.15	.76	.75	.60	.76	3.9	13	3.0	.96	.88	.96
AC-FT	47	35	74	51	52	219	633	1020	483	75	57	78
WTR YR 1978	TOTAL	1422.54	MEAN	3.90	MAX	23	MIN	.15	AC-FT	2820		

10327500 HUMBOLDT RIVER AT COMUS, NV

LOCATION.--Lat 40°59'33", long 117°19'00", in SE¼ sec.14, T.36 N., R.41 E., Humboldt County, Hydrologic Unit 16040105, on left bank at Comus siding of Southern Pacific Railroad, 1.0 mi (1.6 km) upstream from Kelly Creek, 9 mi (14 km) northeast of Golconda, and 32 mi (51 km) northwest of Battle Mountain.

DRAINAGE AREA.--12,100 mi² (31,300 km²), approximately.

PERIOD OF RECORD.--October 1894 to December 1909, September 1910 to September 1926, October 1945 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Golconda" prior to October 1917.

REVISED RECORDS.--WSP 1514: 1921-22, 1926. WSP 1314: 1904, 1907-8, 1911-13, 1916-17.

GAGE.--Water-stage recorder. Datum of gage is 4,359.9 ft (1,328.90 m) National Geodetic Vertical Datum of 1929 (from Soil Conservation Service reference mark). Prior to Sept. 25, 1917, nonrecording gages at several sites about 10 mi (16 km) downstream at different datums. Sept. 25, 1917, to June 30, 1923, and May 23, 1925, to May 31, 1926, nonrecording gages at several sites within 0.5 mi (0.8 km) of present site at different datum.

REMARKS.--Records good. Many diversions above station for irrigation, Humboldt Decree, 206,000 acres (834 km²); additional acreage not covered by decree. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--64 years, 290 ft³/s (8.213 m³/s), 210,100 acre-ft/yr (259 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,860 ft³/s (166 m³/s) May 6, 1952, gage height, 11.52 ft (3.511 m); no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) May 9, gage height, 7.20 ft (2.195 m); minimum, no flow Oct. 7-19.

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	.10	.54	25	42	85	157	709	746	551	539	67	6.0
2	.10	.70	26	47	83	165	713	785	529	504	60	5.8
3	.10	.80	26	56	83	182	720	810	450	471	55	5.4
4	.10	.90	27	38	83	190	733	860	466	460	50	5.1
5	.10	1.1	27	51	83	195	745	907	461	435	45	6.5
6	.10	1.3	27	63	85	229	756	948	443	418	40	8.1
7	.00	1.4	28	59	88	280	763	981	428	401	35	9.4
8	.00	1.5	27	63	92	316	767	1010	440	385	29	8.5
9	.00	1.6	28	62	96	354	767	1000	447	369	28	9.0
10	.00	1.9	28	63	108	385	778	1030	472	345	24	12
11	.00	2.0	28	63	124	412	786	985	505	322	21	12
12	.00	2.2	39	62	139	435	797	937	530	299	17	11
13	.00	2.3	34	62	148	444	804	874	547	288	15	9.4
14	.00	2.7	36	63	160	469	804	814	569	276	14	8.5
15	.00	2.8	38	66	162	466	794	757	574	265	14	9.4
16	.00	2.9	39	66	158	459	789	708	590	263	14	9.4
17	.00	3.3	39	68	154	439	786	673	582	245	13	9.0
18	.00	3.4	41	70	153	414	778	652	615	226	12	7.7
19	.00	3.7	36	79	148	397	766	664	699	208	12	7.7
20	.02	4.0	31	88	146	381	750	676	693	187	12	9.4
21	.06	4.7	36	89	141	386	738	668	670	169	11	11
22	.10	6.2	43	89	147	414	725	643	653	159	11	11
23	.12	4.9	31	89	147	450	697	630	617	148	10	12
24	.12	6.2	40	80	151	478	660	612	609	139	9.8	12
25	.12	10	40	99	153	538	630	601	618	127	9.4	13
26	.12	13	42	87	156	612	615	602	624	117	9.0	14
27	.12	14	44	94	155	656	622	602	618	113	8.5	15
28	.24	15	59	85	155	683	650	603	603	107	7.7	15
29	.36	18	49	88	---	695	685	600	583	95	7.7	17
30	.42	21	54	94	---	702	719	589	563	82	6.9	17
31	.48	---	49	90	---	705	---	570	---	75	6.5	---
TOTAL	2.88	154.04	1117	2215	3583	13088	22046	23537	16749	8237	674.5	306.3
MEAN	.093	5.13	36.0	71.5	128	422	735	759	558	266	21.8	10.2
MAX	.48	21	59	99	162	705	804	1030	699	539	67	17
MIN	.00	.54	25	38	83	157	615	570	428	75	6.5	5.1
AC-FT	5.7	306	2220	4390	7110	25960	43730	46690	33220	16340	1340	608
CAL YR 1977 TOTAL	27836.49			76.3		500		MIN .00	AC-FT 55210			
WTR YR 1978 TOTAL	91709.72			251		1030		MIN .00	AC-FT 181900			

HUMBOLDT RIVER BASIN

10328450 NORTH FORK LITTLE HUMBOLDT RIVER NEAR PARADISE VALLEY, NV

LOCATION.--Lat 41°29'30", long 117°07'30", in SW¼ sec.28, T.42 N., R.43 E., Humboldt County, Hydrologic Unit 16040109, on left bank 0.7 mi (1.1 km) upstream from concrete diversion dam, 7.5 mi (12.1 km) north-northeast of Chimney Dam, and 21 mi (34 km) east of Paradise Valley.

DRAINAGE AREA.--210 mi² (544 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,670 ft (1,420 m), from topographic map.

REMARKS.--Records poor. No known diversions above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 191 ft³/s (5.41 m³/s) Apr. 28, 1978, gage height, 3.33 ft (1.015 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Aug. 15, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 191 ft³/s (5.41 m³/s) Apr. 28, gage height 3.33 ft (1.015 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Aug. 15.

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	1.0	1.9	3.2	7.5	5.6	94	158	90	34	6.7	.65	.41
2	1.0	2.0	3.1	4.8	5.1	15	150	83	33	6.2	.58	.41
3	1.0	2.1	3.2	4.6	5.4	41	104	83	35	7.4	.46	.36
4	1.1	2.1	2.9	4.8	6.8	26	85	82	34	9.2	.41	.36
5	1.1	2.3	3.1	4.7	7.8	57	79	60	34	11	.36	.52
6	1.0	2.5	2.8	4.8	9.4	66	67	71	35	7.6	.28	1.4
7	1.1	2.7	2.7	5.4	9.4	45	63	65	35	6.7	.28	3.1
8	1.2	2.4	2.4	4.8	12	47	61	58	35	5.8	.21	3.8
9	1.2	1.8	2.4	4.1	14	65	61	54	33	5.4	.21	3.4
10	1.2	2.5	2.6	4.9	9.7	52	53	59	30	4.6	.21	2.7
11	1.2	2.2	2.7	6.4	8.6	52	60	64	31	4.0	.18	2.4
12	1.3	3.0	3.4	5.4	8.6	42	61	65	30	3.4	.16	2.2
13	1.4	2.6	3.8	5.4	7.5	26	60	62	23	2.9	.14	2.2
14	1.4	2.5	4.3	5.5	6.6	21	57	64	20	2.7	.12	2.0
15	1.4	2.3	4.6	8.4	7.5	18	55	71	19	2.3	.10	1.9
16	1.5	2.7	5.0	8.2	6.8	18	60	74	18	2.1	.14	1.7
17	1.4	3.1	5.5	10	6.8	40	63	64	17	1.9	.28	1.6
18	1.3	2.0	5.2	9.7	6.8	70	57	55	16	1.6	.32	1.6
19	1.3	1.5	4.3	7.3	7.1	77	58	51	15	1.4	.41	1.7
20	1.5	2.0	3.5	6.5	13	102	55	48	15	1.3	.46	1.7
21	1.6	2.5	4.0	7.3	13	120	60	46	12	1.2	.52	1.9
22	1.6	2.9	4.5	7.1	12	144	57	46	11	1.1	.46	1.9
23	1.5	2.6	4.3	6.6	12	160	55	49	9.8	1.1	.41	1.9
24	1.6	2.8	4.0	5.4	14	137	54	56	8.9	.99	.36	1.9
25	1.7	3.1	3.8	4.5	18	113	57	56	8.7	.90	.36	1.9
26	1.7	3.5	4.1	5.2	16	119	82	51	8.7	.73	.41	1.9
27	1.7	3.4	3.8	5.6	14	126	112	44	8.4	.73	.41	1.9
28	1.7	3.1	4.1	6.6	12	121	99	38	8.1	2.0	.41	1.7
29	1.7	3.4	4.9	6.2	---	129	107	35	7.6	1.6	.41	1.7
30	1.7	3.6	6.8	5.6	---	135	87	33	7.4	1.6	.41	1.7
31	1.8	---	9.4	5.8	---	119	---	35	---	.90	.46	---
TOTAL	42.9	77.1	124.4	189.1	275.5	2397	2237	1812	632.6	107.05	10.58	53.86
MEAN	1.38	2.57	4.01	6.10	9.84	77.3	74.6	58.5	21.1	3.45	.34	1.80
MAX	1.8	3.6	9.4	10	18	160	158	90	35	11	.65	3.8
MIN	1.0	1.5	2.4	4.1	5.1	15	53	33	7.4	.73	.10	.36
AC-FT	85	153	247	375	546	4750	4440	3590	1250	212	21	107
CAL YR 1977 TOTAL	1532.06			MEAN 4.20	MAX 25	MIN .14	AC-FT 3040					
WTR YR 1978 TOTAL	7959.09			MEAN 21.8	MAX 160	MIN .10	AC-FT 15790					

HUMBOLDT RIVER BASIN

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10328475 SOUTH FORK LITTLE HUMBOLDT RIVER NEAR PARADISE VALLEY, NV

LOCATION.--Lat 41°27'00", long 117°06'00", in NE¼ sec.10, T.41 N., R.43 E., Humboldt County, Hydrologic Unit 16040109, on left bank 5.8 mi (9.3 km) northeast of Chimney Dam, and 23 mi (32 km) east of Paradise Valley.

DRAINAGE AREA.--431 mi² (1,116 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,650 ft (1,420 m), from topographic map.

REMARKS.--Records fair except those for winter periods, which are poor. Diversions for irrigation of 865 acres (3.50 km²), Little Humboldt Decree, above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 142 ft³/s (4.02 m³/s) Apr. 10, 1978, gage height 3.80 ft (1.158 m); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 142 ft³/s (4.02 m³/s) Apr. 10, gage height 3.80 ft (1.158 m); no flow Oct. 1 to Jan. 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	.00	.00	.00	.00	1.8	6.1	74	112	33	10	2.0	.16
2	.00	.00	.00	.00	1.5	7.2	80	100	34	10	2.2	.17
3	.00	.00	.00	.00	1.7	22	55	93	35	12	2.1	.21
4	.00	.00	.00	.00	1.9	26	49	89	30	17	1.9	.10
5	.00	.00	.00	.00	3.0	25	47	84	30	13	1.8	.31
6	.00	.00	.00	.00	7.2	36	40	79	31	11	1.4	2.4
7	.00	.00	.00	.00	8.2	28	38	71	33	9.6	1.3	4.9
8	.00	.00	.00	.00	8.0	20	41	63	32	10	.95	2.7
9	.00	.00	.00	.04	7.4	22	48	57	31	9.2	.59	1.9
10	.00	.00	.00	.11	8.3	28	95	57	31	7.2	.61	2.2
11	.00	.00	.00	.21	4.8	28	106	59	32	4.7	.44	3.1
12	.00	.00	.00	.18	4.2	25	80	63	29	5.1	.31	3.5
13	.00	.00	.00	.14	3.0	19	71	65	26	4.7	.24	2.3
14	.00	.00	.00	.12	4.4	15	62	65	25	3.9	.42	1.9
15	.00	.00	.00	.15	2.3	13	53	72	24	3.3	.59	1.7
16	.00	.00	.00	.23	3.0	11	58	82	24	2.9	.55	1.5
17	.00	.00	.00	.49	2.7	11	51	73	24	2.7	.73	1.4
18	.00	.00	.00	1.1	2.6	16	46	61	23	2.7	.85	1.6
19	.00	.00	.00	.82	3.0	23	41	54	23	2.9	.77	2.0
20	.00	.00	.00	1.1	3.5	28	40	50	21	2.7	.77	2.0
21	.00	.00	.00	1.3	3.7	34	41	45	19	3.5	.49	1.7
22	.00	.00	.00	1.6	3.4	60	38	46	18	3.4	.31	1.6
23	.00	.00	.00	1.8	3.2	112	33	50	16	3.0	.48	1.4
24	.00	.00	.00	1.0	5.7	90	31	65	12	2.8	.49	1.3
25	.00	.00	.00	.40	10	68	32	49	12	2.3	.40	1.2
26	.00	.00	.00	.71	13	61	57	46	13	2.1	.42	1.0
27	.00	.00	.00	1.4	12	64	114	39	12	2.2	.42	.93
28	.00	.00	.00	2.2	7.2	60	101	34	12	5.2	.31	1.0
29	.00	.00	.00	2.0	---	63	109	32	11	4.8	.32	.83
30	.00	.00	.00	1.6	---	69	120	32	11	3.3	.22	1.2
31	.00	---	.00	2.0	---	64	---	34	---	2.8	.18	---
TOTAL	.00	.00	.00	20.70	140.7	1154.3	1851	1921	707	180.0	24.56	48.21
MEAN	.000	.000	.000	.67	5.03	37.2	61.7	62.0	23.6	5.81	.79	1.61
MAX	.00	.00	.00	2.2	13	112	120	112	35	17	2.2	4.9
MIN	.00	.00	.00	.00	1.5	6.1	31	32	11	2.1	.18	.10
AC-FT	.00	.00	.00	.41	279	2290	3670	3810	1400	357	.49	.96
CAL YR 1977 TOTAL	247.47			MEAN .68	MAX 6.8	MIN .00	AC-FT 491					
WTR YR 1978 TOTAL	6047.47			MEAN 16.6	MAX 120	MIN .00	AC-FT 12000					

HUMBOLDT RIVER BASIN

10328500 LITTLE HUMBOLDT RIVER BELOW CHIMNEY DAM, NEAR PARADISE VALLEY, NV

LOCATION.--Lat 41°23'25", long 117°11'00", in NW¼ sec.36, T.41 N., R.42 E., Humboldt County, Hydrologic Unit 16040109, on left bank 20 mi (32 km) east-southeast of Paradise Valley.

DRAINAGE AREA.--780 mi² (2,020 km²), approximately.

PERIOD OF RECORD.--October 1941 to September 1950 (before dam was built), April 1975 to current year. Prior to April 1975, published as "at Chimney dam site."

GAGE.--Water-stage recorder. Altitude of gage is 4,560 ft (1,390 m), from topographic map. Prior to April 1975, at different site and datum.

REMARKS.--Records good. Flow regulated by Chimney Dam Reservoir, capacity, 35,000 acre-ft (43.2 hm³). Diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge since dam was built, 206 ft³/s (5.83 m³/s) May 22, 1975, gage height, 4.34 ft (1.323 m); maximum discharge before dam was built, 4,000 ft³/s (113 m³/s) about Jan. 22, 1943, gage height, 14.4 ft (4.39 m), from floodmarks, from slope-area measurement of peak flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 191 ft³/s (5.41 m³/s) May 6, gage height, 4.10 ft (1.250 m); no flow Oct. 1 to Mar. 20, Aug. 9 to Sept. 5, 20-30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	98	108	168	23	2.0	.00
2	.00	.00	.00	.00	.00	.00	98	110	166	15	1.7	.00
3	.00	.00	.00	.00	.00	.00	98	115	165	13	1.5	.00
4	.00	.00	.00	.00	.00	.00	99	117	162	16	1.2	.00
5	.00	.00	.00	.00	.00	.00	98	155	163	19	.90	.00
6	.00	.00	.00	.00	.00	.00	98	182	160	18	.60	.20
7	.00	.00	.00	.00	.00	.00	98	178	158	16	.40	.50
8	.00	.00	.00	.00	.00	.00	98	180	156	15	.20	1.0
9	.00	.00	.00	.00	.00	.00	99	178	155	14	.00	1.3
10	.00	.00	.00	.00	.00	.00	101	178	152	12	.00	1.6
11	.00	.00	.00	.00	.00	.00	103	178	151	11	.00	1.7
12	.00	.00	.00	.00	.00	.00	103	178	150	8.5	.00	1.6
13	.00	.00	.00	.00	.00	.00	103	178	146	8.0	.00	1.7
14	.00	.00	.00	.00	.00	.00	104	178	137	6.9	.00	1.7
15	.00	.00	.00	.00	.00	.00	103	178	100	6.1	.00	1.6
16	.00	.00	.00	.00	.00	.00	102	177	93	5.2	.00	1.0
17	.00	.00	.00	.00	.00	.00	101	178	93	4.6	.00	.50
18	.00	.00	.00	.00	.00	.00	102	179	80	4.0	.00	.20
19	.00	.00	.00	.00	.00	.00	103	179	74	4.0	.00	.10
20	.00	.00	.00	.00	.00	.00	101	180	73	3.4	.00	.00
21	.00	.00	.00	.00	.00	.00	103	180	71	3.3	.00	.00
22	.00	.00	.00	.00	.00	.00	98	103	179	70	.00	.00
23	.00	.00	.00	.00	.00	.00	98	103	178	68	.00	.00
24	.00	.00	.00	.00	.00	.00	99	104	177	66	.00	.00
25	.00	.00	.00	.00	.00	.00	99	103	176	76	.00	.00
26	.00	.00	.00	.00	.00	.00	98	104	176	80	.00	.00
27	.00	.00	.00	.00	.00	.00	98	105	177	74	.00	.00
28	.00	.00	.00	.00	.00	.00	98	106	176	65	.00	.00
29	.00	.00	.00	.00	.00	.00	98	107	170	54	.00	.00
30	.00	.00	.00	.00	.00	.00	107	169	37	2.3	.00	.00
31	.00	.00	.00	.00	.00	.00	98	169	---	2.3	.00	.00
TOTAL	.00	.00	.00	.00	.00	1022.00	3055	5211	3363	251.1	8.50	14.70
MEAN	.000	.000	.000	.000	.000	33.0	102	168	112	8.10	.27	.49
MAX	.00	.00	.00	.00	.00	99	107	182	168	23	2.0	1.7
MIN	.00	.00	.00	.00	.00	.00	98	108	37	2.1	.00	.00
AC-FT	.00	.00	.00	.00	.00	2030	6060	10340	6670	498	17	29
CAL YR 1977 TOTAL	1001.60			MEAN 2.74	MAX 17	MIN .00	AC-FT 1990					
WTR YR 1978 TOTAL	12925.30			MEAN 35.4	MAX 182	MIN .00	AC-FT 25640					

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LOCATION.--Lat 41°24'55", long 117°22'22", in NW¼SE¼ sec.20, T.41 N., R.41 E., Humboldt County, Hydrologic Unit 16040109, on right bank 3.5 mi (5.6 km) downstream from Bullshead Ranch and 9.5 mi (15.3 km) southeast of Paradise Valley.

PERIOD OF RECORD.--October 1921 to June 1928 (fragmentary), October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314.

REMARKS.--Records good. Flow regulated by Chimney Dam Reservoir, capacity, 35,000 acre-ft (43.2 hm³), 10 mi (16 km) upstream, since 1974. Diversions for irrigation of 4,450 acres (18.0 km²), Little Humboldt Decree, above station. Station is above all diversions in Paradise Valley. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,380 ft³/s (67.4 m³/s) Jan. 21, 1969, gage height, 8.40 ft (2.560 m), minimum, 0.46 ft³/s (0.013 m³/s) Aug. 25, 1973, probably result of temporary blockage upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 157 ft³/s (4.45 m³/s) May 9, gage height, 3.01 ft (0.917 m); minimum daily, 6.4 ft³/s (0.181 m³/s) Sept. 3.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	7.4	7.5	7.4	7.5	7.7	90	95	94	43	7.4	6.6
2	7.2	7.4	7.5	7.5	7.5	7.9	83	94	93	34	7.1	6.6
3	6.9	7.4	7.5	7.5	7.6	8.2	83	95	95	27	7.0	6.4
4	7.2	7.5	7.5	7.5	7.6	8.7	85	95	95	25	6.9	6.5
5	6.9	7.4	7.4	7.6	7.8	11	84	98	93	23	6.8	7.1
6	7.2	7.5	7.4	7.7	7.9	11	83	122	88	23	6.8	8.0
7	7.2	7.5	7.4	7.5	8.3	10	84	137	83	24	6.9	7.9
8	7.2	7.5	7.2	7.6	8.3	9.2	84	147	78	23	6.7	7.0
9	7.2	7.5	7.3	7.6	8.4	9.0	80	153	74	21	6.8	6.9
10	7.2	7.5	7.4	7.9	8.6	8.7	80	151	69	20	6.7	7.1
11	7.2	7.5	7.7	7.8	8.4	8.4	82	145	66	18	6.6	7.1
12	7.1	7.5	7.8	7.7	8.2	8.2	79	126	65	17	6.5	7.1
13	7.0	7.5	7.5	7.5	8.3	7.9	80	132	64	15	6.7	7.1
14	7.1	7.5	7.6	7.6	8.2	7.8	79	131	62	14	6.9	7.1
15	7.1	7.5	8.1	8.0	8.3	7.8	79	126	80	13	6.8	7.0
16	7.2	7.5	7.6	8.0	8.1	7.8	102	126	89	12	6.7	7.0
17	7.1	7.2	8.2	8.1	8.2	7.8	92	127	76	12	6.8	7.3
18	7.0	7.2	8.2	7.9	8.2	7.9	92	125	74	11	7.0	7.4
19	7.0	7.2	7.6	8.3	8.2	7.9	91	127	68	10	6.8	7.4
20	7.1	7.2	7.4	8.4	8.1	7.8	89	127	61	9.9	6.7	7.4
21	7.2	7.6	7.4	8.2	8.1	7.9	91	123	56	9.5	6.7	7.3
22	7.2	8.0	7.3	8.1	8.0	8.7	89	117	53	9.2	6.8	7.2
23	7.2	7.8	7.5	7.9	8.0	10	88	113	52	8.7	6.9	7.2
24	7.3	8.1	7.6	7.8	8.1	22	88	112	51	8.4	6.8	7.1
25	7.3	7.8	7.5	7.8	7.9	35	89	119	49	8.2	6.8	7.4
26	7.3	7.6	7.3	7.9	7.9	44	93	121	52	7.9	6.8	7.3
27	7.4	7.5	7.5	7.8	7.9	59	93	119	60	7.8	6.9	7.2
28	7.5	7.5	7.5	7.6	7.7	72	91	114	60	7.6	6.8	7.2
29	7.4	7.5	7.7	7.5	---	77	91	109	54	7.5	6.8	7.1
30	7.5	7.5	8.0	7.5	---	81	94	103	50	7.5	6.7	7.0
31	7.5	---	7.6	7.6	---	86	---	97	---	7.5	6.6	---
TOTAL	223.1	225.3	234.7	240.8	225.3	673.3	2608	3726	2104	484.7	211.2	214.0
MEAN	7.20	7.51	7.57	7.77	8.05	21.7	86.9	120	70.1	15.6	6.81	7.13
MAX	7.5	8.1	8.2	8.4	8.6	86	102	153	95	43	7.4	8.0
MIN	6.9	7.2	7.2	7.4	7.5	7.7	79	94	49	7.5	6.5	6.4
AC-FT	443	447	466	478	447	1340	5170	7390	4170	961	419	424
CAL YR 1977	TOTAL	3202.4	MEAN	8.77	MAX	16	MIN	6.6	AC-FT	6350		
WTR YR 1978	TOTAL	11170.4	MEAN	30.6	MAX	153	MIN	6.4	AC-FT	22160		

HUMBOLDT RIVER BASIN

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10333000 HUMBOLDT RIVER NEAR IMLAY, NV

LOCATION.--Lat 40°41'30", long 118°12'10", in SW¼SE¼ sec.25, T.33 N., R.33 E., Pershing County, Hydrologic Unit 16040108, on right bank 1 mi (2 km) upstream from Callahan bridge and 4 mi (6 km) northwest of Imlay.

DRAINAGE AREA.--15,700 mi² (40,660 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1935 to December 1941, April 1945 to current year. Monthly discharge only October to December 1941, published in WSP 1314.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,130 ft (1,259 m) from Geological Survey vertical-angle bench mark. Prior to Apr. 28, 1945, at site 1 mi (2 km) downstream at different datum. Apr. 28, 1945, to Aug. 20, 1947, at present site at datum 1 ft (0.3 m) higher.

REMARKS.--Records good. Humboldt-Lovelock Irrigation, Light and Power Co.'s feeder canal diverts water at times from river above station to Pitt-Taylor Reservoirs. Flow affected by many diversions above station for irrigation; Humboldt Decree 226,000 acres (915 km²); additional acreage not covered in decree.

AVERAGE DISCHARGE.--39 years, 203 ft³/s (5.749 m³/s), 147,100 acre-ft/yr (181 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,080 ft³/s (172 m³/s) May 9, 1952, gage height, 12.15 ft (3.703 m); no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 754 ft³/s (21.4 m³/s) May 17, gage height, 6.63 ft (2.021 m); minimum daily discharge, 4.1 ft³/s (0.116 m³/s) Nov. 3, 4, 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	6.7	4.7	13	40	75	115	421	453	474	247	143	27
2	6.4	4.4	13	45	76	118	435	444	491	234	134	25
3	6.7	4.1	13	48	78	121	446	440	487	296	125	23
4	6.4	4.1	13	55	78	122	456	435	483	437	116	22
5	6.4	4.7	14	54	78	127	478	439	480	421	107	22
6	6.4	4.7	16	44	78	127	508	462	477	393	98	32
7	6.4	4.4	18	45	78	132	515	498	474	421	89	29
8	6.0	4.4	19	47	76	138	528	530	471	426	86	26
9	6.0	4.1	18	49	78	143	540	580	468	400	82	23
10	5.7	4.4	18	54	78	155	549	600	465	388	78	22
11	5.7	4.4	22	55	81	175	557	608	462	373	70	22
12	6.0	4.7	28	56	80	194	559	646	442	366	67	23
13	6.0	4.7	26	59	87	211	565	704	448	337	63	25
14	5.7	4.7	27	61	85	223	572	729	455	316	61	23
15	5.7	5.0	28	64	89	238	578	735	428	309	59	23
16	5.7	5.0	27	64	95	253	592	750	409	295	56	22
17	5.4	5.4	31	64	100	265	610	750	393	281	54	22
18	5.7	5.0	34	64	109	282	628	729	385	271	52	22
19	5.7	6.0	34	66	112	289	638	706	380	262	50	23
20	6.0	6.7	30	67	112	289	636	660	378	252	48	24
21	5.4	6.0	32	66	112	287	638	612	366	242	46	23
22	5.7	7.5	33	66	112	290	640	526	337	233	44	23
23	5.7	7.9	45	66	111	281	624	496	343	224	45	23
24	5.4	8.6	43	64	110	276	561	513	353	215	42	22
25	5.4	7.9	39	73	109	280	482	520	350	206	40	22
26	5.0	7.5	39	80	109	292	489	530	344	197	39	22
27	5.7	7.5	43	80	111	304	493	526	347	188	38	22
28	6.0	7.5	42	73	112	320	487	523	339	179	36	22
29	5.7	7.1	40	69	---	337	471	536	345	170	33	22
30	5.4	11	39	71	---	363	455	547	318	161	33	22
31	5.0	---	40	75	---	390	---	502	---	152	31	---
TOTAL	181.1	174.1	877	1884	2609	7137	16151	17729	12392	8892	2065	703
MEAN	5.84	5.80	28.3	60.8	93.2	230	538	572	413	287	66.6	23.4
MAX	6.7	11	45	80	112	390	640	750	491	437	143	32
MIN	5.0	4.1	13	40	75	115	421	435	318	152	31	22
AC-FT	359	345	1740	3740	5170	14160	32040	35170	24580	17640	4100	1390
CAL YR 1977 TOTAL	21333.0			58.4		MAX 313	MIN 4.1	AC-FT	42310			
WTR YR 1978 TOTAL	70794.2			194		MAX 750	MIN 4.1	AC-FT	140400			

HUMBOLDT RIVER BASIN

10333000 HUMBOLDT RIVER NEAR IMLAY, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1949 to November 1950, August 1951 to April 1952, October 1952, February 1960 to current year.

SPECIFIC CONDUCTANCES: October 1975 to current year, monthly.

WATER TEMPERATURES: July 1949 to November 1950, August 1951 to April 1952, October 1952, and February 1960 to June 1961, monthly;

November 1961 to October 1962, occasional; November 1962 to October 1968, monthly; November 1968 to September 1969, occasional; October 1969 to current year, monthly.

SEDIMENT DATA: January 1974 to current year, monthly.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 896 micromhos Oct. 20, 1976; minimum, 544 micromhos June 24, 1977.

WATER TEMPERATURES: Maximum, 30.5°C July 26, 1968; minimum, freezing point on some days during winter months of some years.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 1,210 mg/L Feb. 21, 1975; minimum, 9 mg/L Oct. 24, 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM
OCT							
05...	0740	6.4	--	9.0	55	.95	--
05...	1200	6.3	780	13.0	--	--	--
NOV							
22...	0835	8.0	870	1.0	72	1.6	--
DEC							
28...	1255	41	765	2.0	172	19	--
JAN							
24...	1240	74	696	.5	195	39	--
FEB							
22...	1230	116	673	7.0	285	89	--
MAR							
22...	1100	297	--	9.5	765	613	60
MAY							
19...	1050	693	576	16.0	382	715	--
AUG							
17...	0900	55	--	15.5	96	14	--
SEP							
19...	1245	24	810	14.0	14	.91	--
DATE		SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM
OCT							
05...	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--
NOV							
22...	--	--	--	--	--	--	--
DEC							
28...	--	--	--	--	--	--	--
JAN							
24...	--	--	--	--	--	--	--
FEB							
22...	--	--	--	--	--	--	--
MAR							
22...	75	84	91	96	98	100	
MAY							
19...	--	--	--	--	--	--	--
AUG							
17...	--	--	--	--	--	--	--
SEP							
19...	--	--	--	--	--	--	--

10334500 RYE PATCH RESERVOIR NEAR RYE PATCH, NV

LOCATION.--Lat 40°28'15", long 118°18'30", in NW¼NE¼ sec.18, T.30 N., R.33 E., Pershing County, Hydrologic Unit 16040108, at control works on left end of Rye Patch Dam on Humboldt River, and 2 mi (3 km) northwest of Rye Patch.

DRAINAGE AREA.--16,100 mi² (4,170 km²), approximately.

PERIOD OF RECORD.--February 1936 to current year.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Staff gage on dam read daily. Datum of gage is National Geodetic Vertical Datum of 1929 (Southern Pacific Railroad datum).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam; storage began Feb. 20, 1936. Capacity, 157,200 acre-ft (194 hm³) between elevations 4,072.5 ft (1,241.30 m), sill of trashrack structure, and 4,136.0 ft (1,260.65 m), top of spillway gates (since June 1976). Dead storage negligible. Elevation of spillway (gate sill) is 4,119 ft (1,255.6 m). Figures given herein represent usable contents, and are based on capacity table No. 2, in use since Oct. 1, 1971. Water is used for irrigation in the Lovelock area.

COOPERATION.--Records of daily elevation furnished by Pershing County Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 196,900 acre-ft (243 hm³) Apr. 9, 1946, elevation, 4,134.62 ft (1,260.232 m), capacity table then in use; no contents Aug. 7-11, 1955, May 12 to June 13, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 76,000 acre-ft (93.7 hm³) June 8-12, elevation, 4,124.0 ft (1,257.000 m); minimum, 40,130 acre-ft (49.5 hm³) Oct. 28 to Nov. 2, elevation, 4,117.1 ft (1,254.892 m).

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

4,117	39,700	4,123	69,700
4,119	48,500	4,125	82,700
4,121	58,300		

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	50380	40130	40560	42280	46250	50380	59400	73480	74110	72850	72220	59950
2	50850	40130	40560	42280	46250	50380	59950	74110	74740	72850	72220	59950
3	50380	40560	40560	42280	46250	50850	60500	74740	74740	72850	72220	59400
4	49910	40560	40560	42280	46250	50850	61050	74740	74740	72850	72220	59400
5	49440	40560	40560	42710	46700	50850	61600	74740	74740	73480	72220	58850
6	48970	40560	40560	42710	46700	51320	62150	74740	75370	73480	71590	58850
7	48500	40560	40560	42710	46700	51320	62700	74740	75370	73480	71590	58850
8	48050	40560	40560	42710	47150	51790	63250	74740	76000	74110	71590	58850
9	47600	40560	40560	42710	47150	51790	63800	74740	76000	74110	70960	58850
10	47150	40560	40560	43140	47150	52260	63800	74110	76000	74110	70330	58850
11	46700	40560	40560	43140	47600	52260	64590	74110	76000	74110	69700	58850
12	45800	40560	40560	43140	47600	52730	64980	73480	76000	74110	69110	58850
13	45350	40560	40560	43570	47600	52730	64980	72850	75370	74110	68520	58300
14	45350	40560	40560	43570	48050	53200	64980	72220	75370	74110	67930	58300
15	44900	40560	40560	43570	48050	53710	64980	72220	74740	73480	67930	58300
16	44450	40560	40560	43570	48050	54220	65570	72850	74740	73480	66750	58300
17	44450	40560	40990	44000	48050	54220	66160	72220	74740	73480	66160	58300
18	43570	40560	40990	44000	48500	54730	66750	71590	74740	73480	65570	57790
19	43140	40560	41420	44450	48500	55240	66750	71590	74740	73480	64980	57790
20	43140	40560	41420	44450	48500	55240	67340	72220	74740	73480	64390	57790
21	42710	40560	41420	44450	48970	55240	67930	72220	74110	73480	63800	57280
22	42280	40560	41420	44900	48970	55750	67930	72220	74110	73480	63250	57280
23	41850	40560	41420	44900	49440	56260	68520	72220	74110	73480	63250	57280
24	41850	40560	41420	44900	49440	56770	69110	71590	74110	73480	62700	56770
25	41420	40560	41850	45350	49910	57280	69700	70960	73480	72850	62150	56770
26	40990	40560	41850	45350	49910	57280	70330	70960	73480	72850	62150	56770
27	40560	40560	41850	45350	49910	57790	70960	71590	73480	72850	61600	56260
28	40130	40560	41850	45800	49910	58300	71590	72220	73480	72850	61600	55750
29	40130	40560	41850	45800	---	58850	72220	72850	72850	72850	61050	55240
30	40130	40560	41850	45800	---	58850	72850	73480	72850	72220	60500	54730
31	40130	---	42280	45800	---	59400	---	74110	---	72220	60500	---
MAX	50850	40560	42280	45800	49910	59400	72850	74740	76000	74110	72220	59950
MIN	40130	40130	40560	42280	46250	50380	59400	70960	72850	72220	60500	54730
†	4117.1	4117.2	4117.6	4118.4	4119.3	4121.2	4123.5	4123.7	4123.5	4123.4	4121.4	4120.3
‡	-10,720	+430	+1720	+3520	+4110	+9490	+13,450	+1260	-1260	-630	-11,720	-5770

CAL YR 1977 MAX 112200 MIN 40130 ‡ -59,020
WTR YR 1978 MAX 76000 MIN 40130 ‡ -3880

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

HUMBOLDT RIVER BASIN

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10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1949 to September 1954, May to August 1955, April 1956 to September 1958, April to August 1960, April to July 1961, May 1962 to current year.
 CHEMICAL ANALYSES: December 1951 to September 1954, May to August 1955, April 1956 to September 1958, April to August 1960, April to July 1961, and May 1962 to February 1968, once-daily (composited); March 1968 to September 1969, once-daily (composited) and monthly; October 1969 to current year, monthly.
 SPECIFIC CONDUCTANCES: December 1951 to September 1954, May to August 1955, April 1956 to September 1958, April to August 1960, April to July 1961, and May 1962 to current year, once-daily.
 BIOLOGICAL DATA: October 1974 to September 1977, monthly; October 1977 to current year, monthly (seasonal).
 MICROBIOLOGICAL DATA: October 1974 to current year, monthly.
 WATER TEMPERATURES: July 1949 to November 1951, monthly (seasonal); December 1951 to September 1954, May to August 1955, April 1956 to September 1958, April to August 1960, April to July 1961, and May 1962 to current year, once-daily.
 SEDIMENT DATA: January 1974, and October 1974 to current year, monthly.

COOPERATION.--Pesticide analyses by U.S. Environmental Protection Agency.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 4,010 micromhos Sept. 2, 1954; minimum, 384 micromhos June 24, 1956.
 PHYTOPLANKTON: Maximum, 7,000 cells/mL Oct. 23, 1975; minimum, 8 cells/mL Mar. 26, 1976.
 FECAL STREPTOCOCCI: Maximum, 2,400 colonies/100 mL (non-ideal colony count) June 24, 1977; minimum, less than 1 colony/100 mL Apr. 25, 1975.
 WATER TEMPERATURES: Maximum, 29.5°C July 25, 1968; minimum, 0.5°C on many days during winter months of some years.
 SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 92 mg/L Dec. 28, 1977; minimum, 14 mg/L Dec. 13, 1974.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

SPECIFIC CONDUCTANCES: Maximum, 1,300 micromhos Mar. 27, 28; minimum, 662 micromhos Sept. 2-4.
 WATER TEMPERATURES: Maximum, 20.5°C Aug. 10-20; minimum, 4.5°C Dec. 19-31, Jan. 1-7.

REVISIONS.--Microbiological results reported as "0 colonies/100 mL" in previous years should be corrected to "less than 1 colony/100 mL."

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
05...	0835	186	1200	8.4	14.0	15	--	--	--	--
05...	1330	191	1200	--	14.0	--	--	--	--	--
NOV										
22...	1055	.70	1100	8.2	8.0	3	--	--	3	--
DEC										
28...	1425	.52	1100	8.0	7.0	9	--	--	3	--
JAN										
24...	1405	.60	1090	8.2	7.5	7	--	--	<2	--
FEB										
22...	1415	.60	1140	8.6	13.0	7	--	13.0	<2	--
MAR										
22...	1330	.93	1080	8.4	10.0	6	--	9.8	13	--
APR										
25...	1100	240	1300	8.8	9.0	9	--	9.2	--	10
MAY										
24...	1510	435	986	8.7	13.0	--	9.4	8.8	--	4
JUL										
10...	1500	355	790	8.8	18.0	--	8.5	8.4	--	1
AUG										
17...	1115	357	767	--	20.5	--	29	7.8	--	K4
SEP										
19...	1500	84	779	8.6	16.0	--	9.4	8.7	--	2

K: NON-IDEAL COLONY COUNT.

HUMBOLDT RIVER BASIN

10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV--Continued

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

DATE	STREP- TUCUCCI FECAL, (COLS. PER 100 ML)	STREP- TOCUCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (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 AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT										
05...	480	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
NOV										
22...	100	--	210	51	20	150	4.5	12	250	82
DEC										
28...	78	--	--	--	--	--	--	--	--	--
JAN										
24...	27	--	210	51	21	150	4.5	11	250	81
FEB										
22...	61	--	210	49	22	150	4.5	12	250	85
MAR										
22...	550	--	200	46	20	160	5.0	14	240	88
APR										
25...	--	7	190	40	23	200	6.2	22	270	100
MAY										
24...	--	K37	180	41	19	150	4.9	17	230	85
JUL										
10...	--	250	180	41	18	100	3.3	14	210	74
AUG										
17...	--	K44	150	37	15	82	2.9	14	190	68
SEP										
19...	--	2	180	45	16	99	3.2	14	230	69

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 CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT										
05...	--	--	--	--	--	--	.03	.02	.05	.07
05...	--	--	--	--	--	--	--	--	--	--
NOV										
22...	150	.6	35	--	654	1.34	.10	.00	.10	.02
DEC										
28...	--	--	--	--	--	--	.04	.00	.04	.02
JAN										
24...	150	.6	43	629	656	1.02	--	--	.06	.01
FEB										
22...	160	.7	36	640	665	1.04	--	--	.01	.00
MAR										
22...	150	.6	30	638	652	1.60	--	--	.00	.04
APR										
25...	200	1.0	35	774	783	502	.00	.01	.00	.00
MAY										
24...	130	.8	29	579	610	680	--	--	.08	.01
JUL										
10...	80	.8	33	484	487	464	.10	.01	.11	.00
AUG										
17...	68	.8	36	458	435	441	.02	.02	.04	.03
SEP										
19...	69	.8	38	478	489	108	.01	.01	.02	.02

K: NON-IDEAL COLONY COUNT.

HUMBOLDT RIVER BASIN

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10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV--Continued

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT										
05...	--	.62	--	--	.74	.11	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
NOV										
22...	.04	.98	.27	.31	1.1	.06	.06	3.3	--	--
DEC										
28...	--	.89	--	--	.95	.06	--	--	--	--
JAN										
24...	--	.09	--	.03	.16	.05	.04	--	2.8	--
FEB										
22...	--	.72	--	.72	.73	.04	.00	3.2	--	--
MAR										
22...	--	.50	--	.89	.54	.04	.01	--	--	--
APR										
25...	--	.53	--	.50	.53	.07	.04	--	5.5	.2
MAY										
24...	--	--	--	.23	--	.04	.00	4.2	--	--
JUL										
10...	--	.54	--	1.1	.65	.10	.07	--	--	--
AUG										
17...	.00	.52	.59	.59	.59	.09	.04	--	--	.7
SEP										
19...	--	.52	--	.56	.56	.06	.04	5.4	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
NOV									
22...	1055	45	31	--	--	10	1	10	4
JAN									
24...	1405	42	39	100	100	<10	1	0	0
APR									
25...	1100	60	60	300	100	--	--	10	0
AUG									
17...	1115	30	27	300	30	--	--	10	0

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
NOV									
22...	0	0	<10	1	230	0	30	11	50
JAN									
24...	<10	0	10	4	280	10	<10	1	30
APR									
25...	0	2	4	4	590	10	--	--	10
AUG									
17...	3	<1	9	3	1100	20	--	--	30

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV									
22...	40	--	.0	0	1	--	--	0	2
JAN									
24...	40	.4	.0	1	0	0	0	10	0
APR									
25...	0	1.0	.0	0	0	0	0	10	10
AUG									
17...	<1	.0	.0	1	1	0	0	20	<3

HUMBOLDT RIVER BASIN

10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV--Continued

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

DATE	TIME	PCB, TOTAL (UG/L)	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)
NOV 22...	1055	--	ND	ND	ND	ND	ND	ND	ND
FEB 22...	1415	ND	ND	ND	ND	ND	ND	ND	ND
APR 25...	1100	ND	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)
NOV 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR 25...	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA- ZINE TOTAL COUL- SON COND. (UG/L)
NOV 22...	ND	ND	ND	ND	ND	ND	ND	ND
FEB 22...	ND	ND	ND	ND	--	--	--	ND
APR 25...	ND	ND	ND	ND	--	--	--	ND

ND: NONE DETECTED.

10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV--Continued

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

PHYTOPLANKTON

DATE TIME	OCT 5,77 0835	NOV 22,77 1055	MAR 22,78 1330	MAY 24,78 1510
TOTAL CELLS/ML	1500	790	920	670
DIVERSITY: DIVISION	1.2	1.4	1.0	1.5
..CLASS	1.2	1.4	1.0	1.9
...ORDER	1.6	1.8	1.6	2.3
...FAMILY	2.6	2.6	1.7	2.3
....GENUS	3.0	3.0	0.0	2.3

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	150	10	--	-	60	7	110#	17
....DOCYSTACEAE								
....ANKISTRODESMUS	13	1	*	0	--	-	--	-
....DOCYSTIS	470#	32	8	1	40	4	--	-
....QUADRIGULA	33	2	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	160	11	--	-	--	-	--	-
....SCENEDESMUS	65	4	--	-	--	-	--	-
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	--	-	130#	20
..VOLVOCALES								
...CHLAMYDOMONADACEAE	--	-	--	-	280#	30	--	-
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-
...PHACOTACEAE								
....PHACOTUS	46	3	24	3	--	-	--	-
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	33	2	80	10	480#	52	--	-
...MELOSIRA	340#	23	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	16	2	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	64	8	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	--	-	--	-	--	-
....FRAGILARIA	13	1	--	-	--	-	--	-
....SYNEDRA	*	0	--	-	--	-	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	180#	22	--	-	--	-
...NAVICULACEAE								
....NAVICULA	52	4	64	8	--	-	22	3
...NITZSCHIAEAE								
....NITZSCHIA	46	3	32	4	60	7	22	3
..CHRYSTOPHYCEAE								
...CHRYSOMONADALES								
...OCHROMONADACEAE								
....UCHROMONAS	--	-	--	-	--	-	67	10
..XANTHOPHYCEAE								
...HETEROCOCCALES								
...CHLOROTHECIACEAE								
....OPHIOCYTIUM	--	-	--	-	--	-	45	7

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

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

HUMBOLDT RIVER BASIN

10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV--Continued

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

PHYTOPLANKTON

DATE TIME	OCT 5,77 0835	NOV 22,77 1055	MAR 22,78 1330	MAY 24,78 1510				
TOTAL CELLS/ML	1500	790	920	670				
DIVERSITY: DIVISION	1.2	1.4	1.0	1.5				
..CLASS	1.2	1.4	1.0	1.9				
...ORDER	1.6	1.8	1.6	2.3				
...FAMILY	2.6	2.6	1.7	2.3				
....GENUS	3.0	3.0	0.0	2.3				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONIDALES								
....CRYPTOCHRYSIDACEAE								
....RHODOMONAS	13	1	--	-	--	-	--	-
...CRYPTOMONODACEAE								
....CRYPTOMONAS	--	-	32	4	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCCOCCALES								
...CHROCCOCCAEAE								
....ANACYSTIS	33	2	--	-	--	-	270#	40
...HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	220#	27	--	-	--	-
....SPIRULINA	--	-	80	10	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
....EUGLENA	*	0	--	-	--	-	--	-

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

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

HUMBOLDT RIVER BASIN

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10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV--Continued

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

PHYTOPLANKTON

DATE TIME	JUL 10, 78 1500	AUG 17, 78 1115	SEP 19, 78 1500
TOTAL CELLS/ML	3400	2200	2900
DIVERSITY: DIVISION	0.3	1.3	1.5
..CLASS	0.3	1.3	1.5
...ORDER	0.6	2.4	2.5
...FAMILY	0.6	2.6	2.9
...GENUS	0.6	2.6	3.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
...CHARACIACEAE						
....SCHROEDERIA	93	3	78	4	140	5
...OOCYSTACEAE						
....ANKISTRODESMUS	--	-	--	-	25	1
....OOCYSTIS	--	-	570#	26	--	-
....QUADRIGULA	--	-	--	-	--	-
...SCENEDESMACEAE						
....CRUCIGENTIA	--	-	--	-	370	13
....SCENEDESMUS	--	-	--	-	--	-
..TETRASPORALES						
...PALMELLACEAE						
....SPHAEROCYSTIS	--	-	67	3	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	--	-	69	2
...PHACOTACEAE						
....PHACOTUS	--	-	620#	28	250	9
CHRYSOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	--	-	--	-	440#	15
....MELOSIRA	--	-	130	6	46	2
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	46	2
...COCconeis	--	-	22	1	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	--	-
...DIATOMACEAE						
....DIATOMA	--	-	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	11	1	190	6
....FRAGILARIA	23	1	--	-	--	-
....SYNEDRA	--	-	--	-	--	-
...GOMPHONEMACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	23	1	34	2	23	1
...NITZSCHIACEAE						
....NITZSCHIA	--	-	11	1	23	1
..CHRYSOPHYCEAE						
...CHRYDOMONADALES						
...OCHROMONADACEAE						
....OCHROMONAS	--	-	--	-	--	-
..XANTHOPHYCEAE						
...HETEROCOCCALES						
...CHLOROTHECIACEAE						
....OPHIOCYTIUM	--	-	--	-	--	-

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

HUMBOLDT RIVER BASIN

10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV--Continued

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

PHYTOPLANKTON

DATE TIME	JUL 10,78 1500	AUG 17,78 1115	SEP 19,78 1500
TOTAL CELLS/ML	3400	2200	2900
DIVERSITY: DIVISION	0.3	1.3	1.5
..CLASS	0.3	1.3	1.5
...ORDER	0.6	2.4	2.5
...FAMILY	0.6	2.6	2.9
....GENUS	0.6	2.6	3.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CRYPTOPHYTA (CRYPTOMONADS)						
..CRYPTOPHYCEAE						
...CRYPTOMONIDALES						
....CRYPTOCHRYSIDACEAE						
....RHODOMONAS	--	-	--	-	--	-
...CRYPTOMONODACEAE						
....CRYPTOMONAS	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROCOCCOCEAE						
....CHROCOCCOCEAE						
....ANACYSTIS	3100#	90	500#	23	690#	24
...HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	--	-	170	8	580#	20
...OSCILLATORIA	210	6	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-
....SPIRULINA						
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
...EUGLENACEAE						
....EUGLENA	--	-	--	-	--	-

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

PERIPHYTON

Retrieval Date	Length of exposure Polyethylene strip (days)	Biomass (g/m ²)		Chlorophyll a	Chlorophyll b
		Dry weight	Ash weight	(mg/m ²)	(mg/m ²)
Aug. 25	34	7.32	4.64	1.02	0.000

HUMBOLDT RIVER BASIN

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10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV--Continued

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

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT				
05...	0835	186	62	31
NOV				
22...	1055	.70	22	.04
DEC				
28...	1425	.52	92	.13
JAN				
24...	1405	.60	64	.10
FEB				
22...	1415	.60	29	.05
MAR				
22...	1330	.93	45	.11
APR				
25...	1100	240	72	47
MAY				
24...	1510	435	58	68
AUG				
17...	1115	357	69	67
SEP				
19...	1500	84	35	7.9

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	1200	1050	1060	1060	1010	1080	1220	1260	900	813	819	667
2	1180	1050	1060	1050	1040	1080	1230	1290	897	819	778	662
3	1180	1040	1070	1060	1050	1020	1230	1290	897	822	770	662
4	1190	1050	1030	1040	1040	1040	1240	1280	893	825	764	662
5	1200	1010	1040	1040	1040	1030	1240	1250	885	809	764	675
6	1200	1030	---	1030	1040	1040	1230	1240	874	806	758	673
7	1200	1070	1030	1040	1040	1070	1240	1210	870	803	770	689
8	1190	---	1060	1060	1050	1070	1240	1220	870	803	764	770
9	1220	1060	1060	1050	1030	1030	1240	1210	870	800	764	785
10	1200	1010	995	1040	1040	1090	1230	1190	860	800	764	738
11	1200	1050	1040	1030	1040	1080	1240	1190	856	797	770	746
12	1200	1120	---	1090	1040	1090	1250	1160	856	797	756	748
13	1190	1040	1040	1120	1030	1080	1250	1160	852	797	756	756
14	1190	1070	1110	1040	1030	1090	1240	1140	839	797	753	765
15	1180	1060	1040	1030	1050	1010	1240	1120	842	797	753	770
16	1200	1040	1040	1030	1040	1070	1250	1110	829	797	753	792
17	1200	1060	1030	1030	1040	1080	1240	1100	835	794	756	775
18	1200	1020	1070	1020	1060	1070	1250	1090	835	785	753	765
19	1200	1020	1040	1020	1040	1070	1240	1080	832	788	753	770
20	1180	1090	1060	1030	1070	1090	1250	1050	832	788	753	770
21	1200	1040	1040	1020	1070	1070	1240	1040	832	791	756	765
22	1200	1030	1090	1030	1060	1060	1240	1040	835	779	758	768
23	1200	1050	1030	1040	1140	1080	1240	1000	829	779	756	768
24	1200	1010	1070	1080	1080	1090	1230	990	825	773	753	765
25	1210	1120	1040	1080	1080	1090	1250	990	829	776	756	773
26	1190	1010	1010	1040	1030	---	1240	985	832	776	756	770
27	1200	1000	1060	1040	1070	1300	1240	985	825	770	756	770
28	1200	1120	1030	1000	1080	1300	1200	980	819	770	756	770
29	1200	990	1020	1010	---	---	1220	975	822	770	773	770
30	1190	1050	1010	1050	---	---	1220	930	816	776	773	765
31	1200	---	1040	1050	---	---	---	912	---	779	773	---
MEAN	1200	1050	1050	1040	1050	1080	1240	1110	850	793	762	744
MAX	1220	1120	1110	1120	1140	1300	1250	1290	900	825	819	792
MTN	1180	990	995	1000	1010	1010	1200	912	816	770	753	662
WTR YR 1978	MEAN	996	MAX	1300	MIN	662						

HUMBOLDT RIVER BASIN

10335000 HUMBOLDT RIVER NEAR RYE PATCH, NV--Continued

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	15.0	12.0	5.0	4.5	6.0	7.0	8.5	10.5	14.0	18.0	20.0	19.0
2	14.5	11.5	5.0	4.5	6.0	7.0	8.5	10.5	14.5	18.0	20.0	19.0
3	14.5	11.5	5.0	4.5	6.0	7.0	9.0	10.5	14.5	18.0	20.0	18.5
4	14.5	11.0	5.0	4.5	6.0	7.5	9.0	11.0	14.5	18.0	20.0	18.5
5	14.5	10.5	5.0	4.5	6.0	7.5	9.0	11.0	14.5	18.0	20.0	18.5
6	14.0	10.0	5.0	4.5	6.0	7.5	9.0	11.0	15.0	18.0	20.0	18.0
7	14.0	9.0	5.0	4.5	6.0	7.5	9.0	11.0	15.0	18.0	20.0	18.0
8	14.0	8.0	5.0	5.0	6.0	7.5	9.0	11.0	15.0	18.0	20.0	18.0
9	14.0	7.0	5.0	5.0	6.0	7.5	9.0	11.5	15.5	18.0	20.0	18.0
10	14.0	6.5	5.0	5.0	6.0	8.0	9.0	11.5	15.5	18.0	20.5	17.5
11	14.0	6.5	5.0	5.0	6.0	8.0	9.0	11.5	15.5	18.0	20.5	17.5
12	14.0	6.5	5.0	5.0	6.0	8.0	9.0	12.0	15.5	18.0	20.5	17.5
13	14.0	6.5	5.0	5.0	6.0	8.0	9.0	12.0	16.0	18.0	20.5	17.5
14	13.5	6.5	5.0	5.0	6.0	8.0	9.5	12.0	16.0	18.0	20.5	17.0
15	13.5	6.0	5.0	5.0	6.0	8.0	9.5	12.5	16.0	18.0	20.5	17.0
16	13.5	6.0	5.0	5.0	6.5	8.0	9.5	12.5	16.0	18.0	20.5	17.0
17	13.5	6.0	5.0	5.0	6.5	8.0	9.5	13.0	16.0	18.5	20.5	17.0
18	13.5	6.0	5.0	5.0	6.5	8.0	9.5	13.0	16.5	18.5	20.5	17.0
19	13.5	6.0	4.5	5.0	6.5	8.0	9.5	13.0	16.5	18.5	20.5	16.5
20	13.5	6.0	4.5	5.0	6.5	8.0	9.5	13.5	16.5	19.0	20.5	16.5
21	13.0	6.0	4.5	5.5	6.5	8.0	9.5	13.5	17.0	19.0	20.0	16.5
22	13.0	5.5	4.5	5.5	6.5	8.5	10.0	13.5	17.0	19.0	20.0	16.5
23	13.0	5.5	4.5	5.5	6.5	8.5	10.0	13.5	17.0	19.0	20.0	16.0
24	13.0	5.5	4.5	5.5	7.0	8.5	10.0	14.0	17.5	19.0	20.0	16.0
25	13.0	5.5	4.5	5.5	7.0	8.5	10.0	14.0	17.5	19.0	19.5	16.0
26	12.5	5.5	4.5	5.5	7.0	8.5	10.0	14.0	17.5	19.5	19.5	15.0
27	12.5	5.5	4.5	5.5	7.0	8.5	10.0	14.0	18.0	19.5	19.5	15.0
28	12.5	5.0	4.5	5.5	7.0	8.5	10.0	14.0	18.0	19.5	19.5	15.0
29	12.0	5.0	4.5	5.5	---	8.5	10.0	14.0	18.0	19.5	19.5	15.0
30	12.0	5.0	4.5	6.0	---	8.5	10.0	14.0	18.0	20.0	19.5	15.0
31	12.0	---	4.5	6.0	---	8.5	---	14.0	---	20.0	19.0	---
MEAN	13.5	7.0	5.0	5.0	6.5	8.0	9.5	12.5	16.0	18.5	20.0	17.0
MAX	15.0	12.0	5.0	6.0	7.0	8.5	10.0	14.0	18.0	20.0	20.5	19.0
MTN	12.0	5.0	4.5	4.5	6.0	7.0	8.5	10.5	14.0	18.0	19.0	15.0
WTR YR 1978	MEAN	11.5	MAX	20.5	MIN	4.5						

PYRAMID AND WINNEMUCCA LAKES BASIN

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10336500 PYRAMID LAKE NEAR NIXON, NV

LOCATION.--Lat 39°59'05", long 119°30'00", in NE¼NW¼ sec.3, T.24 N., R.22 E., Washoe County, Hydrologic Unit 16050103, in Pyramid Lake Indian Reservation, 0.25 mi (0.40 km) north of the Pyramid, 1.6 mi (2.6 km) northeast of Anaho Island, and 13 mi (21 km) northwest of Nixon.

DRAINAGE AREA.--2,720 mi² (7,040 km²).

PERIOD OF RECORD.--1867-1925 (occasional elevations in some years), June 1926 to current year (occasional elevations in each year).

REVISED RECORDS.--WSP 880: 1934-38 (bench mark). WSP 1090: 1926 (M). WRD 1967 NV: 1966.

GAGE.--Nonrecording gage. Datum of gage is 3,940.29 ft (1,201,000 m) National Geodetic Vertical Datum of 1929 (U.S. Coast and Geodetic Survey Bench Mark N-21), supplementary adjustment of 1956. Prior to January 1934, elevations were determined from Bench Mark No. 1 of General Land Office using elevation of 3,882.26 ft (1,183.313 m), adjustment of 1912; to convert these records to present datum, add 0.81 ft (0.247 m). January 1934 to September 1955, elevations were determined from Bench Mark N-21 using elevation of 3,940.04 ft (1,200.924 m), datum of 1929; to convert these records to present datum, add 0.25 ft (0.076 m). October 1955 to August 1968, nonrecording gages along southwest lake shore at present datum.

REMARKS.--Truckee Canal diverts water out of the basin to Lahontan Reservoir. Elevations are given to the nearest 0.1 ft and contents to 4 significant figures in order to reflect trends of change. Any single observation, however, may be affected by wind and seiche movements on the lake surface. Elevations published for 1867 and 1871 may have been 9 ft (2.7 m) lower because of uncertainty of date of photograph on which they were based.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 3,884.9 ft (1,184.12 m) in 1871 (see remarks paragraph); minimum observed, 3,783.9 ft (1,153.33 m) Feb. 6, Mar. 6, 1967.

MONTHEND ELEVATIONS AND CONTENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-ft)	Change in contents (acre-ft)
Sept.30	3,793.6	21,020,000	--
Oct. 31	3,793.2	20,970,000	-50,000
Nov. 30	3,792.8	20,930,000	-40,000
Dec. 31	3,792.6	20,910,000	-20,000
CAL YR 1977	--	--	-340,000
Jan. 31	3,792.8	20,930,000	+20,000
Feb. 28	3,792.6	20,910,000	-20,000
Mar. 31	3,792.6	20,910,000	0
Apr. 30	3,792.6	20,910,000	0
May 31	3,792.6	20,910,000	0
June 30	3,792.4	20,880,000	-30,000
July 31	3,792.0	20,840,000	-40,000
Aug. 31	3,791.5	20,780,000	-60,000
Sep. 30	3,791.0	20,730,000	-50,000
WTR YR 1977-78	--	--	-290,000

NOTE.--Monthend elevations are interpolated from readings made during the month.

PYRAMID AND WINNEMUCCA LAKES BASIN

10336600 UPPER TRUCKEE RIVER NEAR MEYERS, CA

LOCATION.--Lat 38°50'35", long 120°01'25", in NE¼SE¼ sec.31, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank 0.4 mi (0.6 km) upstream from mouth of Echo Lake outlet, 1.1 mi (1.8 km) southwest of Meyers, and 2.5 mi (4.0 km) upstream from Angora Creek.

DRAINAGE AREA.--33.1 mi² (85.7 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,325 ft (1,928 m), from topographic map.

REMARKS.--Records good except those for period of no gage height record, Aug. 23 to Sept. 30, which are fair. No regulation. Some small diversions above station for domestic use.

AVERAGE DISCHARGE.--18 years, 62.4 ft³/s (1.767 m³/s), 45,210 acre-ft/yr (55.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft³/s (72.2 m³/s) Feb. 1, 1963, gage height, 12.41 ft (3.783 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Aug. 31 to Sept. 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	DISCHARGE (ft ³ /s)	(m ³ /s)	GAGE HEIGHT (ft)	(m)	DATE	TIME	DISCHARGE (ft ³ /s)	(m ³ /s)	GAGE HEIGHT (ft)	(m)
May 4	2230	202	5.72	6.03	1.838	May 30	2215	423	12.0	7.38	2.249
May 14	1945	471	13.3	7.64	2.329	June 6	2330	493	14.0	7.79	2.374
May 21	2000	443	12.5	7.49	2.283	June 13	2130	*503	14.2	7.87	2.399

Minimum daily, 1.9 ft³/s (0.054 m³/s) Oct. 6-13.

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	2.3	3.2	3.8	11	12	15	79	88	332	151	31	6.9
2	2.1	3.2	3.8	11	12	17	64	104	334	143	29	6.7
3	2.1	3.3	3.8	10	12	17	56	144	322	128	29	6.6
4	2.1	3.2	3.7	10	12	26	52	167	347	120	35	6.6
5	2.0	3.9	3.7	11	13	26	47	155	384	122	41	8.5
6	1.9	3.7	3.6	11	14	21	46	123	393	128	32	13
7	2.0	3.7	3.6	11	14	22	43	136	405	135	30	16
8	2.0	3.6	3.6	11	13	24	40	169	391	123	28	13
9	2.0	3.2	3.6	12	13	23	40	210	392	122	26	11
10	2.0	3.3	3.6	12	13	22	48	231	343	119	24	36
11	2.0	3.3	3.7	11	13	22	74	234	298	108	22	19
12	2.0	3.3	3.8	11	13	20	96	249	350	95	20	13
13	1.9	3.3	3.7	11	13	19	95	295	398	88	19	13
14	2.0	3.2	5.8	11	12	19	89	342	388	89	18	15
15	2.0	3.3	24	15	12	19	78	316	321	87	17	18
16	2.0	3.4	11	15	12	21	66	227	261	79	16	11
17	2.0	3.4	16	16	12	26	61	210	242	70	16	10
18	2.0	3.4	12	14	12	30	61	228	248	67	15	13
19	2.1	3.2	9.2	13	12	30	64	258	231	62	14	10
20	2.1	3.0	8.6	13	13	34	64	291	229	58	14	10
21	2.1	6.1	8.4	12	13	41	60	337	223	55	13	9.3
22	2.7	8.6	8.4	12	14	45	57	361	215	53	13	9.0
23	2.6	5.4	8.4	12	14	48	59	301	210	50	12	8.5
24	2.7	4.9	8.4	12	15	42	67	213	204	47	11	8.2
25	2.8	4.7	8.4	12	15	43	108	175	182	46	11	8.2
26	2.9	4.6	8.3	12	15	54	92	172	163	46	12	8.2
27	3.2	4.6	13	12	15	62	97	205	168	43	10	8.2
28	3.2	4.2	16	12	15	72	111	280	165	41	9.0	8.0
29	3.0	3.8	15	12	---	82	94	365	149	38	8.3	7.5
30	3.0	3.8	15	12	---	86	99	363	149	35	7.6	7.4
31	3.0	---	12	12	---	101	---	336	---	34	7.2	---
TOTAL	71.8	117.8	255.9	374	368	1129	2107	7285	8437	2582	590.1	338.8
MFAN	2.32	3.93	8.25	12.1	13.1	36.4	70.2	235	281	83.3	19.0	11.3
MAX	3.2	8.6	24	16	15	101	111	365	405	151	41	36
MIN	1.9	3.0	3.6	10	12	15	40	88	149	34	7.2	6.6
AC-FT	182	234	508	742	730	2240	4180	14450	16730	5120	1170	672

CAL YR 1977 TOTAL 5738.9 MEAN 15.7 MAX 109 MIN 1.5 AC-FT 11380
WTR YR 1978 TOTAL 23656.4 MEAN 64.8 MAX 405 MIN 1.9 AC-FT 46920

PYRAMID AND WINNEMUCCA LAKES BASIN

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10336625 FALLEN LEAF LAKE NEAR CAMP RICHARDSON, CA

LOCATION.--Lat 38°54'00", long 120°04'14", in NE¼SW¼ sec.11, T.12 N., R.17 E., El Dorado County, Hydrologic Unit 16050101, Eldorado National Forest, on left bank near center of lake, 200 ft (61 m) north of Cathedral Creek, 1.5 mi (2.4 km) south of Fallen Leaf Dam, 2.9 mi (4.7 km) southwest of Camp Richardson, and 3.7 mi (6.0 km) west of South Lake Tahoe Post Office.

DRAINAGE AREA.--16.7 mi² (43.3 km²).

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1973, published as "near Tahoe Valley."

GAGE.--Water-stage recorder. Datum of gage is 6,372.30 ft (1,942.277 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Lake levels regulated by a concrete dam at the outlet constructed in 1934. Regulation is for maintenance of lake level and enhancement of fishery.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 5.51 ft (1.679 m) Jan. 22, 1970; minimum, 1.79 ft (0.546 m) Jan. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.55 ft (1.372 m) July 15, 16; minimum, 1.89 ft (0.576 m) Nov. 20.

GAGE HEIGHT, IN 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	2.76	2.18	2.17	2.97	2.62	2.63	2.97	2.87	3.37	3.36	3.97	3.32
2	2.73	2.17	2.16	2.92	2.61	2.65	2.92	2.90	3.37	3.45	3.95	3.31
3	2.72	2.13	2.14	2.89	2.60	2.67	2.86	2.96	3.38	3.53	3.94	3.28
4	2.68	2.12	2.14	2.90	2.60	2.86	2.83	3.03	3.40	3.60	3.93	3.26
5	2.63	2.15	2.13	3.02	2.63	2.90	2.77	3.03	3.45	3.68	3.93	3.35
6	2.61	2.12	2.11	2.98	2.70	2.88	2.79	3.00	3.50	3.81	3.93	3.38
7	2.60	2.11	2.10	2.94	2.80	2.87	2.76	3.01	3.53	3.92	3.93	3.42
8	2.58	2.10	2.10	2.90	2.83	2.85	2.71	3.06	3.54	4.04	3.92	3.43
9	2.56	2.09	2.10	2.96	2.87	2.84	2.67	3.13	3.52	4.14	3.92	3.51
10	2.55	2.08	2.08	2.93	2.87	2.82	2.66	3.19	3.48	4.24	3.90	3.71
11	2.53	2.04	2.12	2.89	2.84	2.82	2.68	3.22	3.43	4.36	3.87	3.76
12	2.51	2.01	2.11	2.87	2.84	2.82	2.72	3.27	3.45	4.42	3.82	3.78
13	2.51	1.99	2.10	2.85	2.83	2.79	2.75	3.37	3.56	4.47	3.78	3.80
14	2.49	1.99	2.26	2.93	2.80	2.77	2.77	3.53	3.60	4.52	3.77	3.82
15	2.47	1.98	2.55	2.93	2.76	2.76	2.82	3.45	3.53	4.55	3.73	3.82
16	2.46	1.97	2.62	3.04	2.73	2.75	2.83	3.32	3.42	4.55	3.70	3.83
17	2.45	1.95	2.89	3.07	2.72	2.75	2.79	3.23	3.32	4.50	3.67	3.82
18	2.43	1.92	2.90	3.05	2.70	2.76	2.76	3.20	3.27	4.45	3.65	3.81
19	2.42	1.90	2.90	3.02	2.69	2.77	2.72	3.21	3.23	4.42	3.62	3.79
20	2.41	1.89	2.90	2.97	2.68	2.77	2.80	3.26	3.21	4.37	3.59	3.78
21	2.40	2.27	2.93	2.92	2.67	2.78	2.77	3.31	3.20	4.32	3.53	3.77
22	2.38	2.25	2.95	2.88	2.65	2.78	2.73	3.35	3.17	4.30	3.51	3.77
23	2.36	2.24	2.96	2.83	2.63	2.80	2.72	3.30	3.14	4.26	3.48	3.76
24	2.34	2.23	2.92	2.80	2.62	2.78	2.75	3.19	3.14	4.21	3.45	3.76
25	2.32	2.22	2.87	2.78	2.61	2.77	2.83	3.11	3.13	4.17	3.42	3.75
26	2.31	2.21	2.89	2.75	2.60	2.77	2.85	3.06	3.10	4.16	3.40	3.73
27	2.31	2.20	2.97	2.73	2.60	2.79	2.85	3.06	3.08	4.13	3.39	3.69
28	2.28	2.19	3.00	2.70	2.60	2.83	2.87	3.13	3.09	4.11	3.38	3.66
29	2.24	2.18	3.11	2.69	---	2.87	2.87	3.25	3.15	4.07	3.37	3.63
30	2.22	2.18	3.06	2.68	---	2.94	2.88	3.33	3.25	4.03	3.34	3.60
31	2.20	---	3.02	2.65	---	2.99	---	3.35	---	4.00	3.34	---
MAX	2.76	2.27	3.11	3.07	2.87	2.99	2.97	3.53	3.60	4.55	3.97	3.83
MIN	2.20	1.89	2.08	2.65	2.60	2.63	2.66	2.87	3.08	3.36	3.34	3.26

CAL YR 1977 MAX 4.49 MIN 1.80
WTR YR 1978 MAX 4.55 MIN 1.89

PYRAMID AND WINNEMUCCA LAKES BASIN

10336626 TAYLOR CREEK NEAR CAMP RICHARDSON, CA

LOCATION.--Lat 38°55'18", long 120°03'37", in NE 1/4 sec. 2, T.12 N., R.17 E., El Dorado County, Hydrologic Unit 16050101, Eldorado National Forest, on left bank 0.1 mi (0.2 km) downstream from Fallen Leaf Lake outlet, and 1.4 mi (2.3 km) southwest of Camp Richardson.

DRAINAGE AREA.--16.7 mi² (43.3 km²).

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1973, published as "near Tahoe Valley."

GAGE.--Water-stage recorder. Datum of gage is 6,361.08 ft (1,938.857 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Fallen Leaf Lake Dam (station 10336625).

AVERAGE DISCHARGE (unadjusted).--10 years, 43.3 ft³/s (1.226 m³/s), 31,370 acre-ft/yr (38.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,180 ft³/s (33.4 m³/s) Nov. 12, 1973, gage height, 5.72 ft (1.743 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Oct. 4-7, 1970, Sept. 4-6, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 283 ft³/s (8.01 m³/s) June 14, gage height, 4.64 ft (1.414 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Sept. 4-6.

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	7.3	5.3	6.7	48	19	17	85	62	196	26	26	.42
2	6.0	5.3	6.7	45	18	19	75	62	200	26	18	.38
3	5.2	5.0	6.6	41	17	20	66	67	205	26	14	.38
4	5.2	5.2	6.5	39	17	27	60	78	208	18	11	.20
5	5.1	5.3	6.2	45	18	36	55	90	223	9.9	9.3	.20
6	5.3	5.3	6.2	50	20	36	53	89	236	9.5	8.4	.20
7	5.3	4.9	6.2	45	26	34	51	84	248	9.2	7.7	1.5
8	5.3	4.9	6.0	42	29	33	47	85	257	9.2	7.0	1.6
9	5.3	5.0	5.7	43	34	31	42	97	260	9.2	6.9	1.3
10	5.3	4.9	5.5	44	35	30	39	119	249	9.2	7.0	3.6
11	5.3	4.9	5.6	41	33	30	39	132	231	9.9	6.8	4.9
12	5.4	4.9	5.7	37	31	29	42	143	224	12	6.7	5.9
13	5.5	4.6	5.5	36	31	28	46	159	241	15	6.5	6.5
14	5.2	4.3	6.0	36	29	27	49	202	272	30	7.4	7.6
15	4.7	4.7	6.7	43	27	25	52	250	269	41	7.1	7.9
16	4.9	4.6	6.7	46	25	24	57	232	235	52	7.3	8.6
17	4.9	3.8	9.3	55	23	24	55	185	201	73	7.0	8.9
18	4.9	4.1	13	52	22	24	51	153	178	71	7.3	7.7
19	4.9	3.2	14	51	21	24	49	144	161	61	7.3	6.7
20	5.1	3.1	15	47	20	33	49	148	151	59	7.3	6.0
21	4.9	5.1	15	43	18	42	52	167	147	57	7.3	5.5
22	5.1	7.2	28	39	18	43	50	193	144	56	6.3	7.9
23	5.1	7.2	38	34	18	45	46	202	141	55	3.7	9.7
24	5.2	7.2	36	31	17	44	44	174	133	52	3.8	8.6
25	5.1	7.2	34	29	17	42	50	137	125	45	3.7	6.0
26	5.1	7.2	33	27	16	42	56	111	116	37	3.7	9.4
27	5.4	7.2	40	25	16	43	57	103	108	37	3.6	20
28	5.3	7.2	46	23	15	46	60	113	74	37	3.6	19
29	5.5	7.0	53	22	---	50	62	144	34	37	3.1	19
30	5.3	6.7	58	21	---	55	64	177	27	37	.94	19
31	5.5	---	53	20	---	77	---	193	---	29	.51	---
TOTAL	163.6	162.5	583.8	1200	630	1080	1603	4295	5494	1055.1	226.25	204.58
MEAN	5.28	5.42	18.8	38.7	22.5	34.8	53.4	139	183	34.0	7.30	6.82
MAX	7.3	7.2	58	55	35	77	85	250	272	73	26	20
MIN	4.7	3.1	5.5	20	15	17	39	62	27	9.2	.51	.20
AC-FT	325	322	1160	2380	1250	2140	3180	8520	10900	2090	449	406
CAL YR 1977	TOTAL	3609.08	MEAN	9.89	MAX	69	MIN	.89	AC-FT	7160		
WTR YR 1978	TOTAL	16697.83	MEAN	45.7	MAX	272	MIN	.20	AC-FT	33120		

PYRAMID AND WINNEMUCCA LAKES BASIN

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10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA

LOCATION.--Lat 39°06'27", long 120°09'40", in NW¼NE¼ sec.36, T.15 N., R.16 E., Placer County, Hydrologic Unit 16050101, on right bank 300 ft (91 m) upstream from bridge on State Highway 89, 1,000 ft (305 m) upstream from Lake Tahoe, and 4.6 mi (7.4 km) south of Tahoe City.

DRAINAGE AREA.--11.2 mi² (29.0 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (1,902 m), from topographic map. Oct. 1, 1960, to Sept. 30, 1964, at site 400 ft (122 m) downstream at datum 10.25 ft (3.124 m) lower, and Oct. 1, 1964, to Aug. 27, 1970, at datum 12 ft (3.658 m) lower.

REMARKS.--Records good except those for the winter months, which are fair. No known diversion or regulation.

AVERAGE DISCHARGE.--18 years, 35.9 ft³/s (1,017 m³/s), 26,010 acre-ft/yr (32.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s (59.5 m³/s) Dec. 22 or 24, 1964, from indirect measurement of peak flow; maximum gage height, 9.90 ft (3.018 m) Dec. 22, 1964; minimum discharge, 0.30 ft³/s (0.008 m³/s) Sept. 19, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*)

DATE	TIME	DISCHARGE (ft ³ /s)	(m ³ /s)	GAGE HEIGHT (ft)	(m)	DATE	TIME	DISCHARGE (ft ³ /s)	(m ³ /s)	GAGE HEIGHT (ft)	(m)
May 14	1915	*301	8.52	2.39	0.728	June 7	1745	298	8.44	2.38	0.725
May 21	1900	260	7.36	2.24	0.683	June 13	1830	233	6.60	2.12	0.646
May 29	1830	276	7.82	2.30	0.701						

Minimum daily, 1.3 ft³/s (0.037 m³/s) on many days during October and November.

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	1.3	1.4	1.7	12	8.9	12	82	72	175	85	11	2.5
2	1.3	1.3	1.7	11	9.2	16	64	91	175	82	10	2.4
3	1.3	1.3	1.7	10	8.9	17	56	114	180	72	9.0	2.3
4	1.3	1.3	1.7	9.4	8.8	20	51	129	200	67	8.4	2.3
5	1.3	1.7	1.7	9.2	8.9	21	46	119	217	68	7.9	3.2
6	1.3	1.5	1.7	9.2	9.2	19	43	99	226	72	7.4	5.1
7	1.3	1.5	1.7	9.2	9.4	19	39	104	239	75	7.9	6.8
8	1.3	1.4	1.7	9.6	9.6	20	37	125	222	69	6.7	4.8
9	1.3	1.4	1.7	13	9.8	20	37	148	216	70	6.1	4.2
10	1.3	1.4	1.7	13	10	20	44	163	186	68	5.3	15
11	1.3	1.4	1.8	11	10	20	57	167	167	62	4.9	7.0
12	1.3	1.4	1.8	10	10	20	70	171	176	55	4.7	5.0
13	1.3	1.4	1.8	9.6	10	19	74	194	192	50	4.5	5.2
14	1.3	1.4	2.9	14	9.6	18	71	227	187	50	4.5	6.0
15	1.3	1.4	21	18	9.4	18	62	234	156	48	4.2	7.3
16	1.3	1.4	6.6	20	9.2	20	55	142	132	43	4.1	4.3
17	1.3	1.4	12	20	9.0	24	49	122	125	38	3.9	3.8
18	1.3	1.4	9.7	14	8.8	27	47	129	128	36	3.9	5.6
19	1.3	1.4	8.0	13	8.8	27	49	144	120	33	3.7	3.8
20	1.3	1.4	6.5	11	8.9	32	52	163	120	30	3.5	4.1
21	1.3	5.0	5.7	11	9.2	41	45	193	119	28	3.4	4.0
22	1.3	2.4	5.6	10	9.3	49	42	204	115	27	3.3	3.5
23	1.3	2.1	5.6	9.5	10	52	42	164	116	25	3.3	3.5
24	1.3	1.9	5.5	9.4	11	46	46	114	111	23	3.2	3.3
25	1.3	1.7	5.5	9.4	11	48	85	94	99	22	3.1	3.2
26	1.3	1.7	5.3	9.3	11	54	75	97	90	20	3.4	3.2
27	1.6	1.8	17	9.0	11	64	79	121	88	19	2.9	3.2
28	1.3	1.9	16	8.8	11	73	84	162	80	17	2.6	3.2
29	1.3	1.8	24	8.8	---	78	78	204	76	15	2.6	3.0
30	1.3	1.8	22	8.9	---	87	77	203	81	13	2.6	3.0
31	1.3	---	15	8.9	---	107	---	183	---	12	2.6	---
TOTAL	40.6	50.3	216.3	349.2	269.9	1108	1738	4596	4514	1394	154.6	133.8
MEAN	1.31	1.68	6.98	11.3	9.64	35.7	57.9	148	150	45.0	4.99	4.46
MAX	1.6	5.0	24	20	11	107	85	234	239	85	11	15
MTN	1.3	1.3	1.7	8.8	8.8	12	37	72	76	12	2.6	2.3
AC-FT	81	100	429	693	535	2200	3450	9120	8950	2760	307	265

CAL YR 1977	TOTAL	3271.6	MEAN	8.96	MAX	70	MIN	1.1	AC-FT	6490
WTR YR 1978	TOTAL	14564.7	MEAN	39.9	MAX	239	MIN	1.3	AC-FT	28890

PYRAMID AND WINNEMUCCA LAKES BASIN

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA

LOCATION.--Lat 39°07'56", long 120°09'24", in NW¼SE¼ sec.24, T.15 N., R.16 E., Placer County, Hydrologic Unit 16050101, Tahoe National Forest, on right bank 165 ft (50 m) downstream from State Highway 89 bridge, 2.1 mi (3.4 km) north of Tahoe Pines, and 2.6 mi (4.2 km) southwest of Tahoe City.

DRAINAGE AREA.--9.70 mi² (25.1 km²).

PERIOD OF RECORD.--October 1972 to current year. Previously reported discontinued May 1977.

GAGE.--Water-stage recorder. Altitude of gage is 6,230 ft (1,899 m), from topographic map.

REMARKS.--Records good except those for the winter periods, which are poor. Minor diversion for local water supply.

AVERAGE DISCHARGE.--6 years, 21.4 ft³/s (0.606 m³/s), 15,500 acre-ft/yr (19.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 800 ft³/s (22.7 m³/s) Nov. 12, 1973, gage height, 6.65 ft (2.027 m), from rating extended above 310 ft³/s (8.78 m³/s); maximum gage height, 7.18 ft (2.188 m) Dec. 17, 1972 (backwater from ice); no flow on many days during 1977.

EXTREMES FOR PERIOD JUNE TO SEPTEMBER 1977.--Maximum discharge, 51 ft³/s (1.44 m³/s) June 1, gage height 4.85 ft (1.48 m); no peak above base of 100 ft³/s (2.83 m³/s); no flow Aug. 4 to Sept. 19, Sept. 22-29.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (283 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 14	1745	226 6.40	5.70 1.737	June 7	1800	*271 7.67	5.81 1.771
May 21	1800	202 5.72	5.62 1.713	June 13	1845	202 5.72	5.62 1.713
May 30	1815	206 5.83	5.63 1.716				

Minimum daily, no flow Oct. 1-8.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									38	3.7	.03	0
2									36	4.4	.04	0
3									33	3.7	.01	0
4									33	3.2	0	0
5									36	2.5	0	0
6									36	2.3	0	0
7									33	1.9	0	0
8									30	1.6	0	0
9									31	1.4	0	0
10									29	1.4	0	0
11									21	1.3	0	0
12									18	1.1	0	0
13									17	.96	0	0
14									15	.85	0	0
15									14	.75	0	0
16									13	.66	0	0
17									12	.57	0	0
18									10	.50	0	0
19									10	.44	0	0
20									9.6	.38	0	.04
21									8.6	.33	0	.02
22									7.9	.29	0	0
23									7.3	.26	0	0
24									6.6	.19	0	0
25									6.3	.19	0	0
26									5.4	.13	0	0
27									4.9	.13	0	0
28									4.4	.11	0	0
29									4.1	.07	0	0
30									3.7	.07	0	.08
31									---	.05	0	---
TOTAL									533.8	35.43	.08	.14
MEAN									17.8	1.14	.003	.005
MAX									38	4.4	.04	.08
MIN									3.7	.05	0	0
AC-FT									1060	70	.2	.3

CAL YR 1976	TOTAL 3379.06	MEAN 9.23	MAX 68	MIN .47	AC-FT 6700
WTR YR 1977	TOTAL 1929.77	MEAN 5.29	MAX 38	MIN 0	AC-FT 3830

PYRAMID AND WINNEMUCCA LAKES BASIN

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10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA

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	.38	1.6	6.2	5.2	7.2	45	44	139	54	9.7	1.6
2	.00	.38	1.4	5.6	5.2	8.7	35	56	139	53	9.0	1.6
3	.00	.44	1.6	5.1	5.1	8.9	30	70	142	49	8.6	1.4
4	.00	.51	1.7	4.6	5.1	11	28	81	164	46	8.1	1.4
5	.00	.86	1.7	4.6	5.2	12	24	74	181	46	7.7	3.1
6	.00	.78	1.7	4.7	5.3	11	24	59	191	48	7.5	6.4
7	.00	.64	1.7	4.9	5.4	12	21	64	201	50	7.1	4.8
8	.00	.64	1.6	5.2	5.5	12	19	79	186	46	6.4	3.3
9	.06	.58	1.4	9.6	5.6	12	20	100	183	48	5.9	3.4
10	.06	.59	1.3	9.0	5.7	12	25	115	148	47	5.5	10
11	.06	.65	1.3	7.4	5.8	12	32	116	131	43	5.0	5.8
12	.06	.66	1.3	6.6	5.8	11	39	115	142	38	4.7	4.1
13	.13	.64	1.6	5.6	5.8	10	41	138	158	35	4.4	3.3
14	.19	.59	6.3	8.9	5.7	10	38	166	155	34	4.2	3.6
15	.13	.62	17	12	5.6	10	33	163	122	34	3.7	3.1
16	.13	.61	10	12	5.5	11	29	94	97	30	3.5	2.7
17	.13	.73	17	11	5.4	13	26	81	90	28	3.1	2.6
18	.19	.66	11	9.3	5.3	14	25	87	87	26	3.1	2.5
19	.19	.64	7.0	7.4	5.2	14	26	98	80	24	2.8	2.5
20	.19	1.1	4.0	6.5	5.2	16	27	115	79	22	2.6	2.5
21	.19	3.0	3.3	6.5	5.5	21	25	140	77	20	2.6	2.4
22	.19	2.1	3.2	6.1	5.8	25	23	147	73	19	2.6	2.4
23	.19	1.9	2.8	5.7	6.1	25	23	110	73	18	2.6	2.2
24	.19	1.8	2.6	5.6	6.3	23	25	74	72	17	2.4	2.1
25	.19	1.7	2.6	5.6	6.3	24	42	63	64	16	2.3	2.1
26	.19	1.7	2.6	5.6	6.3	27	38	70	59	16	2.2	2.0
27	.44	1.9	11	5.4	6.3	32	43	90	58	15	2.2	1.9
28	.38	1.7	10	5.2	6.7	37	47	125	54	14	2.0	1.9
29	.38	1.6	12	5.2	---	41	44	163	52	12	1.8	1.8
30	.38	1.6	8.0	5.2	---	48	45	164	53	12	1.7	1.7
31	.38	---	7.3	5.2	---	61	---	140	---	11	1.7	---
TOTAL	4.62	31.70	157.6	207.5	157.9	591.8	942	3201	3450	971	136.7	90.2
MEAN	.15	1.06	5.08	6.69	5.64	19.1	31.4	103	115	31.3	4.41	3.01
MAX	.44	3.0	17	12	6.7	61	47	166	201	54	9.7	10
MIN	.00	.38	1.3	4.6	5.1	7.2	19	44	52	11	1.7	1.4
AC-FT	9.2	63	313	412	313	1170	1870	6350	6840	1930	271	179
CAL YR 1977	TOTAL	2007.97	MEAN	5.50	MAX	38	MIN	.00	AC-FT	3980		
WTR YR 1978	TOTAL	9942.02	MEAN	27.2	MAX	201	MIN	.00	AC-FT	19720		

PYRAMID AND WINNEMUCCA LAKES BASIN

10336698 THIRD CREEK NEAR CRYSTAL BAY, NV

LOCATION.--Lat 39°14'26", long 119°56'41", in SW¼NE¼ sec.22, T.16 N., R.18 E., Washoe County, Hydrologic Unit 16050101, on right bank 50 ft (15 m) upstream from culvert on Lakeshore Boulevard, 600 ft (180 m) upstream from mouth, and 3 mi (5 km) east of Crystal Bay.

DRAINAGE AREA.--6.05 mi² (15.7 km²) revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to September 1973, February to September 1975, October 1977 to September 1978.

REVISED RECORDS.--WRD 1975: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,234.03 ft (1,900.132 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter months and period of no gage-height record, May 28 to July 8, which are poor. One transmountain diversion to Washoe Valley.

AVERAGE DISCHARGE.--5 years (1970-73, 1978), 7.66 ft³/s (0.217 m³/s), 5,550 acre-ft/yr (6.84 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 110 ft³/s (3.12 m³/s) June 26, 1971, gage height, 3.17 ft (0.966 m); maximum gage height, 3.77 ft (1.149 m) Jan. 23, 1973, backwater from ice; minimum discharge, 0.66 ft³/s (0.019 m³/s) Oct. 13, 14, 16-19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 30 ft³/s (0.85 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 15	0500	45 1.27	2.72 0.829
May 23	0200	* 62 1.76	2.84 0.866

Minimum daily discharge, 0.66 ft³/s (0.019 m³/s) Oct. 13, 14, 16-19.

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	.81	.66	1.1	2.3	1.5	3.3	10	3.5	20	11	2.9	1.6
2	.73	.66	1.1	2.0	1.4	3.7	7.7	3.7	20	11	2.0	1.6
3	.73	.66	1.2	1.7	1.4	3.5	6.9	5.3	19	11	2.0	1.6
4	.73	.66	1.7	1.7	1.6	5.3	6.7	5.8	19	10	2.1	1.6
5	.81	.81	2.3	1.6	1.7	4.9	6.3	6.1	20	11	2.3	2.7
6	.90	.81	2.1	3.3	1.7	4.2	6.1	5.1	21	11	2.3	2.9
7	.90	.77	3.0	2.5	1.4	4.2	6.2	5.3	22	13	2.7	3.5
8	.90	.73	2.5	2.3	3.7	4.2	5.7	7.1	22	12	2.3	2.5
9	.73	.81	2.5	2.5	2.5	3.7	5.4	9.0	22	11	1.4	2.9
10	.73	.73	2.8	2.5	2.0	3.7	5.8	9.6	22	10	1.6	4.0
11	.73	.73	3.0	1.7	2.5	3.7	7.2	11	20	9.4	1.4	3.3
12	.73	.73	3.3	1.6	2.8	3.1	8.9	11	19	8.4	1.4	2.9
13	.66	.73	4.2	1.7	4.0	3.5	9.7	13	19	7.9	1.6	2.7
14	.66	.73	4.0	2.5	3.0	2.9	9.5	25	19	7.5	1.6	4.0
15	.73	.73	4.6	2.7	1.7	3.5	8.9	41	18	7.1	1.6	3.1
16	.66	.73	5.8	2.9	2.7	4.6	8.1	32	18	6.4	1.4	2.9
17	.66	.73	3.3	3.3	2.3	5.2	6.8	25	18	5.8	1.6	2.9
18	.66	.73	2.5	3.3	1.2	5.0	6.1	24	18	5.4	1.4	2.9
19	.66	2.0	2.0	2.3	1.7	6.7	6.4	27	16	4.9	1.2	2.8
20	.73	4.0	2.2	3.1	2.3	6.9	6.4	30	15	4.4	1.4	2.6
21	.73	3.1	2.3	2.1	2.5	7.8	6.4	36	15	4.8	1.4	2.5
22	.73	6.1	2.3	2.5	3.1	6.7	5.2	50	15	5.4	1.4	2.5
23	.73	4.2	2.9	1.8	3.3	5.9	4.8	40	16	4.6	1.4	2.3
24	.73	4.4	3.2	1.3	2.9	5.8	4.8	18	15	4.3	1.4	2.3
25	.73	1.6	2.9	1.5	2.7	6.7	5.7	13	14	4.2	2.0	2.1
26	.73	1.4	2.5	1.8	2.7	7.2	5.1	12	12	4.0	1.6	2.0
27	1.7	1.4	3.1	1.5	2.7	7.8	4.2	14	11	3.9	1.4	2.0
28	1.1	1.2	2.9	1.6	2.7	8.2	5.1	17	12	3.8	1.4	1.7
29	.90	1.2	2.9	2.0	---	8.8	4.4	20	11	3.8	1.4	1.7
30	.73	1.2	2.8	1.7	---	8.9	3.7	25	10	4.2	1.6	2.0
31	.73	---	2.7	1.8	---	11	---	20	---	4.7	1.6	---
TOTAL	24.39	44.94	85.7	67.1	65.7	170.6	194.2	564.5	518	225.9	52.8	76.1
MEAN	.79	1.50	2.76	2.16	2.35	5.50	6.47	18.2	17.3	7.29	1.70	2.54
MAX	1.7	6.1	5.8	3.3	4.0	11	10	50	22	13	2.9	4.0
MIN	.66	.66	1.1	1.3	1.2	2.9	3.7	3.5	10	3.8	1.2	1.6
AC-FT	48	89	170	133	130	338	385	1120	1030	448	105	151

WTR YR 1978 TOTAL 2089.93 MEAN 5.73 MAX 50 MIN .66 AC-FT 4150

PYRAMID AND WINNEMUCCA LAKES BASIN

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10336698 THIRD CREEK NEAR CRYSTAL BAY, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1969 to September 1973, February to September 1975, October 1977 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- MHQS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
JUN 20...	1200	12	28	7.8	10.0	9.1	15	5.2
SEP 19...	1211	5.9	64	8.1	5.0	10.1	22	6.1

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)	ALKA- LINEITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SU4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
JUN 20...	.6	1.7	.2	.9	16	3.2	.9	.0	13
SEP 19...	1.6	4.0	.4	1.4	29	.8	1.3	.0	17

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)
JUN 20...	36	1.21	.01	.01	.06	.08	.03	9
SEP 19...	50	.80	.01	.01	.11	.13	.01	4

PYRAMID AND WINNEMUCCA LAKES BASIN

10336710 MARLETTE LAKE NEAR CARSON CITY, NV

LOCATION.--Lat 39°10'22", long 119°54'15", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.12, T.15 N., R.18 E., Washoe County, Hydrologic Unit 16050101, in Toiyabe National Forest, on west shore, about 1,000 ft (300 m) upstream from left side of dam, and 7.5 mi (12.1 km) west of Carson City.

DRAINAGE AREA.--2.30 mi² (5.96 km²), revised.

PERIOD OF RECORD.--November 1973 to current year.

GAGE.--Water-stage recorder and LANDSAT data collection platform. Datum of gage is National Geodetic Vertical Datum of 1929 (spillway elevation furnished in written communication from Walter Reid, 1971).

REMARKS.--Lake is formed by earthfill dam across the outlet of a small natural lake (at one time called Goodwin Lake) on Marlette Creek, built in 1873 to provide water for fluming lumber from Spooner Summit to Carson City. The dam was built higher in 1876 and used to divert water by flume and siphon to Virginia City, until the flume was abandoned prior to 1963. The dam was raised to its present elevation in 1959. Present capacity, 11,780 acre-ft (14.5 hm³) at spillway elevation 7,838.0 ft (2,389.02 m). Figures given herein represent total contents. Stored water is used for spawning fish for Pyramid and Walker Lakes and in dry years is pumped over the mountain to the Hobart system for municipal and domestic use outside the basin in Virginia City and Carson City. Lake freezes over in winter.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 12,000 acre-ft (14.8 hm³) June 5, 1978, elevation, 7,838.5 ft (2,389.17 m); minimum, 10,970 acre-ft (13.5 hm³) Nov. 10-13, 1976, elevation, 7,835.8 ft (2,388.35 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 12,000 acre-ft (14.8 hm³) June 5, elevation, 7,838.5 ft (2,389.17 m); minimum, 11,300 acre-ft (13.9 hm³) Nov. 18-20, elevation, 7,836.7 ft (2,388.63 m).

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

7,835	10,650	7,837	11,410
7,836	11,030	7,838.5	12,000

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	11400	11330	11460	11770	11820	11750	11680	11660	11940	11960	11860	11700
2	11400	11330	11470	11770	11810	11750	11680	11660	11950	11960	11860	11690
3	11400	11320	11470	11780	11800	11750	11680	11670	11970	11960	11850	11690
4	11390	11320	11470	11790	11790	11770	11670	11670	11960	11960	11850	11680
5	11380	11330	11470	11860	11800	11790	11660	11670	12000	11960	11850	11690
6	11380	11330	11470	11870	11820	11790	11680	11680	11970	11960	11850	11700
7	11380	11320	11470	11870	11860	11780	11670	11680	11970	11960	11840	11700
8	11370	11320	11470	11870	11860	11770	11660	11690	11970	11960	11840	11700
9	11370	11330	11470	11910	11880	11760	11660	11700	11960	11960	11830	11690
10	11360	11330	11470	11910	11890	11760	11660	11710	11960	11950	11820	11700
11	11370	11320	11470	11910	11890	11760	11650	11720	11970	11940	11810	11700
12	11370	11320	11490	11900	11880	11760	11650	11730	11970	11940	11790	11690
13	11370	11320	11490	11890	11880	11750	11640	11750	11970	11940	11790	11700
14	11360	11320	11490	11890	11870	11740	11640	11760	11970	11930	11790	11710
15	11360	11320	11540	11910	11870	11730	11640	11780	11970	11930	11770	11710
16	11360	11320	11550	11920	11860	11730	11640	11790	11970	11930	11760	11710
17	11360	11320	11640	11960	11850	11720	11640	11800	11970	11920	11760	11700
18	11360	11300	11650	11950	11840	11710	11630	11810	11970	11920	11760	11700
19	11360	11300	11640	11950	11830	11710	11620	11820	11970	11910	11750	11690
20	11350	11300	11650	11930	11830	11700	11650	11830	11970	11910	11740	11690
21	11350	11440	11660	11920	11820	11700	11650	11850	11970	11910	11730	11690
22	11350	11450	11690	11910	11810	11700	11640	11860	11960	11900	11730	11690
23	11350	11460	11710	11890	11800	11690	11640	11870	11950	11900	11720	11700
24	11340	11460	11710	11890	11790	11690	11630	11870	11940	11900	11710	11690
25	11340	11460	11710	11880	11780	11680	11650	11900	11950	11890	11710	11690
26	11340	11460	11720	11870	11770	11680	11650	11900	11940	11880	11710	11690
27	11350	11460	11730	11860	11760	11670	11650	11910	11960	11880	11710	11690
28	11340	11460	11740	11850	11760	11670	11650	11920	11960	11870	11710	11690
29	11330	11460	11760	11840	---	11660	11650	11920	11960	11870	11710	11690
30	11330	11460	11760	11830	---	11660	11650	11930	11960	11870	11700	11690
31	11330	---	11760	11830	---	11680	---	11940	---	11870	11700	---
MAX	11400	11460	11760	11960	11890	11790	11680	11940	12000	11960	11860	11710
MIN	11330	11300	11460	11770	11760	11660	11620	11660	11940	11870	11700	11680
†	7836.80	7837.14	7837.93	7838.10	7837.92	7837.70	7837.64	7838.36	7838.40	7838.20	7837.76	7837.73
‡	-80	+130	+300	+70	-70	-80	-30	+290	+20	-90	-170	-10

CAL YR 1977 MAX 11880 MIN 11010 ‡ +750
WTR YR 1978 MAX 12000 MIN 11300 ‡ +280

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

PYRAMID AND WINNEMUCCA LAKES BASIN

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10336715 MARLETTE CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°10'20", long 119°54'25", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.12, T.15 N., R.18 E., Washoe County, Hydrologic Unit 16050101, in Toiyabe National Forest, on left bank about 300 ft (90 m) below dam on Marlette Lake, 0.7 mi (1.1 km) upstream from Marlette Reservoir, and 7 mi (11 km) west of Carson City.

DRAINAGE AREA.--2.08 m² (5.39 km²).

REVISED RECORDS.--WRD NV-77: drainage area.

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,760 ft (2,365 m), from topographic map.

REMARKS.--Records fair except for period of no gage height record, April 24 June 12, which are poor. Flow regulated by Marlette Lake. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--5 years, 2.00 ft³/s (0.0566 m³/s), 1450 acre-ft/yr (1.79 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8.5 ft³/s (0.24 m³/s) June 8-10, 1975, gage height, 2.23 (0.679 m); no flow July 12-15, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7.1 ft³/s (0.201 m³/s) Feb. 28 and Mar. 1, gage height, 2.10 ft (0.640 m); maximum gage height 2.25 ft (0.686 m) Jan 17, (backwater from ice); minimum daily, 0.03 ft³/s (0.0008 m³/s) Dec. 27 to Jan. 2, Sept. 12, 25-31.

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	.05	.09	.08	.03	5.5	7.1	5.1	3.1	2.0	.57	.27	.04
2	.05	.09	.08	.03	5.6	6.9	5.1	3.1	1.9	.72	.27	.04
3	.05	.09	.08	.04	5.6	6.8	5.1	3.0	1.9	.89	.13	.04
4	.05	.08	.08	.04	5.5	6.8	5.1	3.0	1.8	.98	.18	.06
5	.05	.08	.07	.04	5.7	6.6	5.2	3.0	1.8	.98	.11	.06
6	.05	.07	.07	.04	5.6	6.6	5.2	2.9	1.7	.89	.18	.06
7	.06	.07	.05	.04	5.9	6.5	5.2	2.9	1.6	.80	.32	.06
8	.06	.07	.05	.06	5.7	6.5	5.2	2.9	1.6	.80	.27	.06
9	.05	.07	.05	.11	6.1	6.4	5.2	2.8	1.5	.80	.06	.04
10	.05	.07	.06	.40	6.1	6.4	5.3	2.8	1.4	1.4	.06	.06
11	.06	.08	.06	2.2	6.4	6.2	5.3	2.8	1.4	1.3	.06	.04
12	.06	.08	.05	4.6	6.4	6.1	5.3	2.7	1.3	1.1	.11	.03
13	.06	.07	.06	4.7	6.4	6.1	5.3	2.7	1.1	.89	.09	.04
14	.06	.07	.06	4.7	6.4	6.0	5.4	2.7	1.1	.98	.06	.06
15	.06	.07	.06	5.1	6.4	6.0	5.4	2.6	2.9	.98	.06	.04
16	.05	.07	.05	5.4	6.5	5.9	5.4	2.6	3.7	.80	.09	.04
17	.05	.07	.05	6.3	6.4	5.9	5.4	2.6	3.4	.43	.06	.04
18	.05	.07	.04	6.0	6.5	5.7	5.6	2.5	2.4	.80	.04	.05
19	.05	.07	.05	5.9	6.5	5.6	5.6	2.5	1.4	1.3	.04	.06
20	.05	.07	.05	5.8	6.5	5.6	5.6	2.4	1.2	1.2	.04	.06
21	.05	.07	.04	5.7	6.8	5.5	5.6	2.4	1.0	.98	.04	.05
22	.06	.06	.04	5.6	6.6	5.5	5.7	2.4	.87	.72	.04	.04
23	.05	.06	.05	5.5	6.9	5.3	5.6	2.3	1.1	.64	.04	.04
24	.05	.07	.04	5.5	6.8	5.3	4.4	2.3	1.1	.57	.06	.04
25	.06	.07	.04	5.3	7.0	5.2	3.5	2.2	.38	.50	.06	.03
26	.06	.07	.04	5.3	6.9	5.2	3.5	2.2	.43	.57	.06	.03
27	.06	.07	.03	5.2	7.0	5.1	3.5	2.2	.43	.57	.04	.03
28	.07	.07	.03	5.2	7.1	5.1	3.4	2.1	.50	.50	.04	.03
29	.08	.07	.03	5.3	---	4.9	3.3	2.1	.57	.43	.04	.03
30	.08	.07	.03	5.3	---	5.1	3.2	2.0	.64	.43	.04	.03
31	.08	---	.03	5.5	---	5.0	---	2.0	---	.32	.04	---
TOTAL	1.77	2.18	1.60	110.93	176.8	182.9	147.7	79.8	44.12	24.84	3.00	1.33
MEAN	.057	.073	.052	3.58	6.31	5.90	4.92	2.57	1.47	.80	.097	.044
MAX	.08	.09	.08	6.3	7.1	7.1	5.7	3.1	3.7	1.4	.32	.06
MIN	.05	.06	.03	.03	5.5	4.9	3.2	2.0	.38	.32	.04	.03
AC-FT	3.5	4.3	3.2	220	351	363	293	158	88	49	6.0	2.6

CAL YR 1977 TOTAL 22.57 MEAN .062 MAX .30 MIN .02 AC-FT 45
WTR YR 1978 TOTAL 776.97 MEAN 2.13 MAX 7.1 MIN .03 AC-FT 1540

LOCATION.—Lat 38°55'12", long 119°58'17", in NW¼ sec.3, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank 5 ft (1.52 m) upstream from Martin Avenue Bridge, 500 ft (152 m) upstream from Heavenly Valley Creek, and 1.8 mi (2.9 km) east of Tahoe Valley.

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

REMARKS.--Records good except those for the winter period, which are fair. Minor diversions for local water supply.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 535 ft³/s (15.2 m³/s) Feb. 1, 1963, gage height, 11.14 ft (3.395 m), from rating curve extended above 250 ft³/s (7.08 m³/s) on basis of computation of peak flow (weir formula); no flow for part of Sept. 11, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 126 ft³/s (3.57 m³/s) June 9, gage height, 7.86 ft (2.396 m), no other peak above base of 100 ft³/s (2.83 m³/s); minimum daily, 3.6 ft³/s (0.10 m³/s) Oct. 4.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	7.1	7.6	11	10	13	40	38	82	64	26	14
2	3.9	7.1	7.3	11	10	14	34	41	83	62	25	14
3	3.7	7.5	7.2	11	10	14	32	49	83	59	26	13
4	3.6	6.6	7.1	11	9.8	19	30	53	86	56	29	13
5	3.9	6.8	7.6	7.9	10	18	28	51	94	55	29	17
6	3.8	6.5	7.2	8.7	11	19	27	44	101	53	26	22
7	4.0	6.2	6.8	9.5	12	19	26	45	109	56	26	20
8	4.1	6.1	6.6	11	12	20	25	51	113	53	25	17
9	4.2	6.0	6.5	12	12	21	24	58	117	52	24	16
10	4.3	5.8	6.5	12	12	20	27	62	115	50	22	21
11	4.4	5.7	6.6	11	12	19	33	65	106	49	22	17
12	5.3	5.6	6.7	11	11	17	36	66	109	46	21	16
13	6.4	5.5	7.3	11	11	16	35	74	112	44	21	16
14	6.4	5.7	9.3	12	11	16	33	82	112	43	20	21
15	6.4	6.0	38	12	10	17	33	82	108	42	20	18
16	6.2	6.0	18	12	10	18	30	68	101	41	19	16
17	6.2	6.0	17	12	10	20	30	64	97	40	19	15
18	5.7	5.4	16	12	10	20	29	71	96	39	18	16
19	5.9	4.4	11	12	10	21	30	71	92	37	17	16
20	6.0	3.9	11	11	10	23	31	73	90	35	17	16
21	6.1	7.8	10	11	11	27	30	77	88	34	17	16
22	6.6	22	11	11	11	28	28	82	87	33	16	15
23	6.4	10	10	11	11	28	29	78	84	31	16	14
24	6.5	9.7	10	11	12	28	31	67	82	31	16	15
25	6.6	9.8	10	12	12	28	38	60	80	30	15	14
26	6.9	9.4	10	11	12	30	34	59	77	31	15	15
27	7.8	9.3	16	11	12	33	36	63	78	30	15	14
28	7.4	8.9	14	11	13	35	41	71	76	29	15	14
29	7.2	8.3	14	11	---	38	38	79	71	28	14	14
30	7.3	7.8	13	11	---	40	40	83	67	28	14	14
31	7.4	---	12	10	---	50	---	82	---	26	14	---
TOTAL	174.4	222.9	341.3	342.1	307.8	729	958	2009	2796	1307	619	479
MEAN	5.63	7.43	11.0	11.0	11.0	23.5	31.9	64.8	93.2	42.2	20.0	16.0
MAX	7.8	22	38	12	13	50	41	83	117	64	29	22
MIN	3.6	3.9	6.5	7.9	9.8	13	24	38	67	26	14	13
AC-FT	346	442	677	679	611	1450	1900	3980	5550	2590	1230	950
CAL YR 1977	TOTAL	3627.0	MEAN	9.94	MAX	38	MIN	2.8	AC-FT	7190		
WTR YR 1978	TOTAL	10285.5	MEAN	28.2	MAX	117	MIN	3.6	AC-FT	20400		

10337000 LAKE TAHOE AT TAHOE CITY, CA

LOCATION.--Lat 39°10'51", long 120°07'06", in NE¼ sec. 5, T.15 N., R.17 E., Placer County, Hydrologic Unit 16050101, on U.S. Coast Guard pier at Lake Forest, 1.1 mi (1.8 km) northeast of Tahoe City, and 1.8 mi (2.9 km) northeast of Lake Tahoe outlet dam on Truckee River at Tahoe City.

DRAINAGE AREA.--503 mi² (1,303 km²), at lake outlet.

PERIOD OF RECORD.--April 1900 to current year. Monthend elevations only for October 1943 to September 1957, published in WSP 1734. Prior to October 1961, published as "at Tahoe."

GAGE.--Water-stage recorder. Datum of gage is 6,220.00 ft (1,895.856 m) Bureau of Reclamation datum, 6,218.86 ft (1,895.508 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1957, nonrecording gages at several sites near outlet of lake at same datum. Oct. 1, 1957, to May 8, 1958, water-stage recorder on left wingwall of dam at outlet of lake at same datum. May 9, 1958, to Sept. 30, 1968, water-stage recorder on pier, 1,000 ft (300 m) east of dam at lake outlet.

REMARKS.--Lake levels regulated by a 17-gate concrete dam at outlet of lake; storage began about 1874. Monthly figures given herein represent usable contents. Usable capacity, 744,600 acre-ft (918 hm³) between elevations 6,223 ft (1,896.8 m), natural rim of lake and 6,229.1 ft (1,898.63 m), maximum permissible elevation by Federal Court decree. Lake elevations are referred to Bureau of Reclamation datum because that datum is used as the official reference point by all local, State, and Federal agencies. There are minor diversions for domestic purposes, irrigation, and power.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 6,231.26 ft (1,899.288 m) July 14, 15, 17, 18, 1907; minimum, 6,221.74 ft (1,896.386 m) Dec. 26, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 6,225.19 ft (1,897.438 m) July 8; minimum, 6,222.28 ft (1,896.551 m) Nov. 20.

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

6223	0	6227	486800
6224	121400	6228	609300
6225	243000	6229	732300
6226	364800		

GAGE HEIGHT, IN 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	2.89	2.58	2.52	2.92	3.32	3.58	3.95	4.19	4.70	5.12	5.10	4.47
2	2.88	2.58	2.52	2.90	3.32	3.60	3.96	4.20	4.73	5.12	5.10	4.44
3	2.87	2.51	2.51	2.92	3.32	3.63	3.94	4.20	4.76	5.12	5.10	4.43
4	2.85	2.54	2.50	2.94	3.30	3.73	3.95	4.20	4.78	5.12	5.08	4.42
5	2.82	2.51	2.51	3.05	3.43	3.74	3.92	4.23	4.80	5.15	5.07	4.42
6	2.80	2.47	2.48	3.06	3.44	3.75	3.98	4.23	4.83	5.17	5.07	4.40
7	2.77	2.48	2.48	3.06	3.50	3.75	3.98	4.23	4.86	5.18	5.07	4.37
8	2.78	2.45	2.48	3.05	3.58	3.75	3.97	4.25	4.88	5.19	5.05	4.37
9	2.76	2.45	2.47	3.13	3.62	3.75	3.98	4.26	4.88	5.18	5.03	4.38
10	2.77	2.45	2.45	3.13	3.60	3.75	3.98	4.27	4.90	5.17	5.02	4.34
11	2.75	2.40	2.50	3.13	3.60	3.76	3.99	4.28	4.92	5.17	4.97	4.34
12	2.75	2.40	2.49	3.14	3.60	3.77	4.00	4.32	4.92	5.17	4.92	4.29
13	2.73	2.39	2.48	3.13	3.60	3.77	3.99	4.33	4.95	5.18	4.89	4.30
14	2.74	2.39	2.54	3.20	3.59	3.77	3.98	4.35	4.97	5.17	4.87	4.28
15	2.72	2.38	2.63	3.20	3.59	3.77	4.02	4.40	4.97	5.16	4.83	4.28
16	2.73	2.38	2.64	3.34	3.58	3.77	4.05	4.43	5.01	5.16	4.80	4.25
17	2.72	2.37	2.78	3.36	3.58	3.78	4.06	4.43	5.03	5.16	4.77	4.25
18	2.72	2.29	2.76	3.37	3.58	3.78	4.05	4.45	5.04	5.16	4.73	4.21
19	2.70	2.30	2.76	3.37	3.58	3.78	3.95	4.47	5.05	5.16	4.69	4.18
20	2.69	2.28	2.74	3.37	3.58	3.78	4.09	4.49	5.05	5.16	4.67	4.17
21	2.68	2.60	2.78	3.35	3.57	3.82	4.10	4.51	5.07	5.16	4.63	4.14
22	2.68	2.54	2.81	3.35	3.57	3.83	4.10	4.52	5.07	5.16	4.60	4.14
23	2.67	2.54	2.85	3.35	3.57	3.83	4.11	4.55	5.08	5.16	4.58	4.13
24	2.67	2.53	2.85	3.34	3.57	3.84	4.13	4.56	5.08	5.16	4.54	4.13
25	2.67	2.53	2.84	3.34	3.57	3.84	4.14	4.57	5.08	5.15	4.53	4.12
26	2.66	2.55	2.84	3.34	3.56	3.85	4.14	4.58	5.08	5.15	4.52	4.11
27	2.68	2.52	2.90	3.34	3.55	3.86	4.15	4.59	5.12	5.14	4.52	4.10
28	2.60	2.52	2.92	3.34	3.55	3.87	4.16	4.62	5.12	5.13	4.51	4.10
29	2.59	2.52	2.91	3.34	---	3.87	4.17	4.63	5.12	5.12	4.49	4.10
30	2.60	2.51	2.92	3.34	---	3.89	4.18	4.67	5.12	5.12	4.47	4.10
31	2.58	---	2.92	3.33	---	3.94	---	4.67	---	5.10	4.46	---
MAX	2.89	2.60	2.92	3.37	3.62	3.94	4.18	4.67	5.12	5.19	5.10	4.47
MIN	2.58	2.28	2.45	2.90	3.30	3.58	3.92	4.19	4.70	5.10	4.46	4.10
†	0	0	0	40100	66800	114100	143300	202900	257600	255200	177300	133600
‡	0	0	0	+40100	+26700	+47300	+29200	+59600	+54700	-2400	-77900	-43700

CAL YR 1977 MAX 4.59 MIN 2.28 ‡ - 184600

WTR YR 1978 MAX 5.19 MIN 2.28 ‡ + 133600

† Usable contents, in acre-feet, at end of month.

‡ Change in contents, in acre-feet.

NOTE.--Add 6,220 ft to obtain elevation, Bureau of Reclamation datum, at 2400 hours.

PYRAMID AND WINNEMUCCA LAKES BASIN

10337500 TRUCKEE RIVER AT TAHOE CITY, CA

LOCATION.—Lat 39°09'59", long 120°08'36", in NE¼NW¼ sec.7, T.15 N., R.17 E., Placer County, Hydrologic Unit 16050101, on left bank 510 ft (155 m) downstream from dam at outlet of Lake Tahoe at Tahoe City.

DRAINAGE AREA.—504 mi² (1,305 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—July 1895 to February 1896, March 1900 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Prior to October 1961, published as "at Tahoe."

REVISED RECORDS.—WSP 2127: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 6,216.59 ft (1,894.817 m), revised, National Geodetic Vertical Datum of 1929. Prior to Nov. 12, 1912, nonrecording gage at site 370 ft (113 m) upstream at different datum. Nov. 12, 1912, to Sept. 30, 1937, nonrecording gage, Oct. 1, 1937, to Aug. 21, 1957, water-stage recorder at datum 2.26 ft (0.689 m) higher and Aug. 22, 1957, to July 10, 1960, at datum 2.42 ft (0.738 m) higher; all at site 270 ft (82 m) upstream.

REMARKS.—Records good except those below 16 ft³/s (0.45 m³/s), which are poor. Flow regulated by Lake Tahoe, operating capacity, 744,600 acre-ft (918 hm³). There are several diversions for irrigation, power, and domestic water supply. In addition, sewer effluent is pumped from the Lake Tahoe basin. Discharge prior to Jan. 27, 1978, is local inflow between the dam and the station.

AVERAGE DISCHARGE (unadjusted).—78 years (water years 1901-78), 246 ft³/s (6.967 m³/s), 178,200 acre-ft/yr (220 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,630 ft³/s (74.5 m³/s) June 19, 1969, gage height, 9.32 ft (2.841 m); no flow for parts of many years.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 493 ft³/s (14.0 m³/s) Aug. 9, gage height 4.74 ft (1.445 m); minimum daily, 0.02 ft³/s (0.0006 m³/s) on many days during October and November.

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	.06	.02	.05	.22	16	29	40	53	55	47	275	372
2	.06	.02	.05	.22	16	30	43	53	56	47	296	365
3	.05	.02	.05	.22	17	29	44	53	55	46	300	353
4	.04	.02	.05	.21	17	30	46	55	55	45	298	344
5	.04	.05	.05	.33	19	30	49	53	56	47	302	342
6	.02	.04	.05	.40	20	29	46	52	56	50	306	340
7	.02	.02	.05	.21	27	30	47	53	55	51	358	337
8	.02	.02	.04	.21	27	30	62	54	56	50	404	331
9	.02	.02	.04	.60	26	30	81	54	57	48	463	315
10	.02	.02	.04	.50	26	31	81	54	57	45	452	324
11	.02	.04	.04	.40	26	31	82	53	56	40	401	311
12	.02	.04	.04	.33	26	30	62	53	57	39	368	306
13	.02	.02	.05	.40	26	30	49	54	57	46	368	294
14	.02	.02	.33	.84	26	30	49	55	57	59	365	296
15	.02	.02	1.8	1.0	26	31	49	55	57	61	365	291
16	.02	.02	.22	2.0	27	31	48	53	57	59	404	287
17	.02	.02	1.8	2.0	27	40	49	53	57	59	432	275
18	.02	.02	.40	1.0	27	44	52	52	59	59	426	267
19	.02	.02	.22	.84	27	41	53	53	58	60	424	263
20	.02	.02	.22	.58	27	39	52	53	59	88	421	245
21	.02	.20	.22	.48	27	35	52	59	56	91	414	241
22	.02	.08	.22	.48	28	36	52	64	52	84	419	236
23	.02	.06	.70	.40	28	37	52	61	51	95	419	234
24	.02	.05	.27	.40	28	36	52	59	51	129	409	232
25	.02	.05	.22	.40	28	36	52	58	51	154	399	199
26	.02	.05	.22	.48	28	37	54	53	50	176	396	119
27	.02	.05	.48	5.7	28	38	55	47	51	201	394	84
28	.02	.05	.48	16	28	40	54	47	50	203	389	76
29	.02	.05	1.4	16	---	38	54	50	49	208	387	75
30	.02	.05	.58	16	---	38	54	54	48	208	382	74
31	.02	---	.33	16	---	40	---	55	---	228	375	---
TOTAL	.77	1.18	10.71	84.85	699	1056	1615	1675	1641	2823	11811	7828
MEAN	.025	.039	.35	2.74	25.0	34.1	53.8	54.0	54.7	91.1	381	261
MAX	.06	.20	1.8	16	28	44	82	64	59	228	463	372
MIN	.02	.02	.04	.21	16	29	40	47	48	39	275	74
AC-FT	1.5	2.3	21	168	1390	2090	3200	3320	3250	5600	23430	15530
CAL YR 1977 TOTAL	45480.86			125	MAX 268	MIN .02	AC-FT 90210					
WTR YR 1978 TOTAL	29245.51			80.1	MAX 463	MIN .02	AC-FT 58010					

10337500 TRUCKEE RIVER AT TAHOE CITY, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1960 to November 1962, May 1963 to current year.

CHEMICAL ANALYSES AND SPECIFIC CONDUCTANCES: February 1977 to current year, monthly (seasonal).

WATER TEMPERATURES: April 1960 to November 1962, May 1963 to current year, monthly.

REMARKS.--All measurements and sample collections by California Department of Water Resources. Data prior to February 1978 are unpublished.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 147 micromhos Aug. 23, 1978; minimum, 94 micromhos Mar. 23, Apr. 22, and June 23, 1977.

WATER TEMPERATURES: Maximum, 21.5°C July 21, 1960, Aug. 31, 1967; minimum, 0.5°C June 3, 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO
FEB												
22...	1315	27	96	7.8	7.0	10.3	--	32	8.6	2.6	5.7	.4
MAR												
24...	1000	34	101	7.4	5.5	9.9	--	33	9.3	2.3	7.5	.6
APR												
21...	0815	51	95	7.9	3.0	10.0	1	32	8.9	2.5	6.0	.5
MAY												
25...	1145	59	95	7.5	9.5	9.7	--	33	9.2	2.4	6.2	.5
JUN												
27...	1045	51	96	7.7	14.0	8.4	--	32	8.8	2.4	5.6	.4
JUL												
26...	1200	163	95	7.8	20.0	8.0	--	32	9.3	2.2	6.2	.5
AUG												
23...	1000	421	147	8.0	15.0	8.5	--	33	9.0	2.6	5.9	.4
SEP												
27...	0830	81	98	7.6	14.0	8.4	2	33	8.3	3.0	6.1	.5

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
FEB												
22...	1.5	41	2.0	1.6	67	4.88	.00	.00	.00	.10	.01	.01
MAR												
24...	1.1	41	11	2.2	60	5.51	.16	.01	.01	.10	.00	.00
APR												
21...	1.3	43	1.4	1.2	67	9.23	.00	.00	.00	.00	.00	.00
MAY												
25...	1.6	43	.8	4.2	59	9.40	.01	.00	.00	.10	.01	.01
JUN												
27...	1.5	42	1.8	2.4	70	9.64	.01	.02	.00	.10	.01	.01
JUL												
26...	1.6	43	2.5	2.2	72	31.7	.00	.02	.00	.20	.01	.00
AUG												
23...	1.5	43	1.5	2.5	63	71.6	.01	.00	.02	.00	.00	.00
SEP												
27...	1.7	42	1.8	2.6	62	13.6	.02	.00	.02	.10	.01	.01

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB												
22...	--	--	0	--	--	--	--	--	--	--	--	--
MAR												
24...	--	--	100	--	--	--	--	--	--	--	--	--
APR												
21...	0	0	0	0	0	0	20	0	0	.1	0	.7
MAY												
25...	--	--	0	--	--	--	--	--	--	--	--	--
JUN												
27...	--	--	0	--	--	--	--	--	--	--	--	--
JUL												
26...	0	0	0	0	0	0	0	0	0	.0	0	--
AUG												
23...	--	--	0	--	--	--	--	--	--	--	--	--
SEP												
27...	0	0	0	0	0	10	800	0	20	.1	10	2.4

PYRAMID AND WINNEMUCCA LAKES BASIN

10338000 TRUCKEE RIVER NEAR TRUCKEE, CA

LOCATION.--Lat 39°17'46", long 120°12'17", in SW¼NE¼ sec.28, T.17 N., R.16 E., Placer County, Hydrologic Unit 16050102, Tahoe National Forest, on left bank 1.4 mi (2.3 km) downstream from Cabin Creek and 2.5 mi (4.0 km) southwest of Truckee.

DRAINAGE AREA.--553 mi² (1,432 km²).

PERIOD OF RECORD.--December 1944 to September 1961, June 1977 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD CA-77-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,860 ft (1,786 m), from topographic map.

REMARKS.--Records excellent. Flow regulated by Lake Tahoe (station 10337000), operating capacity, 744,600 acre-ft (918 hm³).

AVERAGE DISCHARGE.--17 years (water years 1946-61, 1978), 336 ft³/s (9.516 m³/s), 243, 400 acre-ft/yr (300 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,760 ft³/s (220 m³/s) Dec. 23, 1955, gage height, 7.92 ft (2.414 m) from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of slope-area measurements at gage heights 7.62 ft (2.323 m) and 7.92 ft (2.414 m); minimum daily, 7.7 ft³/s (0.22 m³/s) Nov 19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 627 ft³/s (17.8 m³/s) May 14, gage height, 2.52 ft (0.768 m); minimum daily 7.7 ft³/s (0.22 m³/s) Nov. 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	8.9	9.4	13	55	58	98	321	279	413	228	307	376
2	8.9	9.3	12	49	56	117	267	314	412	219	320	371
3	8.6	9.4	12	44	58	116	235	358	411	196	325	362
4	8.4	9.4	13	44	57	150	219	389	440	184	325	354
5	8.4	12	15	44	65	155	199	365	475	190	327	359
6	8.5	11	14	44	74	131	189	319	496	206	330	366
7	8.9	9.9	13	44	72	129	171	322	516	220	356	360
8	8.9	9.4	12	41	81	132	166	353	489	205	404	348
9	8.9	9.3	11	68	85	130	193	405	481	205	446	341
10	8.9	9.4	12	69	77	126	214	443	429	203	456	377
11	8.9	9.3	12	55	73	128	251	447	391	190	415	339
12	8.9	9.4	12	48	71	117	279	434	421	170	379	337
13	8.9	9.7	13	48	71	107	281	473	463	165	376	316
14	8.9	9.3	32	83	67	105	268	531	450	179	374	323
15	8.8	9.3	217	95	66	108	247	551	378	185	372	314
16	8.7	9.3	58	90	64	120	221	398	328	170	377	313
17	8.8	8.9	106	80	63	150	205	345	312	160	426	302
18	9.0	8.8	70	70	62	176	197	348	315	157	425	295
19	8.8	7.7	41	68	63	173	201	369	298	153	422	288
20	8.9	8.5	36	59	66	190	207	398	297	162	417	279
21	8.9	12	34	54	69	217	193	442	292	179	411	267
22	8.9	30	43	50	75	225	185	467	279	165	412	262
23	9.0	19	61	45	82	245	185	415	280	166	414	260
24	8.9	15	42	43	89	224	199	334	273	195	412	259
25	9.1	14	35	43	90	222	276	286	248	219	400	244
26	9.3	14	31	41	90	241	260	276	228	239	396	164
27	11	14	83	40	90	264	286	310	229	267	394	106
28	10	14	73	49	91	291	304	382	218	264	391	92
29	9.8	13	117	57	---	305	288	450	212	263	391	86
30	9.8	13	108	58	---	328	294	464	222	260	385	85
31	9.8	---	69	59	---	391	---	429	---	262	380	---
TOTAL	280.4	346.7	1420	1737	2025	5611	7001	12096	10696	6226	11965	8545
MEAN	9.05	11.6	45.8	56.0	72.3	181	233	390	357	201	386	285
MAX	11	30	217	95	91	391	321	551	516	267	456	377
MIN	8.4	7.7	11	40	56	98	166	276	212	153	307	85
AC-FT	556	688	2820	3450	4020	11130	13890	23990	21220	12350	23730	16950

WTR YR 1978 TOTAL 67949.1 MEAN 186 MAX 551 MIN 7.7 AC-FT 134800

LOCATION.—Lat 39°19'25", long 120°14'00", in SW 1/4 sec.17, T.17 N., R.16 E., Nevada County, Hydrologic Unit 16050102, in Donner Memorial State Park on left bank 10 ft (3 m) downstream from bridge on Donner Memorial State Park road, 0.2 mi (0.3 km) downstream from outlet of Donner Lake, 0.7 mi (1.1 km) upstream from Cold Creek, and 2.5 mi (4.0 km) west of Truckee.

PERIOD OF RECORD.--November 1909 to August 1910, January 1929 to October 1935, January 1936 to March 1938, July to October 1938, January 1939 to February 1943, June 1943 to December 1953, May 1955 to December 1957, October 1958 to current year. Monthly discharge only prior to October 1958, published in WSP 1314 and 1734.

GAGE.--Water-stage recorder. Altitude of gage is 5,930 ft (1,807 m), from topographic map. Nov. 1, 1909, to Aug. 31, 1910, non-recording gage at different datum. January 1929 to December 1957, water-stage recorder at same site at unknown datum.

AVERAGE DISCHARGE.--41 years (1929-35, 1936-37, 1939-42, 1943-52, 1955-57, 1958-78), 33.3 ft³/s (0.943 m³/s), 24,130 acre-ft/yr (29.8 hm³/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 700 ft³/s (19.8 m³/s) (estimated) Nov. 21, 1950; maximum gage height observed 4.55 ft (1.387 m) Dec. 25, 1964; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 397 ft³/s (11.2 m³/s) May 15, gage height, 4.02 ft (1.225 m); minimum daily, 0.66 ft³/s (0.019 m³/s) Dec. 13.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	8.8	12	23	49	25	117	3.6	154	15	10	8.4
2	12	8.8	7.7	23	49	25	118	35	170	15	10	8.4
3	12	10	1.5	23	47	26	133	93	178	15	9.9	8.4
4	12	13	1.2	23	47	27	145	175	164	14	9.9	8.4
5	12	13	1.1	23	46	28	153	209	149	14	10	8.4
6	11	11	1.1	24	38	29	158	212	140	14	10	8.0
7	7.9	11	1.1	24	24	29	132	215	140	14	10	8.0
8	7.9	12	.84	24	24	29	93	149	140	14	10	8.4
9	7.9	14	.86	25	25	29	91	84	140	14	10	8.4
10	7.9	13	.74	33	25	29	89	87	140	13	10	8.0
11	8.3	11	.72	65	25	30	88	88	138	14	9.9	8.0
12	8.6	11	.72	78	25	30	87	153	103	14	9.9	8.0
13	8.3	10	.66	76	25	30	87	201	77	14	9.9	7.5
14	7.9	9.7	.74	76	25	30	47	201	77	14	10	7.5
15	7.5	10	.89	76	25	30	6.4	267	77	14	10	7.5
16	7.1	11	.80	76	25	32	6.4	367	77	14	10	7.5
17	7.1	8.3	1.2	76	24	32	6.4	360	77	14	9.6	7.5
18	8.1	5.2	.97	109	24	34	6.2	340	76	10	9.4	7.5
19	9.2	3.7	.97	130	24	34	5.9	301	61	10	9.4	16
20	9.2	2.6	.97	122	24	35	4.9	261	58	10	9.8	24
21	9.2	2.4	.97	114	24	35	4.5	255	65	10	9.4	35
22	9.2	7.7	.97	107	24	35	4.3	168	64	10	9.4	44
23	9.2	11	1.1	99	24	35	4.1	43	63	10	9.4	44
24	9.2	8.1	1.2	95	24	43	3.8	34	62	10	9.4	41
25	9.2	3.8	1.2	93	24	53	3.8	24	61	10	9.1	38
26	8.8	3.1	1.2	69	24	53	3.8	24	48	10	8.9	40
27	8.8	2.6	1.3	53	25	53	3.8	24	22	10	8.9	43
28	8.8	2.2	2.0	52	25	66	3.6	24	16	10	8.9	42
29	8.8	6.9	31	52	---	79	3.6	24	16	10	8.9	52
30	8.8	11	38	51	---	92	3.6	44	16	10	8.7	61
31	8.8	---	23	50	---	111	---	102	---	10	8.3	---
TOTAL	282.7	255.9	138.72	1964	814	1248	1613.1	4567.6	2769	380	297.0	623.8
MEAN	9.12	8.53	4.47	63.4	29.1	40.3	53.8	147	92.3	12.3	9.58	20.8
MAX	12	14	38	130	49	111	158	367	178	15	10	61
MTN	7.1	2.2	.66	23	24	25	3.6	3.6	16	10	8.3	7.5
AC=FT	561	508	275	3900	1610	2480	3200	9060	5490	754	589	1240
WAL YR 1977	TOTAL	1323.76	MEAN	3.63	MAX	40	MIN	.00	AC=FT	2630		
CAL YR 1978	TOTAL	14953.82	MEAN	41.0	MAX	367	MIN	.66	AC=FT	29660		

PYRAMID AND WINNEMUCCA LAKES BASIN

10339250 MARTIS CREEK AT HIGHWAY 267 NEAR TRUCKEE, CA

LOCATION.--Lat 39°18'08", long 120°07'13", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.20, T.17 N., R.17 E., Placer County, Hydrologic Unit 16050102, 4.0 mi (6.4 km) southwest of Truckee. Water-quality samples are collected about 150 ft (50 m) downstream from State Highway 267. Thermograph records are obtained about 300 ft (90 m) upstream from highway, off north bank immediately downstream from confluence of mainstem and Middle Martis Creek.

DRAINAGE AREA.--25.8 mi² (66.8 km²).

PERIOD OF RECORD.--July 1973 to current year.

CHEMICAL ANALYSES, SPECIFIC CONDUCTANCES, AND SEDIMENT DATA: August 1973 to current year, twice-yearly.

WATER TEMPERATURES: July 1973 to November 1974, hourly; December 1974 to July 1975, monthly; August 1975 to current year, hourly.

INSTRUMENTATION.--Temperature recorder since July 1973.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 153 micromhos Sept. 6, 1977; minimum, 61 micromhos May 28, 1975.

WATER TEMPERATURES: Maximum, 27.5°C July 30, 1977; minimum, freezing point on several days during periods of cold weather.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 68 mg/L Sept. 7, 1978; minimum, 1 mg/L Aug. 16, 1973.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

WATER TEMPERATURES: Maximum, 26.0°C July 21, 24, 30; minimum, freezing point on several days during periods of cold weather.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
MAY 26...	0800	23	79	--	4.5	10.3	1.2	.02	.00	1.0	2.2	.01
SEP 07...	0930	4.1	130	8.0	8.5	8.3	.21	.00	.00	.82	1.0	.03

DATE	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
MAY 26...	.02	8	5	210	80	30	20	180	--	10	.62
SEP 07...	.01	3	5	200	170	10	10	60	70	68	.76

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

[illegible]

PYRAMID AND WINNEMUCCA LAKES BASIN

10339380 MARTIS CREEK LAKE NEAR TRUCKEE, CA

LOCATION.--Lat 39°19'38", long 120°06'48", in NE 1/4 sec. 17, T. 17 N., R. 17 E., Nevada County, Hydrologic 16050102, Tahoe National Forest, in control house at Martis Creek Dam, 2.0 mi (3.2 km) upstream from mouth, and 3.5 mi (5.6 km) east of Truckee.

DRAINAGE AREA.--40.0 mi² (103.6 km²).

RESERVOIR-CONTENTS RECORDS

PERIOD OF RECORD.--March to May 1972 (occasional readings only), June 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineer).

REMARKS.--Lake is formed by rolled-earthfill dam. Storage began Oct. 7, 1971. Total capacity, 20,400 acre-ft (25.2 hm³) between elevations 5,745 ft (1,751.1 m), streambed elevation at dam, and 5,838 ft (1,779.4 m), elevation of spillway crest. Figures given herein represent total contents, which include 817 acre-ft (1.01 hm³) of inactive storage below elevation, 5,780 ft (1,761.7 m), intake crest. Reservoir is used for flood control, enhancement of fishery, and recreation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 4,450 acre-ft (5.49 hm³) Apr. 2, 1974, elevation, 5,805.14 ft (1,769.407 m); minimum (since storage began), 808 acre-ft (996,000 m³) Aug. 24, 1977, elevation, 5,779.88 ft (1,761.707 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 4,050 acre-ft (4.99 hm³) June 4-6, elevation, 5,803.60 ft (1,768.937 m); minimum, 814 acre-ft (1.00 m³) Oct. 1-3, elevation, 5,779.97 ft (1,761.735 m).

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

5779	748	5790	1708
5780	817	5800	3224
5785	1211	5810	5919

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	814	819	1180	2070	3280	859	912	2160	4030	1700	1730	1820
2	814	820	1190	2100	3200	877	901	2260	4040	1710	1740	1830
3	814	819	1200	2120	3120	873	908	2370	4040	1720	1740	1830
4	814	819	1210	2150	3040	934	887	2480	4050	1730	1740	1830
5	818	822	1220	2180	3000	919	882	2580	4050	1730	1750	1840
6	823	822	1230	2190	2900	899	883	2680	4050	1740	1750	1840
7	821	822	1240	2210	2780	908	877	2760	4040	1760	1760	1850
8	819	829	1250	2230	2660	911	871	2850	4030	1770	1760	1850
9	817	840	1260	2320	2560	896	870	2940	4010	1770	1760	1860
10	817	853	1260	2380	2460	900	874	3030	3990	1780	1760	1870
11	817	865	1280	2410	2340	887	879	3110	3980	1780	1770	1880
12	817	876	1290	2440	2220	878	884	3200	3960	1790	1770	1880
13	817	887	1300	2480	2090	879	887	3280	3940	1790	1770	1890
14	817	898	1330	2660	1960	879	887	3370	3880	1790	1770	1890
15	817	909	1420	2800	1820	883	887	3480	3800	1780	1770	1900
16	817	921	1440	3010	1670	890	882	3550	3700	1770	1780	1900
17	817	930	1540	3140	1520	890	876	3600	3580	1750	1780	1910
18	817	940	1570	3220	1370	885	873	3650	3460	1740	1780	1910
19	817	948	1580	3270	1220	890	930	3700	3310	1730	1780	1910
20	817	957	1600	3300	1070	895	1040	3740	3140	1720	1790	1920
21	817	1010	1620	3310	927	911	1150	3790	2970	1710	1790	1920
22	818	1060	1640	3320	856	905	1240	3840	2810	1700	1790	1930
23	818	1080	1750	3330	852	906	1320	3880	2620	1710	1800	1930
24	818	1090	1780	3330	853	899	1410	3920	2400	1710	1800	1930
25	819	1110	1800	3330	856	899	1520	3940	2190	1720	1800	1940
26	819	1120	1820	3340	857	899	1620	3950	1990	1720	1800	1940
27	822	1130	1860	3340	856	905	1730	3960	1790	1720	1810	1940
28	821	1140	1900	3340	856	907	1840	3980	1670	1730	1810	1950
29	819	1160	1970	3340	---	909	1950	3990	1680	1730	1820	1950
30	819	1170	2020	3340	---	916	2050	4010	1690	1730	1820	1950
31	819	---	2050	3340	---	936	---	4020	---	1730	1820	---
MAX	823	1170	2050	3340	3280	936	2050	4020	4050	1790	1820	1950
MIN	814	819	1180	2070	852	859	870	2160	1670	1700	1730	1820
†	5780.04	5784.49	5792.84	5800.54	5780.54	5781.62	5792.85	5803.50	5789.86	5790.23	5790.98	5792.07
‡	+5	+351	+880	+1290	-2484	+80	+1114	+1970	-2330	+40	+90	+130

CAL YR 1977 MAX 2050 MIN 809 ‡ + 1225
WTR YR 1978 MAX 4050 MIN 814 ‡ + 1136

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

PYRAMID AND WINNEMUCCA LAKES BASIN

10339380 MARTIS CREEK LAKE NEAR TRUCKEE, CA--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
MAY 26...	1110	1	74	7.3	14.0	1	9.5	11	.02	.00	.98	12
SEP 07...	1115	1	105	8.2	17.0	--	11.0	18	.01	.12	2.0	20

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDED (MG/L)
MAY 26...	.03	.02	13	8	150	50	10	10	250	240	5
SEP 07...	.11	.02	8	3	710	340	110	60	130	40	7

PYRAMID AND WINNEMUCCA LAKES BASIN

10339400 MARTIS CREEK NEAR TRUCKEE, CA

LOCATION.--Lat 39°19'44", long 120°07'00", in NE¼ sec.17, T.17 N., R.17 E., Nevada County, Hydrologic Unit 16050102, Tahoe National Forest, on left bank 0.2 mi (0.3 km) downstream from Martis Creek Lake Dam, 1.8 mi (2.9 km) upstream from mouth, and 3.5 mi (5.6 km) east of Truckee.

DRAINAGE AREA.--40.2 mi² (104.1 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WRD NV-77: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,730 ft (1,747 m), from topographic map. Prior to July 10, 1972, at site 1.0 mi (1.6 km) downstream at different datum.

REMARKS.--Records excellent. Flow subject to regulation by Martis Creek Lake Dam since Oct. 7, 1971.

AVERAGE DISCHARGE (unadjusted).--20 years, 23.1 ft³/s (0.654 m³/s), 16,740 acre-ft/yr (20.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft³/s (53.2 m³/s) Feb. 1, 1963, gage height, 6.16 ft (1.878 m), site and datum then in use; minimum, 1.1 ft³/s (0.031 m³/s) July 19, 20, 1961. Maximum discharge since construction of Martis Creek Dam in 1971, 648 ft³/s (18.4 m³/s) Apr. 2, 1974, gage height, 6.01 ft (1.832 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Nov. 9-14, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 143 ft³/s (4.05 m³/s) Mar. 4, gage height, 3.59 ft (1.094 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Nov. 9-14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	4.9	.64	2.2	37	34	118	2.7	17	10	4.0	2.6
2	3.7	4.9	.64	2.3	55	43	92	2.9	17	9.8	3.9	2.5
3	3.7	5.1	.74	2.4	54	52	72	3.1	17	9.6	3.9	2.5
4	3.7	5.0	.74	2.5	54	95	76	3.3	17	9.4	3.9	2.6
5	2.1	5.4	.74	2.7	54	128	61	3.5	17	8.9	3.8	2.6
6	1.3	5.6	.74	2.7	77	95	59	3.8	17	8.3	3.8	2.6
7	4.8	5.6	.86	2.7	97	83	54	4.2	17	8.3	3.7	2.6
8	4.7	2.7	.86	2.9	96	99	48	4.8	17	8.3	3.7	2.6
9	4.4	.20	.86	3.4	95	89	43	5.5	18	8.0	3.6	2.6
10	4.2	.20	.86	3.2	94	79	44	6.3	18	7.9	3.6	2.6
11	4.2	.20	1.0	3.2	93	77	50	7.2	18	7.7	3.5	2.5
12	4.2	.20	1.0	3.3	92	63	56	8.1	18	8.1	3.4	2.5
13	4.1	.20	1.0	3.5	89	55	62	9.2	18	7.3	3.4	2.5
14	4.2	.20	1.2	4.4	88	56	64	10	37	12	3.3	2.7
15	4.2	.24	1.3	4.1	94	58	64	11	51	16	3.3	2.7
16	4.1	.27	1.2	5.0	101	63	60	12	62	15	3.3	2.7
17	4.1	.24	1.7	5.2	99	69	53	13	71	15	3.2	2.7
18	4.2	.24	1.2	6.1	97	67	47	13	70	14	3.2	2.7
19	4.3	.27	1.2	8.4	95	68	24	14	87	14	3.2	2.7
20	4.2	.32	1.2	11	91	73	.60	14	100	14	3.1	2.7
21	4.3	.94	1.3	12	88	92	.80	14	98	14	3.0	2.7
22	4.4	.62	1.4	12	56	93	1.0	15	97	9.3	3.0	2.7
23	4.4	.34	2.0	11	30	93	1.2	15	113	5.3	3.0	2.7
24	4.5	.40	1.5	9.9	30	87	1.4	15	128	4.9	2.9	2.7
25	4.5	.40	1.5	10	31	81	1.6	16	125	4.8	2.8	2.7
26	4.7	.46	1.7	10	34	83	1.8	16	123	4.7	2.8	2.9
27	5.4	.46	1.8	10	33	86	2.0	16	120	4.6	2.7	2.9
28	5.4	.46	1.9	10	31	91	2.2	16	87	4.5	2.7	3.0
29	5.0	.54	2.1	11	---	95	2.4	16	11	4.4	2.7	2.9
30	4.9	.64	2.0	11	---	100	2.5	16	10	4.3	2.6	3.0
31	4.9	---	2.0	11	---	126	---	17	---	4.3	2.6	---
TOTAL	130.6	47.24	38.88	199.1	1985	2473	1164.50	323.6	1616	276.7	101.6	80.4
MEAN	4.21	1.57	1.25	6.42	70.9	79.8	38.8	10.4	53.9	8.93	3.28	2.68
MAX	5.4	5.6	2.1	12	101	128	118	17	128	16	4.0	3.0
MIN	1.3	.20	.64	2.2	30	34	.60	2.7	10	4.3	2.6	2.5
AC-FT	259	94	77	395	3940	4910	2310	642	3210	549	202	159
CAL YR 1977 TOTAL	2116.12			MEAN 5.80	MAX 23	MIN .20	AC-FT 4200					
WTR YR 1978 TOTAL	8436.62			MEAN 23.1	MAX 128	MIN .20	AC-FT 16730					

PYRAMID AND WINNEMUCCA LAKES BASIN

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10339400 MARTIS CREEK NEAR TRUCKEE, CA--Continued

WATER-QUALITY RECORDS

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

CHEMICAL ANALYSES, SPECIFIC CONDUCTANCES, AND SEDIMENT DATA: August 1973 to current year, twice-yearly.

WATER TEMPERATURES: March 1960 to June 1973, monthly; July 1973 to current year, hourly.

INSTRUMENTATION.--Temperature recorder since July 1973.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 200 micromhos Sept. 6, 1977; minimum, 68 micromhos May 28, 1975.

WATER TEMPERATURES: Maximum, 29.0°C July 31, 1972; minimum, freezing point Jan. 3, 1963, Dec. 20, 1965.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 9 mg/L May 28, 1975; minimum, 0 mg/L Aug. 16, 1973.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

WATER TEMPERATURES: Maximum, 20.5°C July 22; minimum, 1.0°C Nov. 19, 20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
MAY 26...	1315	16	92	7.9	12.0	1	8.7	.17	.01	.00	.35	.53
SEP 07...	1240	2.6	121	7.5	13.5	--	12.0	1.1	.00	.01	.66	1.8

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
MAY 26...	.02	.05	10	2	180	30	10	10	30	30	6	.26
SEP 07...	.03	.02	4	2	160	50	20	10	40	10	7	.05

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

PYRAMID AND WINNEMUCCA LAKES BASIN

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10340300 PROSSER CREEK RESERVOIR NEAR TRUCKEE, CA
(formerly published as Prosser Creek Reservoir near Boca)

LOCATION.--Lat 39°22'45", long 120°08'25", in NW¼SW¼ sec.30, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, in control house at Prosser Creek Dam on Prosser Creek, 1.5 mi (2.4 km) upstream from mouth, and 4.2 mi (6.8 km) northeast of Truckee.

DRAINAGE AREA.--50.5 mi² (130.8 km²).

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

GAGE.--Water-stage recorder with surface follower and telemark. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation).

REVISED RECORDS.--WRD NV-76: 1975.

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Jan. 30, 1963. Usable capacity, 28,640 acre-ft (35.3 hm³) between elevations, 5,660.6 ft (1,725.35 m), top of inactive storage, and 5,741.2 ft (1,749.92 m), spillway crest. Inactive storage, 1,200 acre-ft (1.48 hm³), includes 83 acre-ft (102,000 m³) dead storage, below elevation 5,660.6 ft (1,725.35 m). Elevation of streambed at dam axis, 5,622 ft (1,713.6 m). Figures given herein represent usable contents. Reservoir is used for flood control, enhancement of fishery, and recreation.

COOPERATION.--Records furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 31,070 acre-ft (38.3 hm³) June 1, 1973, elevation 5,744.33 ft (1,750.872 m); minimum observed, 83 acre-ft (0.10 hm³) Aug. 18, 1976, to Apr. 18, 1977, July 8 to Dec. 26, 1977, Feb. 19 to Mar. 21, 1978; minimum elevation observed, 5,637.01 ft (1,718.161 m) July 20 to Dec. 19, 1977, Feb. 24 to Mar. 17, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 28,673 acre-ft (35.4 hm³) July 24, elevation 5,739.62 ft (1,749.436 m); minimum observed, 83 acre-ft (0.10 hm³) Oct. 1 to Dec. 26, Feb. 19 to Mar. 21; minimum elevation observed, 5,637.01 ft (1,718.161 m) Oct. 1 to Dec. 19, Feb. 24 to Mar. 17.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-ft)	Change in contents (acre-ft)
Sept. 30	5,637.01	83	--
Oct. 31	5,637.01	83	0
Nov. 30	5,637.01	83	0
Dec. 31	5,669.24	2,132	+2,049
CAL YR 1977	--	--	+2,049
Jan. 31	5,692.50	4,264	+2,132
Feb. 28	5,637.01	83	-4,181
Mar. 31	5,684.12	4,588	+4,505
Apr. 30	5,704.40	10,071	+5,483
May 31	5,715.05	14,285	+4,214
June 30	5,735.75	25,943	+11,658
July 31	5,739.31	28,447	+2,504
Aug. 31	5,739.07	28,272	-175
Sept. 30	5,734.80	25,301	-2,971
WTR YR 1978	--	--	+25,218

PYRAMID AND WINNEMUCCA LAKES BASIN

10340500 PROSSER CREEK BELOW PROSSER CREEK DAM NEAR TRUCKEE, CA

LOCATION.--Lat 39°22'24", long 120°07'50", in NW¼NE¼ sec.31, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank 1.0 mi (1.6 km) upstream from mouth, 0.2 mi (0.3 km) downstream from Prosser Creek Dam, and 4.2 mi (6.7 km) northeast of Truckee.

DRAINAGE AREA.--53.2 mi² (137.8 km²).

PERIOD OF RECORD.--October 1902 to June 1903 (gage heights only), October 1942 to December 1950, June 1951 to current year. Prior to October 1976, published as "Near Boca." Monthly discharge only for October 1942 to December 1950, published in WSP 1734. Records for April 1889 to November 1890, published in the 11th and 12th Annual Reports, Pt. 2, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 2127: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,602.31 ft (1,707.584 m) National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). See WSP 2127 for history of changes prior to September 1956. October 1956 to May 1976, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 29.69 ft (9.050 m) lower.

REMARKS.--Records good except those for winter months, which are fair. Flow regulated by Prosser Creek Dam since Jan. 31, 1963.

AVERAGE DISCHARGE.--35 years (1942-50, 1951-78), 85.6 ft³/s (2.424 m³/s), 62,020 acre-ft/yr (76.5 hm³/yr). Adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--(Water years 1943-78) Maximum discharge, 4,560 ft³/s (129 m³/s) Dec. 23, 1955, gage height, 10.13 ft (3.088 m), present datum from rating curve extended above 910 ft³/s (25.8 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 11.0 ft (3.35 m), from floodmarks (present datum), Nov. 20, 1950, discharge, 4,320 ft³/s (122 m³/s), by slope-area measurement; minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Jan. 2, 1975, result of temporary closing of Prosser Creek Dam, for spillway maintenance.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,300 ft³/s (36.8 m³/s) May 21, gage height, 6.31 ft (1.923 m), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of reported release at Prosser Creek Dam; minimum daily, 0.91 ft³/s (0.026 m³/s) Dec. 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	7.3	9.2	1.0	73	58	43	153	11	105	48	12
2	6.8	7.4	9.2	.97	46	71	11	146	11	116	50	12
3	6.5	7.4	9.4	.95	72	77	11	173	11	98	50	12
4	6.5	7.2	10	.94	89	91	10	190	11	86	27	12
5	6.5	9.9	12	.95	89	105	77	191	11	86	12	12
6	6.2	9.7	9.0	.95	102	108	123	192	12	86	12	7.4
7	6.2	8.9	8.0	1.0	111	108	123	193	12	41	12	12
8	6.2	9.0	7.5	1.0	109	111	123	193	12	10	12	12
9	6.5	9.7	7.0	1.8	108	112	123	193	12	10	12	12
10	6.5	9.3	6.8	1.6	107	114	69	194	12	10	12	12
11	6.5	8.5	6.7	1.2	105	116	34	195	12	10	12	12
12	6.5	9.2	6.6	1.0	104	115	34	219	105	10	12	12
13	6.5	8.2	6.6	1.2	119	111	34	235	169	10	12	12
14	6.5	8.6	31	2.6	127	108	70	235	133	10	12	13
15	6.5	8.6	72	2.9	144	107	98	104	109	10	12	12
16	6.5	8.6	74	4.7	149	108	98	12	92	10	12	12
17	6.5	8.4	51	5.5	144	78	129	11	80	10	12	12
18	6.8	8.0	1.8	2.1	138	60	150	11	80	55	12	56
19	6.8	9.5	1.3	1.7	132	63	150	262	39	86	12	78
20	6.5	12	1.1	1.5	123	68	150	915	12	60	12	90
21	6.4	36	1.0	1.4	116	72	151	1160	12	47	12	135
22	6.5	45	1.2	1.3	105	39	151	901	12	47	12	155
23	6.7	28	1.3	20	64	14	150	149	12	47	12	155
24	6.5	14	1.0	27	52	101	150	12	12	57	12	155
25	6.5	13	.95	40	51	160	150	133	12	65	12	174
26	6.6	12	.91	50	53	161	150	199	55	65	12	204
27	9.3	12	1.1	89	53	197	151	187	86	65	12	184
28	8.3	11	.92	117	54	218	159	187	103	65	12	155
29	7.4	9.5	1.4	117	---	155	165	207	151	65	12	136
30	7.7	9.2	1.5	114	---	117	164	169	113	64	12	90
31	7.7	---	1.1	114	---	98	---	62	---	51	12	---
TOTAL	210.5	365.1	352.58	726.26	2739	3221	3201	7383	1514	1557	499	1967.4
MEAN	6.79	12.2	11.4	23.4	97.8	104	107	238	50.5	50.2	16.1	65.6
MAX	9.3	45	74	117	149	218	165	1160	169	116	50	204
MTN	6.2	7.2	.91	.94	46	14	10	11	11	10	12	7.4
AC-FT	418	724	699	1440	5430	6390	6350	14640	3000	3090	990	3900
CAL YR 1977 TOTAL	8231.58			MEAN 22.6	MAX 152	MIN .30	AC-FT 16330		MEAN ‡ 25.4		AC-FT ‡ 18,380	
WTR YR 1978 TOTAL	23735.84			MEAN 65.0	MAX 1160	MIN .91	AC-FT 47080		MEAN ‡ 99.8		AC-FT ‡ 72,300	

‡ Adjusted for change in contents in Prosser Creek Reservoir.

LOCATION (REVISED).--Lat 39°27'20", long 120°17'13", in SW¼NW¼ sec.35, T.19 N., R.15 E., Sierra County, Hydrologic Unit 16050102, Tahoe National Forest, on left bank 0.3 mi (0.5 km) downstream from Independence Lake outlet, and 10.5 mi (16.9 km) northwest of Truckee.

PERIOD OF RECORD.--November 1902 to September 1907, November 1909 to June 1910, August 1968 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 6,940 ft (2,115 m), from topographic map. July 1, 1904, to June 30, 1910, water-stage recorder 75 ft (25 m) downstream from Independence Lake outlet; prior to July 1, 1904, water-stage recorder 600 ft (180 m) downstream at approximately same datum.

AVERAGE DISCHARGE (unadjusted).--15 years (water years 1903-7, 1969-78), 28.1 ft³/s (0.796 m³/s), 20,360 acre-ft/yr (25.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge observed, 286 ft³/s (8.10 m³/s) June 23, 1907, gage height, 3.9 ft (1.19 m) site and datum then in use; no flow Sept. 28 to Nov. 10, 1905, June 1, 1906.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 132 ft³/s (3.74 m³/s) June 14, 16, gage height, 4.48 ft (1.366 m); minimum daily, 6.9 ft³/s (0.20 m³/s) Dec. 16, 18, 19.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	8.0	7.6	7.4	8.6	7.7	8.6	11	36	57	21	18
2	8.2	8.0	7.4	7.4	8.6	7.7	8.7	12	56	34	21	19
3	8.1	7.9	7.4	7.7	8.6	7.7	8.8	13	56	32	21	18
4	8.1	7.7	7.4	7.8	8.6	7.4	8.6	13	55	34	21	18
5	8.1	7.6	7.4	8.0	8.2	7.5	8.5	12	56	37	21	19
6	8.0	7.7	7.4	8.0	7.7	7.4	8.3	12	56	41	21	18
7	8.0	7.7	7.2	8.0	7.7	7.4	8.3	12	56	62	21	18
8	8.0	7.7	7.2	8.0	7.7	7.4	8.3	13	70	74	21	18
9	8.0	7.7	7.2	8.2	7.7	7.4	8.3	13	86	64	21	18
10	8.1	7.9	7.2	8.1	7.7	7.4	8.5	14	92	54	21	18
11	8.1	8.0	7.2	8.0	7.7	7.2	9.1	13	93	67	21	18
12	8.1	7.7	7.2	8.0	7.7	7.2	9.5	14	100	43	21	18
13	8.1	7.7	7.1	8.1	7.7	7.2	10	13	105	33	21	18
14	8.1	7.7	7.2	8.3	7.7	7.2	10	14	121	33	21	18
15	8.2	7.8	7.1	8.8	7.7	7.2	10	12	122	34	20	18
16	8.2	7.8	6.9	8.5	7.7	7.3	9.8	11	122	33	20	18
17	8.2	7.7	7.0	8.6	7.7	7.4	9.7	12	114	32	20	18
18	7.9	7.8	6.9	8.6	7.7	7.2	9.6	12	99	30	20	18
19	8.0	7.7	6.9	8.8	7.7	7.2	9.7	12	89	29	20	18
20	8.1	7.7	7.2	8.8	7.7	7.2	9.7	13	86	25	20	18
21	8.3	7.7	7.1	8.8	7.7	7.4	9.5	13	85	22	20	18
22	8.3	7.7	7.2	8.8	7.7	7.4	9.4	12	70	22	20	18
23	8.3	7.7	7.2	8.8	7.7	7.5	9.5	12	37	22	20	18
24	8.3	7.8	7.2	8.8	7.7	7.7	10	11	28	22	20	18
25	8.3	7.7	7.2	8.8	7.7	7.7	11	11	27	22	20	18
26	8.4	7.7	7.2	8.8	7.7	7.9	11	11	30	22	20	18
27	8.3	7.7	7.2	8.8	7.7	8.1	11	11	35	22	20	17
28	8.1	7.4	7.2	8.8	7.7	8.2	11	11	41	22	20	17
29	8.0	7.4	7.3	8.8	---	8.4	11	11	35	22	20	17
30	8.0	7.5	7.2	8.6	---	8.4	11	11	32	22	20	17
31	8.0	---	7.3	8.6	---	8.6	---	10	---	21	20	---
TOTAL	252.1	231.8	223.4	259.5	219.7	234.6	286.4	375	2090	1089	634	538
MEAN	8.13	7.73	7.21	8.37	7.85	7.57	9.55	12.1	69.7	35.1	20.5	17.9
MAX	8.4	8.0	7.6	8.8	8.6	8.6	11	14	122	74	21	19
MIN	7.9	7.4	6.9	7.4	7.7	7.2	8.3	10	27	21	20	17
AC-FT	500	460	443	515	436	465	568	744	4150	2160	1260	1070
CAL YR 1977	TOTAL	3714.4	MEAN 10.2	MAX 137	MIN 1.1	AC-FT 7370						
WTR YR 1978	TOTAL	6433.5	MEAN 17.6	MAX 122	MIN 6.9	AC-FT 12760						

PYRAMID AND WINNEMUCCA LAKES BASIN

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA

LOCATION.—Lat 39°25'54", long 120°14'07", in NE 1/4 sec. 7, T.18 N., R.16 E., Nevada County, Hydrologic Unit 16050102, on left bank 2.2 mi (3.5 km) upstream from bridge on State Highway 89, and 7.5 mi (12.1 km) north of Truckee.

DRAINAGE AREA.—10.8 mi² (28.0 km²).

PERIOD OF RECORD.—October 1953 to current year.

GAGE.—Water-stage recorder and concrete control. Altitude of gage is 6,320 ft (1,926 m), from topographic map. Prior to Dec. 2, 1953, nonrecording gage at site 100 ft (30 m) upstream at different datum.

REMARKS.—Records excellent. No storage or diversion above station.

AVERAGE DISCHARGE.—25 years, 12.1 ft³/s (0.343 m³/s), 8,770 acre-ft/yr (10.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 765 ft³/s (21.7 m³/s) Feb. 1, 1963, gage height, 4.64 ft (1.414 m) from floodmarks, from rating curve extended above 130 ft³/s (3.68 m³/s) on basis of slope-area measurement at gage height 4.28 ft (1.305 m); minimum, 0.6 ft³/s (0.017 m³/s) Aug. 8, 1960, Aug. 7, 1961, result of temporary regulation.

EXTREMES FOR CURRENT YEAR.—Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*)

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Apr. 27	1800	55	1.56	2.56	0.808
May 3	1730	72	2.04	2.81	0.856
May 14	1630	*114	3.23	3.11	0.948

Minimum daily, 1.7 ft³/s (0.048 m³/s) on many days during October and November.

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	1.7	1.8	2.1	3.8	3.1	3.8	23	40	50	15	3.4	2.1
2	1.7	1.8	2.2	3.6	3.1	4.4	19	48	48	14	3.3	2.0
3	1.7	1.8	2.2	3.5	3.1	4.6	18	55	45	13	3.2	2.0
4	1.7	1.8	2.4	3.4	3.1	5.8	17	57	47	13	3.1	2.0
5	1.7	2.0	2.4	2.8	3.9	5.9	14	49	49	12	3.1	3.4
6	1.7	1.9	2.3	3.6	4.1	5.2	13	46	50	12	2.9	3.6
7	1.7	1.9	2.3	3.2	3.7	5.4	12	51	51	15	2.8	3.0
8	1.7	1.9	2.1	3.6	3.7	5.7	10	58	49	12	2.8	2.6
9	1.8	1.9	2.0	6.6	3.6	5.7	11	66	49	11	2.8	2.9
10	1.8	1.9	2.0	5.3	3.5	5.8	15	72	45	10	2.5	4.1
11	1.8	1.9	2.1	4.3	3.3	5.9	20	72	41	9.5	2.5	2.9
12	1.8	1.8	2.1	3.9	3.3	5.3	25	72	41	8.9	2.4	2.6
13	1.8	1.8	2.6	3.9	3.3	5.0	29	79	41	8.3	2.5	2.5
14	1.8	1.8	7.1	7.1	3.1	4.9	27	88	39	7.9	2.5	2.8
15	1.8	1.8	18	7.0	3.1	5.0	22	86	35	7.6	2.5	2.5
16	1.8	1.8	5.0	6.1	3.1	5.6	19	64	32	7.2	2.4	2.4
17	1.7	1.8	8.5	5.5	3.0	6.5	17	61	29	6.9	2.4	2.3
18	1.7	1.8	4.9	4.7	3.0	7.0	17	62	28	6.5	2.4	2.4
19	1.7	1.7	3.6	4.4	3.0	7.6	19	63	26	6.1	2.4	2.4
20	1.7	1.8	3.3	4.1	3.2	8.4	18	64	25	5.8	2.3	2.4
21	1.7	2.7	3.0	3.9	3.2	11	16	67	23	5.6	2.3	2.4
22	1.7	4.6	3.0	3.7	3.3	12	16	67	22	5.3	2.3	2.3
23	1.7	2.8	3.7	3.6	3.5	13	19	57	21	5.0	2.3	2.2
24	1.7	2.8	3.0	3.7	3.6	12	24	52	19	4.8	2.3	2.1
25	1.7	2.6	2.7	3.4	3.7	13	30	44	18	4.6	2.2	2.1
26	1.7	2.7	2.7	3.4	3.7	15	31	43	18	4.4	2.2	2.1
27	2.4	2.7	4.9	3.3	3.7	17	39	46	20	4.3	2.2	2.1
28	1.9	2.4	4.2	3.3	3.7	20	37	50	19	4.1	2.2	2.1
29	1.9	2.3	6.8	3.3	---	22	38	54	17	3.9	2.2	2.1
30	1.9	2.2	6.4	3.2	---	25	35	53	16	3.7	2.1	2.1
31	1.9	---	4.4	3.1	---	29	---	51	---	3.6	2.1	---
TOTAL	55.0	64.5	124.0	128.3	94.7	302.5	650	1837	1013	251.0	78.6	74.5
MEAN	1.77	2.15	4.00	4.14	3.38	9.76	21.7	59.3	33.8	8.10	2.54	2.48
MAX	2.4	4.6	18	7.1	4.1	29	39	88	51	15	3.4	4.1
MIN	1.7	1.7	2.0	2.8	3.0	3.8	10	40	16	3.6	2.1	2.0
AC-FT	109	128	246	254	188	600	1290	3640	2010	498	156	148

CAL YR 1977	TOTAL	1005.9	MEAN	2.76	MAX	18	MIN	1.3	AC-FT	2000
WTR YR 1978	TOTAL	4673.1	MEAN	12.8	MAX	88	MIN	1.7	AC-FT	9270

PYRAMID AND WINNEMUCCA LAKES BASIN

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10344300 STAMPEDE RESERVOIR NEAR TRUCKEE, CA
(formerly published as Stampede Reservoir near Boca)

LOCATION.--Lat 39°28'24", long 120°06'06", in SW¹/₄ NW¹/₄ sec.28, T.19 N., R.17 E., Sierra County, Hydrologic Unit 16050102, in Tahoe National Forest, in control house on Stampede Dam on Little Truckee River, just downstream from mouth of Davies Creek and 11.0 mi (17.7 km) northeast of Truckee.

DRAINAGE AREA.--136 mi² (352 km²).

PERIOD OF RECORD.--August 1969 to current year. August 1969 to September 1977 (monthend elevations and contents only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Aug. 1, 1969. Total capacity, 226,500 acre-ft (279 hm³) at elevation 5,948.7 ft (1,813.16 m), spillway crest. Inactive storage, 5,010 acre-ft (6.18 hm³), includes 660 acre-ft (814,000 m³) dead storage, below elevation 5,798.3 ft (1,767.32 m). Figures given herein, including extremes, represent total contents. Reservoir is used for flood control, municipal water supply, enhancement of fishery, and recreation.

COOPERATION.--Records furnished by the Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 226,500 acre-ft (279 hm³) June 19, 21, 1974, elevation, 5,948.7 ft (1,813.16 m); minimum since reservoir first filled 30,772 acre-ft (37.9 hm³) Jan. 31, Feb. 1, 1978, elevation, 5,853.60 ft (1,784.177 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 65,075 acre-ft (80.2 hm³) July 10, elevation, 5,883.28 ft (1,793.224 m); minimum, 30,772 acre-ft (37.9 hm³) Jan. 31, Feb. 1, elevation, 5,853.60 ft (1,784.177 m).

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

5850.00	27915	5900.00	94535
5855.00	31951	5910.00	115865
5860.00	36470	5920.00	140141
5865.00	41505	5930.00	167355
5870.00	47204	5940.00	197630
5875.00	53295	5950.00	231005
5880.00	60185	5960.00	267386
5890.00	76008		

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	31382	31382	31712	31866	30772	31551	42146	51361	39151	63946	63538	62014
2	31382	31382	31708	31712	30781	31602	43123	50801	40360	64311	63523	61989
3	31382	31382	31704	31619	30789	31653	44285	50243	41561	64463	63576	61964
4	31382	31382	31700	31526	30822	31758	45130	49663	42761	64570	63417	61940
5	31391	31382	31695	31462	30855	31863	45975	49085	43961	64676	63357	61903
6	31382	31382	31695	31398	30889	31968	46673	48699	45334	64791	63297	61866
7	31382	31382	31695	31334	30968	32067	47310	48314	46739	64906	63237	61815
8	31382	31381	31695	31270	31047	32166	47865	47927	48090	65013	63177	61763
9	31382	31380	31695	31206	31114	32312	48420	47310	49439	65044	63117	61763
10	31382	31379	31695	31180	31181	32355	48975	46693	50599	65075	63021	61763
11	31382	31377	31695	31156	31223	32338	49809	45793	51758	65020	62922	61763
12	31382	31376	31721	31076	31265	32162	50642	44892	52917	64967	62788	61734
13	31382	31375	31708	30997	31307	31985	51462	43619	53980	64822	62654	61704
14	31382	31374	31695	31123	31323	31781	52282	42346	55088	64676	62519	61704
15	31402	31381	31695	31249	31340	31577	52791	41071	55989	64554	62466	61704
16	31421	31388	31695	31374	31340	31425	53300	39326	56890	64440	62424	61684
17	31441	31395	31695	31543	31340	31273	53808	37579	57544	64326	62340	61665
18	31451	31403	31695	31712	31346	31259	54086	36176	58198	64196	62266	61645
19	31460	31410	31695	31703	31351	31245	54365	35008	58852	64067	62246	61616
20	31470	31417	31943	31695	31357	31231	54199	34150	59396	63931	62226	61586
21	31480	31424	32192	31622	31366	31527	54033	33808	59940	63855	62207	61564
22	31490	31556	32261	31549	31374	31823	53295	33979	60426	63825	62155	61542
23	31499	31687	32330	31475	31395	32504	52346	34568	60911	63840	62103	61552
24	31509	31661	32269	31374	31416	33186	51298	34962	61308	63885	62066	61562
25	31492	31636	32209	31273	31450	33998	50720	34898	61709	63916	62029	61571
26	31475	31661	32149	31180	31484	34810	50143	34972	62103	63931	62029	61571
27	31458	31686	32110	31089	31517	35621	50412	35101	62453	63878	62029	61571
28	31509	31712	32071	30988	31526	36673	50680	35556	62802	63825	62029	61534
29	31424	31712	32089	30888	---	37726	51020	36015	63163	63755	62044	61497
30	31408	31712	32106	30789	---	39127	51184	36901	63522	63685	62058	61483
31	31391	---	32045	30772	---	40527	---	38021	---	63613	62029	---
MAX	31509	31712	32330	31866	31526	40527	54365	51361	63522	65075	63576	62014
MIN	31382	31374	31695	30772	30772	31231	42146	33808	39151	63613	62029	61483
†	5854.34	5854.72	5855.11	5836.60	5854.50	5864.07	5873.36	5861.60	5882.26	5882.32	5881.26	5880.89
‡	0	+321	+333	-1273	+754	+9001	+10657	-13163	+25501	+91	-1584	-546

CAL YR 1977 ‡ -13245

WTR YR 1978 MAX 65075 MIN 30772 ‡ +30093

† Elevation, in feet NGVD, at end of month.

‡ Change in contents, in acre-feet.

PYRAMID AND WINNEMUCCA LAKES BASIN

10344400 LITTLE TRUCKEE RIVER ABOVE BOCA RESERVOIR, NEAR TRUCKEE, CA

LOCATION.—Lat 39°26'09", long 120°05'00", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank 1 mi (2 km) upstream from Boca Reservoir, 1.5 mi (2.4 km) upstream from Dry Creek, 3.0 mi (4.8 km) downstream from Stampede Dam, and 5.5 mi (8.8 km) east of Truckee.

DRAINAGE AREA.—146 mi² (378 km²).

PERIOD OF RECORD.—June 1903 to October 1910, September 1939 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Published as "at Pine Station" June 1903 to December 1907 and as "at Starr" January 1908 to October 1910, and as "near Boca" September 1939 to September 1976.

REVISED RECORDS.—WSP 1564: 1903-4, 1906-7, 1910, drainage area at site used 1903-7.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 5,618.67 ft (1,712.571 m) National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark). June 1903 to October 1910, nonrecording gages at different sites and datums.

REMARKS.—Records good. Flow regulated by Independence Lake, capacity, about 17,500 acre-ft (21.6 hm³), one transbasin diversion to Sierra Valley, and Stampede Reservoir (station 10344300), capacity, 226,500 acre-ft (279 hm³).

AVERAGE DISCHARGE.—46 years (1903-10, 1939-78), 189 ft³/s (5.352 m³/s), 136,900 acre-ft/yr (169 hm³/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 13,300 ft³/s (377 m³/s) Feb. 1, 1963, gage height, 9.00 ft (2.743 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.30 ft³/s (0.008 m³/s) Sept. 16-21, 1969.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 1,740 ft³/s (49.3 m³/s) May 16, gage height, 3.21 ft (0.978 m); minimum, 12 ft³/s (0.34 m³/s) Oct. 1-7, 14-23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	20	30	148	64	81	79	497	48	48	32	30
2	12	18	30	129	64	84	57	912	36	91	52	30
3	12	18	30	114	64	105	52	902	36	118	54	30
4	12	18	31	114	64	128	49	912	35	128	56	30
5	12	18	36	116	66	130	47	781	35	138	54	31
6	12	18	42	114	68	126	46	717	35	158	54	31
7	12	18	42	113	68	127	43	720	44	164	54	30
8	13	18	41	113	65	131	42	720	52	183	54	30
9	13	18	41	117	66	154	41	1050	52	196	54	30
10	13	18	41	116	66	205	42	1230	52	196	54	31
11	13	18	42	115	64	249	44	1230	52	196	54	30
12	13	18	42	115	64	267	92	1270	52	212	54	30
13	13	18	42	86	64	264	157	1520	62	207	54	31
14	12	18	43	67	64	264	184	1620	93	183	49	31
15	12	18	49	69	64	265	222	1660	109	163	35	31
16	12	18	44	72	64	269	221	1680	109	154	33	31
17	12	18	49	69	62	273	218	1460	109	154	30	30
18	12	18	46	96	62	273	218	1160	109	154	30	31
19	12	18	44	118	62	279	350	1090	110	135	30	31
20	12	18	44	118	62	254	428	874	110	110	30	31
21	12	21	44	118	63	237	545	679	110	82	30	31
22	12	19	45	117	64	181	784	481	110	62	30	31
23	12	35	67	115	65	145	814	409	87	39	30	31
24	19	50	81	115	66	110	834	465	71	32	28	31
25	27	37	80	115	64	89	722	397	71	44	22	31
26	27	22	80	115	65	89	327	306	72	54	22	31
27	28	21	81	115	74	91	326	247	72	54	22	31
28	27	26	81	115	81	93	328	265	71	54	26	31
29	27	30	84	115	---	94	356	243	71	54	30	31
30	27	30	101	93	---	97	381	149	51	54	30	31
31	24	---	133	65	---	103	---	82	---	54	30	---
TOTAL	488	653	1686	3317	1829	5257	8049	25728	2126	3671	1217	921
MEAN	15.7	21.8	54.4	107	65.3	170	268	830	70.9	118	39.3	30.7
MAX	28	50	133	148	81	279	834	1680	110	212	56	31
MIN	12	18	30	65	62	81	41	82	35	32	22	30
AC-FT	968	1300	3340	6580	3630	10430	15970	51030	4220	7280	2410	1830
CAL YR 1977 TOTAL	19213.1			MEAN 52.6	MAX 162	MIN 5.9	AC-FT 38110	MEAN \pm 34.3	† \pm AC-FT 24860			
WTR YR 1978 TOTAL	54942.0			MEAN 151	MAX 1680	MIN 12	AC-FT 109000	MEAN \pm 192.	† \pm AC-FT 139090			

† Adjusted for change in contents in Stampede Reservoir.

10344490 BOCA RESERVOIR NEAR TRUCKEE, CA

LOCATION.--Lat 39°23'20", long 120°05'45", in NE¼NW¼ sec.28, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, in control house at Boca Dam on Little Truckee River, 1,800 ft (550 m) upstream from mouth, and 6.5 mi (10.5 km) northeast of Truckee.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--December 1938 to current year. Prior to October 1976 published as "at Boca." Monthend contents only for December 1938 to September 1957, published in WSP 1734.

REVISED RECORDS.--WSP 1634: Drainage area.

GAGE.--Pressure gage with mercury column read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1938. Usable capacity, 40,870 acre-ft (50.4 hm³) between elevations 5,521 ft (1,682.8 m), outlet sill, and 5,605 ft (1,708.4 m) top of spillway gates. Elevation of spillway (gate open) is 5,589.01 ft (1,703.530 m). Dead storage, 241 acre-ft (297,000 m³), below outlet sill. Figures given herein represent usable contents at 0800 hours. Water is used for irrigation in the State of Nevada and for power development.

COOPERATION.--Daily elevations furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 41,440 acre-ft (51.1 hm³) Dec. 23, 1955, elevation, 5,605.55 ft (1,708.572 m); minimum, 37 acre-ft (45,600 m³) Mar. 4-9, 1955, elevation, 5,521.65 ft (1,682.999 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 40,870 acre-ft (50.4 hm³) June 30 to July 16, elevation, 5,605.0 ft (1,708.40 m); minimum, 4,720 acre-ft (5.82 hm³) Oct. 1, elevation 5,549.2 ft (1,691.40 m).

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

5,548	4,350	5,572	14,920
5,552	5,640	5,576	17,360
5,556	7,110	5,580	20,000
5,560	8,780	5,585	23,590
5,564	10,630	5,590	27,490
5,568	12,670	5,600	36,130
		5,605	40,870

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	4720	5740	7270	11220	18790	23070	31440	34310	38370	40870	39940	40380
2	4750	5780	7310	11520	18920	23220	31520	34310	38130	40870	39900	40380
3	4780	5830	7410	11800	19050	23440	31720	34310	37900	40870	39990	40332
4	4800	5860	7470	12010	19260	23810	31940	34220	37750	40870	39990	40332
5	4810	5920	7530	12300	19390	24190	32110	34630	37610	40870	40090	40240
6	4840	5970	7610	12590	19520	24570	32240	35080	37610	40870	40040	40140
7	4860	5980	7670	12830	19730	24920	32240	35440	37660	40870	39990	40090
8	4890	6020	7740	13080	19930	25240	32200	35850	37710	40870	39990	39990
9	4920	6060	7840	13320	20280	25730	32200	35490	37800	40870	39990	39940
10	4940	6100	7920	13600	20280	25890	32200	35620	37900	40870	40040	39900
11	4970	6130	8050	13820	20420	26210	32070	35850	37940	40870	40090	39800
12	4990	6170	8090	14110	20560	26400	31890	35940	37990	40870	40140	39700
13	5020	6200	8190	14340	20760	26560	31940	35940	38080	40870	40190	39560
14	5040	6240	8300	14510	20900	26680	32020	36220	38220	40870	40140	39420
15	5070	6280	8450	14770	21050	26840	32200	36450	38370	40870	40140	39220
16	5100	6310	8560	15030	21150	26960	32370	37190	38560	40870	40140	39080
17	5120	6350	8690	15330	21260	27080	32590	38410	38750	40770	40140	38940
18	5150	6420	8890	15540	21470	27160	32720	38650	39030	40720	40140	38650
19	5160	6420	8960	15900	21610	27240	32760	38560	39180	40770	40140	38560
20	5200	6480	9040	16110	21760	27280	33160	38270	39420	40770	40190	38410
21	5210	6560	9160	16360	21860	27410	33160	37800	39560	40770	40190	38370
22	5230	6710	9320	16670	21970	27450	33340	37620	39800	40670	40190	38220
23	5260	6720	9450	16850	22120	28100	33600	37570	39990	40530	40240	38130
24	5300	6820	9630	17140	22330	28470	33780	37660	40140	40280	40280	38080
25	5330	6920	9820	17330	22480	28880	33960	37940	40190	40140	40280	37850
26	5400	7000	9960	17650	22630	29300	34090	38080	40380	40040	40280	37660
27	5500	7050	10170	17810	22740	29640	34180	38040	40530	39990	40330	37430
28	5530	7090	10390	18070	22850	30060	34310	37940	40670	39990	40330	37290
29	5600	7150	10550	18260	---	30490	34310	38180	40770	39990	40330	36960
30	5640	7190	10720	18520	---	30920	34310	38370	40870	40040	40380	36680
31	5710	---	10950	18660	---	31310	---	38460	---	40040	40330	---
MAX	5710	7190	10950	18660	22850	31310	34310	38650	40870	40870	40380	40380
MTN	4720	5740	7270	11220	18790	23070	31440	34220	37610	39990	39900	36680
†	5552.20	5556.20	5564.65	5578.00	5584.00	5594.55	5598.00	5602.50	5605.00	5604.15	5604.45	5600.60
‡	+1020	+1480	+3760	+7710	+4190	+8460	+3000	+4150	+2410	-830	+290	-3650

CAL YR 1977 MAX 36040 MIN 4440 ‡ - 13130
WTR YR 1978 MAX 40870 MIN 4720 ‡ + 31990

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

PYRAMID AND WINNEMUCCA LAKES BASIN

10344500 LITTLE TRUCKEE RIVER BELOW BOCA DAM, NEAR TRUCKEE, CA

LOCATION.--Lat 39°23'13", long 120°05'40", in NE 1/4 sec.28, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on right bank 800 ft (250 m) upstream from mouth, 1,000 ft (300 m) downstream from Boca Dam, and 6.2 mi (10.0 km) northeast of Truckee.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--April to October 1890 (monthly discharge only), January 1911 to September 1915, January 1939 to current year. Prior to October 1976 published as "at Boca." Monthly discharge only for January 1939 to September 1957, published in WSP 1734.

REVISED RECORDS.--WSP 1564: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,500 ft (1,676 m), from topographic map. Jan. 1, 1911, to Sept. 30, 1915, non-recording gage at site 650 ft (200 m) downstream at different datum. January 1939 to September 1957, records computed from daily log of rated settings of needle valve in dam, and from computed flow over spillway.

REMARKS.--Records good. Flow regulated by Boca Reservoir (station 1034490), capacity, 40,870 acre-ft (50.4 hm³), Independence Lake, capacity, 17,500 acre-ft (21.6 hm³), one transmountain diversion to Sierra Valley, and Stampede Reservoir (station 10344300), capacity, 226,500 acre-ft (279 hm³) since Aug. 1, 1969.

AVERAGE DISCHARGE.--43 years (1911-15, 1939-78), 185 ft³/s (5.239 m³/s), 134,000 acre-ft/yr (165 hm³/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft³/s (249 m³/s) Dec. 24, 1955, from records of Washoe County Water Conservation District; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,420 ft³/s (40.2 m³/s) May 15, gage height, 5.10 ft (1.554 m); minimum, 0.05 ft³/s (0.001 m³/s) Jan. 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	.14	.14	.12	.05	.09	26	149	483	153	72	60	31
2	.14	.16	.11	.06	.09	26	49	932	207	98	15	43
3	.14	.16	.11	.06	.08	26	.64	946	147	122	22	43
4	.14	.16	.11	.07	.08	26	.69	754	103	126	54	45
5	.19	.17	.11	.10	.11	27	26	573	79	138	69	72
6	.23	.16	.12	.07	.12	27	86	504	24	150	69	60
7	.20	.18	.14	.07	.14	27	101	509	2.1	164	69	47
8	.23	.18	.13	.07	.12	61	101	692	2.1	190	50	53
9	.26	.18	.13	.11	.14	156	101	1090	2.1	200	25	70
10	.23	.18	.12	.09	.13	200	143	1090	2.1	215	.10	70
11	.23	.18	.14	.07	.12	239	160	1100	2.1	229	.10	70
12	.20	.18	.13	.06	.12	244	147	1150	2.0	239	20	69
13	.23	.18	.11	.08	.11	256	147	1380	1.9	244	43	98
14	.19	.16	.13	.14	.11	296	147	1400	1.8	244	37	121
15	.19	.16	.18	.15	.10	298	148	1180	1.8	245	23	118
16	.18	.16	.11	.20	.09	299	148	1060	1.8	232	23	118
17	.18	.17	.20	.17	.09	315	187	1170	1.9	210	23	116
18	.17	.18	.11	.16	.09	338	249	1210	1.9	164	12	109
19	.20	.18	.09	.16	.10	346	296	1210	1.9	133	.10	79
20	.18	.18	.08	.15	.10	325	352	1130	1.9	109	.10	67
21	.21	.33	.08	.13	.10	237	462	867	1.9	120	.10	81
22	.19	.21	.10	.12	.10	137	683	548	1.9	147	.10	91
23	.14	.14	.13	.11	.11	104	710	383	2.0	148	.10	91
24	.16	.13	.08	.10	12	.75	766	348	2.0	135	.10	91
25	.15	.12	.07	.11	25	.68	657	310	2.2	109	.10	112
26	.16	.12	.06	.11	26	.72	316	344	2.4	88	.10	132
27	.18	.12	.08	.09	26	.75	310	348	2.5	44	13	132
28	.16	.12	.08	.09	26	.70	331	244	2.4	32	22	149
29	.15	.12	.08	.09	---	.71	367	128	2.4	43	22	171
30	.14	.12	.08	.09	---	.70	369	106	23	43	22	206
31	.14	---	.06	.10	---	102	---	107	---	64	22	---
TOTAL	5.63	4.93	3.38	3.23	117.44	4143.01	7709.33	23296	783.1	4497	716.00	2755
MEAN	.18	.16	.11	.10	4.19	134	257	751	26.1	145	23.1	91.8
MAX	.26	.33	.20	.20	.26	346	766	1400	207	245	69	206
MIN	.14	.12	.06	.05	.08	.68	.64	106	1.8	32	.10	31
AC-FT	11	9.8	6.7	6.4	233	8220	15290	46210	1550	8920	1420	5460
CAL YR 1977 TOTAL	25900.96			71.0		337		51370				
WTR YR 1978 TOTAL	44034.05			121		1400		87340				

PYRAMID AND WINNEMUCCA LAKES BASIN

237

10346000 TRUCKEE RIVER AT FARAD, CA
(National stream-quality accounting network station)

LOCATION.--Lat 39°25'41", long 120°01'59", in SE 1/4 sec. 12, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank 0.5 mi (0.8 km) upstream from Mystic Canyon, 0.7 mi (1.1 km) downstream from Farad powerplant, 2.5 mi (4.0 km) north of Floriston, 3.4 mi (5.5 km) downstream from Bronco Creek, and 3.5 mi (5.6 km) upstream from California-Nevada State line.

DRAINAGE AREA.--932 mi² (2,414 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March to October 1890 (monthly discharge only), September 1899 to current year. Monthly discharge only for January 1944 to July 1957, published in WSP 1734. Published as "near Boca" March to October 1890, "at or near Nevada-California State line" September 1899 to August 1912, and as "at Iceland" August 1912 to December 1937.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,153.21 ft (1,570.698 m) National Geodetic Vertical Datum of 1929 level (Bureau of Reclamation bench mark). See WSP 2127 for history of changes prior to Aug 26, 1957.

REMARKS.--Records good. Flow regulated by Lake Tahoe (station 10337000), Martis Creek Lake (station 10339380), Prosser Creek, Stampede and Boca Reservoirs (stations 10343300 and 10344490), Donner and Independence Lakes, and by several powerplants.

AVERAGE DISCHARGE.--79 years (1900-1978), 791 ft³/s (22.40 m³/s), 573,100 acre-ft/yr (707 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft³/s (496 m³/s) Nov. 21, 1950, gage height, 14.5 ft (4.420 m), present datum, from floodmarks, from slope-area measurement of peak flow; minimum, 28 ft³/s (0.793 m³/s) Dec. 18, 1930.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,330 ft³/s (94.3 m³/s) May 21, gage height, 6.19 ft (1.887 m); minimum, 37 ft³/s (1.05 m³/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	60	54	71	153	281	319	1030	1060	1120	646	495	488
2	57	53	70	142	272	351	764	1650	1190	672	490	497
3	56	53	63	137	280	386	629	1830	1160	646	505	493
4	54	54	58	134	303	468	625	1830	1130	600	509	487
5	52	61	61	141	313	586	635	1650	1190	610	497	495
6	49	67	63	121	353	526	745	1470	1180	640	497	507
7	49	61	61	135	373	494	721	1480	1200	656	508	503
8	50	59	54	131	362	547	656	1650	1170	608	559	489
9	49	55	54	158	386	631	656	2100	1160	604	546	498
10	49	57	59	187	377	650	674	2200	1080	615	574	539
11	48	56	56	182	368	700	720	2250	975	625	526	510
12	49	53	60	197	358	676	768	2330	1040	615	494	500
13	50	52	60	192	365	649	790	2760	1160	590	513	491
14	49	51	75	233	364	687	797	2930	1150	595	511	529
15	49	51	326	321	375	690	740	2710	1030	601	491	514
16	47	52	216	316	388	707	698	2260	894	569	490	511
17	45	52	229	334	381	739	701	2270	851	535	531	500
18	43	50	181	302	375	791	770	2310	857	522	537	514
19	48	39	105	315	368	799	798	2520	804	523	520	521
20	50	37	101	293	364	822	865	3100	747	472	513	515
21	50	75	95	274	360	803	922	3200	758	477	509	548
22	50	130	89	260	341	709	1160	2740	725	484	497	596
23	50	109	136	247	290	671	1180	1490	731	474	511	594
24	50	84	119	249	278	623	1250	1090	742	485	506	589
25	50	78	99	260	297	675	1270	1000	709	491	488	608
26	50	70	88	263	305	708	894	1090	698	494	485	600
27	57	70	101	253	307	770	894	1140	693	485	496	531
28	58	68	162	290	304	860	984	1160	693	464	502	492
29	55	65	157	297	---	874	993	1200	615	474	497	498
30	54	68	262	298	---	863	1030	1240	615	465	497	506
31	54	---	178	297	---	1090	---	1140	---	462	488	---
TOTAL	1581	1884	3509	7112	9488	20864	25359	58850	28067	17199	15782	15663
MEAN	51.0	62.8	113	229	339	673	845	1898	936	555	509	522
MAX	60	130	326	334	388	1090	1270	3200	1200	672	574	608
MIN	43	37	54	121	272	319	625	1000	615	462	485	487
AC-FT	3140	3740	6960	14110	18820	41380	50300	116700	55670	34110	31300	31070

CAL YR 1977 TOTAL 106011 MEAN 290 MAX 463 MIN 37 AC-FT 210300
WTR YR 1978 TOTAL 205358 MEAN 563 MAX 3200 MIN 37 AC-FT 407300

PYRAMID AND WINNEMUCCA LAKES BASIN

10346000 TRUCKEE RIVER AT FARAD, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1951 to current year (published as Truckee River at Floriston, sta. no. 10345900, January 1964 to September 1971).

CHEMICAL ANALYSES: April 1951 to September 1952, occasional; October 1952 to September 1958, monthly (seasonal); October 1958 to September 1961, monthly; January 1964 to February 1968, once-daily (composited); March 1968 to September 1969, once-daily (composited) and monthly; October 1969 to April 1974, monthly; June 1974 to current year, twice-monthly.

SPECIFIC CONDUCTANCES: April 1951 to September 1952, occasional; October 1952 to September 1958, monthly (seasonal); October 1958 to September 1961, monthly; January 1964 to current year, once-daily.

BIOLOGICAL DATA: January 1975 to current year, monthly.

MICROBIOLOGICAL DATA: June 1967 to June 1974, monthly; July 1974 to current year, twice-monthly (data prior to January 1975 are unpublished).

WATER TEMPERATURES: March 1960 to December 1963, monthly; January 1964 to current year, once-daily.

SEDIMENT DATA: February 1974 to October 1977, monthly.

REMARKS.--Water quality at this site is considered comparable with that of sta. no. 10345900, Truckee River at Floriston, which was operated 2.5 mi (4.0 km) upstream from present site from January 1964 to September 1971. Daily specific-conductance and temperature data are collected at Farad powerplant, 0.7 mi (1.1 km) upstream from gage.

COOPERATION.--Samples through September 1961 were collected by California Department of Water Resources. Microbiological analyses for entire period of record by Nevada Bureau of Laboratories and Research.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 190 micromhos Nov. 20, 1977; minimum, 39 micromhos Dec. 23, 1964.

PHYTOPLANKTON: Maximum, 1,700 cells/mL June 13, 1977; minimum, 270 cells/mL Dec. 13, 1976.

FECAL STREPTOCOCCI (since July 1974): Maximum, 200 colonies/100 mL (non-ideal colony count) July 6, Aug. 2, 1978; minimum, less than 1 colony/100 mL several times during period of record.

WATER TEMPERATURES: Maximum, 21.0°C Aug. 2, 6, 1971, June 27, 1977; minimum, freezing point on several days during winter months of most years.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 42 mg/L May 21, 1975; minimum, 2 mg/L Dec. 8, 1975, Jan. 7, 1976.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

SPECIFIC CONDUCTANCES: Maximum, 190 micromhos Nov. 20; minimum, 61 micromhos June 13-15.

WATER TEMPERATURES: Maximum, 16.0°C Aug. 10, 12, 29, and Sept. 1; minimum, freezing point Dec. 20, 21.

REVISIONS.--Microbiological results reported as "0 colonies/100 mL" in previous years should be corrected to "less than 1 colony/100 mL."

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)
OCT										
11...	1045	48	176	8.5	8.0	3	3.2	--	37	>160
NOV										
07...	1100	59	163	8.6	5.5	--	1.9	11.8	14	30
22...	1120	134	145	8.5	3.0	--	4.0	11.8	8	--
DEC										
06...	1100	62	156	--	3.5	--	1.0	11.2	15	>200
19...	1100	111	153	8.8	.5	--	4.2	12.6	28	>80
JAN										
03...	0945	140	153	8.2	3.5	--	1.1	11.4	56	2
17...	1410	319	153	7.7	2.5	--	7.1	11.6	15	>80
FEB										
08...	1030	347	132	--	1.5	--	4.5	11.7	15	1
MAR										
09...	1050	661	114	--	5.0	--	5.9	11.0	--	--
APR										
03...	1000	635	98	8.1	6.0	--	1.9	10.7	80	10
19...	1200	770	91	8.1	8.0	--	1.7	10.1	5	30
MAY										
02...	0900	1580	88	8.6	7.5	--	2.0	10.2	22	>80
17...	1000	2340	81	8.6	8.5	--	1.7	9.9	50	--
JUN										
06...	1100	1040	56	8.3	9.0	--	2.6	10.0	34	--
20...	0915	693	70	8.6	10.0	--	1.2	8.4	--	K300
JUL										
06...	1100	600	67	8.2	13.0	--	1.0	8.7	--	K300
24...	1240	471	85	8.2	16.5	--	.90	7.4	19	--
AUG										
02...	1420	458	95	8.2	19.0	--	3.4	8.0	11	--
16...	1345	471	96	8.0	17.0	--	1.2	7.5	29	--
SEP										
06...	0920	529	104	7.9	13.0	--	.40	8.2	21	--
21...	0930	497	107	--	9.5	--	1.5	9.3	28	--

K: NON-IDEAL COLONY COUNT.

PYRAMID AND WINNEMUCCA LAKES BASIN

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10346000 TRUCKEE RIVER AT FARAD, CA--Continued

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

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
OCT 11...	<1	<1	--	--	--	--	--	--	--	--
NOV 07...	<1	8	61	15	15	5.6	5.6	11	9.8	.5
22...	--	--	--	--	--	--	--	--	--	--
DEC 06...	<1	1	--	--	--	--	--	--	--	--
19...	2	7	--	--	--	--	--	--	--	--
JAN 03...	<1	<1	58	13	15	4.5	5.1	9.1	9.0	.5
17...	10	<1	--	--	--	--	--	--	--	--
FEB 08...	4	10	--	--	--	--	--	--	--	--
MAR 09...	--	--	--	--	--	--	--	--	--	--
APR 03...	<1	2	35	9.5	9.1	--	2.9	5.9	5.3	.4
19...	<1	3	--	--	--	--	--	--	--	--
MAY 02...	2	8	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
JUN 06...	<100	<100	36	16	11	2.6	2.1	3.7	3.1	.2
20...	<100	--	--	--	--	--	--	--	--	--
JUL 06...	<100	K200	--	--	--	--	--	--	--	--
24...	<100	<100	--	--	--	--	--	--	--	--
AUG 02...	<100	K200	--	--	--	--	--	--	--	--
16...	<100	<100	--	--	--	--	--	--	--	--
SEP 06...	<100	100	37	10	10	2.9	3.0	5.9	5.9	.4
21...	<100	<100	--	--	--	--	--	--	--	--

DATE	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SU4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 11...	--	--	--	--	--	--	--	--	--	1
NOV 07...	2.2	2.1	63	3.6	9.4	23	100	106	15.9	2
22...	--	--	--	--	--	--	--	--	--	17
DEC 06...	--	--	--	--	--	--	--	--	--	6
19...	--	--	--	--	--	--	--	--	--	13
JAN 03...	1.7	1.9	45	14	14	21	107	107	40.4	15
17...	--	--	--	--	--	--	--	--	--	14
FEB 08...	--	--	--	--	--	--	--	--	--	22
MAR 09...	--	--	--	--	--	--	--	--	--	26
APR 03...	1.2	1.3	34	3.9	6.7	18	68	68	117	5
19...	--	--	--	--	--	--	--	--	--	5
MAY 02...	--	--	--	--	--	--	--	--	--	17
17...	--	--	--	--	--	--	--	--	--	13
JUN 06...	1.5	1.1	--	3.4	2.2	8.3	--	--	86.2	55
20...	--	--	--	--	--	--	--	--	--	8
JUL 06...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	3
AUG 02...	--	--	--	--	--	--	--	--	--	20
16...	--	--	--	--	--	--	--	--	--	5
SEP 06...	1.5	1.7	46	2.9	3.7	14	68	69	97.1	3
21...	--	--	--	--	--	--	--	--	--	0

K: NON-IDEAL COLONY COUNT.

PYRAMID AND WINNEMUCCA LAKES BASIN

10346000 TRUCKEE RIVER AT FARAD, CA--Continued

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

DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT										
11...	.84	.01	.02	.05	.92	.00	--	1.2	--	--
NOV										
07...	.30	.01	.11	.05	.47	.00	.00	1.4	--	--
22...	--	--	.00	.23	.77	.02	--	--	--	--
DEC										
06...	.59	.01	.03	.28	.91	.01	--	.9	--	--
19...	.62	.01	.00	.17	.80	.03	--	1.9	--	--
JAN										
03...	.88	.00	.02	.21	1.1	.02	.01	1.2	.530	.000
17...	.58	.01	.03	.02	.64	.05	--	--	--	--
FEB										
08...	.36	.01	.02	.39	.78	.03	--	2.4	--	--
MAR										
09...	.33	.01	.01	.76	1.1	.08	--	2.6	--	--
APR										
03...	.10	.01	.01	.34	.46	.01	.01	3.2	1.21	.000
19...	.08	.01	.00	.66	.75	.00	--	2.9	--	--
MAY										
02...	.98	.01	.32	.09	1.4	.03	--	5.8	3.00	.000
17...	.24	.00	.01	.29	.54	.02	--	1.8	--	--
JUN										
06...	.03	.01	.01	.46	.51	.02	.02	2.0	.950	.000
20...	.02	.00	.03	1.2	1.2	.02	--	2.4	--	--
JUL										
06...	.08	.00	.03	.70	.81	.02	--	2.7	--	--
24...	.13	.02	.00	2.1	2.3	.01	--	1.6	--	--
AUG										
02...	.05	.00	.03	.31	.39	.03	--	3.6	--	--
16...	.05	.00	.01	.15	.21	.02	--	2.0	--	--
SEP										
06...	.05	.01	.02	.35	.43	.02	.01	2.5	1.87	.000
21...	.05	.01	.01	.32	.39	.01	--	1.8	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CUPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
NOV							
07...	1100	--	300	23	4	3	130
DEC							
06...	1100	5	100	0	0	5	140
JAN							
03...	0945	3	0	0	0	10	320
FEB							
08...	1030	2	0	0	0	7	330
MAR							
09...	1050	2	0	0	0	5	720
APR							
03...	1000	2	100	--	0	3	250
MAY							
02...	0900	1	0	--	0	8	160
JUN							
06...	1100	6	200	--	0	8	490
JUL							
06...	1100	4	200	--	10	4	180
AUG							
02...	1420	2	200	--	0	12	200
SEP							
06...	0920	3	0	--	0	4	270
21...	0930	1	0	--	10	5	180

PYRAMID AND WINNEMUCCA LAKES BASIN

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10346000 TRUCKEE RIVER AT FARAD, CA--Continued

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

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
NOV 07...	2	20	--	--	0	20
DEC 06...	6	30	.0	0	0	30
JAN 03...	5	40	.0	0	1	20
FEB 08...	4	40	.1	0	0	20
MAR 09...	6	70	.0	0	1	10
APR 03...	--	20	.0	0	0	10
MAY 02...	--	40	.0	0	0	20
JUN 06...	--	30	.1	0	0	30
JUL 06...	--	30	.0	0	1	30
AUG 02...	--	30	.0	0	0	?160
SEP 06...	--	30	.0	0	0	10
21...	--	40	.0	0	0	?90

DATE	TIME	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, 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)
NOV 07...	1100	.0	.00	.00	.0	.00	.00	.00	.00
JAN 03...	0945	.0	.00	.00	.0	.00	.00	.00	.00
APR 03...	1000	.0	.00	.00	.0	.00	.00	.00	.00
JUN 06...	1100	--	--	--	--	--	--	--	.00
SEP 06...	0920	.0	.00	.00	.0	.00	.00	.00	.00

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)
NOV 07...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JAN 03...	.00	.00	.00	.00	.00	.00	.00	.01	.00
APR 03...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUN 06...	--	--	--	.00	--	--	--	.00	.00
SEP 06...	.00	.00	.00	.00	.00	.00	.00	.00	.00

?: QUESTIONABLE ANALYTICAL RESULT NOT VERIFIED BY REDETERMINATION.

PYRAMID AND WINNEMUCCA LAKES BASIN

10346000 TRUCKEE RIVER AT FARAD, CA--Continued

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

DATE	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THIUN (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV 07...	.00	--	.00	--	0	.00	.00	.00	.00
JAN 03...	.00	--	.00	--	0	.00	.00	.00	.00
APR 03...	.00	--	.00	--	0	.00	.00	.00	.00
JUN 06...	.00	--	.00	--	--	.00	.00	.00	.00
SEP 06...	.00	.00	.00	.00	0	.00	.00	.00	.00

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 11...	1045	48	3	.39

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	177	174	173	---	151	138	93	93	---	68	98	106
2	175	177	173	---	---	125	99	93	74	66	99	106
3	173	176	---	168	---	126	101	90	72	69	---	105
4	176	176	---	173	147	112	103	91	71	74	99	106
5	175	173	179	---	150	126	107	90	64	73	102	100
6	173	168	180	180	136	128	100	90	63	71	103	103
7	177	170	182	---	135	126	100	91	---	69	103	105
8	178	170	182	---	135	118	104	---	64	74	101	105
9	182	171	---	181	127	116	103	---	---	75	101	105
10	176	169	---	182	---	116	103	81	64	74	105	103
11	176	172	---	182	138	113	---	81	68	76	105	103
12	176	171	179	---	149	117	102	---	70	76	106	103
13	176	146	178	173	149	117	99	80	61	80	105	100
14	176	171	179	162	151	116	98	---	61	79	105	101
15	176	168	106	157	146	---	97	---	61	79	106	101
16	176	168	113	108	143	---	100	79	---	81	108	102
17	180	174	---	152	145	113	111	85	74	86	106	103
18	179	185	---	150	145	112	100	84	73	---	106	103
19	178	187	167	159	146	109	100	---	79	83	107	96
20	179	190	184	170	145	---	99	74	---	85	107	---
21	177	174	185	170	143	---	101	72	---	88	107	---
22	178	173	172	169	142	88	101	69	---	88	108	91
23	178	174	172	170	139	100	98	---	79	89	107	91
24	179	---	---	175	133	106	96	---	80	88	107	91
25	178	---	---	173	---	103	96	---	---	88	108	91
26	177	---	---	147	132	101	---	---	---	90	108	86
27	175	---	189	---	131	99	---	80	84	90	108	84
28	176	177	161	156	132	94	93	74	84	95	108	88
29	176	176	163	153	---	92	94	67	---	94	108	86
30	176	172	156	153	---	92	94	63	82	94	109	89
31	---	---	---	154	---	92	---	67	---	95	107	---
MEAN	177	173	169	163	141	111	100	81	71	81	105	98
MAX	182	190	189	182	151	138	111	93	84	95	109	106
MIN	173	146	106	108	127	88	93	63	61	66	98	84
WTR YR 1978	MEAN	123	MAX	190	MIN	61						

PYRAMID AND WINNEMUCCA LAKES BASIN

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10346000 TRUCKEE RIVER AT FARAD, CA--Continued

TEMPERATURE (DFG. 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	9.0	7.0	4.0	---	1.5	6.0	6.0	10.0	---	9.5	13.0	16.0
2	8.0	7.0	4.0	---	---	5.0	5.0	9.5	7.5	9.5	13.0	13.0
3	8.0	7.5	---	---	---	4.0	5.5	11.5	8.0	9.5	---	15.0
4	9.0	8.0	---	---	7.0	6.0	5.5	6.5	7.5	9.0	15.5	13.0
5	10.0	7.0	5.0	---	4.5	4.0	4.5	7.0	6.5	9.5	14.5	13.0
6	12.0	5.5	3.5	---	5.0	4.5	---	7.0	8.0	9.5	15.0	11.5
7	7.0	5.0	3.0	---	3.0	4.0	6.0	7.5	---	9.5	15.0	10.5
8	8.0	4.0	1.0	---	1.0	8.0	5.0	---	7.5	12.0	15.0	9.5
9	9.0	4.5	---	3.0	1.0	5.0	10.0	---	---	11.0	15.5	11.0
10	8.0	3.0	---	3.0	---	5.5	7.5	8.0	10.0	13.0	16.0	10.0
11	7.5	6.0	---	2.5	---	5.0	---	8.0	8.0	9.0	15.0	9.5
12	7.0	6.5	3.0	---	4.0	4.0	7.5	---	9.5	10.0	16.0	9.5
13	9.0	7.0	5.0	5.0	6.0	3.0	9.0	9.5	8.5	10.0	15.0	9.0
14	8.0	5.0	6.0	6.0	3.0	5.0	9.0	---	11.0	14.0	12.5	11.0
15	8.0	5.0	2.0	3.0	5.0	---	7.5	---	7.0	13.5	12.0	10.0
16	8.5	4.5	2.0	4.0	3.5	---	5.0	7.0	---	10.0	13.0	11.0
17	8.0	5.0	---	5.0	2.0	4.5	6.0	8.0	9.0	---	15.0	11.0
18	8.0	1.5	---	3.0	6.5	5.0	9.5	9.0	10.0	---	11.0	8.0
19	8.0	1.5	1.0	4.0	7.0	6.0	10.0	---	10.5	10.0	15.0	7.5
20	7.5	1.0	.0	4.5	7.0	---	7.0	8.0	---	10.0	14.0	---
21	7.0	1.5	.0	4.5	4.5	---	8.0	9.0	---	15.0	12.0	---
22	8.0	1.5	1.5	3.5	8.0	6.5	6.0	9.0	---	12.0	11.0	9.0
23	8.5	2.0	2.5	3.0	3.5	7.0	7.0	---	10.0	11.5	13.0	10.0
24	9.0	---	---	3.0	7.0	5.5	7.5	---	10.0	15.5	11.0	11.0
25	8.0	---	---	1.0	---	8.0	9.0	---	---	12.0	11.0	11.0
26	9.0	---	---	4.0	3.0	8.0	---	---	---	13.5	14.0	11.0
27	10.5	---	3.5	---	4.0	7.0	---	8.5	9.0	15.0	15.0	11.0
28	7.0	3.0	4.0	3.0	7.0	6.0	7.5	8.5	9.0	13.5	15.0	10.5
29	7.0	5.0	5.0	2.0	---	7.0	6.5	8.0	---	13.5	16.0	13.0
30	7.0	4.0	4.5	1.0	---	7.0	7.0	7.0	9.5	13.0	13.0	10.5
31	---	---	---	---	---	7.0	---	9.0	---	13.0	15.0	---
MEAN	8.5	4.5	3.0	3.5	4.5	5.5	7.0	8.5	9.0	11.5	14.0	11.0
MAX	12.0	8.0	6.0	6.0	8.0	8.0	10.0	11.5	11.0	15.5	16.0	16.0
MIN	7.0	1.0	.0	1.0	1.0	3.0	4.5	6.5	6.5	9.0	11.0	7.5
WTR YR 1978	MEAN	8.0	MAX	16.0	MIN	.0						

PYRAMID AND WINNEMUCCA LAKES BASIN

10347600 HUNTER CREEK NEAR RENO, NV

LOCATION.—Lat 39°29'25", long 119°53'55", in SW $\frac{1}{4}$ sec.19, T.19 N., R.19 E., Washoe County, Hydrologic Unit 16050102, on right bank 1.0 mi (1.6 km) upstream from mouth, 1.2 mi (1.9 km) upstream from Hunter Creek Reservoir, and 5 mi (8.0 km) southwest of Reno.

DRAINAGE AREA.—11.5 m² (29.8 km²).

PERIOD OF RECORD.—October 1961 to September 1971, October 1977 to September 1978.

GAGE.—Water-stage recorder. Altitude of gage is 5,070 ft (1,545 m), from topographic map.

REMARKS.—Records fair except for periods of no gage-height record, Dec. 31 to Jan. 26 and July 8 to Sept. 30, which are poor.

AVERAGE DISCHARGE.—11 years (1962-1971, 1978) 10.5 ft³/s (0.297 m³/s), 7610 acre-ft/yr (9.38 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 986 ft³/s (27.9 m³/s) Jan. 31, 1963, gage height, 6.93 ft (2.112 m), from floodmarks, from rating curve extended above 54 ft³/s (1.53 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.4 ft³/s (0.040 m³/s) Dec. 20, 21, 1962.

EXTREMES FOR CURRENT YEAR.—Peak discharge above base of 20 ft³/s (0.57 m³/s) and maximum (*).

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 22	2030	*28 0.79	1.73 0.527
May 29	2100	28 0.79	1.72 0.524

Minimum daily discharge, 2.5 ft³/s (0.071 m³/s) Nov. 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	3.2	3.5	3.8	3.8	3.8	4.4	8.6	7.1	22	13	8.3	5.8
2	3.2	3.8	3.8	3.8	3.8	5.0	7.1	7.1	22	13	8.2	5.8
3	3.2	3.8	3.8	3.7	3.8	5.0	6.7	8.6	22	12	8.0	5.7
4	3.2	3.8	3.8	3.7	3.8	6.0	6.4	8.6	22	12	8.0	5.7
5	3.2	3.8	3.8	3.7	4.1	6.4	5.3	8.6	22	12	7.9	5.6
6	3.2	3.5	3.8	3.7	4.4	5.3	5.0	7.8	23	12	7.7	5.6
7	3.2	3.5	3.5	3.7	4.7	6.0	4.7	8.2	24	13	7.6	5.5
8	3.2	3.5	3.5	3.7	4.1	6.0	4.4	9.1	24	12	7.5	5.5
9	3.2	3.5	3.8	3.6	4.4	5.7	4.4	10	24	12	7.4	5.4
10	3.5	3.2	3.8	3.6	4.4	5.7	4.7	12	24	12	7.2	5.4
11	3.5	3.2	3.8	3.6	4.1	5.3	6.4	13	22	12	7.1	5.4
12	3.5	3.2	3.8	3.6	4.1	5.3	7.1	15	22	11	7.0	5.3
13	3.8	3.2	4.1	3.8	4.1	5.0	8.6	17	22	11	6.9	5.3
14	3.8	3.2	5.7	4.1	4.2	4.7	7.1	20	22	11	6.8	5.3
15	3.8	3.2	3.8	4.7	4.3	5.0	7.1	19	21	11	6.8	5.3
16	3.8	3.2	6.0	6.0	4.4	5.0	6.4	17	21	11	6.7	5.2
17	3.8	3.2	4.4	5.5	4.7	5.3	6.4	17	21	11	6.6	5.2
18	3.8	2.5	3.8	5.0	4.4	5.7	6.4	17	21	11	6.5	5.2
19	3.8	5.3	3.5	4.7	4.4	6.4	6.0	18	19	10	6.4	5.2
20	3.8	3.5	3.8	4.5	4.4	6.7	6.4	21	19	10	6.3	5.2
21	3.8	5.7	3.8	4.2	4.4	7.9	6.0	23	18	10	6.2	5.2
22	3.8	4.4	4.7	4.1	4.4	7.5	6.0	24	17	10	6.2	5.2
23	3.8	4.1	4.1	4.1	4.4	7.1	5.3	25	17	10	6.2	5.2
24	3.8	4.1	3.8	4.0	4.4	7.1	5.3	23	16	9.8	6.1	5.2
25	3.8	3.8	3.8	4.0	4.4	6.7	6.4	21	16	9.6	6.1	5.2
26	3.5	3.8	4.4	3.9	4.4	6.7	6.4	19	15	9.4	6.0	5.2
27	3.8	3.8	4.4	3.8	4.4	7.1	6.7	20	15	9.2	6.0	5.2
28	3.8	3.8	4.1	3.8	4.4	7.1	7.1	21	15	9.0	5.9	5.2
29	3.5	3.8	3.8	3.8	---	7.9	7.1	24	14	8.8	5.9	5.2
30	3.5	3.8	4.1	3.8	---	8.6	7.5	22	14	8.6	5.8	5.2
31	3.5	---	3.9	3.8	---	9.9	---	22	---	8.4	5.8	---
TOTAL	110.3	110.7	125.0	125.8	119.6	193.5	189.0	505.1	596	334.8	211.1	160.6
MEAN	3.56	3.69	4.03	4.06	4.27	6.24	6.30	16.3	19.9	10.8	6.81	5.35
MAX	3.8	5.7	6.0	6.0	4.7	9.9	8.6	25	24	13	8.3	5.8
MIN	3.2	2.5	3.5	3.6	3.8	4.4	4.4	7.1	14	8.4	5.8	5.2
AC-FT	219	220	248	250	237	384	375	1000	1180	664	419	319

WTR YR 1978 TOTAL 2781.5 MEAN 7.62 MAX 25 MIN 2.5 AC-FT 5520

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LOCATION.—Lat 39°31'53", long 119°47'07", in NW¼ sec.7, T.19 N., R.20 E., Washoe County, Hydrologic Unit 16050102, on left bank 400 ft (120 m) downstream from Kietzke Lane bridge, 0.5 mi (0.8 km) downstream from Scott Island, 1.5 mi (2.4 km) east of Reno Post Office, and 5 mi (8 km) upstream from Steamboat Creek.

PERIOD OF RECORD.--July 1906 to September 1921, June 1925 to September 1926, January 1930 to December 1935, January to December 1943, January 1946 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734.

GAGE.--Water-stage recorder. Datum of gage is 4,431.97 ft (1,350.864 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). July 1906, to September 1946, nonrecording gage at site 1 mi (2 km) upstream at different datum.

REMARKS.--Records excellent. Flow regulated by Lake Tahoe, Martis Creek Lake, Prosser Creek, Stampede and Boca Reservoirs, Donner and Independence Lakes, and by several powerplants. Many diversions above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,800 ft³/s (589 m³/s) Dec. 23, 1955; maximum gage height, 13.83 ft (4.215 m) Nov. 21, 1950; no flow Sept. 12, 14-24, 26-30, 1926.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,050 ft³/s (86.4 m³/s) May 22, gage height, 6.04 ft (1.841 m); minimum, 15 ft³/s (0.425 m³/s) Oct. 18, 19.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	44	51	164	289	343	1250	738	797	325	187	196
2	72	41	52	148	266	385	908	1300	906	371	191	199
3	56	44	56	134	261	443	723	1490	866	370	200	200
4	63	37	47	130	298	542	693	1560	801	332	211	208
5	61	47	48	234	311	767	653	1380	871	325	268	212
6	63	49	45	198	355	657	781	1180	857	370	212	285
7	77	45	48	147	475	600	777	1150	869	435	209	285
8	50	45	48	139	432	627	709	1230	873	351	249	274
9	34	47	39	176	519	731	682	1660	847	327	252	270
10	36	45	37	217	449	738	689	1810	829	324	280	301
11	41	49	47	192	407	800	747	1880	691	327	259	298
12	38	49	45	198	385	761	787	1870	686	318	231	261
13	32	36	46	203	383	713	802	2310	832	282	232	256
14	24	39	49	233	387	745	808	2490	840	265	230	320
15	27	39	250	354	392	754	745	2560	772	281	231	304
16	26	47	274	494	404	774	706	2000	637	285	201	296
17	24	47	342	551	403	818	659	1970	563	257	215	282
18	25	45	256	363	401	868	704	2000	561	217	254	287
19	27	37	137	342	397	896	683	2070	541	227	244	329
20	33	38	102	315	394	941	781	2710	447	203	228	284
21	34	50	90	287	394	943	762	2860	468	170	224	292
22	34	161	103	262	386	874	1010	2660	446	189	228	353
23	35	122	241	237	347	789	1010	1380	435	184	232	354
24	29	83	157	238	298	734	1060	957	464	170	228	349
25	26	74	115	251	320	773	1150	777	434	178	213	346
26	34	63	100	272	330	804	758	817	392	186	204	376
27	48	60	113	242	337	847	666	866	420	193	197	339
28	52	58	154	279	328	950	728	856	438	167	206	268
29	54	51	154	290	---	997	749	874	354	198	208	269
30	52	52	258	295	---	971	798	940	330	180	202	275
31	48	---	207	293	---	1230	---	869	---	168	199	---
TOTAL	1325	1644	3711	7878	10348	23815	23978	49214	19267	8175	6925	8568
MEAN	42.7	54.8	120	254	370	768	799	1588	642	264	223	286
MAX	77	161	342	551	519	1230	1250	2860	906	435	280	376
MIN	24	36	37	130	261	343	653	738	330	167	187	196
AC-FT	2630	3260	7360	15630	20530	47240	47560	97620	38220	16220	13740	16990
CAL YR 1977	TOTAL	68910	MEAN	189	MAX	469	MIN	24	AC-FT	136700		
WTR YR 1978	TOTAL	164848	MEAN	452	MAX	2860	MIN	24	AC-FT	327000		

PYRAMID AND WINNEMUCCA LAKES BASIN

10348200 TRUCKEE RIVER NEAR SPARKS, NV

LOCATION.--Lat 39°31'11", long 119°44'27", in SW¼NW¼NE¼ sec.16, T.19 N., R.20 E., Washoe County, Hydrologic Unit 16050102, on left bank 400 ft (122 m) upstream from McCarren Boulevard bridge, 1 mi (1.6 km) south of Southern Pacific Railroad in Sparks, and 2.5 mi (4 km) upstream from Steamboat Creek.

DRAINAGE AREA.--1,070 mi² (2,770 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,390 ft (1,340 m), from topographic map.

REMARKS.--Records good. Flow regulated by Lake Tahoe, Martis Creek Lake, Prosser Creek, Stampede and Boca Reservoirs, Donner and Independence Lakes, and by several powerplants. Many diversions above stations.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,800 ft³/s (79.3 m³/s) May 22, 1978, gage height, 7.55 ft (2.301 m); minimum, 2.0 ft³/s (0.057 m³/s), Nov. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,800 ft³/s (79.3 m³/s) May 22, gage height, 7.55 ft (2.301 m); minimum, 2.0 ft³/s (0.057 m³/s), Nov. 17.

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	24	33	39	153	264	332	1210	750	796	264	115	151
2	24	25	35	137	250	362	887	1310	838	315	118	160
3	16	27	35	121	245	416	705	1490	796	295	128	151
4	21	35	30	117	283	512	673	1560	737	250	138	157
5	20	30	29	205	291	737	631	1380	796	246	205	180
6	22	33	26	199	332	637	756	1200	783	283	154	253
7	32	32	27	134	448	572	756	1180	803	353	141	243
8	22	30	29	127	409	601	686	1250	796	291	174	218
9	15	32	22	162	491	698	661	1700	776	261	180	215
10	16	36	21	203	432	705	667	1830	680	253	215	246
11	17	39	30	179	383	763	730	1890	620	257	199	253
12	15	42	32	182	366	730	776	1900	660	250	171	209
13	9.7	24	29	191	366	679	783	2330	780	222	174	202
14	9.8	19	35	200	371	704	790	2490	750	209	171	268
15	12	17	208	336	366	717	724	2430	650	215	171	246
16	8.5	26	274	469	382	737	686	1870	540	219	143	232
17	7.7	18	326	537	384	796	631	1850	500	193	157	229
18	9.3	18	252	349	384	844	673	1870	500	159	193	232
19	12	18	129	323	379	873	667	1940	440	166	183	280
20	9.2	13	94	303	379	923	783	2510	390	146	168	239
21	23	18	78	274	379	923	763	2670	379	118	166	246
22	18	151	91	249	362	859	1010	2480	362	135	168	315
23	21	113	234	225	332	769	1010	1290	353	130	174	315
24	19	73	152	226	287	717	1060	887	379	118	171	307
25	12	62	109	236	311	750	1150	698	357	123	154	303
26	17	55	90	254	319	783	750	750	327	130	154	327
27	37	48	106	232	327	824	673	803	357	125	154	287
28	39	49	142	261	319	938	750	790	379	93	163	212
29	42	41	142	268	---	976	769	810	299	125	157	212
30	39	42	238	268	---	960	824	859	272	108	166	222
31	38	---	198	272	---	1180	---	796	---	102	157	---
TOTAL	627.2	1199	3282	7392	9845	23017	23634	47563	17095	6154	5082	7110
MEAN	20.2	40.0	106	238	352	742	788	1534	570	199	164	237
MAX	42	151	326	537	491	1180	1210	2670	838	353	215	327
MIN	7.7	13	21	117	245	332	631	698	272	93	115	151
AC-FT	1240	2380	6510	14660	19530	45650	46880	94340	33910	12210	10080	14100
WTR YR 1978	TOTAL	152000.2	MEAN	416	MAX	2670	MIN	7.7	AC-FT	301500		

PYRAMID AND WINNEMUCCA LAKES BASIN

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10348460 FRANKTOWN CREEK NEAR CARSON CITY, NV

LOCATION.--Lat 39°12'12", long 119°52'17", in NW¼SW¼SE¼ sec.32, T.16 N., R.19 E., Washoe County, Hydrologic Unit 16050102, in Toiyabe National Forest, on right bank 300 ft (100 m) upstream from Red House diversion dam, 0.2 mi (0.3 km) upstream from Red House, and 6.1 mi (9.8 km) northwest of Carson City.

DRAINAGE AREA.--3.24 mi² (8.39 km²).

PERIOD OF RECORD.--June 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,380 ft (2,250 m), from topographic map.

REMARKS.--Records fair except those for winter periods, which are poor. Flow regulated by Hobart Reservoir, and by pumping from Marlette Lake during dry years. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50 ft³/s (1.42 m³/s) May 31, 1975, gage height 2.14 ft (0.652 m); maximum gage height, 3.68 ft (1.122 m), backwater from ice or snowblock; minimum discharge, 0.48 ft³/s (0.014 m³/s) Sept. 9-11, 13-17, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15 ft³/s (0.42 m³/s) May 14, gage height, 1.75 ft (0.533 m); maximum gage height 3.36 ft (1.024 m) Dec. 20 (backwater from ice); minimum discharge 0.79 ft³/s (0.022 m³/s) Oct. 7-12.

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	1.4	1.1	1.2	1.2	1.1	.95	7.9	4.2	7.7	1.7	1.1	3.5
2	1.4	1.1	1.2	1.2	1.1	1.1	6.9	6.0	7.8	2.0	1.1	3.4
3	1.2	1.1	1.1	1.1	1.1	1.1	5.2	7.3	7.6	1.9	1.1	3.4
4	1.1	1.1	1.2	1.1	1.1	1.3	3.6	7.3	7.7	1.8	1.1	3.4
5	1.1	1.1	1.3	1.1	1.1	1.4	3.2	6.0	8.0	2.4	1.1	2.1
6	1.1	1.1	1.2	1.1	1.1	1.1	3.1	5.7	8.0	2.2	1.1	1.3
7	.98	1.1	1.2	1.1	1.1	1.1	2.9	6.3	8.1	2.4	1.1	1.4
8	.79	1.1	1.1	1.1	1.1	1.1	2.6	7.6	7.8	1.7	1.1	1.4
9	.79	1.1	1.1	1.1	1.1	1.2	2.6	9.4	7.5	1.4	1.1	1.4
10	.79	1.1	1.1	1.1	1.1	1.2	3.1	10	7.0	2.2	1.1	1.4
11	.79	1.1	1.2	1.1	1.1	1.3	4.9	9.8	6.5	2.2	1.1	1.2
12	.85	1.1	1.2	1.1	1.1	1.2	6.6	9.4	6.2	1.7	1.1	1.1
13	.91	1.1	1.2	1.1	1.1	1.1	7.3	9.8	6.1	1.5	1.1	1.1
14	.91	1.1	1.6	1.1	1.1	1.1	5.7	10	5.7	1.6	1.1	1.2
15	.98	1.1	3.0	1.1	1.0	1.1	4.7	9.8	5.2	1.7	1.2	1.1
16	.98	1.1	2.1	1.1	.98	1.2	3.6	7.3	4.4	1.5	1.2	1.1
17	.91	1.1	1.8	1.1	1.0	1.4	2.9	6.9	4.2	1.5	1.2	1.1
18	.91	1.1	1.6	1.1	.94	1.3	2.7	8.0	4.0	1.5	1.2	1.1
19	.91	1.1	1.5	1.1	.97	1.5	3.8	8.0	3.8	1.5	1.2	1.1
20	.91	1.1	1.4	1.1	1.1	2.2	4.7	8.8	3.5	1.5	1.2	1.1
21	.91	1.1	1.3	1.1	1.0	3.0	4.2	10	3.2	1.3	1.2	1.1
22	.91	1.3	1.2	1.1	1.0	3.1	3.4	10	3.0	1.1	1.2	1.1
23	.91	1.7	1.2	1.1	1.1	2.8	3.2	8.8	2.7	1.1	1.2	1.1
24	.91	1.4	1.1	1.1	1.0	3.8	3.2	6.5	2.6	1.1	1.1	1.1
25	.91	1.4	1.1	1.1	.98	3.4	3.8	6.2	2.6	1.1	1.1	.98
26	.91	1.4	1.1	1.1	.98	3.1	3.6	6.5	2.0	1.1	1.1	.98
27	1.0	1.5	1.2	1.1	.98	3.7	5.2	7.5	1.7	1.1	.99	1.4
28	1.0	1.4	1.2	1.1	.96	4.5	6.0	8.4	1.9	1.1	1.0	1.9
29	1.1	1.3	1.3	1.1	---	5.2	5.7	9.0	1.4	1.1	2.5	1.7
30	1.1	1.2	1.3	1.0	---	6.3	4.9	9.2	1.4	1.1	3.6	1.6
31	1.1	---	1.3	1.1	---	9.8	---	8.5	---	1.1	3.6	---
TOTAL	30.47	35.7	41.6	34.2	29.39	73.65	131.2	248.2	149.3	48.2	41.19	46.86
MEAN	.98	1.19	1.34	1.10	1.05	2.38	4.37	8.01	4.98	1.55	1.33	1.56
MAX	1.4	1.7	3.0	1.2	1.1	9.8	7.9	10	8.1	2.4	3.6	3.5
MIN	.79	1.1	1.1	1.0	.94	.95	2.6	4.2	1.4	1.1	.99	.98
AC-FT	60	71	83	68	58	146	260	492	296	96	82	93
CAL YR 1977	TOTAL 552.93		MEAN 1.51	MAX 5.6	MIN .62	AC-FT 1100						
WTR YR 1978	TOTAL 909.96		MEAN 2.49	MAX 10	MIN .79	AC-FT 1800						

PYRAMID AND WINNEMUCCA LAKES BASIN

10348700 WASHOE LAKE NEAR CARSON CITY, NV

LOCATION.--Lat 39°16'30", long 119°47'35", in S½SE¼ sec.1, T.16 N., R.19 E., Washoe County, Hydrologic Unit 16050102, on Washoe County boatdock on northeast shore about 6.8 mi (10.9 km) north of Carson City.

DRAINAGE AREA.--83.8 mi² (217 km²), including Little Washoe Lake.

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

GAGE.--Reference mark. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is formed by a natural basin whose natural rim falls below the control works on Little Washoe Lake allowing storage regulation. Total capacity 49,200 acre-ft (60.7 hm³) between elevations 5,017.5 ft (1,529.33 m) and 5,031.0 ft (1,533.45 m). Figures given herein represent total contents including Scripps Wildlife Management Area Marsh. Two transarea diversions enter the lakes, one from Galena Creek and one from Third Creek into Ophir Creek. Franktown Creek is diverted into the Virginia City-Carson City pipeline and during dry years additional water is pumped from Marlette Lake into Hobart Reservoir and released into Franktown Creek for diversion into the Virginia City-Carson City pipeline at Red House.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 5,030.6 ft (1,533.33 m) Feb. 12, 24, 1970; minimum observed, 5,021.8 ft (1,530.64 m) Dec. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 5,025.3 ft (1,531.71 m) Mar. 31; minimum observed, 5,021.8 ft (1,530.64 m) Dec. 5.

MONTHEND ELEVATIONS AND TOTAL CONTENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-ft)	Change in contents (acre-ft)
Sept. 30	5,022.1	7,300	--
Oct. 31	5,022.0	7,000	-300
Nov. 30	5,021.8	6,400	-600
Dec. 31	5,022.6	8,800	+2,400
CAL YR 1977	--	--	-6,500
Jan. 31	5,023.5	11,590	+2,790
Feb. 28	5,024.4	14,920	+3,330
Mar. 31	5,025.3	18,540	+3,620
Apr. 30	5,024.6	15,700	-2,840
May 31	5,024.5	15,300	-400
June 30	5,024.3	14,540	-760
July 31	5,023.5	11,590	-2,950
Aug. 31	5,022.4	8,200	-3,390
Sept. 30	5,022.6	8,800	+600
WTR YR 1977-78	--	--	+1,500

NOTE.--Monthend elevations are interpolated from readings made during the month.

PYRAMID AND WINNEMUCCA LAKES BASIN

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10348800 LITTLE WASHOE LAKE NEAR STEAMBOAT, NV

LOCATION.--Lat 39°19'45", long 119°48'00", in NE¼NW¼ sec. 24, T.17 N., R.19 E., Washoe County, Hydrologic Unit 16050102, at outlet (head of Steamboat Creek), and 5.5 mi (8.8 km) southwest of Steamboat.

DRAINAGE AREA.--83.8 mi² (217 km²).

PERIOD OF RECORD.--April 1963 to September 1970 (monthly observations only), October 1970 to current year.

GAGE.--Water-stage recorder. Prior to Oct. 1, 1970, nonrecording gage at same site and datum. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is formed by a natural basin supplemented by a control works downstream from the natural rim which provides storage regulation for both Little Washoe Lake and Washoe Lake. See additional remarks under "Washoe Lake." Strong steady winds often cause pileup on the side of the lake where the recorder is located. Observations during periods of no record are instantaneous gage heights, rather than 2400 hrs. Most periods of no record either prior or after record of low gage heights are a result of the lake being dry.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 5,030.6 ft (1,533.33 m) Feb. 12, 24, 1970; minimum, that of Sept. 13 to Dec. 3, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 5,027.0 ft (1,532.23 m) Mar. 23 (pileup from wind); no contents, Oct. 1 to Dec. 3.

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

5,021.1	0	5,026	300
5,022	10	5,027	400
5,023	50	5,028	500
5,024	125	5,029	650
5,025	200	5,030	750

GAGE HEIGHT, IN 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			---	4.58	6.51	6.64	---	6.55	5.98	5.83	3.77	2.81
2			---	4.66	6.53	6.65	---	6.56	5.98	5.80	3.70	2.79
3			---	4.71	6.52	6.65	---	6.57	5.95	5.77	3.64	2.75
4			---	4.83	6.53	6.77	---	6.53	5.93	5.76	3.59	2.74
5			1.16	4.93	6.59	6.78	---	6.52	5.92	5.75	3.57	2.71
6			---	5.00	6.62	6.75	---	6.49	5.90	5.72	3.52	2.69
7			---	5.08	6.71	6.77	---	6.48	5.88	5.71	3.48	---
8			---	5.16	6.76	6.75	---	6.47	5.87	5.70	3.44	---
9			---	5.31	6.74	6.74	---	6.48	5.83	5.66	3.40	---
10			---	5.38	6.70	6.75	---	6.48	5.79	5.64	3.36	---
11			---	5.46	6.67	6.71	---	6.42	5.78	5.60	3.32	---
12			---	5.50	6.64	6.68	---	6.38	5.76	5.57	3.28	---
13			---	5.59	6.63	6.67	---	6.37	5.73	5.55	3.24	---
14			---	5.68	6.62	6.67	---	6.43	5.71	5.53	3.22	---
15			---	5.84	6.58	6.66	---	6.29	5.74	5.49	3.20	---
16			---	5.97	6.58	6.66	---	6.27	5.81	5.47	3.17	---
17			---	6.05	6.57	6.68	---	6.24	5.90	5.45	3.13	---
18			---	6.11	6.57	6.69	---	6.23	5.95	5.42	3.10	---
19			3.25	6.17	6.57	6.70	---	6.20	6.01	5.39	3.09	---
20			3.32	6.22	6.57	6.73	6.66	6.18	6.04	5.36	3.07	---
21			3.40	6.30	6.57	6.76	6.64	6.17	6.06	5.34	3.03	2.52
22			3.53	6.28	6.57	6.78	6.60	6.14	6.05	5.32	2.99	---
23			3.71	6.32	6.62	6.86	6.59	6.13	6.02	5.28	3.00	---
24			3.82	6.33	6.63	6.81	6.59	6.13	5.96	5.14	2.95	---
25			3.90	6.36	6.63	6.81	6.59	6.11	5.95	4.90	2.95	---
26			4.02	6.38	6.63	6.82	6.58	6.10	5.93	4.64	2.94	---
27			4.12	6.40	6.63	---	6.57	6.10	5.93	4.38	2.92	---
28			4.24	6.44	6.62	6.82	6.56	6.08	5.90	4.23	2.90	---
29			4.43	6.46	---	---	6.56	6.05	5.87	4.09	2.88	---
30			4.45	6.47	---	---	6.55	6.03	5.80	3.96	2.86	---
31			4.51	6.48	---	---	---	6.01	---	3.86	2.84	---
MAX	---	---	---	6.48	6.76	---	---	6.57	6.06	5.83	3.77	---
MIN	---	---	---	4.58	6.51	---	---	6.01	5.71	3.86	2.84	---

CAL YR 1977

WTR YR 1978

MAX 5026.82

MAX 5026.86

MIN No contents

MIN No contents

NOTE.--Add 5020 ft to obtain elevation in feet NGVD at 2400 hours.

PYRAMID AND WINNEMUCCA LAKES BASIN

10348900 GALENA CREEK NEAR STEAMBOAT, NV

LOCATION.—Lat 39°21'45", long 119°49'30", in SW¼SW¼ sec.2, T.17 N., R.19 E., Washoe County, Hydrologic Unit 16050102, on right bank 1 mi (2 km) upstream from Jones Creek, 3.5 mi (5.6 km) upstream from mouth, 4.5 mi (7.2 km) west-southwest of Steamboat, and 12 mi (19 km) south of Reno.

DRAINAGE AREA.—8.5 mi² (22.0 km²), approximately.

PERIOD OF RECORD.—October 1961 to current year.

GAGE.—Water-stage recorder. Datum of gage is 5,592.0 ft (1,704.44 m) National Geodetic Vertical Datum of 1929, supplementary adjustment of 1956. Prior to Oct. 8, 1965, at same site at datum 3.00 ft (0.914 m) higher.

REMARKS.—Records poor. Two small diversions above station, one for irrigation and one diverts to Little Washoe Lake during winter months. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.—17 years, 8.68 ft³/s (0.246 m³/s), 6,290 acre-ft/yr (7.76 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,670 ft³/s (104 m³/s) Aug. 15, 1965, gage height not determined, from slope-area measurement of peak flow; no flow for parts of many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges above base of 20 ft³/s (0.57 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
May 14	2100	40	1.13	2.79	0.850
May 21	1900	29	0.82	2.70	0.823
June 4	1700	*56	1.59	2.87	0.875

Minimum daily, 0.05 ft³/s (0.001 m³/s) Jan. 5, 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	3.9	3.6	1.3	.32	.68	.93	2.7	3.1	34	16	9.0	6.8
2	4.5	3.6	1.2	.44	.68	.93	3.1	3.1	32	15	9.0	6.8
3	4.2	3.6	1.2	.50	.68	.93	3.1	4.3	33	15	9.0	6.5
4	4.2	3.6	1.2	.50	.68	1.5	2.9	6.5	35	15	9.0	6.5
5	3.9	3.3	1.2	.05	.80	1.7	2.9	8.1	29	14	8.5	7.2
6	3.9	3.3	1.0	.05	.68	1.4	2.7	9.0	16	14	8.1	7.6
7	3.9	4.5	.86	.20	.44	1.4	2.7	10	25	15	9.0	7.2
8	3.9	4.5	.90	.68	.56	1.8	2.3	12	29	14	8.1	7.2
9	3.9	3.9	.90	.50	1.3	1.7	2.3	15	28	14	7.6	6.8
10	3.9	2.6	.93	.56	.86	1.7	2.3	16	24	14	7.2	7.6
11	3.9	1.0	1.0	.56	.74	1.7	2.5	15	27	14	7.2	7.6
12	3.9	.93	1.0	.56	.80	1.7	2.9	16	27	14	7.2	7.2
13	3.9	.93	.86	.50	.80	1.5	3.1	19	38	14	7.2	6.1
14	3.9	.93	.86	.60	.70	1.7	3.1	23	34	14	6.6	7.2
15	3.9	.74	.86	.64	.62	1.5	3.1	17	24	14	6.6	7.2
16	3.9	.74	.86	.68	.65	1.5	2.9	11	21	14	6.1	7.2
17	3.9	.56	.80	.68	.68	1.7	2.7	11	20	14	6.5	6.8
18	3.9	.56	.77	.80	.68	1.7	2.7	11	20	14	6.8	6.8
19	3.9	.32	.74	.80	.74	1.7	2.7	11	20	14	6.5	7.2
20	3.9	2.9	.70	.80	.80	1.8	2.3	13	19	14	6.5	7.6
21	3.9	13	.68	.80	.80	2.0	2.5	19	19	15	6.5	7.6
22	4.2	2.7	.68	.80	.89	1.8	2.5	27	19	16	6.5	7.6
23	4.2	2.7	.62	.80	.86	2.0	2.5	26	19	16	6.1	8.1
24	4.2	2.4	.56	.80	.86	1.8	2.5	22	20	16	6.8	7.6
25	4.2	2.3	.50	.80	.80	1.8	2.5	18	19	10	6.1	7.6
26	3.9	2.1	.50	.74	.86	1.8	2.7	18	18	10	6.8	7.6
27	4.2	1.7	.50	.74	.80	1.8	2.9	22	18	9.5	6.8	7.3
28	4.2	1.3	.50	.74	.90	1.6	3.1	25	17	9.0	6.8	6.8
29	4.2	1.3	.56	.74	---	1.9	3.1	32	17	9.5	6.5	6.8
30	3.6	1.3	.50	.68	---	1.9	3.1	30	16	9.0	6.5	6.8
31	3.6	---	.44	.68	---	2.3	---	33	---	9.0	6.8	---
TOTAL	123.6	76.91	25.18	18.74	21.34	51.19	82.4	506.1	717	415.0	223.9	214.9
MEAN	3.99	2.56	.81	.60	.76	1.65	2.75	16.3	23.9	13.4	7.22	7.16
MAX	4.5	13	1.3	.80	1.3	2.3	3.1	33	38	16	9.0	8.1
MIN	3.6	.32	.44	.05	.44	.93	2.3	3.1	16	9.0	6.1	6.1
AC-FT	245	153	50	37	42	102	163	1000	1420	823	444	426
CAL YR 1977	TOTAL	1357.39	MEAN	3.72	MAX	21	MIN	.15	AC-FT	2690		
WTR YR 1978	TOTAL	2476.26	MEAN	6.78	MAX	38	MIN	.05	AC-FT	4910		

10349300 STEAMBOAT CREEK AT STEAMBOAT, NV

LOCATION.--Lat 39°22'40", long 119°44'33", in S $\frac{1}{4}$ sec.33, T.18 N., R.20 E., Washoe County, Hydrologic Unit 16050102, on left bank 250 ft (80 m) upstream from Steamboat ditch, 0.2 mi (0.3 km) southwest of Steamboat Post Office, and 11 mi (18 km) southeast of Reno.

DRAINAGE AREA.--123 mi² (319 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,600 ft (1,402 m), from topographic map.

REMARKS.--Records good. Many diversions for irrigation above station. Flow partly regulated by Washoe Lake. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--17 years, 13.4 ft³/s (0.379 m³/s), 9,710 acre-ft/yr (12.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,000 ft³/s (28.3 m³/s) Jan. 31, 1963, gage height, 5.44 ft (1.658 m), from rating curve extended above 360 ft³/s (10.2 m³/s); minimum, no flow Sept. 9-15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 119 ft³/s (3.37 m³/s) Dec. 17, gage height, 2.41 ft (0.735 m); minimum, 0.24 ft³/s (0.007 m³/s) Oct. 1.

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	.24	.61	2.0	5.0	4.5	5.8	6.4	1.8	20	19	6.2	3.5
2	.31	.62	2.1	4.8	4.5	5.7	6.2	2.0	21	17	6.0	2.7
3	.35	.64	2.1	4.6	4.5	5.3	5.3	3.1	20	15	6.0	2.2
4	.36	.61	2.0	4.5	4.5	14	5.3	3.5	24	14	5.7	2.0
5	.35	.58	2.1	19	5.8	11	5.1	2.1	28	16	4.5	4.0
6	.32	.68	1.9	16	5.9	7.1	5.2	1.8	32	16	4.1	6.7
7	.34	.91	1.7	6.9	16	6.3	5.2	1.4	40	20	4.1	8.6
8	.39	.92	1.5	6.2	11	6.5	4.2	1.4	42	18	3.9	5.7
9	.39	.82	1.8	13	22	6.4	3.3	1.4	40	16	3.3	4.3
10	.40	.89	2.5	11	11	6.0	3.3	1.4	41	15	2.5	6.5
11	.42	.98	3.1	8.0	9.5	5.4	3.3	1.4	41	14	2.1	5.7
12	.44	1.0	3.5	6.4	7.6	5.2	3.3	1.4	39	13	1.9	4.7
13	.48	.94	3.2	5.7	7.6	5.2	2.9	1.4	45	13	2.5	3.9
14	.45	.70	3.1	6.2	7.3	4.9	2.9	1.4	38	12	2.9	13
15	.39	.68	10	11	7.6	4.9	2.9	1.4	34	9.8	3.3	7.5
16	1.0	.68	3.9	29	6.3	4.9	2.8	1.6	28	7.9	4.3	5.6
17	2.2	.78	37	21	6.2	4.7	2.0	2.0	23	6.5	3.9	5.1
18	2.2	.80	8.2	9.6	6.3	4.8	1.9	2.2	21	5.4	4.0	5.4
19	2.3	.91	4.9	8.6	6.2	6.3	2.1	2.6	21	5.5	4.7	5.9
20	2.5	1.2	4.0	7.3	6.2	5.3	2.7	3.1	22	5.8	4.0	5.7
21	2.3	5.7	3.9	6.4	6.2	4.4	3.2	3.7	22	10	3.1	5.7
22	.97	7.6	6.8	6.1	6.1	4.0	2.2	4.5	21	6.8	2.6	5.8
23	.72	2.7	30	5.4	5.9	4.0	2.0	5.4	19	5.8	2.5	5.5
24	.77	2.4	5.6	5.1	5.7	4.3	2.0	6.4	22	5.4	1.6	5.5
25	.74	2.4	4.2	5.3	5.2	4.3	2.0	7.6	19	9.6	2.1	4.6
26	.67	2.4	3.9	5.6	5.1	4.3	2.0	9.0	19	12	1.9	3.8
27	.66	2.5	5.7	5.1	5.1	4.3	1.9	11	20	12	1.4	3.8
28	.60	2.2	7.0	5.0	5.0	4.3	1.9	15	24	11	2.1	4.6
29	.60	2.1	8.7	4.9	---	4.6	1.6	17	22	9.8	2.2	4.8
30	.60	1.9	7.5	4.8	---	5.3	1.7	21	19	8.3	2.3	4.0
31	.60	---	5.3	4.7	---	6.7	---	21	---	6.8	2.9	---
TOTAL	25.06	47.85	189.2	262.2	204.8	176.2	96.8	160.0	827	356.4	104.6	156.8
MEAN	.81	1.60	6.10	8.46	7.31	5.68	3.23	5.16	27.6	11.5	3.37	5.23
MAX	2.5	7.6	37	29	22	14	6.4	21	45	20	6.2	13
MIN	.24	.58	1.5	4.5	4.5	4.0	1.6	1.4	19	5.4	1.4	2.0
AC-FT	50	95	375	520	406	349	192	317	1640	707	207	311

CAL YR 1977 TOTAL 904.89 MEAN 2.48 MAX 37 MIN .00 AC-FT 1790
WTR YR 1978 TOTAL 2606.91 MEAN 7.14 MAX 45 MIN .24 AC-FT 5170

PYRAMID AND WINNEMUCCA LAKES BASIN

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10350050 TRUCKEE RIVER AT LOCKWOOD, NV

LOCATION.--Lat 39°30'36", long 119°38'52", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.17, T.19 N., R.21 E., on boundary line between Washoe and Storey Counties, Hydrologic Unit 16050102, at bridge 2.1 mi (3.4 km) downstream from stream-gaging station 10350000 (Truckee River at Vista), 2.7 mi (4.3 km) downstream from mouth of North Truckee Drain, 3.3 mi (5.3 km) downstream from mouth of Steamboat Creek, and 6 mi (10 km) southeast of Sparks.

DRAINAGE AREA.--1,433 mi² (3,711 km²).

PERIOD OF RECORD.--August 1966 to December 1973, May 1974 to current year.

CHEMICAL ANALYSES AND WATER TEMPERATURES: August 1966 to May 1967, occasional; June 1967 to December 1973, monthly; May 1974 to current year, twice-monthly.

SPECIFIC CONDUCTANCES: May 1974 to current year, twice-monthly.

BIOLOGICAL DATA: October 1975 to current year, monthly.

MICROBIOLOGICAL DATA: June 1967 to December 1973 and May, June 1974, monthly; July 1974 to current year, twice-monthly (data prior to October 1976 are unpublished).

REMARKS.--Estimated streamflows are based on data from station 10350000, and are considered accurate for Lockwood site except during periods of low flow, when a small diversion for irrigation in Lockwood area could significantly decrease streamflow. Effluent from Reno-Sparks Joint Waste Water Treatment Plant enters Steamboat Creek several hundred feet upstream from confluence with Truckee River.

COOPERATION.--Field measurements and sample collection through November 1977 by Nevada Division of Environmental Protection. Chemical analyses for period August 1966 to December 1973, and microbiological analyses for entire period of record, by Nevada Bureau of Laboratories and Research.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 587 micromhos Oct. 11, 1977; minimum, 84 micromhos May 21, 1975.

FECAL STREPTOCOCCI: Maximum, greater than 2,000 colonies/100 mL Nov. 22, 1977; minimum, less than 1 colony/100 mL Nov. 8, 1974, Jan. 9, 22, 1975.

WATER TEMPERATURES: Maximum, 22.0°C July 29, 1971; minimum, freezing point Jan. 5, Dec. 16, 1968.

REVISIONS.--Microbiological results reported as "0 colonies/100 mL" in previous years should be corrected to "less than 1 colony/100 mL."

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTANTANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)
OCT										
11...	1100	E35	587	8.3	14.0	4.8	--	--	--	<100
25...	1050	E46	551	8.5	14.5	6.5	--	25	--	K990
NOV										
08...	1110	E98	520	7.9	8.0	4.5	9.2	23	--	K180
22...	1045	E204	401	7.6	6.5	10	--	60	--	580
DEC										
06...	1115	E63	579	8.2	10.0	5.2	--	54	>800	430
20...	1005	E164	459	8.0	2.5	11	--	20	>800	K100
JAN										
11...	1145	E356	462	--	4.5	14	--	50	>800	K60
31...	1030	E392	279	7.8	4.0	4.7	--	13	--	--
FEB										
21...	1220	E513	254	7.9	6.0	9.0	10.7	38	K200	K10
MAR										
07...	0955	E675	241	7.8	6.0	15	--	19	K800	K30
22...	0930	E1020	162	7.8	6.0	14	--	21	--	--
APR										
11...	1105	E814	154	7.9	10.0	9.0	--	9	K900	K10
24...	1055	E1100	132	7.4	9.0	10	--	19	K1200	21
MAY										
09...	1150	E1760	108	--	11.0	20	9.7	16	K500	270
24...	0950	E950	129	7.6	7.5	4.5	--	54	4000	520
JUN										
12...	1205	E640	132	--	14.5	4.0	--	13	3000	K190
26...	1000	E451	189	7.9	15.0	3.5	--	--	K1900	210
JUL										
11...	1145	E398	206	7.9	18.0	3.8	--	18	2000	K150
25...	0915	E228	174	7.9	21.0	3.0	--	35	2900	300
AUG										
08...	0905	E324	268	8.0	21.5	4.7	12.7	31	>8000	490
22...	1200	E326	224	--	16.0	3.5	--	7	K1900	K190
SEP										
06...	1040	E369	219	--	16.0	4.3	--	14	13600	390
26...	1110	E471	194	7.2	15.0	4.5	--	21	K1400	370

E: ESTIMATED.

K: NON-IDEAL COLONY COUNT.

PYRAMID AND WINNEMUCCA LAKES BASIN

10350050 TRUCKEE RIVER AT LOCKWOOD, NV--Continued

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

DATE	STREP- TUBOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K)
OCT										
11...	<100	--	--	--	--	--	--	50	--	--
25...	500	--	--	--	--	--	--	--	--	--
NOV										
08...	K180	130	28	32	12	12	47	50	1.9	7.4
22...	>2000	--	--	--	--	--	--	--	--	--
DEC										
06...	>1000	--	--	--	--	--	--	--	--	--
20...	590	--	--	--	--	--	--	--	--	--
JAN										
11...	<10	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
FEB										
21...	K20	76	19	19	6.8	6.9	21	21	1.1	3.0
MAR										
07...	K170	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
APR										
11...	K50	--	--	--	--	--	--	--	--	--
24...	K110	--	--	--	--	--	--	--	--	--
MAY										
09...	260	38	13	9.8	4.0	3.2	7.1	6.5	.5	1.8
24...	610	--	--	--	--	--	--	--	--	--
JUN										
12...	K100	--	--	--	--	--	--	--	--	--
26...	240	--	--	--	--	--	--	--	--	--
JUL										
11...	290	--	--	--	--	--	--	--	--	--
25...	K180	--	--	--	--	--	--	--	--	--
AUG										
08...	560	80	21	20	7.2	7.3	19	21	1.0	4.2
22...	230	--	--	--	--	--	--	--	--	--
SEP										
06...	>1000	--	--	--	--	--	--	--	--	--
26...	350	--	--	--	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)
OCT										
11...	8.6	--	60	40	33	--	--	--	16	6.2
25...	--	--	--	--	--	--	--	--	5	1.1
NOV										
08...	7.6	140	47	42	31	293	305	E77.5	4	.91
22...	--	--	--	--	--	--	--	--	8	.75
DEC										
06...	--	--	--	--	--	--	--	--	10	.93
20...	--	--	--	--	--	--	--	--	38	1.0
JAN										
11...	--	--	--	--	--	--	--	--	30	.65
31...	--	--	--	--	--	--	--	--	18	.75
FEB										
21...	3.3	74	20	20	20	156	155	E216	34	.31
MAR										
07...	--	--	--	--	--	--	--	--	48	.27
22...	--	--	--	--	--	--	--	--	49	.26
APR										
11...	--	--	--	--	--	--	--	--	42	.12
24...	--	--	--	--	--	--	--	--	29	.20
MAY										
09...	1.8	41	4.5	4.0	16	70	70	E333	78	.28
24...	--	--	--	--	--	--	--	--	34	.17
JUN										
12...	--	--	--	--	--	--	--	--	34	.32
26...	--	--	--	--	--	--	--	--	35	.21
JUL										
11...	--	--	--	--	--	--	--	--	26	.41
25...	--	--	--	--	--	--	--	--	25	.55
AUG										
08...	4.6	81	25	13	25	171	165	E150	15	.52
22...	--	--	--	--	--	--	--	--	8	.25
SEP										
06...	--	--	--	--	--	--	--	--	22	.24
26...	--	--	--	--	--	--	--	--	27	.14

E: ESTIMATED.

K: NON-IDEAL COLONY COUNT.

PYRAMID AND WINNEMUCCA LAKES BASIN

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10350050 TRUCKEE RIVER AT LOCKWOOD, NV--Continued

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

DATE	NITRO- GEN, NITRITE (MG/L AS N)	NITRO- GEN, AMMONIA (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT									
11...	3.4	.68	9.3	20	11	11	7.3	.000	.000
25...	.23	8.9	.40	11	5.8	--	--	--	--
NOV									
08...	.19	3.5	.80	5.4	2.5	1.9	4.0	--	--
22...	.02	1.6	.70	3.1	.76	--	8.0	2.70	.000
DEC									
06...	.27	.04	4.8	6.0	.20	--	5.4	.000	.000
20...	.07	.27	2.5	3.9	.14	--	4.9	--	--
JAN									
11...	.03	.67	.83	2.2	.43	--	5.8	1.39	.000
31...	.04	.58	.20	1.6	.33	--	3.1	--	--
FEB									
21...	.02	.54	.00	.87	.29	.24	3.1	5.23	.000
MAR									
07...	.02	.37	.37	1.0	.23	--	4.1	--	--
22...	.01	.27	.28	.82	.18	--	4.6	3.23	.000
APR									
11...	.01	.28	.25	.66	.19	--	2.7	--	--
24...	.02	.20	.21	.63	.15	--	4.0	--	--
MAY									
09...	.03	.21	.40	.92	.22	.12	--	--	--
24...	.01	.21	.61	1.0	.10	--	3.7	1.70	.000
JUN									
12...	.08	.06	1.1	1.6	.28	--	3.4	--	--
26...	.02	.35	.53	1.1	.32	--	4.0	3.62	.530
JUL									
11...	.05	.67	.83	2.0	.48	--	4.5	--	--
25...	.07	1.4	.70	2.7	1.0	--	5.5	4.08	.000
AUG									
08...	.04	1.7	.50	2.8	1.0	.79	6.3	--	--
22...	.16	.61	.59	1.6	.51	--	4.2	--	--
SEP									
06...	.01	.65	.55	1.5	.43	--	5.8	5.86	.000
26...	.01	.33	.30	.78	.27	--	4.8	--	--

PYRAMID AND WINNEMUCCA LAKES BASIN

10350050 TRUCKEE RIVER AT LOCKWOOD, NV--Continued

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

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CUPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
UCT							
11...	1100	15	200	<10	8	10	400
NOV							
08...	1110	36	--	<10	4	10	220
DEC							
06...	1115	33	100	<10	10	10	480
JAN							
11...	1145	50	0	10	10	10	860
FEB							
21...	1220	20	0	0	10	10	720
MAR							
22...	0930	10	300	10	10	10	990
APR							
11...	1105	9	0	--	10	6	590
MAY							
09...	1150	4	200	--	0	11	2000
JUN							
26...	1000	13	200	--	--	8	580
JUL							
11...	1145	13	200	--	10	10	590
AUG							
08...	0905	9	300	--	0	7	500
SEP							
06...	1040	10	200	--	0	6	580

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT						
11...	<100	80	.0	0	<10	70
NOV						
08...	<100	60	.0	0	<10	60
DEC						
06...	<10	80	.0	0	<10	60
JAN						
11...	--	60	.0	0	0	30
FEB						
21...	30	40	.3	0	0	20
MAR						
22...	60	80	.0	0	<10	20
APR						
11...	--	40	1.1	0	0	10
MAY						
09...	--	140	.0	0	0	30
JUN						
26...	--	40	.1	0	0	20
JUL						
11...	--	50	.0	0	0	20
AUG						
08...	--	100	.0	0	0	20
SEP						
06...	--	60	.0	0	0	20

PYRAMID AND WINNEMUCCA LAKES BASIN

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10350050 TRUCKEE RIVER AT LOCKWOOD, NV--Continued

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

DATE	TIME	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDO, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)
NOV 22...	1045	.0	.00	.00	.0	.00	.00	.00	.10
MAR 22...	0930	--	--	--	--	--	--	--	--
MAY 24...	0950	.0	.00	.00	.0	.00	.00	.00	.01
AUG 08...	0905	.0	.00	.00	.0	.00	.00	.00	.01

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)
NOV 22...	.00	.00	.00	.00	.00	.00	.00	.03	.00
MAR 22...	--	--	--	--	--	--	--	--	--
MAY 24...	.00	.00	.00	.00	.00	.00	.00	.00	.00
AUG 08...	.00	.01	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THIUN (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV 22...	.00	--	.00	0	.00	.38	.03	.02
MAR 22...	--	--	--	--	--	.00	.00	.00
MAY 24...	.00	--	.00	0	.00	.06	.01	.00
AUG 08...	.00	.00	.00	0	.00	.04	.00	.00

PYRAMID AND WINNEMUCCA LAKES BASIN

10350390 TRUCKEE RIVER ABOVE TRACY, NV

LOCATION.--Lat 39°33'53", long 119°31'15", in NE¼NW¼ sec.33, T.20 N., R.22 E., Storey County, Hydrologic Unit 16050102, on right bank about 1,200 ft (370 m) upstream from Tracy powerplant, about 200 ft (60 m) upstream from cooling pond outlet, and 13 mi (21 km) east of Sparks.

DRAINAGE AREA.--1,590 mi² (4,120 km²), approximately.

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

WATER TEMPERATURES: April 1972 to July 1972, monthly; August 1972 to February 1977, continuous; March 1977 to current year, four times per hour.

INSTRUMENTATION.--Temperature recorder since August 1972.

REMARKS.--Temperature recorder malfunctioned from Feb. 22 to Mar. 21, Apr. 25 to May 17, and Aug. 5-13.

EXTREMES MEASURED FOR PERIOD OF RECORD.--Maximum, 28.0°C June 24, 1977; minimum, freezing point on several days in December 1972, January 1973, January 1974, and on Jan. 1, 1975.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

WATER TEMPERATURES: Maximum, 26.5°C July 29, 30, Aug. 1, 2; minimum, 2.5°C Dec. 20, 21.

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.5	12.5	12.5	9.0	9.0	8.0	5.0	4.5	5.5	5.0	---	---
2	16.0	12.5	13.0	10.5	8.5	7.5	4.5	4.0	5.5	4.5	---	---
3	16.0	13.0	13.0	10.5	8.5	7.5	5.0	4.0	6.5	5.5	---	---
4	16.5	13.0	12.5	10.0	9.0	8.5	5.0	4.5	6.5	6.0	---	---
5	16.0	13.0	11.5	9.0	9.5	8.5	5.5	5.0	7.0	6.5	---	---
6	15.5	13.0	10.5	8.5	9.0	8.0	5.5	5.0	7.0	6.5	---	---
7	14.5	11.5	10.0	7.5	9.0	8.0	5.0	4.5	6.5	5.5	---	---
8	15.0	12.0	9.0	7.5	8.0	7.0	5.5	4.5	5.5	5.0	---	---
9	15.5	12.5	8.5	6.0	7.0	4.0	5.5	5.5	5.5	5.0	---	---
10	16.0	12.5	8.5	6.5	5.0	4.0	5.5	5.0	5.0	5.0	---	---
11	15.5	12.5	9.0	7.0	5.0	4.0	5.5	5.0	5.0	4.5	---	---
12	16.0	12.0	9.0	7.0	5.5	5.0	5.5	5.0	4.5	4.0	---	---
13	17.0	12.5	9.0	7.0	6.5	5.5	6.5	5.5	4.5	4.0	---	---
14	17.0	13.5	9.0	7.0	7.0	6.5	6.5	6.0	5.5	4.5	---	---
15	17.0	13.5	10.0	7.0	7.0	6.5	6.5	6.0	5.5	5.0	---	---
16	16.5	14.0	10.5	8.0	6.5	4.5	6.0	5.5	5.0	4.5	---	---
17	16.5	13.0	10.0	8.0	4.5	4.0	5.5	5.0	4.5	4.0	---	---
18	17.0	13.0	9.0	6.5	4.0	3.5	5.0	5.0	5.0	4.5	---	---
19	17.0	14.0	6.5	3.5	3.5	3.0	5.5	5.0	6.0	5.0	---	---
20	16.0	13.5	5.0	3.5	3.0	2.5	6.5	5.5	6.5	5.5	---	---
21	15.0	12.0	7.0	4.5	3.5	2.5	6.5	6.0	---	---	---	---
22	15.5	12.0	8.0	7.0	5.0	3.5	6.0	5.5	---	---	---	---
23	14.5	12.5	8.0	6.5	5.5	5.0	5.5	5.0	---	---	9.0	8.5
24	16.0	12.5	9.5	7.5	5.0	4.5	5.0	4.0	---	---	9.0	8.5
25	16.5	13.0	9.5	8.0	5.0	4.5	4.0	3.5	---	---	10.0	8.5
26	16.0	13.0	10.0	9.0	5.0	4.5	4.5	3.5	---	---	10.0	9.0
27	15.5	13.0	10.0	9.5	5.0	4.0	5.0	4.0	---	---	11.0	9.0
28	13.5	12.0	9.0	8.5	5.5	5.0	5.5	5.0	---	---	11.0	10.0
29	12.0	10.5	9.0	8.5	6.0	5.0	5.5	4.5	---	---	11.0	10.5
30	12.0	10.0	9.0	9.0	6.0	5.5	5.5	5.0	---	---	11.0	10.5
31	12.5	10.0	---	---	5.5	5.0	5.5	5.0	---	---	11.0	9.0
MONTH	17.0	10.0	13.0	3.5	9.5	2.5	6.5	3.5	7.0	4.0	11.0	8.5

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[illegible]

PYRAMID AND WINNEMUCCA LAKES BASIN

10350400 TRUCKEE RIVER BELOW TRACY, NV

LOCATION.--Lat 39°33'52", long 119°31'02", in NW¼NE¼ sec.33, T.20 N., R.22 E., Washoe County, Hydrologic Unit 16050102, on left bank on upstream side of bridge, 200 ft (60 m) downstream from Tracy powerplant, and 13 mi (21 km) east of Sparks.

DRAINAGE AREA.--1,590 mi² (4,120 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 4,238.15 ft (1,291.788 m) National Geodetic Vertical Datum of 1929 (levels by S.E.&A. Engineers).

REMARKS.--Records good. Flow regulated by Lake Tahoe, Prosser Creek, Stampede and Boca Reservoirs, and other lakes, powerplants, and many diversions for irrigation.

AVERAGE DISCHARGE.--6 years, 695 ft³/s (19.68 m³/s), 503,500 acre-ft/yr (621 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,660 ft³/s (104 m³/s) May 15, 1975, gage height, 8.75 ft (2.667 m); minimum, 22 ft³/s (0.623) Oct. 24, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2830 ft³/s (80.1 m³/s) May 22, gage height, 7.92 ft (2.414 m); minimum, 22 ft³/s (0.62 m³/s) Oct 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	73	56	94	285	356	440	1340	944	907	399	174	281
2	77	59	94	258	338	475	1020	1280	999	430	199	285
3	79	56	92	220	332	560	838	1530	979	438	204	279
4	71	56	94	203	354	700	778	1650	899	402	238	283
5	67	52	83	251	378	880	738	1480	933	381	284	279
6	64	64	85	447	429	760	823	1310	935	414	295	341
7	71	64	79	290	520	703	857	1270	926	461	253	407
8	79	64	81	247	621	729	806	1290	951	419	261	347
9	75	64	92	264	672	797	776	1690	921	359	292	349
10	60	59	85	408	627	834	772	1880	908	380	287	356
11	62	62	85	330	547	871	804	1940	799	363	306	390
12	62	65	104	297	489	861	838	1960	751	356	294	345
13	62	69	99	297	476	818	864	2320	871	338	260	328
14	51	57	94	299	479	815	859	2530	918	306	276	389
15	56	56	133	466	475	830	820	2650	857	308	286	394
16	60	51	474	603	466	848	785	2020	783	326	258	368
17	56	59	440	889	476	896	737	2020	679	314	264	350
18	54	51	527	556	472	932	763	2010	644	291	308	364
19	59	54	297	454	465	965	779	2030	636	264	304	387
20	64	54	204	421	463	1020	847	2490	520	234	296	375
21	59	51	171	385	469	1040	863	2720	526	196	283	370
22	69	136	192	357	461	1010	1020	2700	496	188	292	414
23	65	200	451	330	441	894	1080	1610	487	196	289	435
24	41	164	377	311	394	861	1120	1140	497	187	293	439
25	43	120	262	328	384	869	1180	914	498	174	292	419
26	40	120	190	342	394	894	970	944	448	196	280	444
27	43	107	229	331	407	920	796	972	451	233	289	426
28	60	102	272	330	403	1020	832	944	510	209	296	364
29	69	102	308	351	---	1070	897	938	457	196	302	344
30	71	96	334	357	---	1040	931	1030	407	206	293	355
31	67	---	357	360	---	1210	---	978	---	181	294	---
TOTAL	1929	2370	6479	11267	12788	26562	26533	51184	21593	9345	8542	10907
MEAN	62.2	79.0	209	363	457	857	884	1651	720	301	276	364
MAX	79	200	527	889	672	1210	1340	2720	999	461	308	444
MIN	40	51	79	203	332	440	737	914	407	174	174	279
AC-FT	3830	4700	12850	22350	25360	52690	52630	101500	42830	18540	16940	21630
CAL YR 1977	TOTAL	86490	MEAN 237	MAX 611	MIN 40	AC-FT 171600						
WTR YR 1978	TOTAL	189499	MEAN 519	MAX 2720	MIN 40	AC-FT 375900						

PYRAMID AND WINNEMUCCA LAKES BASIN
10350400 TRUCKEE RIVER BELOW TRACY, NV--Continued

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WATER-QUALITY RECORDS

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

WATER TEMPERATURES: April to September 1972, monthly; October 1972 to September 1975, continuous; October 1975 to March 1976, monthly; April 1976 to March 1977, continuous; April to September 1977, four times per hour.

INSTRUMENTATION.--Temperature recorder since October 1972.

REMARKS.--Temperature recorder malfunctioned Oct. 2-14, Feb. 6-24, and July 25 to Aug. 14.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

WATER TEMPERATURES: Maximum, 33.5°C June 24, 28, 1977; minimum, freezing point on several days in January 1973 and January 1974.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

WATER TEMPERATURES: Maximum may not have been measured (see "Remarks"); minimum, 0.5°C Dec. 20.

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	12.5	11.5	8.0	7.5	6.5	4.0	2.5	5.0	4.0	9.0	7.0
2	---	---	12.0	9.0	8.0	6.0	4.0	2.5	6.0	4.0	9.0	7.5
3	---	---	12.0	9.0	8.0	6.5	5.5	2.5	8.0	5.0	9.0	7.0
4	---	---	11.5	8.5	9.0	7.0	5.0	3.0	7.5	6.0	8.5	7.5
5	---	---	10.0	8.0	9.5	8.0	6.0	4.0	7.5	6.0	7.5	6.0
6	---	---	9.5	7.5	8.5	7.0	5.5	3.5	---	---	7.5	6.0
7	---	---	9.0	6.5	8.5	6.5	5.5	3.0	---	---	8.0	7.0
8	---	---	8.5	6.0	7.0	5.5	6.5	3.0	---	---	9.0	7.5
9	---	---	7.5	4.5	5.5	4.0	6.0	5.0	---	---	8.5	7.0
10	---	---	8.0	5.0	5.0	4.0	5.5	4.0	---	---	8.5	6.5
11	---	---	8.0	6.0	6.5	4.0	6.0	3.5	---	---	7.5	6.5
12	---	---	8.5	6.0	6.5	5.5	6.0	4.0	---	---	6.5	5.5
13	---	---	8.5	6.0	7.0	6.5	7.0	5.0	---	---	7.0	4.5
14	---	---	8.0	5.5	8.5	7.0	7.0	6.5	---	---	8.0	5.0
15	15.0	12.0	9.0	6.0	8.0	6.5	6.5	5.0	---	---	8.5	6.0
16	14.5	12.5	10.0	6.5	7.0	3.0	6.0	5.0	---	---	9.0	7.0
17	14.5	11.5	8.5	6.5	5.0	3.0	5.0	4.0	---	---	9.0	7.5
18	15.0	11.5	8.0	4.5	4.0	2.5	5.0	4.0	---	---	8.5	7.5
19	15.5	12.5	4.5	2.0	3.0	2.0	6.0	4.0	---	---	9.5	7.5
20	14.5	11.5	3.5	1.0	2.0	1.0	7.5	5.5	---	---	9.5	7.5
21	13.5	10.5	5.0	2.0	4.0	.5	7.0	5.0	---	---	9.0	7.0
22	12.5	10.5	6.5	4.5	5.5	2.5	5.5	3.5	---	---	8.0	6.5
23	13.0	11.0	6.5	4.0	6.5	4.0	5.0	2.5	---	---	9.5	7.0
24	15.0	11.0	9.0	6.0	5.5	3.5	4.0	2.0	---	---	9.0	7.0
25	15.0	11.5	9.0	7.0	5.5	2.5	4.0	2.0	7.5	5.5	10.0	7.5
26	14.5	11.5	9.0	8.5	4.5	2.5	5.5	2.0	9.0	5.5	10.0	8.5
27	13.5	11.5	9.0	8.5	5.0	2.5	6.5	3.5	9.0	6.0	11.5	8.5
28	12.0	10.0	8.5	7.0	5.5	4.0	6.5	4.0	8.5	6.0	11.5	9.5
29	11.0	9.0	8.5	7.0	6.5	5.0	6.5	4.0	---	---	11.0	9.5
30	10.5	8.5	9.0	7.5	7.0	4.5	6.5	4.0	---	---	11.0	9.5
31	11.0	8.5	---	---	5.5	3.5	6.5	4.0	---	---	10.5	8.0
MONTH	15.5	8.5	12.0	1.0	9.5	.5	7.5	2.0	9.0	4.0	11.5	4.5

[illegible]

PYRAMID AND WINNEMUCCA LAKES BASIN

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10350405 TRUCKEE RIVER RIGHT BANK BELOW TRACY, NV

LOCATION.--Lat 39°33'52", long 119°31'02", in NW 1/4 sec.33, T.20 N., R.22 E., Storey County, Hydrologic Unit 16050102, on right bank 200 ft (60 m) downstream from Tracy powerplant, about 1,500 ft (460 m) downstream from cooling pond outlet, and 13 mi (21 km) east of Sparks.

DRAINAGE AREA.--1,590 mi² (4,120 km²).

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

WATER TEMPERATURES: April 1972 to July 1975, continuous; August 1975 to March 1976, monthly; April 1976 to February 1977, continuous; March 1977 to current year, four times per hour.

INSTRUMENTATION.--Temperature recorder since April 1972.

REMARKS.--Temperature recorder malfunctioned from Jan. 20 to Feb. 25 and July 21 to Aug. 14.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

WATER TEMPERATURES: Maximum, 33.5°C June 24, 28, 29, 1977; minimum, freezing point Jan. 5-9, 1973, Jan. 2, 1974.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

WATER TEMPERATURES: Maximum presumably not measured (see "Remarks"); minimum, 1.0°C Dec. 20, 21.

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	11.5	10.5	8.5	6.5	5.5	4.0	2.5	---	---	9.0	7.0
2	14.0	11.5	11.0	9.0	7.5	6.0	4.0	2.5	---	---	8.5	7.5
3	15.5	12.0	11.0	9.5	8.0	6.0	5.0	2.5	---	---	9.0	7.0
4	14.5	12.0	11.0	9.5	8.5	6.5	5.0	3.0	---	---	8.0	7.0
5	14.0	12.0	10.5	8.0	8.5	7.0	6.0	4.0	---	---	7.0	6.0
6	14.0	12.0	9.0	7.5	8.0	5.5	5.5	4.0	---	---	7.5	5.5
7	13.5	11.0	8.5	7.0	8.0	6.0	5.5	3.5	---	---	7.5	6.5
8	13.5	11.0	8.5	6.5	6.0	5.0	6.5	3.5	---	---	8.5	7.0
9	13.0	11.5	7.5	5.5	5.0	4.5	6.0	5.0	---	---	8.0	6.5
10	14.0	11.0	8.0	6.5	5.0	4.5	5.5	4.5	---	---	9.0	6.5
11	13.5	11.0	8.0	7.0	6.5	4.5	6.0	4.0	---	---	8.0	6.5
12	13.0	11.0	8.5	6.5	5.5	4.5	6.0	4.0	---	---	6.5	5.5
13	13.0	11.0	8.0	6.5	7.0	5.0	7.0	5.0	---	---	7.5	5.0
14	14.5	11.5	8.0	6.5	8.0	7.0	7.0	6.5	---	---	8.0	5.5
15	14.0	12.5	8.5	6.5	7.5	5.5	9.0	5.0	---	---	9.0	6.0
16	14.5	12.5	8.5	7.0	7.0	3.0	6.0	5.0	---	---	9.5	7.0
17	14.0	12.0	8.5	7.0	5.0	3.0	5.0	4.0	---	---	9.5	7.5
18	13.5	12.0	8.0	4.5	4.0	2.5	5.0	4.0	---	---	8.5	7.5
19	14.0	12.5	5.0	2.0	3.0	2.0	6.5	4.0	---	---	10.0	7.5
20	13.5	11.5	5.0	3.5	2.0	1.0	---	---	---	---	10.0	7.5
21	12.5	11.0	6.5	4.5	5.0	1.0	---	---	---	---	9.0	7.5
22	13.0	10.5	7.0	5.0	5.5	3.0	---	---	---	---	8.5	7.0
23	12.5	11.5	7.0	4.5	7.0	4.0	---	---	---	---	9.5	7.5
24	13.5	12.0	9.0	6.5	5.5	4.0	---	---	---	---	9.0	7.5
25	13.5	12.0	8.5	6.5	5.5	3.0	---	---	7.5	5.5	10.5	7.5
26	13.5	12.0	10.0	7.5	5.0	3.0	---	---	8.5	5.5	10.0	8.5
27	12.5	11.0	9.0	7.5	5.0	2.5	---	---	8.5	5.5	11.5	8.5
28	11.5	10.0	7.5	6.5	5.5	4.0	---	---	8.5	5.5	11.5	9.5
29	11.0	9.5	7.5	6.0	6.5	5.0	---	---	---	---	11.5	9.5
30	10.0	8.5	7.5	6.5	7.0	4.5	---	---	---	---	11.0	9.5
31	10.5	9.0	---	---	5.5	3.5	---	---	---	---	10.5	8.5
MONTH	15.5	8.5	11.0	2.0	8.5	1.0	9.0	2.5	8.5	5.5	11.5	5.0

10350405 TRUCKEE RIVER RIGHT BANK BELOW TRACY, NV.--Continued

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

[illegible]

PYRAMID AND WINNEMUCCA LAKES BASIN

10351300 TRUCKEE CANAL NEAR WADSWORTH, NV

LOCATION.--Lat 39°36'25", long 119°18'35", in NW 1/4 sec.17, T.20 N., R.24 E., Storey County, Hydrologic Unit 16050102 on left bank at upstream end of Tunnel No. 3 and 2 mi (3 km) southwest of Wadsworth.

PERIOD OF RECORD.--October 1966 to current year.

REVISED RECORDS.--WRD 1977 : 1975

GAGE.--Water-stage recorder. Altitude of gage is 4,200 ft (1,280 m), from topographic map. Since Feb. 13, 1967, auxiliary water-stage recorder on left bank 0.3 mi (0.5 km) downstream from base gage.

REMARKS.--Records fair. Flow is regulated by Derby Dam (including two wasteways between gage and Derby Dam) and many reservoirs, powerplants, and diversions above Derby Dam.

AVERAGE DISCHARGE.--12 years, 282 ft³/s (7.986 m³/s), 204,300 acre-ft/yr (252 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 955 ft³/s (27.0 m³/s) June 10, 1970; no flow at times in some 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	66	67	88	281	338	387	785	791	794	360	152	206
2	78	62	88	248	327	433	776	784	813	400	170	209
3	76	62	84	230	316	499	768	746	827	437	165	219
4	76	62	74	215	318	540	730	812	793	391	200	216
5	72	60	72	211	345	720	679	757	789	366	228	223
6	70	62	68	385	381	689	698	750	788	377	262	269
7	70	70	70	318	417	719	776	771	784	436	220	356
8	74	68	72	261	496	693	746	776	827	456	204	337
9	74	74	75	231	602	746	693	782	807	352	247	322
10	67	70	76	379	653	801	688	808	792	361	232	332
11	64	68	76	352	597	597	702	838	719	357	270	368
12	62	72	83	302	505	.71	747	892	650	365	238	331
13	62	75	88	295	473	400	775	840	698	340	213	297
14	56	68	84	289	472	768	763	903	772	300	229	327
15	52	62	84	278	480	797	748	862	759	301	230	384
16	56	63	152	364	462	805	702	758	699	325	215	343
17	57	62	113	443	471	831	668	791	597	328	214	342
18	51	64	122	432	466	829	655	842	534	288	239	356
19	48	60	130	438	458	841	683	919	539	249	247	377
20	56	66	204	424	450	807	709	841	454	235	233	393
21	54	61	180	387	458	813	768	880	440	211	218	374
22	58	76	173	357	459	818	760	835	458	184	229	406
23	58	78	229	328	431	800	771	792	449	182	226	419
24	58	94	240	300	389	824	789	835	445	183	231	389
25	52	110	230	308	365	794	804	806	474	175	220	373
26	51	103	199	325	378	822	716	830	445	178	210	387
27	50	100	196	328	386	821	663	853	429	199	214	381
28	60	87	218	304	384	848	692	854	459	200	220	328
29	67	92	273	335	---	824	753	847	445	167	233	315
30	72	88	265	337	---	808	766	871	363	189	227	319
31	72	---	342	343	---	828	---	828	---	164	221	---
TOTAL	1939	2206	4448	10028	12277	21902.71	21973	25494	18842	9056	6857	9898
MEAN	62.5	73.5	143	323	438	707	732	822	628	292	221	330
MAX	78	110	342	443	653	848	804	919	827	456	270	419
MIN	48	60	68	211	316	.71	655	746	363	164	152	206
AC-FT	3850	4380	8820	19890	24350	43440	43580	50570	37370	17960	13600	19630
CAL YR 1977 TOTAL	71649.00			MEAN 196	MAX 484	MIN .00	AC-FT 142100					
WTR YR 1978 TOTAL	144920.71			MEAN 397	MAX 919	MIN .71	AC-FT 287500					

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LOCATION.—Lat 39°36'00", long 119°12'10", in SW 1/4 sec.17, T.20 N., R.25 E., Lyon County, Hydrologic Unit 16050104, on right bank 2.6 mi (4.2 km) east of Fernley.

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

GAGE.—Water-stage recorder. Altitude of gage is 4,110 ft (1,253 m), from topographic map. Prior to Aug. 13, 1971, water-stage recorder at site 60 ft (18 m) upstream at datum 5.53 ft (1.686 m) higher. Aug. 13, 1971, to Feb. 20, 1973, water-stage recorder at present site at datum 2.89 ft (0.881 m) higher. Feb. 21, 1973, to July 28, 1975, water-stage recorder at present site at datum 2.00 ft (0.070 m) higher.

REMARKS.--Records poor. Flow in canal is return flow from lands irrigated by Truckee Canal and discharges to Fernley State Wildlife Management Area.

AVERAGE DISCHARGE.--10 years, 5.50 ft³/s (0.156 m³/s), 3,980 acre-ft/yr (4.91 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, about 60 ft³/s (1.70 m³/s) July 21, 1971; no flow Mar. 14 to Apr. 20, 22, 1978.

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	1.0	.59	.37	.29	.13	.08	.00	4.0	6.5	3.8	1.8	3.4
2	1.0	.59	.37	.27	.13	.13	.00	5.7	3.6	3.9	1.4	5.6
3	.98	.52	.37	.29	.13	.12	.00	2.3	6.4	2.1	1.2	8.0
4	.98	.52	.37	.29	.13	.10	.00	1.9	4.4	1.6	2.5	7.2
5	.94	.52	.33	.28	.13	.09	.00	2.2	6.6	1.3	3.3	16
6	.90	.47	.33	.28	.12	.07	.00	2.9	3.9	1.3	5.8	17
7	.90	.47	.33	.27	.12	.05	.00	3.7	8.7	1.5	5.4	15
8	.90	.47	.33	.26	.12	.05	.00	4.8	4.8	1.6	3.2	8.9
9	.90	.52	.30	.26	.12	.05	.00	3.4	5.9	3.6	1.9	7.8
10	.90	.47	.33	.25	.12	.07	.00	1.9	8.3	1.8	1.6	3.9
11	.87	.47	.30	.25	.11	.05	.00	3.6	12	4.8	2.7	3.4
12	.87	.47	.30	.24	.11	.05	.00	5.5	8.1	4.9	4.3	3.1
13	.87	.42	.30	.23	.11	2.8	.00	7.3	2.2	4.9	1.7	2.9
14	.87	.42	.30	.23	.11	.00	.00	3.5	2.1	7.2	3.6	2.8
15	.83	.42	.30	.22	.11	.00	.00	3.6	1.8	4.4	8.0	2.7
16	.83	.42	.26	.22	.10	.00	.00	2.4	1.8	7.6	6.3	2.9
17	.80	.42	.30	.21	.10	.00	.00	2.7	3.9	4.2	3.3	3.8
18	.80	.42	.26	.21	.10	.00	.00	8.9	4.0	6.0	4.2	2.5
19	.72	.42	.26	.20	.10	.00	.00	6.7	2.7	8.2	8.1	2.4
20	.59	3.2	.26	.19	.10	.00	.00	7.2	3.8	5.3	11	2.3
21	.59	.42	.26	.19	.09	.00	.88	6.0	2.7	8.7	8.7	2.2
22	.59	.37	.27	.18	.09	.00	.00	8.7	5.5	6.2	7.7	2.4
23	.59	.37	.27	.17	.09	.00	.02	8.7	13	4.8	11	4.4
24	.59	.37	.27	.17	.09	.00	.75	3.8	10	2.0	6.8	5.2
25	.59	.37	.27	.16	.09	.00	.04	2.9	15	2.7	2.5	3.4
26	.52	.37	.28	.16	.08	.00	1.1	3.0	9.4	6.4	2.7	5.1
27	.52	.37	.28	.15	.08	.00	.50	2.7	9.4	3.4	4.2	3.0
28	.52	.37	.28	.14	.08	.00	1.0	4.0	6.2	5.6	5.6	2.7
29	.52	.37	.28	.14	---	.00	3.0	2.3	3.9	6.0	7.5	2.6
30	.52	.37	.28	.13	---	.00	2.5	2.5	2.0	7.2	4.3	7.1
31	.52	---	.29	.13	---	.00	---	6.2	---	5.2	3.5	---
TOTAL	23.52	15.97	9.30	6.66	2.99	3.71	9.79	135.0	178.6	138.2	145.8	159.7
MEAN	.76	.53	.30	.21	.11	.12	.33	4.35	5.95	4.46	4.70	5.32
MAX	1.0	3.2	.37	.29	.13	2.8	3.0	8.9	15	8.7	11	17
MIN	.52	.37	.26	.13	.08	.00	.00	1.9	1.8	1.3	1.2	2.2
AC-FT	47	32	18	13	5.9	7.4	19	268	354	274	289	317
CAL YR 1977	TOTAL	537.62	MEAN	1.47	MAX	8.7	MIN	.26	AC-FT	1070		
WTR YR 1978	TOTAL	829.24	MEAN	2.27	MAX	17	MIN	.00	AC-FT	1640		

PYRAMID AND WINNEMUCCA LAKES BASIN

10351400 TRUCKEE CANAL NEAR HAZEN, NV

LOCATION.--Lat 39°32'15", long 119°04'15", in NE¼SW¼ sec.4, T.19 N., R.26 E., Churchill County, Hydrologic Unit 16050203, on left bank 0.1 mi (0.2 km) downstream from Hazen check dam and 2.3 mi (3.7 km) southwest of Hazen.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,172.10 ft (1,271.656 m) Bureau of Reclamation datum. Since Mar. 17, 1972, auxiliary water-stage recorder 20 ft (6 m) upstream from KX lateral diversion canal. Oct. 1, 1967, to Mar. 17, 1972, auxiliary water-stage recorder on right bank approximately 6 mi (10 km) downstream from base gage.

REMARKS.--Records poor. Flow regulated by Derby Dam, diversions, and spillways between Derby Dam and station.

AVERAGE DISCHARGE.--12 years, 211 ft³/s (5,976 m³/s), 152,900 acre-ft/yr (189 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 916 ft³/s (25.9 m³/s) Feb. 3, 1967; no flow at times.

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	38	52	64	248	300	377	747	706	617	279	73	100
2	55	47	64	209	297	412	749	713	600	283	48	66
3	60	45	70	193	291	455	730	699	601	349	58	43
4	63	44	72	183	294	516	713	719	626	354	74	98
5	60	42	66	163	320	634	663	683	632	335	66	102
6	52	39	59	213	350	641	641	642	630	266	75	179
7	20	45	57	325	390	697	721	627	595	237	100	245
8	11	49	59	283	450	651	729	661	631	269	111	260
9	27	50	62	243	559	673	682	690	671	219	130	235
10	30	51	66	251	641	732	655	664	657	214	135	239
11	14	48	67	338	602	727	655	667	625	164	168	253
12	17	50	70	321	528	195	692	684	575	168	77	263
13	42	53	82	295	479	108	724	648	571	176	30	238
14	46	54	82	282	470	699	733	700	683	175	59	225
15	38	48	71	286	475	753	733	777	713	153	87	264
16	37	44	139	280	472	757	694	707	656	177	118	268
17	41	42	136	365	473	773	664	688	536	175	97	256
18	38	46	109	391	460	776	629	644	457	164	119	257
19	35	44	96	407	450	792	657	737	424	150	125	264
20	36	44	188	403	440	757	657	696	356	124	106	288
21	41	49	180	373	450	756	692	700	312	77	124	279
22	39	51	174	321	441	766	693	687	362	38	104	276
23	43	58	190	300	415	750	688	669	357	.00	76	294
24	45	68	221	277	375	771	714	697	330	21	96	280
25	38	76	240	261	358	743	723	704	334	73	152	294
26	34	73	236	274	363	761	680	727	410	28	139	273
27	32	70	211	256	375	766	596	715	369	63	129	294
28	33	63	174	280	378	778	583	707	355	65	137	254
29	45	64	195	300	---	768	659	697	375	8.9	107	198
30	53	66	187	302	---	768	677	714	354	10	94	186
31	54	---	267	304	---	771	---	668	---	87	112	---
TOTAL	1217	1575	3954	8927	11896	20523	20573	21437	15414	4901.90	3126	6779
MFAN	39.3	52.5	128	288	425	662	686	692	514	158	101	226
MAX	63	76	267	407	641	792	749	777	713	354	168	294
MIN	11	39	57	163	291	108	583	627	312	.00	30	43
AC-FT	2410	3120	7840	17710	23600	40710	40810	42520	30570	9720	6200	13450
CAL YR 1977 TOTAL	57890.07			MEAN 159	MAX 499	MIN .00	AC-FT 114800					
WTR YR 1978 TOTAL	120322.90			MEAN 330	MAX 792	MIN .00	AC-FT 238700					

PYRAMID AND WINNEMUCCA LAKES BASIN

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10351600 TRUCKEE RIVER BELOW DERBY DAM, NEAR WADSWORTH, NV

LOCATION.--Lat 39°35'05", long 119°26'25", in NW¼SE¼ sec.19, T.20 N., R.23 E., Storey County, Hydrologic Unit 16050102, on right bank 1,500 ft (500 m) downstream from Derby Dam, 3.2 mi (5.1 km) downstream from Clark, and 9 mi (14 km) southwest of Wadsworth.

DRAINAGE AREA.--1,670 mi² (4,325 km²).

PERIOD OF RECORD.--January 1909 to December 1910, January to December 1916, January 1918 to July 1958, October 1958 to current year. Monthly discharge only for some periods, published in WSP 1734.

REVISED RECORDS.--WSP 1714: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,200 ft (1,280 m), from topographic map.

REMARKS.--Records good. Flow regulated by Lake Tahoe, Prosser Creek, Stampede and Boca Reservoirs, other lakes, powerplants many diversions for irrigation, and by Derby Dam. Truckee Canal diverts water at Derby Dam out of basin to Lahontan Reservoir.

AVERAGE DISCHARGE.--59 years (1918-57, 1958-78), 328 ft³/s (9.289 m³/s), 237,600 acre-ft/yr (293 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft³/s (521 m³/s) Feb. 1, 1963, gage height, 14.26 ft (4.346 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement of peak flow; no flow Aug. 8-11, 1924, Sept. 1-7, 10, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,070 ft³/s (58.6 m³/s) May 21, gage height, 6.01 ft (1.832 m); minimum, 2.2 ft³/s (0.062 m³/s) Oct. 1-3.

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	2.2	5.2	8.0	7.5	13	12	554	158	147	44	31	36
2	2.2	5.2	8.0	6.4	11	21	274	487	193	44	31	36
3	2.2	5.2	8.3	5.7	9.4	39	72	744	198	44	32	36
4	2.4	5.2	8.3	5.0	10	22	45	881	147	44	32	36
5	2.4	5.5	8.7	4.1	11	149	56	751	163	43	33	36
6	2.4	5.5	8.0	20	14	59	62	560	167	43	34	37
7	2.4	5.2	7.2	9.7	26	20	68	487	132	43	34	40
8	2.6	5.2	6.8	9.6	147	16	69	480	128	44	34	40
9	2.6	5.2	6.8	8.6	48	22	73	830	131	40	34	39
10	2.6	4.9	6.8	18	23	32	82	1080	128	39	34	39
11	2.6	4.9	6.8	13	18	39	68	1080	105	38	35	41
12	2.8	5.2	6.8	9.0	14	60	68	1080	94	38	35	39
13	2.8	5.2	6.8	8.6	12	30	68	1440	103	37	34	36
14	2.8	4.9	6.5	8.3	11	25	69	1630	129	36	35	36
15	2.8	5.2	6.1	89	10	33	69	1810	106	35	35	38
16	2.8	5.2	180	203	9.5	33	69	1270	99	35	35	36
17	2.8	5.2	133	544	9.4	71	73	1270	89	35	35	36
18	2.8	5.2	270	156	9.8	93	76	1180	83	35	35	35
19	2.8	5.2	59	55	9.8	145	76	1150	80	34	36	36
20	2.8	5.5	9.4	35	10	211	78	1620	67	33	35	37
21	2.8	5.5	6.8	27	14	230	89	1930	45	33	35	36
22	3.4	6.1	5.8	21	11	229	217	1920	31	32	35	36
23	4.1	8.7	151	16	18	83	281	944	30	32	35	58
24	4.7	13	145	13	9.8	50	312	376	30	32	36	85
25	4.9	9.4	31	13	15	37	368	159	29	31	36	85
26	4.9	8.3	9.4	14	11	55	307	118	27	32	35	85
27	4.7	8.0	12	15	6.1	78	111	135	30	32	35	84
28	5.2	7.6	30	11	8.0	175	92	130	47	32	36	71
29	5.2	7.6	23	15	---	240	115	126	47	31	36	36
30	5.5	7.6	12	14	---	230	136	208	45	31	36	36
31	5.2	---	14	14	---	398	---	193	---	31	36	---
TOTAL	102.4	145.8	1201.3	1388.5	518.8	2937	4097	26227	2850	1133	1070	1357
MEAN	3.30	6.19	38.8	44.8	18.5	94.7	137	846	95.0	36.5	34.5	45.2
MAX	5.5	13	270	544	147	398	554	1930	198	44	36	85
MIN	2.2	4.9	5.8	4.1	6.1	12	45	118	27	31	31	35
AC-FT	203	369	2380	2750	1030	5830	8130	52020	5650	2250	2120	2690
CAL YP 1977 TOTAL	11345.8			31.1	MAX 270	MIN 1.9	AC-FT 22500					
WTR YR 1978 TOTAL	43067.8			MEAN 118	MAX 1930	MIN 2.2	AC-FT 85420					

PYRAMID AND WINNEMUCCA LAKES BASIN

10351650 TRUCKEE RIVER AT WADSWORTH, NV

LOCATION.--Lat 39°38'19", long 119°16'09", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T.21 N., R.24 E., Washoe County, Hydrologic Unit 16050102, in Pyramid Lake Indian Reservation, on right bank 0.5 mi (0.8 km) downstream from U.S. Highway 40 bridge and 0.2 mi (0.3 km) northeast of Wadsworth.

DRAINAGE AREA.--1,719 mi² (4,452 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with thermograph attachment. Datum of gage is 4,037.90 ft (1,230.752 m) National Geodetic Vertical Datum of 1929, supplementary adjustment of 1956.

REMARKS.--Records good above 10 ft³/s (0.28 m³/s) and fair below. Flow regulated by Lake Tahoe, Prosser Creek, Stampede and Boca Reservoirs, other lakes, powerplants, many diversions for irrigation above and below station, and by Derby Dam which diverts water out of the basin to Lahontan Reservoir.

AVERAGE DISCHARGE.--13 years, 557 ft³/s (15.77 m³/s), 403,500 acre-ft/yr (498 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,790 ft³/s (220 m³/s) Jan. 24, 1970, gage height, 11.65 ft (3.551 m); maximum gage height, 11.90 ft (3.627 m) May 22, 1967; minimum daily discharge, 3.1 ft³/s (0.088 m³/s) Sept. 4, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,340 ft³/s (66.3 m³/s) May 15, gage height, 8.15 ft (2.484 m); minimum daily, 3.1 ft³/s (0.088 m³/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	15	16	24	25	31	41	735	153	145	32	18	22
2	15	16	24	20	36	47	379	419	164	28	22	11
3	14	16	24	15	37	56	132	874	191	42	14	5.1
4	14	16	23	13	43	64	58	1040	147	48	11	3.1
5	14	16	23	13	53	212	74	895	149	56	11	3.5
6	14	17	23	34	58	210	74	703	152	65	14	12
7	15	17	20	29	75	45	78	575	137	64	16	26
8	15	18	15	15	181	40	79	546	118	52	5.7	28
9	15	18	15	15	51	38	73	910	126	47	9.6	22
10	14	18	15	23	39	63	71	1090	128	47	8.9	23
11	14	18	15	28	31	291	68	1090	117	24	11	26
12	14	18	15	22	28	1050	61	1080	113	28	22	27
13	13	19	15	22	26	502	60	1460	110	28	26	29
14	13	19	14	26	25	63	74	1710	131	22	27	30
15	13	19	14	132	25	60	78	1980	126	7.5	36	28
16	13	19	189	135	26	59	74	1430	113	6.2	41	29
17	13	18	195	686	26	60	73	1310	103	7.5	18	28
18	13	19	469	205	26	110	75	1210	96	11	19	29
19	14	19	186	76	27	138	71	1180	91	8.8	24	31
20	14	20	26	46	27	217	80	1750	86	9.6	15	34
21	14	21	20	39	27	242	84	2070	76	10	12	32
22	14	21	17	35	28	262	190	2120	57	12	6.6	34
23	14	127	75	31	28	135	307	1150	46	13	14	46
24	15	71	173	28	28	73	354	453	46	17	22	91
25	15	19	52	27	29	53	383	205	46	15	23	81
26	15	16	21	28	31	60	402	123	45	5.9	24	63
27	16	15	18	28	33	82	133	124	44	6.5	21	68
28	16	22	26	27	37	138	94	124	52	9.0	22	65
29	16	24	29	27	---	261	109	117	29	5.1	27	26
30	16	24	23	28	---	263	122	173	30	38	22	17
31	16	---	31	29	---	381	---	190	---	25	20	---
TOTAL	446	716	1829	1907	1112	5316	4645	28254	3014	790.1	582.8	969.7
MEAN	14.4	23.9	59.0	61.5	39.7	171	155	911	100	25.5	18.8	32.3
MAX	16	127	469	686	181	1050	735	2120	191	65	41	91
MIN	13	15	14	13	25	38	58	117	29	5.1	5.7	3.1
AC-FT	885	1420	3630	3780	2210	10540	9210	56040	5980	1570	1160	1920
CAL YR 1977 TOTAL	14208.0			38.9		469	13					
WTR YR 1978 TOTAL	49581.6			136		2120	3.1					

10351650 TRUCKEE RIVER AT WADSWORTH, NV--Continued

WATER-QUALITY RECORDS

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

CHEMICAL ANALYSES: September 1969 to April 1972, monthly or less frequently.

SPECIFIC CONDUCTANCES: September 1969 to January 1973, monthly or less frequently; March 1977 to current year, monthly.

WATER TEMPERATURES: March to June 1965, monthly; July 1965 to current year, continuous.

INSTRUMENTATION.--Temperature recorder since July 1965.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 505 micromhos Oct. 14, 1977; minimum, 104 micromhos May 15, 1978.

WATER TEMPERATURES: Maximum, 28.5°C July 20, Aug. 11, 12, 1970, July 27, 28, 1971; minimum, freezing point on several days during winter months of 1974-76.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE-DAILY).--

WATER TEMPERATURES: Maximum, 26.0°C July 9, 13, 14; minimum, 2.0°C Dec. 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)
OCT , 1977					APR , 1978				
14...	1000	13	505	14.5	13...	1030	56	211	12.0
DEC 19...	1235	224	308	2.0	MAY 15...	1340	1960	104	10.0
JAN , 1978					JUN 13...	0920	109	225	13.5
18...	1320	220	323	3.0	JUL 13...	0955	35	283	19.0
FEB 14...	1240	25	426	7.5					
MAR 15...	1030	61	243	14.0					

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.0	14.5	13.0	10.5	9.5	7.5	5.5	4.5	7.0	5.5	10.5	9.0
2	18.0	13.5	13.5	11.0	9.0	7.5	5.5	5.0	6.5	5.5	11.0	10.0
3	18.0	14.0	13.5	11.5	9.0	8.0	5.5	5.0	8.5	6.0	11.5	9.0
4	17.5	14.5	13.5	11.5	10.0	8.5	6.0	5.5	8.0	7.0	11.0	10.0
5	18.0	14.0	13.0	12.0	10.5	10.0	6.5	5.5	9.0	7.5	10.5	8.0
6	17.0	14.5	12.0	10.0	9.5	8.0	6.5	5.5	8.5	6.5	11.0	6.0
7	16.5	12.5	11.5	9.5	9.5	8.0	6.0	4.0	8.0	7.0	11.0	8.0
8	16.5	13.5	11.0	9.0	9.5	8.0	7.0	6.0	7.0	3.5	12.5	10.0
9	17.0	14.0	10.0	8.0	7.5	6.5	7.0	6.5	6.5	5.0	12.0	10.0
10	17.0	13.5	10.5	8.0	7.5	6.5	6.5	6.0	6.0	5.5	12.5	9.0
11	17.0	13.5	10.0	9.0	8.0	6.5	6.5	5.5	6.0	4.5	10.5	8.0
12	17.0	13.5	11.0	8.5	8.5	7.0	6.5	5.5	6.0	4.5	7.5	6.0
13	18.0	14.0	11.0	9.0	8.0	7.5	6.5	6.5	7.5	5.0	8.0	5.0
14	18.0	14.5	10.5	9.0	9.5	8.0	7.5	7.0	8.0	6.0	11.5	6.0
15	17.0	15.0	11.5	9.0	9.5	9.0	7.5	5.0	8.0	6.5	12.5	7.0
16	18.0	15.0	11.0	9.0	8.0	2.5	5.5	4.0	7.0	5.5	13.5	8.0
17	18.0	14.5	10.5	9.0	4.5	4.0	5.5	3.5	7.0	5.5	13.0	9.0
18	18.0	14.0	10.0	8.5	4.0	3.0	5.0	3.0	8.5	6.5	12.5	8.5
19	17.5	15.5	8.5	7.0	3.5	2.0	6.0	4.0	9.5	7.0	12.0	9.0
20	17.5	15.0	8.0	6.0	5.0	3.0	7.5	5.0	10.0	7.5	12.5	8.0
21	16.5	14.0	8.5	7.0	6.0	5.0	7.0	5.0	10.0	8.0	11.5	9.0
22	16.0	13.5	10.0	8.0	7.0	5.5	7.0	5.5	10.5	8.0	9.5	7.5
23	15.0	14.0	8.5	4.0	7.0	4.5	5.5	4.0	11.0	8.0	12.0	7.0
24	17.0	14.0	10.5	6.0	5.0	4.0	5.0	4.0	10.5	8.5	13.0	7.5
25	17.0	14.5	10.5	9.0	5.5	3.0	4.5	4.0	10.0	8.5	14.5	9.0
26	16.5	14.0	10.5	9.5	5.5	5.0	7.0	4.5	11.0	8.0	14.0	10.5
27	15.5	14.5	10.5	10.0	6.5	5.0	7.0	5.0	10.0	8.0	15.5	10.0
28	13.5	12.5	9.5	8.0	6.5	6.0	7.0	5.5	10.5	8.0	15.5	10.0
29	13.5	11.5	9.0	8.0	7.5	6.0	7.0	5.5	---	---	14.0	10.0
30	13.0	11.0	9.5	8.5	7.5	6.0	7.0	5.5	---	---	14.0	11.0
31	13.0	11.5	---	---	7.0	4.5	7.0	5.5	---	---	13.0	9.5
MONTH	18.0	11.0	13.5	4.0	10.5	2.0	7.5	3.0	11.0	3.5	15.5	5.0

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

[illegible]

PYRAMID AND WINNEMUCCA LAKES BASIN

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10351700 TRUCKEE RIVER NEAR NIXON, NV
(National stream-quality accounting network and pesticide network station)

LOCATION.--Lat 39°46'40", long 119°20'10", in SW¹/₄ sec.18, T.22 N., R.24 E., Washoe County, Hydrologic Unit 16050103, in Pyramid Lake Indian Reservation, on right bank 1.0 mi (1.6 km) upstream from Numana Dam, 4 mi (6 km) south of Nixon, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--1,815 mi² (4,701 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to current year. Records kept by Federal Court Watermaster April to June 1926, May 1928 to current year at site 1.0 mi (1.6 km) downstream (Truckee River below Pyramid Dam, near Nixon, Nev.) not equivalent, but would be equivalent by adding flow of Indian Canal, both of which are available in files of Federal Court Watermaster. Currently, these records are kept only at times of diversion to the canal. At other times, the records are equivalent.

REVISED RECORDS.--WSP 2127: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 3,940 ft (1,201 m), from topographic map.

REMARKS.--Records good. Flow regulated by Lake Tahoe, Prosser Creek, Stampede and Boca Reservoirs, other lakes, powerplants, and many diversions for irrigation. Truckee Canal often diverts much of the flow at Derby Dam, about 25 mi (40 km) upstream, out of basin to Lahontan Reservoir. Several diversions for irrigation between station and Truckee Canal. One irrigation canal diverts between station and mouth of river.

AVERAGE DISCHARGE.--21 years, 439 ft³/s (12.43 m³/s), 318,060 acre-ft/yr (392 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,400 ft³/s (408 m³/s) Feb. 2, 1963, gage height, 14.39 ft (4.386 m); minimum daily, 8.1 ft³/s (0.23 m³/s) July 7, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 24, 1955, reached a stage of 14.1 ft (4.298 m), from floodmarks, discharge, 14,000 ft³/s (396 m³/s), by flow-over-dam measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,040 ft³/s (57.8 m³/s) May 22, gage height, 6.38 ft (1.945 m); minimum, 18 ft³/s (0.51 m³/s) Oct. 18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	22	34	52	36	33	641	176	186	52	32	44
2	21	22	35	37	35	33	428	219	171	53	37	42
3	21	23	34	32	34	32	211	799	210	54	38	41
4	21	22	34	30	32	34	88	874	176	62	38	27
5	21	22	32	28	32	72	96	861	149	57	38	27
6	21	23	32	32	34	246	94	722	173	62	38	36
7	20	23	32	65	36	79	99	555	167	63	39	56
8	21	24	32	38	115	57	99	517	139	62	38	57
9	21	23	27	33	89	52	94	667	141	48	38	53
10	21	23	27	32	73	58	91	1140	141	38	37	52
11	21	23	27	43	54	76	88	1090	139	34	36	51
12	21	23	27	38	47	861	78	1080	124	32	35	52
13	21	23	25	32	44	660	62	1320	116	42	34	51
14	20	22	25	30	42	114	78	1580	125	44	34	53
15	20	23	25	31	42	93	86	1740	128	43	34	51
16	21	22	88	190	40	88	86	1500	114	38	30	51
17	20	23	229	428	39	82	84	1270	106	38	34	50
18	19	23	359	318	38	124	82	1220	104	40	32	50
19	21	22	264	120	38	138	84	1150	100	39	38	50
20	21	37	80	76	37	220	80	1500	97	40	38	49
21	21	23	44	61	36	252	90	1860	88	42	34	50
22	22	23	37	51	36	275	114	1960	73	42	31	49
23	22	52	41	46	36	202	267	1340	58	43	38	50
24	22	121	189	41	35	102	301	600	50	43	41	71
25	22	43	106	38	34	88	344	340	50	43	41	83
26	22	33	52	37	33	80	448	181	47	40	38	72
27	23	28	40	37	32	97	197	165	45	38	37	72
28	23	28	38	37	32	128	132	171	41	38	40	73
29	23	34	50	34	---	242	134	153	52	38	44	67
30	23	34	51	36	---	269	144	168	55	38	43	46
31	23	---	46	36	---	286	---	224	---	40	42	---
TOTAL	660	887	2162	2139	1211	5173	4920	27142	3365	1386	1147	1576
MEAN	21.3	29.6	69.7	69.0	43.3	167	164	876	112	44.7	37.0	52.5
MAX	23	121	359	428	115	861	641	1960	210	63	44	83
MIN	19	22	25	28	32	32	62	153	41	32	30	27
AC-FT	1310	1760	4290	4240	2400	10260	9760	53840	6670	2750	2280	3130
CAL YR 1977	TOTAL	17046	MEAN	46.7	MAX	359	MIN	19	AC-FT	33810		
WTR YR 1978	TOTAL	51768	MEAN	142	MAX	1960	MIN	19	AC-FT	102700		

PYRAMID AND WINNEMUCCA LAKES BASIN

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1960 to November 1961, May 1962 to current year.

CHEMICAL ANALYSES: January 1969 to December 1971 and January 1973 to current year, monthly.

SPECIFIC CONDUCTANCES: January to December 1969, monthly or more frequently; January 1970 to current year, monthly.

BIOLOGICAL DATA: January 1973 to September 1977, monthly; October 1977 to current year, monthly (seasonal).

MICROBIOLOGICAL DATA: February 1973 to current year, monthly.

WATER TEMPERATURES: March 1960 to November 1961 and May 1962 to March 1965, monthly; April 1965 to June 1975, monthly or more frequently; July 1975 to current year, monthly.

SEDIMENT DATA: December 1964 to June 1975, monthly or more frequently; July 1975 to current year, monthly.

COOPERATION.--Pesticide analyses by U.S. Environmental Protection Agency.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 1,110 micromhos Nov. 18, 1977; minimum, 96 micromhos May 17, June 1, 1969.

PHYTOPLANKTON: Maximum, 31,000 cells/mL July 21, 1976, Aug. 10, 1978; minimum, 700 cells/mL Oct. 21, 1976.

FECAL STREPTOCOCCI: Maximum, 2,100 colonies/100 mL (non-ideal colony count) June 22, 1977; minimum, 2 colonies/100 mL Mar. 15, 1973, Dec. 11, 1974.

WATER TEMPERATURES: Maximum, 26.5°C Aug. 4, 1966; minimum, freezing point on Jan. 4, 1973, Dec. 15, 1975.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 2,530 mg/L Mar. 17, 1967; minimum, 2 mg/L several times during period of record.

REVISIONS.--Microbiological results reported as "0 colonies/100 mL" in previous years should be corrected to "less than 1 colony/100 mL."

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHQS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
06...	1110	22	976	8.6	14.0	5	--	--	--	--
26...	1115	23	1030	8.4	13.5	6	--	--	4	--
NOV										
18...	1050	22	1110	8.4	5.5	4	--	--	<1	--
DEC										
29...	1000	49	878	8.0	5.5	20	--	--	13	--
JAN										
17...	1110	628	368	7.8	5.5	210	--	9.2	K200	--
FEB										
24...	1020	35	882	8.8	8.0	4	--	9.6	<1	--
MAR										
27...	1125	102	491	8.5	13.0	10	--	11.4	2	--
APR										
18...	1210	E82	445	8.8	13.0	4	--	10.6	--	<1
MAY										
22...	1040	1890	104	7.1	12.5	--	33	9.1	--	84
JUN										
16...	1050	118	305	8.8	15.5	--	2.5	--	--	17
JUL										
19...	1100	41	757	8.6	23.0	--	3.1	7.7	--	9
AUG										
10...	0950	E37	865	8.4	22.0	--	4.1	7.6	--	K26
SEP										
22...	1030	49	619	7.8	14.0	--	1.8	9.2	--	6

E: ESTIMATED.

K: NON-IDEAL COLONY COUNT.

PYRAMID AND WINNEMUCCA LAKES BASIN

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10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

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

DATE	STREP- TUCUCCI FECAL, (COLS. PER 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT										
06...	36	--	--	--	--	--	--	--	--	--
26...	20	--	250	56	26	110	3.0	8.8	140	110
NOV										
18...	120	--	--	--	--	--	--	--	--	--
DEC										
29...	620	--	--	--	--	--	--	--	--	--
JAN										
17...	970	--	88	22	8.1	31	1.4	4.7	75	31
FEB										
24...	78	--	220	50	22	89	2.6	7.1	120	100
MAR										
27...	71	--	150	35	14	48	1.7	5.0	90	72
APR										
18...	--	160	120	28	12	42	1.7	4.5	93	53
MAY										
22...	--	220	37	8.7	3.8	7.2	.5	1.6	37	10
JUN										
16...	--	18	84	20	8.2	31	1.5	3.5	71	29
JUL										
19...	--	380	180	41	19	75	2.4	7.7	120	90
AUG										
10...	--	7	210	49	21	92	2.8	8.8	130	100
SEP										
22...	--	4	160	39	16	58	2.0	5.6	120	78

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 CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT										
06...	--	--	--	--	--	--	.01	.01	.02	.03
26...	160	.2	20	617	575	38.3	.06	.01	.07	.01
NOV										
18...	--	--	--	--	--	--	.05	.04	.09	.07
DEC										
29...	--	--	--	--	--	--	.86	.01	.87	.12
JAN										
17...	32	.1	23	204	197	346	--	--	.87	.46
FEB										
24...	130	.1	13	489	485	46.2	--	--	.06	.02
MAR										
27...	59	.1	15	289	302	79.6	--	--	.19	.08
APR										
18...	56	.1	13	249	265	ES5.1	--	--	.01	.03
MAY										
22...	5.3	.1	16	68	75	347	.26	.03	.29	.06
JUN										
16...	33	.1	17	181	184	57.7	--	--	--	--
JUL										
19...	110	.2	25	439	440	48.6	.00	.00	.00	.00
AUG										
10...	130	.2	24	505	503	ES0.4	.02	.00	.02	.00
SEP										
22...	76	.2	16	353	361	46.7	.00	.00	.00	.01

E: ESTIMATED.

PYRAMID AND WINNEMUCCA LAKES BASIN

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT										
06...	--	.66	--	--	.71	.11	--	--	--	--
26...	.00	.66	.22	.22	.74	.10	.01	3.2	--	--
NOV										
18...	--	.31	--	--	.47	.06	--	--	--	--
DEC										
29...	--	.79	--	--	1.8	.23	--	--	--	--
JAN										
17...	--	--	--	.81	--	2.1	.19	--	4.2	<5.0
FEB										
24...	--	.48	--	.25	.56	.09	.04	3.8	--	--
MAR										
27...	--	.71	--	.29	.98	.14	.05	4.3	--	--
APR										
18...	--	.27	--	.17	.51	.11	.06	--	3.4	1.4
MAY										
22...	--	--	--	1.5	--	.19	.04	8.2	--	--
JUN										
16...	--	--	--	.47	--	.13	.10	2.6	--	--
JUL										
19...	.00	.70	--	--	.70	.24	.19	--	4.8	.4
AUG										
10...	--	.48	--	.35	.50	.23	.17	6.0	--	--
SEP										
22...	--	.39	--	.32	.40	.15	.12	4.5	--	--

PYRAMID AND WINNEMUCCA LAKES BASIN

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10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 26...	1115	6	8	--	--	<10	0	<10	10
JAN 17...	1110	24	11	300	0	2	2	10	10
APR 18...	1210	11	12	200	300	--	--	10	0
MAY 22...	1040	4	3	200	100	--	--	20	0
JUL 19...	1100	13	13	200	100	--	--	10	10

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CU)	COBALT, DIS- SOLVED (UG/L AS CU)	CUPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	CUPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 26...	<50	0	<10	1	460	30	<100	0	120
JAN 17...	8	0	44	2	20000	70	30	9	1100
APR 18...	<10	0	<10	3	580	30	--	--	70
MAY 22...	<10	0	40	1	6300	60	--	--	230
JUL 19...	0	0	7	2	370	20	--	--	140

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 26...	60	.0	.0	0	0	--	--	50	10
JAN 17...	30	.4	.0	1	0	1	0	90	0
APR 18...	40	.0	.0	0	0	0	0	10	10
MAY 22...	10	.0	.0	0	0	0	0	50	5
JUL 19...	20	.2	.0	0	0	0	0	10	10

PYRAMID AND WINNEMUCCA LAKES BASIN

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ATRA- ZINE, TOTAL (UG/L)	ATRA- ZINE, 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)
NOV 18...	1050	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 22...	1040	ND	--	ND	ND	ND	--	ND	ND	ND
AUG 10...	0915	ND	--	ND	--	ND	--	ND	--	ND

DATE	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)
NOV 18...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 10...	--	ND	--	ND	--	--	--	ND	--	ND

DATE	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 18...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 10...	--	--	--	ND	--	ND	ND	--	--	--

DATE	METH- OXY- CHLOR, TOTAL (UG/L)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 18...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 10...	ND	--	--	--	--	--	--	--	ND	--

DATE	TRI- THION, TOTAL (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	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)	SIMA- ZINE TOTAL COND. (UG/L)	SIMA- ZINE IN BOTTOM MATERI- AL (UG/ KG DRY SOLIDS)
NOV 18...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 22...	ND	ND	--	--	--	--	--	--	ND	--
AUG 10...	--	--	--	--	--	--	--	--	ND	--

ND: NONE DETECTED.

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

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

PHYTOPLANKTON

DATE TIME	OCT 6,77 1110	NOV 18,77 1050	MAR 27,78 1125	MAY 22,78 1040
TOTAL CELLS/ML	14000	1800	7700	6600
DIVERSITY: DIVISION	1.4	0.8	0.5	0.5
..CLASS	1.4	0.8	0.5	0.5
...ORDER	1.9	1.6	1.1	0.8
....FAMILY	2.4	3.1	3.0	2.7
.....GENUS	2.5	3.4	3.7	3.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....COELASTRACEAE								
.....COELASTRUM	--	-	--	-	--	-	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	550	4	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	*	0	13	1	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	72	1	--	-
...OOCYSTIS	--	-	--	-	--	-	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	--	-
...SCENEDESMUS	4300#	31	350#	20	870	11	--	-
....TETRASTRUM	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CARTERIA	*	0	--	-	--	-	--	-
...CHLAMYDOMONAS	*	0	--	-	--	-	--	-
....CHLOROGONIUM	--	-	--	-	--	-	--	-
...PHACOTACEAE								
....PTEROMONAS	--	-	13	1	--	-	--	-
...VOLVOCAEAE								
....PANDORINA	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
....COSCINODISCACEAE								
.....CYCLOTELLA	--	-	300#	17	940	12	96	1
....MELOSIRA	280	2	88	5	--	-	160	2
...STEPHANODISCUS	5300#	38	--	-	220	3	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	13	1	140	2	130	2
...COCCONEIS	140	1	88	5	940	12	130	2
....RHUICOSPHENIA	--	-	25	1	140	2	220	3
...CYMBELLACEAE								
....AMPHURA	--	-	25	1	290	4	--	-
....CYMBELLA	--	-	--	-	140	2	410	6
...EPITHEMIA	280	2	150	9	360	5	64	1
...DIATOMACEAE								
....DIATOMA	140	1	75	4	510	7	130	2
...FRAGILARIACEAE								
....FRAGILARIA	960	7	160	9	--	-	2500#	38
....SYNEDRA	*	0	--	-	--	-	*	0
...GOMPHONEMACEAE								
....GOMPHONEIS	*	0	--	-	--	-	--	-
....GOMPHONEMA	--	-	63	4	870	11	380	6
...NAVICULACEAE								
....NAVICULA	*	0	88	5	870	11	1400#	22
....PINNULARIA	--	-	--	-	510	7	--	-
....STAURONEIS	--	-	--	-	--	-	*	0
...NITZSCHACEAE								
....DENTICULA	--	-	--	-	580	7	--	-
....NITZSCHIA	140	1	280#	16	290	4	64	1
...SURIPELLACEAE								
....CYMATOPLEURA	--	-	--	-	--	-	64	1
....SURIPELLA	--	-	13	1	--	-	96	1
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONIDALES								
....CRYPTOMONODACEAE								
.....CRYPTOMONAS	*	0	--	-	--	-	--	-

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

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

PYRAMID AND WINNEMUCCA LAKES BASIN

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

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

PHYTOPLANKTON

DATE TIME	OCT 6,77 1110	NOV 18,77 1050	MAR 27,78 1125	MAY 22,78 1040
TOTAL CELLS/ML	14000	1800	7700	6600
DIVERSITY: DIVISION	1.4	0.8	0.5	0.5
..CLASS	1.4	0.8	0.5	0.5
...ORDER	1.9	1.6	1.1	0.8
...FAMILY	2.4	3.1	3.0	2.7
....GENUS	2.5	3.4	3.7	3.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCCOCCALES								
....CHROCCOCCAEAE								
.....ANACYSTIS	--	-	--	-	--	-	--	-
...HORMOGONALES								
....OSCILLATORIACEAE								
.....LYNGBYA	--	-	--	-	--	-	570	9
....OSCILLATORIA	1200	9	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENUIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
.....EUGLENA	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	25	1	--	-	96	1

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

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

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

PHYTOPLANKTON

DATE TIME	JUN 16,78 1050	JUL 19,78 1100	AUG 10,78 0950	SEP 22,78 1030
TOTAL CELLS/ML	9300	29000	31000	2800
DIVERSITY: DIVISION	0.5	1.6	1.5	0.3
..CLASS	0.5	1.6	1.5	0.3
..ORDER	0.8	1.9	1.9	0.8
...FAMILY	2.7	2.4	2.3	1.1
....GENUS	3.0	2.5	2.4	1.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	440	5	--	-	--	-	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	55	1	*	0	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	1000	3	590	2	--	-
....KIRCHNERIELLA	--	-	690	2	--	-	--	-
...OOCYSTIS	--	-	*	0	*	0	--	-
....TETRAEDRON	--	-	230	1	250	1	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	680	2	--	-
...SCENEDESMUS	440	5	3100	11	2100	7	120	4
....TETRASTRUM	--	-	230	1	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CARTERIA	--	-	--	-	--	-	--	-
...CHLAMYDOMONAS	--	-	1000	3	420	1	--	-
...CHLOROGONIUM	--	-	--	-	*	0	--	-
...PHACOTACEAE								
....PTEROMONAS	--	-	--	-	--	-	--	-
...VOLVOCAEAE								
....PANDORINA	--	-	--	-	680	2	--	-
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	500	5	1200	4	3100	10	2300#	83
....MELOSIRA	--	-	--	-	--	-	29	1
...STEPHANODISCUS	--	-	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	*	0	--	-	--	-
...COCCONEIS	55	1	390	1	170	1	29	1
...RHODICOSPHENIA	--	-	150	1	170	1	--	-
...CYMBELLACEAE								
....AMPHURA	--	-	--	-	--	-	--	-
...CYMBELLA	500	5	--	-	*	0	88	3
....EPITHEMIA	--	-	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	55	1	*	0	--	-	88	3
...FRAGILARIACEAE								
....FRAGILARIA	3200#	34	8600#	30	6100#	20	--	-
...SYNEDRA	170	2	--	-	--	-	44	2
...GOMPHONEMATACEAE								
....GOMPHONEIS	--	-	--	-	--	-	--	-
...GOMPHONEMA	280	3	230	1	*	0	15	1
...NAVICULACEAE								
....NAVICULA	720	8	*	0	340	1	15	1
...PINNULARIA	940	10	--	-	*	0	29	1
...STAURONEIS	--	-	--	-	--	-	--	-
...NITZSCHIIACEAE								
....DENTICULA	--	-	--	-	--	-	--	-
...NITZSCHIA	1900#	20	310	1	590	2	29	1
...SURIPELLACEAE								
....CYMATOPLEURA	--	-	--	-	--	-	--	-
...SURIPELLA	55	1	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONIDALES								
...CRYPTOMONODACEAE								
....CRYPTOMONAS	--	-	--	-	*	0	--	-

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

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

PYRAMID AND WINNEMUCCA LAKES BASIN

10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

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

PHYTOPLANKTON

DATE TIME	JUN 16,78 1050	JUL 19,78 1100	AUG 10,78 0950	SEP 22,78 1030
TOTAL CELLS/ML	9300	29000	31000	2800
DIVERSITY: DIVISION	0.5	1.6	1.5	0.3
..CLASS	0.5	1.6	1.5	0.3
...ORDER	0.8	1.9	1.9	0.8
...FAMILY	2.7	2.4	2.3	1.1
....GENUS	3.0	2.5	2.4	1.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCCOCCALES								
...CHROCCOCCAEAE								
....ANACYSTIS	--	-	11000#	39	16000#	50	--	-
...HORMOGONALES								
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
....EUGLENA	55	1	--	-	--	-	--	-
....TRACHELOMONAS	--	-	*	0	--	-	--	-

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

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

PERIPHYTON

Retrieval Date	Length of exposure Polyethylene strip (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Biomass pigment ratio
		Dry weight	Ash weight			
Nov. 18	43	4,880	4,090	0.170	0.000	4,647
Feb. 24	38	--	--	2.45	0.180	--
Aug. 10	22	34.0	25.7	22.2	10.5	--

PYRAMID AND WINNEMUCCA LAKES BASIN

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10351700 TRUCKEE RIVER NEAR NIXON, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT							
06...	1110	22	22	1.3	--	--	--
26...	1115	23	16	.99	--	--	--
NOV							
18...	1050	22	7	.42	--	--	--
DEC							
29...	1000	49	43	5.7	--	--	--
JAN							
17...	1110	628	742	1260	35	43	58
FEB							
24...	1020	35	12	1.1	--	--	--
MAR							
27...	1125	102	33	9.1	--	--	--
APR							
18...	1210	E82	18	E4.0	--	--	--
MAY							
22...	1040	1890	360	1840	14	17	23
JUN							
16...	1050	118	12	3.8	--	--	--
JUL							
19...	1100	41	15	1.7	--	--	--
AUG							
10...	0950	E37	15	E1.5	--	--	--
SEP							
22...	1030	49	7	.93	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	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							
06...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
NOV							
18...	--	--	--	--	--	--	--
DEC							
29...	--	--	--	--	--	--	--
JAN							
17...	70	82	94	99	100	--	--
FEB							
24...	--	--	--	--	--	--	--
MAR							
27...	--	--	--	--	--	--	--
APR							
18...	--	--	--	--	--	--	--
MAY							
22...	28	34	41	54	80	99	100
JUN							
16...	--	--	--	--	--	--	--
JUL							
19...	--	--	--	--	--	--	--
AUG							
10...	--	--	--	--	--	--	--
SEP							
22...	--	--	--	--	--	--	--

E: ESTIMATED.

BLACK ROCK DESERT BASIN

10352500 McDERMITT CREEK NEAR McDERMITT, NV

LOCATION.--Lat 41°58'00", long 117°50'01", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.8, T.47 N., R.37 E., Humboldt County, Hydrologic Unit 16040201, on right bank at mouth of canyon, 6.5 mi (10.5 km) southwest of McDermitt.

DRAINAGE AREA.--225 mi² (583 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1214: 1949-50 (P).

GAGE.--Water-stage recorder. Altitude of gage is 4,545 ft (1,385 m), from topographic map. Prior to May 11, 1972, at site approximately 300 ft (91 m) downstream on left bank at same datum.

REMARKS.--Records fair except those for winter months and period of no gage-height record, Mar. 8-28, which are poor. One diversion for about 1,500 acres (6.07 km²) above station.

AVERAGE DISCHARGE.--30 years, 30.4 ft³/s (0.861 m³/s), 22,020 acre-ft/yr (27.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,970 ft³/s (112 m³/s) about Feb. 1, 1963, gage height, 8.64 ft (2.634 m), in gage well, from rating curve extended above 250 ft³/s (7.08 m³/s) on basis of slope-area measurement of peak flow; no flow for several days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Mar. 22	unknown	*421	11.9	4.40	1.341
Apr. 1	2300	337	9.54	3.99	1.216

Minimum daily discharge, 1.6 ft³/s (0.045 m³/s) Oct. 9, 10, 12.

DISCHARGE, IN CURTIC 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	5.1	7.5	16	8.6	48	282	102	48	12	3.9	2.8
2	2.2	5.6	6.8	14	8.6	50	279	102	46	12	3.7	2.7
3	2.2	5.7	6.0	13	8.3	61	228	102	47	13	3.7	2.6
4	2.2	5.7	5.9	12	8.6	84	201	97	50	15	3.6	2.6
5	2.2	6.0	6.1	14	9.7	93	168	91	49	16	3.6	2.6
6	2.1	5.9	5.4	9.6	21	114	155	90	48	22	2.9	3.6
7	1.8	5.7	5.3	9.3	28	125	143	85	48	20	2.5	5.1
8	1.7	5.6	5.1	8.4	32	135	129	82	49	17	2.0	5.6
9	1.6	5.5	4.9	7.7	29	140	125	78	46	14	1.9	4.9
10	1.6	5.8	5.4	7.3	25	145	131	74	45	11	1.9	4.9
11	1.7	6.2	5.6	7.0	19	125	136	76	51	10	1.7	4.9
12	1.6	6.2	5.7	7.0	17	100	123	75	43	9.3	1.7	4.9
13	1.7	6.0	5.9	7.3	24	80	121	75	38	8.3	1.9	4.5
14	1.8	5.9	6.2	8.3	13	70	113	75	36	7.8	2.1	4.5
15	1.8	6.3	44	8.6	14	62	112	78	34	7.1	2.3	4.2
16	1.9	6.4	32	9.0	7.3	58	116	98	32	6.4	2.5	4.2
17	1.9	6.0	22	8.4	11	72	102	98	30	6.5	2.1	4.2
18	1.9	5.2	16	8.2	12	95	97	89	27	6.5	2.1	4.2
19	2.0	4.6	25	8.4	13	130	91	84	29	6.0	2.1	5.6
20	2.2	4.2	15	8.4	13	190	91	81	26	6.1	2.0	6.2
21	2.4	4.3	6.5	8.1	17	250	88	74	23	5.7	1.9	6.2
22	2.5	11	7.2	7.8	20	320	81	74	23	8.1	1.9	5.9
23	2.6	9.5	8.0	7.6	28	310	72	78	19	8.4	1.9	5.6
24	2.8	12	7.4	7.8	41	280	67	81	14	7.6	1.9	5.6
25	2.8	14	6.8	8.2	48	260	77	81	16	6.4	1.9	5.4
26	3.1	14	9.3	8.4	61	240	112	70	16	4.1	1.9	5.1
27	4.0	14	19	8.1	68	230	112	60	16	4.0	1.9	5.1
28	4.8	9.8	22	8.0	53	220	98	53	15	4.5	2.1	5.1
29	4.8	8.8	19	8.1	---	235	100	50	13	4.4	2.3	5.1
30	4.9	8.2	16	8.3	---	226	98	51	13	4.2	2.7	5.1
31	4.9	---	15	8.5	---	220	---	50	---	4.1	2.8	---
TOTAL	78.0	219.2	372.0	280.8	658.1	4768	3848	2454	990	287.5	73.4	139.0
MEAN	2.52	7.31	12.0	9.06	23.5	154	128	79.2	33.0	9.27	2.37	4.63
MAX	4.9	14	44	16	68	320	282	102	51	22	3.9	6.2
MIN	1.6	4.2	4.9	7.0	7.3	48	67	50	13	4.0	1.7	2.6
AC-FT	155	435	738	557	1310	9460	7630	4870	1960	570	146	276
CAL YR 1977 TOTAL	2268.57			MEAN 6.22	MAX 44	MIN .00	AC-FT 4500					
WTR YR 1978 TOTAL	14168.00			MEAN 38.8	MAX 320	MIN 1.6	AC-FT 28100					

BLACK ROCK DESERT BASIN

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10352500 McDERMITT CREEK NEAR McDERMITT, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July to September 1949, March 1950 to October 1951, April 1952, November 1961 to current year.

CHEMICAL ANALYSES: October 1974 to October 1977, monthly.

SPECIFIC CONDUCTANCES: October 1974 to August 1975, monthly; September 1975 to October 1977, once-daily; November 1977 to current year, monthly.

BIOLOGICAL, MICROBIOLOGICAL, AND SEDIMENT DATA: January 1975 to October 1977, monthly.

WATER TEMPERATURES: July to September 1949 and March 1950 to October 1951, monthly (seasonal); April 1952, twice-monthly; November 1961 to September 1962, monthly (seasonal); October 1962 to August 1975, monthly; September 1975 to October 1977, once-daily; November 1977 to current year, monthly.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 579 micromhos June 10, 1977; minimum, 160 micromhos Mar. 18, 1976.

PHYTOPLANKTON: Maximum, 8,000 cells/mL Feb. 20, 1975; minimum, 260 cells/mL Oct. 19, 1976.

FECAL STREPTOCOCCI: Maximum, 18,000 colonies/100 mL (non-ideal colony count) Sept. 22, 1976; minimum, 1 colony/100 mL Dec. 30, 1975, Dec. 22, 1976.

WATER TEMPERATURES: Maximum, 31.0°C June 18, 1968; minimum, freezing point on several days during winter months of most years.

SUSPENDED--SEDIMENT CONCENTRATIONS: Maximum, 1,460 mg/L Sept. 22, 1976; minimum, 3 mg/L Dec. 22, 1976.

REVISIONS.--Microbiological results reported as "0 colonies/100 mL" in previous years should be corrected to "less than 1 colony/100 mL."

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML)	HARD- NESS (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)
OCT									
04...	1425	6.1	390	8.8	18.0	3	24	130	38
NOV									
30...	1510	8.3	315	--	5.0	--	--	--	--
DEC									
29...	1125	15	263	--	.0	--	--	--	--
JAN									
25...	1155	8.3	323	--	.0	--	--	--	--
MAR									
28...	1810	200	173	--	6.0	--	--	--	--
MAY									
02...	0850	103	248	--	8.5	--	--	--	--
18...	1130	92	246	--	12.5	--	--	--	--
JUN									
21...	1515	24	333	--	20.5	--	--	--	--
AUG									
08...	1300	2.0	312	--	27.5	--	--	--	--
SEP									
18...	1510	6.0	346	--	15.5	--	--	--	--

10352500 McDERMITT CREEK NEAR McDERMITT, NV--Continued

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

[illegible][illegible]

10352500 McDERMITT CREEK NEAR McDERMITT, NV--Continued

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

PHYTOPLANKTON

DATE	OCT 4, 77
TIME	1425
TOTAL CELLS/ML	2500
DIVERSITY: DIVISION	1.2
..CLASS	1.2
...ORDER	1.3
...FAMILY	1.6
....GENUS	1.7

ORGANISM	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)		
..CHLOROPHYCEAE		
...CHLORUCCALES		
...OOCYSTACEAE		
....ANKISTRODESMUS	46	2
....KIRCHNERIELLA	*	0
...OOCYSTIS	18	1
...SCENEDESMACEAE		
....CRUCIGENIA	37	1
...SCENEDESMUS	250	10
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	18	1
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	*	0
...PENNALES		
...ACHNANTHACEAE		
....ACHNANTHES	*	0
...COCCONEIS	37	1
...CYMBELLACEAE		
...EPITHEMIA	*	0
...FRAGILARIACEAE		
....FRAGILARIA	18	1
...SYNEDRA	140	5
...NITZSCHACEAE		
....NITZSCHIA	150	6
CYANOPHYTA (BLUE-GREEN ALGAE)		
..CYANOPHYCEAE		
...HORMOGONALES		
...NOSTOCACEAE		
....ANABAENA	1800#	70
EUGLENOPHYTA (EUGLENOIDS)		
..EUGLENOPHYCEAE		
...EUGLENALES		
...EUGLENACEAE		
....EUGLENA	*	0

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	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 04...	1425	6.1	8	.13

10352500 McDERMITT CREEK NEAR McDERMITT, NV--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	400											
2	394											
3	394											
4	394											
5	402											
6	405											
7	404											
8	415											
9	414											
10	412											
11	418											
12	443											
13	425											
14	423											
15	425											
16	432											
17	433											
18	417											
19	432											
20	437											
21	439											
22	441											
23	449											
24	443											
25	450											
26	441											
27	450											
28	468											
29	411											
30	398											
31	388											
MEAN	422											
MAX	468											
MTN	388											
WTR YR 1978	MEAN	422	MAX	468	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	18.0											
2	18.0											
3	19.0											
4	18.0											
5	16.0											
6	16.0											
7	16.0											
8	17.0											
9	16.0											
10	16.0											
11	18.0											
12	16.0											
13	18.0											
14	20.0											
15	19.0											
16	19.0											
17	19.0											
18	17.0											
19	18.0											
20	15.0											
21	15.0											
22	15.0											
23	11.0											
24	15.0											
25	17.0											
26	18.0											
27	18.0											
28	10.0											
29	9.0											
30	7.0											
31	9.0											
MEAN	15.5											
MAX	20.0											
MTN	7.0											
WTR YR 1978	MEAN	15.5	MAX	20.0	MIN	7.0						

BLACK ROCK DESERT BASIN

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10353000 EAST FORK QUINN RIVER NEAR McDERMITT, NV

LOCATION.--Lat 41°59'00", long 117°35'00", in sec.9, T.47 N., R.39 E., Humboldt County, Hydrologic Unit 16040201, in Fort McDermitt Indian Reservation, on right bank 1 mi (2 km) downstream from South Fork and 7 mi (11 km) east of McDermitt.

DRAINAGE AREA.--140 mi² (363 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,700 ft (1,433 m), from topographic map.

REMARKS.--Records good, except for period of backwater due to beaver dam, Oct. 6 to Mar. 5, which are poor. No diversion above station. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--30 years, 26.5 ft³/s (0.750 m³/s), 19,200 acre-ft/yr (23.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,270 ft³/s (36.0 m³/s) Jan. 15, 1956, gage height, 8.52 ft (2.597 m); minimum, 0.10 ft³/s (0.003 m³/s) Sept. 6, 7, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Mar. 10	0200	111	3.14	3.54	1.079
Mar. 23	1800	*525	14.9	5.00	1.524
Apr. 28	unknown	293	8.30	4.44	1.353

Minimum discharge, 1.4 ft³/s (0.040 m³/s) Aug. 10, 11.

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	3.2	5.6	7.2	10	10	35	199	120	26	7.3	2.0	1.9
2	3.4	6.0	6.5	12	10	37	168	130	26	6.7	1.9	1.9
3	3.0	6.3	6.3	13	11	45	148	120	24	7.0	1.7	1.9
4	3.2	6.4	6.4	12	14	60	132	100	23	8.4	1.8	1.9
5	3.2	6.5	6.2	11	22	66	114	90	22	7.7	1.8	2.2
6	3.1	6.5	5.9	9.7	30	75	103	80	20	7.6	1.8	3.1
7	3.0	6.3	5.7	8.9	40	80	96	76	19	6.6	1.7	4.0
8	2.9	6.1	5.5	8.6	41	80	95	70	17	6.2	1.7	3.8
9	2.8	6.0	5.5	8.2	35	100	103	64	16	5.7	1.7	3.3
10	2.8	6.3	5.8	8.2	28	103	102	58	18	5.2	1.8	3.4
11	2.8	6.7	6.0	8.2	23	96	108	54	18	4.9	1.8	3.5
12	2.8	6.9	6.0	8.4	20	78	94	54	15	4.7	1.8	3.4
13	2.8	6.8	6.1	8.9	22	59	85	54	14	4.6	2.2	3.3
14	2.8	6.6	6.4	11	16	50	82	54	13	4.2	2.2	3.1
15	2.9	6.9	6.6	15	14	43	79	60	13	3.9	2.2	3.1
16	2.9	7.2	6.5	18	13	39	79	66	12	3.8	2.7	3.1
17	3.0	6.7	6.3	20	13	54	72	66	12	3.7	2.9	3.1
18	3.0	6.2	6.2	19	13	112	74	54	11	3.6	2.9	3.8
19	3.1	5.4	6.3	19	15	133	79	53	11	3.4	2.5	4.0
20	3.3	5.0	6.5	18	18	150	75	49	9.9	3.3	2.3	3.8
21	3.6	5.2	7.2	16	23	183	70	45	11	3.3	2.2	3.5
22	3.9	6.2	8.2	14	30	309	70	43	11	3.2	2.2	3.3
23	4.1	7.0	8.6	13	37	318	73	44	9.9	2.9	2.2	3.3
24	4.5	6.6	8.8	13	43	282	70	48	9.5	2.8	2.1	3.1
25	4.7	7.0	9.0	14	48	272	75	46	9.8	2.6	2.0	3.1
26	5.0	8.0	9.3	14	50	269	100	42	9.4	2.4	2.0	3.1
27	5.1	8.5	9.6	12	47	266	130	36	9.0	2.5	2.0	3.3
28	5.2	8.1	9.9	10	38	252	140	33	8.6	2.6	2.0	3.4
29	5.3	7.9	10	9.5	---	219	130	31	8.0	2.5	1.9	3.3
30	5.4	7.6	12	10	---	196	120	30	7.8	2.3	1.9	3.1
31	5.5	---	8.9	11	---	214	---	28	---	2.2	1.8	---
TOTAL	112.3	198.5	225.4	383.6	724	4275	3065	1898	433.9	137.8	63.7	94.1
MEAN	3.62	6.62	7.27	12.4	25.9	138	102	61.2	14.5	4.45	2.05	3.14
MAX	5.5	8.5	12	20	50	318	199	130	26	8.4	2.9	4.0
MIN	2.8	5.0	5.5	8.2	10	35	70	28	7.8	2.2	1.7	1.9
AC-FT	223	394	447	761	1440	8480	6080	3760	861	273	126	187
CAL YR 1977 TOTAL	2062.50			MEAN 5.65	MAX 24	MIN .43	AC-FT 4090					
WTR YR 1978 TOTAL	11611.30			MEAN 31.8	MAX 318	MIN 1.7	AC-FT 23030					

BLACK ROCK DESERT BASIN

10353500 QUINN RIVER NEAR McDERMITT, NV

LOCATION.--Lat 41°46'30", long 117°48'15", in SW¼ sec.15, T.45 N., R.37 E., Humboldt County, Hydrologic Unit 16040201, on left bank 1.5 mi (2.4 km) upstream from Flat Creek and 15.5 mi (24.9 km) south of McDermitt.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--1,100 mi² (2,849 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,240 ft (1,292 m), from river-profile map.

REMARKS.--Records fair. Several diversions for irrigation above station.

AVERAGE DISCHARGE.--30 years, 34.8 ft³/s (0.986 m³/s), 25,210 acre-ft/yr (31.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,580 ft³/s (44.7 m³/s) Apr. 27, 1952, gage height, 8.39 ft (2.557 m); no flow for some days in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 556 ft³/s (15.7 m³/s) Apr. 28, gage height, 4.42 ft (1.347 m); minimum daily 0.19 ft³/s (0.005 m³/s) Dec. 22-24.

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	.44	1.5	.44	.65	3.4	24	452	396	38	3.7	.84	.84
2	.44	1.2	.81	.70	4.7	25	506	353	58	3.4	.82	.81
3	.27	1.2	1.1	.75	6.6	26	432	299	51	3.1	.81	.89
4	.34	1.0	1.1	.75	8.3	27	387	251	44	3.1	.81	.89
5	.89	1.1	1.1	.80	9.9	28	326	243	43	3.2	.80	.95
6	1.3	.89	.80	.80	13	29	282	226	38	3.0	.90	1.1
7	1.3	.81	.75	.70	19	30	271	202	34	2.8	.87	1.1
8	1.0	.89	.65	.40	21	32	244	171	30	2.6	.87	.94
9	.81	.97	.70	.35	25	38	220	96	26	2.3	.88	.97
10	1.0	1.3	.80	.30	26	49	203	111	24	2.1	.86	.93
11	1.0	1.2	1.0	.30	25	93	203	123	26	1.8	.84	.90
12	1.5	1.1	1.0	.35	22	103	198	120	24	1.6	.84	.90
13	1.7	.66	1.1	.45	22	105	188	112	22	1.5	.94	.89
14	1.9	.73	1.4	.60	22	94	179	98	21	1.3	.90	.86
15	2.0	.66	1.6	.80	21	64	163	90	19	1.1	.91	.88
16	1.6	.73	2.3	.75	19	61	160	98	18	1.0	.89	.86
17	.42	.81	2.5	.70	16	58	176	101	17	.96	.86	.86
18	.42	.58	2.2	.60	15	65	165	94	16	.88	.86	.88
19	.58	.66	1.1	.70	11	102	150	89	14	.76	.81	.87
20	.97	.58	.38	.65	13	151	151	81	13	.74	.81	.87
21	2.1	.63	.24	.60	14	245	169	73	11	.72	.81	.86
22	2.3	.50	.19	.60	17	360	146	66	9.4	.71	.81	.85
23	1.9	.38	.19	.70	18	451	139	59	7.6	.77	.82	.82
24	1.8	.58	.19	.70	19	512	137	60	6.4	.76	.80	.81
25	1.6	.42	.30	.66	22	481	141	62	5.6	.73	.80	.81
26	1.5	.38	.38	.58	23	413	208	74	5.4	.72	.81	.81
27	1.2	.38	.44	.58	25	389	415	75	5.0	.73	.82	.81
28	2.0	.24	.38	.66	26	385	542	70	4.8	.73	.82	.81
29	1.0	.30	.40	1.0	---	366	494	59	4.4	.73	.81	.81
30	1.0	.38	.45	1.6	---	365	442	50	4.1	.87	.85	.81
31	1.4	---	.55	2.3	---	371	---	43	---	.85	.85	---
TOTAL	37.68	22.76	26.54	22.08	486.9	5542	7889	4045	639.7	49.26	26.12	26.39
MEAN	1.22	.76	.86	.71	17.4	179	263	130	21.3	1.59	.84	.88
MAX	2.3	1.5	2.5	2.3	26	512	542	396	58	3.7	.94	1.1
MIN	.27	.24	.19	.30	3.4	24	137	43	4.1	.71	.80	.81
AC-FT	75	45	53	44	966	10990	15650	8020	1270	98	52	52

CAL YR 1977 TOTAL 441.15 MEAN 1.21 MAX 6.7 MIN .19 AC-FT 875
WTR YR 1978 TOTAL 18813.43 MEAN 51.5 MAX 542 MIN .19 AC-FT 37320

10353500 QUINN RIVER NEAR McDERMITT, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1949 to October 1951, April 1952, November 1961 to current year.

CHEMICAL ANALYSES, AND MICROBIOLOGICAL AND SEDIMENT DATA: November 1977 to current year, monthly.

SPECIFIC CONDUCTANCES: April 1977 to current year, monthly.

BIOLOGICAL DATA: November 1977 to current year, monthly (seasonal).

WATER TEMPERATURES: July 1949 to October 1951, April 1952, and November 1961 to current year, monthly.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 763 micromhos Apr. 26, 1977; minimum, 323 micromhos Mar. 8, 1978.

PHYTOPLANKTON: Maximum, 51,000 cells/mL July 12, 1978; minimum, 220 cells/mL May 25, 1978.

FECAL STREPTOCOCCI: Maximum, 750 colonies/100 mL Feb. 23, 1978; minimum, 10 colonies/100 mL (non-ideal colony count) Sept. 20, 1978.

WATER TEMPERATURES: Maximum, 26.5°C July 18, 1968; minimum, freezing point on some days during winter months of most years.

SUSPENDED--SEDIMENT CONCENTRATIONS: Maximum, 308 mg/L Mar. 29, 1978; minimum, 4 mg/L Sept. 20, 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)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
04...	1310	.45	692	--	--	--	--	--	--	--
NOV										
21...	1345	.63	674	7.8	1.0	6	--	--	50	--
DEC										
29...	1345	.72	684	8.0	5.0	3	--	--	3	--
29...	1400	.72	684	--	5.0	--	--	--	--	--
JAN										
25...	1335	.66	687	8.7	3.0	20	--	--	K40	--
FEB										
23...	1310	16	325	8.4	7.0	50	--	15.0	190	--
MAR										
08...	1110	31	323	--	7.5	--	--	--	--	--
23...	1130	425	359	--	7.5	--	--	--	--	--
29...	1115	370	334	8.1	12.5	75	--	8.7	K37	--
APR										
24...	1430	147	479	8.4	14.0	8	--	7.5	--	14
MAY										
25...	1110	66	592	8.2	9.0	--	3.1	9.0	--	91
JUL										
12...	1025	1.6	611	7.2	17.5	--	1.1	--	--	K100
AUG										
16...	1520	.92	660	--	18.0	--	2.2	10.2	--	300
SEP										
20...	1145	.88	669	8.4	10.0	--	16	9.4	--	K12

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
NOV										
21...	220	--	120	33	9.1	100	4.0	8.2	200	75
DEC										
29...	620	--	120	33	9.2	100	4.0	8.0	190	82
29...	--	--	--	--	--	--	--	--	--	--
JAN										
25...	320	--	120	34	9.5	100	3.9	8.3	200	80
FEB										
23...	750	--	85	23	6.6	34	1.6	5.2	98	29
MAR										
08...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
29...	K200	--	93	25	7.5	36	1.6	5.9	120	24
APR										
24...	--	43	130	35	11	57	2.2	6.7	170	37
MAY										
25...	--	19	170	45	14	72	2.4	7.4	--	35
JUL										
12...	--	K30	120	31	10	94	3.8	8.2	180	63
AUG										
16...	--	62	110	29	8.2	96	4.1	8.5	190	74
SEP										
20...	--	K10	120	34	8.4	99	3.9	8.1	190	77

K: NON-IDEAL COLONY COUNT.

BLACK ROCK DESERT BASIN

10353500 QUINN RIVER NEAR McDERMITT, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DTS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT 04...	--	--	--	--	--	--	--	--	--	--
NOV 21...	45	.9	--	474	--	.81	.06	.00	.06	.02
DEC 29...	44	1.4	52	431	443	.84	--	--	.04	.02
29...	--	--	--	--	--	--	--	--	--	--
JAN 25...	51	1.6	52	438	456	.78	--	--	.05	.13
FEB 23...	22	.5	32	203	211	8.77	--	--	.08	.01
MAR 08...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
29...	19	.8	36	232	228	252	.02	.01	.03	.06
APR 24...	22	1.0	41	317	316	126	.26	.01	.27	.00
MAY 25...	28	1.1	46	381	399	67.9	.02	.00	.02	.01
JUL 12...	52	1.4	40	402	408	1.75	.01	.01	.02	.00
AUG 16...	42	1.5	49	410	423	1.02	.07	.01	.08	.07
SEP 20...	46	1.5	50	430	438	1.02	.00	.01	.01	.01

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 04...	--	--	--	--	--	--	--	--	--	--
NOV 21...	.01	.53	.14	.15	.61	.13	.13	2.1	--	--
DEC 29...	--	--	--	--	--	.11	.10	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
JAN 25...	--	.13	--	.05	.31	.17	.09	--	1.4	--
FEB 23...	--	.45	--	.45	.54	.16	.08	4.7	--	--
MAR 08...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
29...	--	.78	--	.58	.87	.29	.12	12	--	--
APR 24...	--	.95	--	.35	1.2	.16	.10	--	9.6	.3
MAY 25...	--	--	--	1.5	--	.07	.06	6.8	--	--
JUL 12...	--	.35	--	.61	.37	.08	.04	--	--	--
AUG 16...	.00	.57	.17	.17	.72	.10	.07	--	--	--
SEP 20...	--	.35	--	.23	.37	.08	.07	1.5	--	--

BLACK ROCK DESERT BASIN

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10353500 QUINN RIVER NEAR McDERMITT, NV--Continued

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

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
NOV									
21...	1345	12	14	--	--	10	0	0	0
JAN									
25...	1335	16	15	100	0	<10	0	0	0
APR									
24...	1430	15	13	200	100	--	--	10	0
AUG									
16...	1520	18	15	200	50	--	--	0	0

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
NOV									
21...	0	0	<10	0	460	10	30	11	220
JAN									
25...	<10	1	10	2	1300	0	10	1	270
APR									
24...	1	2	5	3	1600	60	--	--	50
AUG									
16...	4	<1	4	0	120	<10	--	--	90

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV									
21...	160	.0	.0	0	1	--	--	10	2
JAN									
25...	160	.0	.0	1	0	<10	0	20	10
APR									
24...	10	.2	.0	0	0	0	0	10	0
AUG									
16...	20	.0	.0	0	0	0	0	10	<3

BLACK ROCK DESERT BASIN

10353500 QUINN RIVER NEAR McDERMITT, NV--Continued

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

PHYTOPLANKTON

DATE TIME	NOV 21,77 1345	MAY 28,78 1110	JUL 12,78 1025	AUG 16,78 1520	SEP 20,78 1145
TOTAL CELLS/ML	3200	220	51000	6200	410
DIVERSITY: DIVISION	1.4	0.7	0.1	1.6	0.7
..CLASS	1.4	0.7	0.1	1.6	0.7
...ORDER	2.1	1.2	0.2	2.0	0.7
...FAMILY	2.6	2.4	0.2	2.4	2.3
....GENUS	2.7	2.4	0.2	2.5	2.8

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										
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-	160	3	--	-
....UOCYSTACEAE										
....ANKISTRODESMUS	550#	17	--	-	--	-	39	1	--	-
...SCENEDESMACEAE										
...SCENEDESMUS	130	4	--	-	--	-	--	-	--	-
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CARTERIA	--	-	--	-	--	-	1600#	27	--	-
....CHLAMYDOMONAS	--	-	--	-	510	1	200	3	--	-
...VOLVOCACEAE										
....GONIUM	--	-	--	-	--	-	--	-	88#	21
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
...COSCINODISCAEAE										
...CYCLOTELLA	--	-	22	10	50000#	97	670	11	--	-
....MELOSIRA	1100#	35	--	-	--	-	--	-	--	-
...PENNALES										
...ACHNANTHACEAE										
...COCCONEIS	38	1	--	-	--	-	39	1	--	-
...RHOICOSPHEA	*	0	22	10	--	-	--	-	--	-
...CYMBELLACEAE										
....AMPHORA	*	0	--	-	--	-	--	-	--	-
....CYMBELLA	57	2	--	-	--	-	--	-	130#	32
....EPITHEMIA	38	1	22	10	510	1	160	3	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	--	-	29	7
...FRAGILARIACEAE										
...FRAGILARIA	420	13	--	-	--	-	--	-	29	7
...SYNEDRA	76	2	--	-	--	-	--	-	15	4
...GOMPHONEMACEAE										
....GOMPHONEMA	*	0	45#	20	--	-	--	-	--	-
...NAVICULACEAE										
....DIPLONEIS	--	-	--	-	--	-	--	-	29	7
....GYROSIGMA	--	-	--	-	--	-	--	-	29	7
...NAVICULA	57	2	--	-	--	-	550	9	44	11
...NITZSCHIAEAE										
....NITZSCHIA	19	1	67#	30	510	1	550	9	15	4
...SURIINELLACEAE										
...CYMATOPLEURA	*	0	--	-	--	-	--	-	--	-
...SURIELLA	38	1	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROCOCCOCCALES										
...CHROCOCCACEAE										
....ANACYSTIS	57	2	--	-	--	-	--	-	--	-
...HORMOGONALES										
...OSCILLATORIACEAE										
...OSCILLATORIA	620#	19	--	-	--	-	2200#	35	--	-
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
...EUGLENACEAE										
...TRACHELUMONAS	--	-	45#	20	--	-	--	-	--	-

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

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

BLACK ROCK DESERT BASIN

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10353500 QUINN RIVER NEAR McDERMITT, NV--Continued

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

PERIPHYTON

Retrieval Date	Length of exposure Polyethylene strip (days)	Biomass (g/m ²)		Chlorophyll a	Chlorophyll b
		Dry weight	Ash weight	(mg/m ²)	(mg/m ²)
Dec. 28	38	1.34	1.02	0.400	0.040
Sep. 20	35	45.0	37.5	13.2	4.79

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
NOV 21...	1345	.63	16	.03
DEC 29...	1345	.72	14	.03
JAN 25...	1335	.66	43	.08
FEB 23...	1310	16	105	4.5
MAR 29...	1115	370	308	308
APR 24...	1430	147	50	20
MAY 25...	1110	66	17	3.0
AUG 16...	1520	.92	8	.02
SEP 20...	1145	.88	4	.01

BLACK ROCK DESERT BASIN

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10353650 QUINN RIVER NEAR DENIO, NV

LOCATION.--Lat 41°27'50", long 118°16'50", in SW¼SE¼ sec.33, T.42 N., R.33 E., Humboldt County, Hydrologic Unit 16040201, on right bank 8 mi (13 km) downstream from Kings River and 42 mi (68 km) southeast of Denio.

DRAINAGE AREA.--3,520 mi² (9,117 km²), approximately.

PERIOD OF RECORD.--October 1963 to September 1967, October 1977 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 4,100 ft (1,250 m), from topographic map.

REMARKS.--Records good. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--5 years (1964-67, 1978), 2.58 ft³/s (0.0731 m³/s), 1,870 acre-ft/yr (2.31 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 227 ft³/s (6.43 m³/s) May 8, 1978, gage height 4.66 ft (1.42 m), no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 227 ft³/s (6.43 m³/s) May 8, gage height 4.66 ft (1.420 m), no flow, Oct. 1 to Apr. 10, June 30 to Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	92	14	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	92	12	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	99	11	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	113	9.5	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	161	8.3	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	208	7.4	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	222	6.2	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	226	5.6	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	212	4.5	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	190	3.4	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	18	143	3.4	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	22	151	3.1	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	1.7	141	2.7	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	2.40	99	2.0	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	2.2	62	1.8	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	14	101	1.6	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	42	95	1.5	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	61	79	1.4	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	58	67	1.2	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	42	55	.91	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	67	48	.65	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	70	43	.40	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	73	40	.35	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	79	37	.18	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	71	34	.15	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	63	30	.10	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	77	25	.07	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	87	21	.02	.00	.00	.00
29	.00	.00	.00	.00	---	.00	91	19	.01	.00	.00	.00
30	.00	.00	.00	.00	---	.00	91	15	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	15	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	1030.30	2935	103.44	.00	.00	.00
MEAN	.000	.000	.000	.000	.000	.000	34.3	94.7	3.45	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	91	226	14	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	15	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	2040	5820	205	.00	.00	.00
WTR YR 1978	TOTAL	4068.74	MEAN	11.1	MAX	226	MIN	.00	AC-FT	8070		

BLACK ROCK DESERT BASIN

10353700 LEONARD CREEK NEAR DENIO, NV

LOCATION.--Lat 41°31'40", long 118°42'45", in SE¼ sec.25, T.42 N., R.28 E., Humboldt County, Hydrologic Unit 16040202, on right bank 0.3 mi (0.5 km) upstream from concrete diversion structure, 0.7 mi (1.1 km) upstream from Leonard Creek ranch buildings, about 18 mi (29 km) upstream from Quinn River, and 32 mi (51 km) south of Denio.

DRAINAGE AREA.--52 mi² (135 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,300 ft (1,310 m) from topographic AMS map. Prior to Aug. 21, 1969, at site 50 ft (15 m) downstream at datum 0.28 ft (0.085 m) lower.

REMARKS.--Records good except those for winter periods, which are fair. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--18 years, 5.29 ft³/s (0.150 m³/s), 3,830 acre-ft/yr (4.72 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 612 ft³/s (17.3 m³/s) Feb. 1, 1963, gage height, 4.98 ft (1.518 m), from rating curve extended above 15 ft³/s (0.42 m³/s) on basis of slope-area measurement of peak flow; no flow for part of each day July 23 to Aug. 5, 1961, Jan. 11, 12, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15 ft³/s (0.425 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Mar. 5	1800	23	0.651	1.46	0.445	Apr. 26	1600	36	1.02	1.65	0.503
Mar. 22	1900	*119	3.37	2.37	0.722	May 15	0100	29	0.821	1.48	0.451
Apr. 1	1900	53	1.50	1.91	0.582						

Minimum daily discharge 1.5 ft³/s (0.042 m³/s) 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	1.5	1.7	2.4	2.3	3.0	5.1	30	16	20	7.9	4.5	3.9
2	1.5	1.7	2.4	2.5	2.7	6.0	21	17	20	7.8	4.5	3.8
3	1.5	1.8	2.4	2.6	2.8	7.8	16	17	20	9.7	4.4	3.6
4	1.5	1.8	2.5	2.5	3.0	9.8	15	19	21	8.1	4.2	3.6
5	1.5	1.9	2.4	2.5	3.3	14	13	17	21	7.1	4.2	4.2
6	1.5	1.8	2.4	2.5	4.2	13	13	14	22	6.2	4.3	5.2
7	1.6	1.8	2.4	2.6	4.3	12	12	17	22	6.3	4.1	6.2
8	1.6	1.8	2.4	2.7	3.2	11	12	18	22	6.4	3.9	5.3
9	1.6	1.7	2.3	2.9	3.6	10	12	17	22	6.1	3.8	5.2
10	1.6	1.8	2.4	3.0	3.5	11	12	17	23	6.1	3.8	5.0
11	1.6	1.9	2.6	2.8	3.2	9.6	12	18	21	6.0	3.7	4.9
12	1.6	2.0	2.6	2.7	2.9	8.9	12	18	19	6.0	3.6	4.7
13	1.6	2.0	2.5	2.9	3.1	8.3	12	20	18	5.9	4.0	4.6
14	1.6	2.0	2.8	3.3	3.3	8.6	12	24	18	5.9	4.0	4.6
15	1.6	2.0	3.7	5.1	3.1	8.9	12	26	17	5.6	3.8	4.6
16	1.5	2.0	2.7	2.8	3.8	11	13	22	17	5.6	3.9	4.3
17	1.5	1.9	3.7	3.2	3.9	14	12	19	16	5.7	4.0	4.4
18	1.6	1.9	3.2	2.7	4.0	15	12	18	16	5.7	3.9	4.7
19	1.6	2.0	2.8	3.0	4.0	14	12	18	15	5.5	3.7	4.5
20	1.6	1.8	2.4	2.9	4.5	17	12	18	14	5.6	3.6	4.4
21	1.7	4.3	2.7	2.7	5.0	19	12	19	13	5.7	3.8	4.4
22	1.6	5.7	3.3	2.5	5.2	56	11	20	12	5.5	3.9	4.2
23	1.6	2.7	3.0	2.3	6.0	33	11	21	12	5.4	3.9	4.1
24	1.7	2.7	2.7	2.2	6.3	16	10	22	11	5.3	3.9	4.0
25	1.6	2.5	2.5	2.4	6.1	16	12	22	11	5.1	3.8	3.9
26	1.7	2.4	2.6	2.6	5.8	16	20	20	9.7	5.0	3.9	3.9
27	1.7	2.3	2.6	2.7	5.5	14	14	20	9.5	5.0	3.9	3.9
28	1.7	2.1	2.6	2.8	5.2	13	14	21	9.5	4.9	3.8	3.9
29	1.7	2.1	2.7	2.8	---	15	15	20	8.7	4.8	3.7	3.9
30	1.8	2.3	2.5	2.8	---	13	16	20	8.4	4.7	4.0	3.8
31	1.7	---	2.4	2.9	---	17	---	20	---	4.6	4.1	---
TOTAL	49.7	66.4	82.6	86.2	114.5	443.0	412	595	488.8	185.2	122.6	131.7
MEAN	1.60	2.21	2.66	2.78	4.09	14.3	13.7	19.2	16.3	5.97	3.95	4.39
MAX	1.8	5.7	3.7	5.1	6.3	56	30	26	23	9.7	4.5	6.2
MIN	1.5	1.7	2.3	2.2	2.7	5.1	10	14	8.4	4.6	3.6	3.6
AC-FT	99	132	164	171	227	879	817	1180	970	367	243	261

CAL YR 1977 TOTAL 975.36 MEAN 2.67 MAX 10 MIN .88 AC-FT 1930
WTR YR 1978 TOTAL 2777.70 MEAN 7.61 MAX 56 MIN 1.5 AC-FT 5510

HUALAPAI FLAT

299

10353770 SOUTH WILLOW CREEK NEAR GERLACH, NV

LOCATION.--Lat 41°01'00", long 119°21'00", in E½ sec.11, T.36 N., R.23 E., Washoe County, Hydrologic Unit 16040203, on left bank 150 ft (50 m) east of State Highway 34 and 25 mi (40 km) north of Gerlach.

DRAINAGE AREA.--31 mi² (80 km²), approximately.

PERIOD OF RECORD.--Water years 1963-73 (annual maximum), August 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,500 ft (1,372 m), approximately (from topographic map). July 1, 1963, to Aug. 16, 1973, operated as a crest-stage gage only, at datum 1.00 ft (0.305 m) lower.

REMARKS.--Records fair except for period of no gage-height record, May 24 to Aug. 22, which are poor. No diversion or regulation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 113 ft³/s (3.20 m³/s), March 5, 1978, gage height, 2.46 ft (0.750 m); no flow most of the time.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of unknown date reached a stage of 9.4 ft (2.87 m), present datum, from floodmarks, estimated discharge, 3,100 ft³/s (8.78 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 113 ft³/s (3.20 m³/s) March 5, gage height, 2.46 ft (0.750 m); no flow most of 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	1.6	7.8	2.7	1.4	.70	.10	.00	.00
2	.00	.00	.00	.00	1.6	15	2.7	1.4	.70	.10	.00	.00
3	.00	.00	.00	.00	1.6	35	2.7	1.4	.70	.10	.00	.00
4	.00	.00	.00	.00	1.9	45	2.7	1.3	.70	.10	.00	.00
5	.00	.00	.00	.00	7.3	63	2.6	1.3	.70	.10	.00	.00
6	.00	.00	.00	.00	7.9	23	2.6	1.2	.60	.07	.00	.00
7	.00	.00	.00	.00	4.9	20	2.5	1.2	.60	.07	.00	.00
8	.00	.00	.00	.00	2.7	21	2.5	1.2	.60	.07	.00	.00
9	.00	.00	.00	.00	1.8	20	2.5	1.2	.60	.07	.00	.00
10	.00	.00	.00	.00	1.2	11	2.4	1.1	.60	.07	.00	.00
11	.00	.00	.00	.00	.74	6.2	2.4	1.1	.50	.04	.00	.00
12	.00	.00	.00	.00	.62	3.7	2.3	1.1	.50	.04	.00	.00
13	.00	.00	.00	.00	.47	3.1	2.3	1.0	.50	.04	.00	.00
14	.00	.00	.00	.51	.47	2.9	2.3	1.0	.50	.04	.00	.00
15	.00	.00	.00	3.1	.47	2.9	2.4	1.0	.50	.04	.00	.00
16	.00	.00	.00	1.5	.43	2.9	2.2	1.0	.40	.03	.00	.00
17	.00	.00	.00	1.5	.39	2.9	2.1	.96	.40	.02	.00	.00
18	.00	.00	.00	1.5	.43	2.9	2.0	.96	.40	.01	.00	.00
19	.00	.00	.00	1.5	.74	2.9	2.0	.96	.40	.01	.00	.00
20	.00	.00	.00	1.5	6.2	2.9	2.0	.96	.40	.01	.00	.00
21	.00	.00	.00	1.5	12	2.9	1.9	.81	.30	.00	.00	.00
22	.00	.00	.00	1.5	20	3.9	1.9	.81	.30	.00	.00	.00
23	.00	.00	.00	1.5	30	3.5	1.8	.81	.30	.00	.00	.00
24	.00	.00	.00	1.6	17	2.9	1.8	.81	.30	.00	.00	.00
25	.00	.00	.00	1.6	21	2.9	2.1	.80	.30	.00	.00	.00
26	.00	.00	.00	1.6	20	2.9	2.2	.80	.20	.00	.00	.00
27	.00	.00	.00	1.6	15	2.9	2.0	.80	.20	.00	.00	.00
28	.00	.00	.00	1.6	11	2.8	1.6	.80	.20	.00	.00	.00
29	.00	.00	.00	1.6	---	2.8	1.6	.80	.20	.00	.00	.00
30	.00	.00	.00	1.6	---	2.8	1.8	.80	.20	.00	.00	.00
31	.00	---	.00	1.6	---	2.8	---	.80	---	.00	.00	---
TOTAL	.00	.00	.00	28.41	189.46	327.2	66.6	31.58	13.50	1.13	.00	.00
MEAN	.000	.000	.000	.92	6.77	10.6	2.22	1.02	.45	.036	.000	.000
MAX	.00	.00	.00	3.1	30	63	2.7	1.4	.70	.10	.00	.00
MIN	.00	.00	.00	.00	.39	2.8	1.6	.80	.20	.00	.00	.00
AC-FT	.00	.00	.00	56	376	649	132	63	27	2.2	.00	.00

CAL YR 1977 TOTAL 6.85 MEAN .019 MAX 4.7 MIN .00 AC-FT 14
WTR YR 1978 TOTAL 657.88 MEAN 1.80 MAX 63 MIN .00 AC-FT 1300

GOOSE CREEK BASIN

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, and 9 mi (14.5 km) southwest of Oakley.

DRAINAGE AREA.--633 mi² (1,640 km²). 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 (1,453.8 m) by barometer. Prior to Aug. 29, 1912, at site 200 ft (60.9 m) downstream at different datum.

REMARKS.--Records good. Decreed water rights are reported to apply to about 2,700 acres (1,090 hm²) 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 ft³/s (1.32 m³/s), 33,760 acre-ft/yr (41.63 hm³).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,240 ft³/s (91.8 m³/s) Feb. 11, 1962, gage height, 9.3 ft (2.83 m), from rating curve extended above 200 ft³/s (5.66 m³/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 ft³/s (6.32 m³/s) May 6,, gage height, 3.35 ft (1.021 m); minimum 2.9 ft³/s (0.082 m³/s) Nov. 11, gage height, 1.10 ft (0.335 m), result of freezeup.

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	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	18	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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1949 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)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO
NOV 03...	1145	22	373	--	6.0	--	--	--	--	--
DEC 16...	1315	35	370	--	2.0	--	--	--	--	--
JAN 26...	1245	38	390	--	1.0	--	--	--	--	--
MAR 07...	1245	48	387	--	7.0	--	--	--	--	--
APR 21...	1200	136	217	--	7.5	--	--	--	--	--
MAY 23...	1115	136	240	8.2	14.0	98	31	5.1	11	.5
JUN 27...	0910	21	485	--	15.5	--	--	--	--	--
AUG 15...	0850	13	451	8.4	10.5	180	57	9.8	18	.6
SEP 19...	1510	23	374	--	11.0	--	--	--	--	--

[illegible]

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 mi² (3,760 km²), 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 hm²) 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 ft³/s (3.96 m³/s), 101,400 acre-ft/yr (125 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 2,430 ft³/s (68.8 m³/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 discharge, 2.6 ft³/s (0.074 m³/s) Sept. 4, 1961, gage height, 3.37 ft (1.027 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 665 ft³/s (18.8 m³/s) Apr. 2, gage height, 7.20 ft (2.195 m); minimum, 19 ft³/s (0.538 m³/s) Nov. 20, gage height, 4.13 ft (1.259 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	46	49	59	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	59	64	89	509	498	392	131	42	25
5	44	51	61	58	63	94	475	515	366	148	41	32
6	45	51	58	59	66	104	432	507	361	127	40	52
7	44	50	57	59	70	109	408	482	384	113	38	63
8	44	48	58	56	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	59	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	419	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	69	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	389	420	199	57	29	61
22	47	56	52	63	67	298	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	549	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	479	144	45	23	54
28	49	60	61	56	77	471	468	418	135	46	24	53
29	49	60	61	59	---	515	462	393	124	47	23	52
30	50	60	62	59	---	558	473	399	117	45	22	52
31	51	---	61	60	---	612	---	399	---	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	479	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
CAL YR 1977 TOTAL	26106			71.5	MAX 255	MIN 18	AC-FT 51780					
WTR YR 1978 TOTAL	57202			157	MAX 648	MIN 21	AC-FT 113500					

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1953 to September 1962, October 1963 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)	FIELD PH	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACU3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SURP- TION RATIO
OCT 31...	1530	52	275	--	9.0	--	--	--	--	--
DEC 13...	1500	62	240	--	5.5	--	--	--	--	--
JAN 24...	1050	34	162	--	.5	--	--	--	--	--
MAR 04...	1310	103	222	--	6.5	--	--	--	--	--
31...	1015	604	85	--	10.5	--	--	--	--	--
APR 18...	1625	424	81	--	9.5	--	--	--	--	--
MAY 20...	1600	432	112	8.6	17.0	39	11	2.7	7.2	.5
JUN 25...	1505	152	199	--	19.0	--	--	--	--	--
AUG 17...	0955	33	303	8.1	12.5	97	29	6.0	18	.8
SEP 23...	0955	60	245	--	10.5	--	--	--	--	--

[illegible]

SALMON FALLS CREEK BASIN

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 mi² (4,170 km²), 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 hm³) 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 hm³). 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 hm³) June 24, 1975 gage height, 75.00 ft (22.860 m); minimum observed, 125 acre-ft (0.154 hm³) 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 hm³) May 29, gage height, 44.20 ft (13.472 m); minimum observed, 21,400 acre-ft (26.4 hm³) 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	40,800
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	---	30100	32900	35900	47700	69500	79500	79000	67900	42600	---
MIN	24100	---	27500	30300	33000	36000	48800	70200	68600	43500	21500	---
+	17.35	18.45	20.05	21.65	23.25	29.45	39.85	44.10	39.45	27.35	15.00	15.95
†	+1500	+1900	+2700	+2800	+3000	+11800	+21800	+9800	-10700	-25100	-22000	+1600

CAL YR 1977 MAX 86600 MIN 23400 † -50300

WTR YR 1978 MAX 79500 MIN 21400 † -900

+ Gage height, in feet, at end of month.

† Change in contents, in acre-feet.

13161500 BRUNEAU RIVER AT ROWLAND, NV

LOCATION.--Lat 41°56'00", long 115°40'25", in NW¼SE¼ sec.29, T.47 N., R.56 E., Elko County, Hydrologic Unit 17050102, Humboldt National Forest, on left bank 2 mi (3 km) upstream from McDonald Creek and 0.5 mi (0.8 km) south of Rowland.

DRAINAGE AREA.--382 mi² (989 km²). Area at crest-stage site, 380 mi² (984 km²).

PERIOD OF RECORD.--June 1913 to September 1918 (published as "near Rowland"), water years 1962-66 (annual maximum), October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,500 ft (1,372 m), from topographic map. June 1913 to September 1918, nonrecording gage at different site and datum. October 1961 to September 1966, crest-stage gage at site 3 mi (5 km) upstream at different datum.

REMARKS.--Records good. Minor diversions for irrigation above station. Monthly of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--17 years, 119 ft³/s (3.370 m³/s), 86,220 acre-ft/yr (106 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,120 ft³/s (60.0 m³/s) Feb. 11, 1962, gage height, 13.0 ft (3.96 m) site and datum then in use; minimum, 5 ft³/s (0.14 m³/s) Aug. 12, 13, 1918.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Mar. 31	2200	*630	17.8	5.78	1.762
Apr. 26	2200	445	12.6	5.03	1.533
May 15	2200	522	14.8	5.37	1.637
June 10	0100	313	8.86	4.56	1.390

Minimum discharge, 7.2 ft³/s (0.20 m³/s) Sept. 3, 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	14	16	25	23	37	65	586	364	231	84	18	8.9
2	14	16	25	33	38	70	470	362	226	84	17	8.5
3	13	16	27	35	38	67	367	388	225	82	16	8.2
4	13	16	36	32	37	69	334	381	218	85	15	7.9
5	13	17	29	31	41	79	303	358	225	80	14	12
6	13	18	25	32	42	87	277	330	250	74	14	25
7	13	18	28	31	47	84	293	306	283	68	13	18
8	13	16	25	28	45	89	282	287	292	66	12	16
9	13	15	20	32	47	93	281	292	299	61	11	14
10	13	17	19	32	48	103	293	329	306	56	11	18
11	13	18	20	32	42	108	318	351	273	53	11	24
12	13	18	23	32	41	117	314	338	235	51	9.9	22
13	14	17	24	31	46	98	308	352	226	48	9.6	20
14	14	17	29	33	48	95	296	409	227	44	11	18
15	14	18	52	40	37	85	303	490	218	42	11	17
16	14	18	40	41	42	87	326	479	203	40	11	17
17	14	18	37	41	41	95	295	401	177	37	12	16
18	14	17	32	41	43	122	266	338	165	35	12	17
19	14	14	25	41	46	158	261	304	158	32	12	20
20	15	17	30	44	43	206	272	290	151	31	11	20
21	15	21	40	42	43	264	256	294	145	32	9.6	21
22	15	27	45	37	45	339	235	316	143	30	9.2	22
23	15	23	42	32	49	385	225	344	137	28	9.6	22
24	15	22	33	27	54	390	218	349	129	26	9.6	20
25	15	30	31	30	59	359	241	321	123	23	9.2	19
26	15	44	29	35	59	395	378	287	116	22	8.9	19
27	15	39	31	33	71	451	404	255	110	22	9.2	18
28	15	32	30	32	60	529	396	235	102	22	9.9	18
29	15	28	31	34	---	562	400	236	95	21	9.6	18
30	15	25	33	34	---	592	377	244	90	20	8.9	18
31	16	---	31	35	---	583	---	239	---	19	8.9	---
TOTAL	437	628	947	1056	1289	6826	9575	10269	5778	1418	354.1	522.5
MEAN	14.1	20.9	30.5	34.1	46.0	220	319	331	193	45.7	11.4	17.4
MAX	16	44	52	44	71	592	586	490	306	85	18	25
MTN	13	14	19	23	37	65	218	235	90	19	8.9	7.9
AC-FT	867	1250	1880	2090	2560	13540	18990	20370	11460	2810	702	1040
CAL YR 1977 TOTAL	15384.5			42.1	MAX 236	MIN 6.1	AC-FT 30520					
WTR YR 1978 TOTAL	39099.6			107	MAX 592	MIN 7.9	AC-FT 77550					

OWYHEE RIVER BASIN

13174000 WILD HORSE RESERVOIR NEAR GOLD CREEK, NV

LOCATION.--Lat 41°41'10", long 115°50'35", in NE¼NW¼ sec.25, T.44 N., R.54 E., Elko County, Hydrologic Unit 17050104, in Humboldt National Forest, at Wild Horse Dam on Owyhee River, 8 mi (13 km) west of Gold Creek, and 12 mi (19 km) southeast of Mountain City.

DRAINAGE AREA.--209 mi² (541 km²).

PERIOD OF RECORD.--March 1938 to current year. Monthend contents for some periods, published in WSP 1317.

GAGE.--Elevations obtained about three times a month, more frequently during irrigation season, from wire-weight gage on dam. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Bureau of Indian Affairs).

REMARKS.--Reservoir is formed by concrete-arch dam; storage began Mar. 18, 1938. New dam completed in June 1969, capacity 71,660 acre-ft (88.4 hm³) between elevations 6,138.50 ft (1,871.015 m), sill of outlet gate, and 6,205 ft (1,891.284 m) spillway crest. No dead storage. Water is used for irrigation on Duck Valley project.

COOPERATION.--Most of elevation record furnished by Bureau of Indian Affairs.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed 77,780 acre-ft (95.9 hm³) May 18, 19, 1975, elevation, 6,207.0 ft (1,891.89 m); no contents at times in each year 1938-41, 1964-65, 1968-69.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 49,220 acre-ft (60.7 hm³) May 30, elevation 6,196.7 ft (1,888.75 m); minimum observed, 20,420 acre-ft (25.2 hm³) Nov. 15, elevation 6,181.3 ft (1,884.06 m).

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

6,181	20,010		
6,182	21,400	6,190	34,820
6,183	22,870	6,191	36,760
6,184	24,390	6,192	38,780
6,185	25,980	6,193	40,860
6,186	27,630	6,194	43,010
6,187	29,340	6,195	45,230
6,188	31,110	6,196	47,520
6,189	32,940	6,197	49,880

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-ft)	Change in contents (acre-ft)
Sep. 30	6,182.00	21,410	
Oct. 31	6,181.41	20,580	-830
Nov. 30	6,181.57	20,810	+230
Dec. 31	6,182.07	21,510	+700
CAL YR 1977.	--	--	-22,610
Jan. 31	6,182.62	22,310	+800
Feb. 28	6,183.77	24,040	+1,730
Mar. 31	6,187.70	30,570	+6,530
Apr. 30	6,194.33	43,740	+13,170
May 31	6,196.64	49,020	+5,280
June 30	6,194.02	43,050	-5,970
July 31	6,190.76	36,290	-6,760
Aug. 31	6,186.26	28,070	-8,220
Sep. 30	6,185.19	26,300	-1,770
WTR YR 1977-78	--	--	+4,890

NOTE.--Monthend elevations and contents are interpolated from observations made during the month.

13174500 OWYHEE RIVER NEAR GOLD CREEK, NV

LOCATION.--Lat 41°41'15", long 115°50'38", in NE¼NW¼ sec.25, T.44 N., R.54 E., Elko County, Hydrologic Unit 17050104, in Humboldt National Forest, on left bank 500 ft (150 m) downstream from Wild Horse Dam, 0.1 mi (0.2 km) upstream from Beaver Creek, 8 mi (13 km) west of Gold Creek, and 12 mi (19 km) southeast of Mountain City.

DRAINAGE AREA.--209 mi² (541 km²).

PERIOD OF RECORD.--March to November 1916, April 1917 to September 1925, October 1936 to current year. Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1317: 1939-42 (M).

GAGE.--Water-stage recorder. Datum of gage is 6,118.75 ft (1,864.995 m), Bureau of Reclamation datum. Prior to Oct. 1, 1936, at site 0.3 mi (0.5 km) upstream at different datum. Nov. 17, 1936, to Oct. 18, 1967, at site 0.1 mi (0.2 km) upstream at different datum. Oct. 19, 1967, to Sept. 30, 1971, temporary gage, 250 ft (76 m) downstream at different datum, while new dam was being constructed 300 ft (91 m) downstream from old dam.

REMARKS.--Records fair. Small diversions for irrigation above station. Flow regulated by Wild Horse Reservoir, capacity, 71,660 acre-ft (88.4 hm³), 0.1 mi (0.2 km) upstream beginning Mar. 18, 1938. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--50 years (1917-25, 1936-78), 42.5 ft³/s (1.204 m³/s), 30,790 acre-ft/yr (38.0 hm³/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,810 ft³/s (51.3 m³/s) May 5, 1922, gage height, 10.11 ft (3.082 m), site and datum then in use; no flow at times when reservoir gates were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 220 ft³/s (6.23 m³/s) June 29, gage height, 2.43 ft (0.741 m); minimum, no flow Dec. 17 to May 31.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	3.0	.75	.00	.00	.00	.00	.00	14	212	143	72
2	24	3.6	.60	.00	.00	.00	.00	.00	41	210	143	72
3	24	4.4	.61	.00	.00	.00	.00	.00	41	157	143	72
4	24	3.4	.67	.00	.00	.00	.00	.00	40	104	143	72
5	24	3.3	.71	.00	.00	.00	.00	.00	55	103	143	61
6	23	3.3	.71	.00	.00	.00	.00	.00	71	85	145	53
7	23	3.3	.71	.00	.00	.00	.00	.00	71	70	119	54
8	23	3.3	.71	.00	.00	.00	.00	.00	70	68	91	40
9	23	3.3	.66	.00	.00	.00	.00	.00	70	67	101	29
10	23	3.3	.60	.00	.00	.00	.00	.00	69	52	113	29
11	23	3.4	.60	.00	.00	.00	.00	.00	70	39	115	17
12	15	3.3	.60	.00	.00	.00	.00	.00	69	39	115	9.2
13	5.7	3.1	.60	.00	.00	.00	.00	.00	69	38	115	9.9
14	5.7	3.3	.60	.00	.00	.00	.00	.00	81	38	115	9.3
15	5.5	3.1	.64	.00	.00	.00	.00	.00	121	38	115	8.8
16	4.8	3.8	.56	.00	.00	.00	.00	.00	149	38	115	8.8
17	4.8	3.8	.00	.00	.00	.00	.00	.00	148	38	113	8.4
18	5.0	3.7	.00	.00	.00	.00	.00	.00	148	38	106	8.0
19	5.5	3.4	.00	.00	.00	.00	.00	.00	146	38	93	8.0
20	5.2	3.4	.00	.00	.00	.00	.00	.00	148	52	93	8.2
21	5.0	3.4	.00	.00	.00	.00	.00	.00	146	70	91	7.6
22	4.6	3.4	.00	.00	.00	.00	.00	.00	168	71	93	8.4
23	4.2	3.4	.00	.00	.00	.00	.00	.00	192	73	93	8.5
24	4.2	3.3	.00	.00	.00	.00	.00	.00	190	73	91	7.9
25	4.4	2.2	.00	.00	.00	.00	.00	.00	194	101	93	7.9
26	3.8	1.5	.00	.00	.00	.00	.00	.00	207	125	94	7.9
27	3.6	1.5	.00	.00	.00	.00	.00	.00	200	123	94	7.9
28	3.6	1.5	.00	.00	.00	.00	.00	.00	205	133	82	7.9
29	3.6	1.5	.00	.00	---	.00	.00	.00	210	137	72	7.9
30	3.4	1.3	.00	.00	---	.00	.00	.00	210	139	72	7.9
31	3.1	---	.00	.00	---	.00	---	.00	---	138	72	---
TOTAL	358.7	91.5	10.33	.00	.00	.00	.00	.00	3613	2707	3326	729.4
MEAN	11.6	3.05	.33	.000	.000	.000	.000	.000	120	87.3	107	24.3
MAX	24	4.4	.75	.00	.00	.00	.00	.00	210	212	145	72
MTN	3.1	1.3	.00	.00	.00	.00	.00	.00	14	38	72	7.6
AC-FT	711	181	20	.00	.00	.00	.00	.00	7170	5370	6600	1450
CAL YR 1977 TOTAL	14940.13			MEAN 40.9	MAX 177	MIN .00	AC-FT 29630					
WTR YR 1978 TOTAL	10835.93			MEAN 29.7	MAX 212	MIN .00	AC-FT 21490					

OWYHEE RIVER BASIN

13176000 OWYHEE RIVER ABOVE CHINA DIVERSION DAM, NEAR OWYHEE, NV

LOCATION.--Lat 41°55'20", long 116°04'10", in NW¼ sec.6, T.46 N., R.53 E., Elko County, Hydrologic Unit 17050104, in Duck Valley Indian Reservation, on right bank 1,000 ft (300 m) downstream from Skull Creek, 1 mi (2 km) upstream from China diversion dam, and 2 mi (3 km) southeast of Owyhee.

DRAINAGE AREA.--458 mi² (1,186 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 5,425 ft (1,654 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1939, at datum 1.48 ft (0.451 m) higher.

REMARKS.--Records good except those for winter months, which are poor. Numerous diversions above station for irrigation. Flow partly regulated by Wild Horse Reservoir. Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--39 years, 144 ft³/s (4.078 m³/s), 104,300 acre-ft/yr (129 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,790 ft³/s (79.0 m³/s) about May 18, 1975, gage height, 10.84 ft (3.304 m), from inside high-water marks; minimum, 1.8 ft³/s (0.051 m³/s) Nov. 16, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 547 ft³/s (15.49 m³/s) Apr. 27, gage height, 6.51 ft (1.984 m); minimum daily 12 ft³/s (0.34 m³/s) Nov. 20.

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	38	16	20	20	29	62	409	472	212	243	170	73
2	37	16	19	23	31	67	365	451	244	241	165	72
3	36	15	21	27	31	76	308	449	260	247	165	72
4	35	15	23	24	30	91	288	438	244	201	169	72
5	35	16	20	25	30	101	271	408	238	174	165	60
6	34	16	20	24	32	132	252	380	254	155	170	88
7	34	16	20	26	35	127	264	352	256	127	166	77
8	35	14	16	27	37	125	270	334	253	109	122	68
9	35	14	16	24	38	145	278	337	247	107	106	55
10	34	14	19	24	36	164	273	368	242	97	123	51
11	34	17	19	25	33	155	294	392	249	80	127	58
12	35	17	22	23	32	143	301	386	222	60	115	46
13	32	15	20	23	33	114	299	407	212	56	122	36
14	22	13	26	24	34	104	290	443	202	55	131	31
15	19	17	49	28	31	90	297	455	220	52	131	29
16	19	16	45	30	30	89	316	412	256	51	129	27
17	18	14	38	30	30	106	300	361	264	49	132	26
18	17	15	31	29	32	151	285	323	261	49	125	27
19	18	13	25	30	35	192	279	301	257	49	111	29
20	18	12	30	31	34	223	286	288	245	48	100	29
21	17	23	35	29	37	251	281	284	234	72	101	28
22	17	32	36	27	38	314	267	292	225	87	100	28
23	17	38	34	25	41	368	252	293	259	87	100	27
24	17	29	31	23	45	351	250	322	264	92	100	26
25	17	38	26	26	50	295	266	302	263	87	105	26
26	17	37	25	28	53	296	422	282	264	134	109	25
27	16	34	26	27	56	317	477	261	262	152	107	25
28	16	28	25	26	59	348	475	246	254	162	107	24
29	16	23	25	28	---	361	491	236	249	174	88	23
30	16	22	25	27	---	404	489	229	247	177	75	23
31	16	---	23	28	---	417	---	220	---	176	74	---
TOTAL	767	605	810	811	1032	6179	9595	10724	7359	3650	3810	1301
MEAN	24.7	20.2	26.1	26.2	36.9	199	320	346	245	118	123	43.4
MAX	38	38	49	31	59	417	491	472	264	247	170	88
MIN	16	12	16	20	29	62	250	220	202	48	74	23
AC-FT	1520	1200	1610	1610	2050	12260	19030	21270	14600	7240	7560	2580
CAL YR 1977 TOTAL	25356			69.5	MAX 228	MIN 12	AC-FT 50290					
WTR YR 1978 TOTAL	46643			128	MAX 491	MIN 12	AC-FT 92520					

OWYHEE RIVER BASIN

309

13177800 SOUTH FORK OWYHEE RIVER NEAR WHITEROCK, NV

LOCATION.--Lat 41°48'00", long 116°29'00", in NE¼ sec.16, T.45 N., R.49 E., Elko County, Hydrologic Unit 17050105, on left bank 500 ft (150 m) downstream from Rye Grass Creek, 1.8 mi (2.9 km) upstream from Chimney Creek, and 17 mi (27 km) northwest of Whiterock.

DRAINAGE AREA.--1,080 mi² (2,800 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,900 ft (1,490 m), from topographic map.

REMARKS.--Records good. Many diversions for irrigation of hay meadows above station. Flow partly regulated by four small reservoirs, total capacity, about 16,100 acre-ft (19.8 hm³). Monthly measurements of specific conductance and water temperature are listed in section titled "Supplemental Water-Quality Data for Gaging Stations."

AVERAGE DISCHARGE.--23 years, 162 ft³/s (4.588 m³/s), 117,400 acre-ft/yr (145 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,830 ft³/s (108 m³/s) June 5, 1963, gage height, 7.55 ft (2.301 m); no flow Oct. 1-12, 1955, part of Sept. 17, 28, 1960, Aug. 27, 31, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 2,050 ft³/s (58.1 m³/s) Apr. 27 (2100 hrs), gage height 5.85 ft (1.783 m), no other peak above base of 600 ft³/s (17.0 m³/s); minimum daily, 4.5 ft³/s (0.127 m³/s) Aug. 18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	26	35	40	51	90	222	1290	225	73	52	25
2	22	26	34	40	48	88	229	1150	206	59	36	26
3	21	26	35	41	49	107	249	1000	219	51	36	25
4	20	26	35	44	52	156	260	892	219	71	36	25
5	20	28	34	45	69	156	275	835	212	120	30	30
6	23	30	29	44	81	184	267	821	178	120	28	61
7	22	30	26	42	75	187	282	701	178	95	25	83
8	24	28	28	37	73	145	351	570	175	95	21	79
9	27	29	26	46	73	170	391	483	175	102	20	52
10	27	32	30	39	73	209	343	448	170	97	19	49
11	22	32	29	35	71	164	306	414	199	83	15	51
12	26	32	34	39	59	156	298	351	206	73	14	43
13	25	31	35	39	58	140	290	338	172	69	13	40
14	24	31	31	37	65	127	282	330	158	69	13	34
15	24	30	36	39	58	115	275	347	153	63	12	30
16	24	35	34	48	59	104	275	419	157	59	7.3	27
17	24	32	37	54	58	102	282	483	150	63	6.7	25
18	24	31	44	49	59	112	264	463	142	69	4.5	26
19	25	25	42	54	69	122	232	414	135	67	5.9	27
20	25	32	43	50	71	132	206	364	120	69	5.9	30
21	25	31	42	52	92	145	193	322	104	75	6.2	29
22	24	34	43	49	92	190	181	290	95	71	7.8	26
23	23	39	43	44	92	249	167	275	85	65	9.4	24
24	23	58	44	27	117	264	156	400	73	59	14	23
25	23	59	44	40	161	239	150	553	61	52	17	22
26	23	52	44	58	164	229	547	564	67	36	19	21
27	24	44	44	67	137	222	1640	443	67	42	22	22
28	24	42	44	58	104	203	1770	356	67	75	23	21
29	25	39	42	49	---	190	1530	302	59	83	24	20
30	25	36	40	51	---	196	1420	260	63	77	24	20
31	26	---	39	53	---	206	---	242	---	75	23	---
TOTAL	736	1026	1146	1414	2230	5099	13333	16120	4290	2277	589.7	1016
MEAN	23.7	34.2	37.0	45.6	79.6	164	444	520	143	73.5	19.0	33.9
MAX	27	59	44	67	164	264	1770	1290	225	120	52	83
MIN	20	25	26	27	48	88	150	242	59	36	4.5	20
AC-FT	1460	2040	2270	2800	4420	10110	26450	31970	8510	4520	1170	2020
CAL YR 1977 TOTAL	12211.3			33.5	121							
WTR YR 1978 TOTAL	49276.7			135	1770							

COLORADO RIVER BASIN

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	DEPTH (FT)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	ALKA- LITY, TOTAL (MG/L AS CaCO ₃)
09420600 LAKE MEAD AT ICEBERG CANYON, AZ-NV (RIVER MILE 295.0; LAT 36°11', LONG 114°04'; SECCHI DISK TRANSPARENCY 22 FT)*						
NOV.						
29...	0	1020	8.1	17.0	8.0	110
29...	10	1020	8.5	17.0	8.0	110
29...	25	1020	8.6	16.5	8.8	114
29...	50	940	8.5	14.0	10.0	114
29...	57	960		13.5		

09420650 LAKE MEAD AT SANDY POINT, AZ (RIVER MILE 295.0; LAT 36°07', LONG 114°07'; SECCHI DISK TRANSPARENCY 34 FT)*						
NOV						
28...	0	1090	7.4	14.5	8.5	110
28...	10	915	7.8	16.5	8.5	125
28...	25	1050	7.9	18.0	8.8	125
28...	50	1040	8.0	18.0	8.3	125
28...	75	1040	7.9	18.5	8.3	112
28...	100	1000	7.6	17.0	9.0	112
28...	150	960	7.2	14.5	8.3	112
28...	200	1010	7.1	18.0	8.9	112

09420700 LAKE MEAD AT VIRGIN CANYON, AZ-NV (RIVER MILE 305.3; LAT 36°16', LONG 114°24'; SECCHI DISK TRANSPARENCY 40 FT)*						
NOV.						
29...	0	1070	8.3	15.5	8.0	114
29...	10	1065	8.8	16.0	8.0	126
29...	25	1040	8.7	16.5	6.2	116
29...	50	1020	8.7	16.5	7.9	116
29...	75	1020	8.9	17.0	7.2	116
29...	100	1010	8.7	17.0	7.5	108
29...	150	920	8.5	17.0	5.6	116
29...	200	945	8.3	14.5	4.7	114
29...	250	965	8.0	14.0	4.0	110
29...	295	1010	8.0	12.0	4.0	110

09420750 LAKE MEAD NEAR OVERTON BEACH, NV (RIVER MILE 27.5; LAT 36°27', LONG 114°21'; SECCHI DISK TRANSPARENCY 4.5 FT)*						
NOV.						
30...	0	1140	9.0	16.0	9.9	115
30...	5	1160	8.4	14.5	10.0	100
30...	15	1200	8.4	14.0	9.9	112

09420800 LAKE MEAD AT OVERTON ISLANDS, NV (RIVER MILE 9.5; LAT 36°01', LONG 114°12'; SECCHI DISK TRANSPARENCY 43 FT)*						
DEC.						
01...	0	1090	8.2	14.5	8.4	103
01...	10	1090	8.3	15.5	8.4	103
01...	25	1075	8.3	16.0	8.4	100
01...	75	1075	8.2	16.0	8.4	106
01...	100	1070	8.2	16.0	8.3	100
01...	125	1070	8.2	16.0	6.6	103
01...	175	995	8.2	14.5	5.4	103
01...	225	1000	8.1	14.0	6.3	105
01...	275	1005	7.8	13.0	6.3	104
01...	290	1030	7.8	13.0	6.1	102

09420850 LAKE MEAD AT BOULDER CANYON, AZ-NV (RIVER MILE 334.6; LAT 36°08', LONG 114°37'; SECCHI DISK TRANSPARENCY 39 FT)*						
DEC.						
01...	0	1020	7.6	18.0	8.0	96
01...	10	1050	7.2	17.0	8.0	96
01...	25	1055	7.2	17.0	8.0	100
01...	75	1060	7.2	16.5	8.0	100
01...	125	1060	7.2	16.5	6.5	103
01...	175	1060	6.9	16.5	5.8	103
01...	225	995	7.0	15.0	6.0	103
01...	275	1010	6.8	14.0	6.6	103
01...	325	1020	6.8	13.5	6.2	103
01...	375	1010	7.0	14.0	5.9	103
01...	410	1020	7.0	13.5	5.4	103

* FIELD DETERMINATIONS BY U.S. BUREAU OF RECLAMATION.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COLORADO RIVER MAIN STEM

09420900 LAKE MEAD NEAR LAS VEGAS BEACH, NV (LAT 36°06'30", LONG 114°49'10")

WATER-QUALITY RECORDS

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

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (MG/L AS CACO3)
DEC											
06...	0951	10	1110	16.5	340	82	32	110	2.6	5.3	120
06...	0954	214	1080	13.0	330	83	30	100	2.4	5.0	130
MAR											
06...	1003	10	1100	14.0	350	88	31	100	2.3	5.0	130
06...	1026	218	1300	10.5	450	120	36	110	2.3	7.3	130
JUN											
01...	1000	10	1080	22.5	330	81	31	100	2.4	5.2	110
01...	1030	227	1080	17.5	340	85	31	100	2.4	4.9	110
AUG											
29...	1030	10	1130	27.0	310	76	30	110	2.7	5.5	90
29...	1055	235	1110	14.0	330	86	29	99	2.4	5.0	120

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
DEC										
06...	310	92	8.1	713	.15	.01	.08	.33	.57	.02
06...	310	83	10	700	--	--	--	--	--	--
MAR										
06...	280	89	8.3	680	.21	.01	.09	.35	.66	.02
06...	370	110	9.5	842	--	--	--	--	--	--
JUN										
01...	290	90	7.9	674	.01	.00	.06	.69	.76	.01
01...	290	90	9.1	679	--	--	--	--	--	--
AUG										
29...	310	98	8.5	692	.01	.01	.07	.49	.58	.03
29...	270	91	9.8	664	--	--	--	--	--	--

TRANSPARENCY,
SECCHI DISK
(FEET)

DATE	
DEC. 6	21
JUNE 1	18
AUG. 29	7

* Samples and field data collected by U.S. Bureau of Reclamation.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COLORADO RIVER MAIN STEM

09420950 LAKE MEAD AT SADDLE ISLAND, NV (LAT 36°03'45", LONG 114°47'40")

WATER-QUALITY RECORDS

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

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)
DEC											
06...	1232	10	1110	16.5	340	82	32	110	2.6	5.3	120
06...	1256	243	1050	12.5	330	83	30	98	2.3	4.8	140
MAR											
06...	1242	10	1090	14.0	340	86	30	100	2.4	5.0	130
JUN											
01...	1215	10	1070	24.5	330	81	31	100	2.4	5.1	110
01...	1230	268	1060	14.0	330	81	30	100	2.4	4.7	140
AUG											
29...	1200	10	1120	27.0	320	79	30	110	2.7	5.3	98
29...	1220	290	1080	13.0	330	86	28	97	2.3	4.8	120

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
DEC										
06...	310	90	8.1	711	.16	.01	.07	.38	.62	.02
06...	290	81	9.4	680	--	--	--	--	--	--
MAR										
06...	290	89	8.3	687	.23	.01	.03	.27	.54	.07
JUN										
01...	280	89	8.4	664	.01	.00	.01	.68	.70	.01
01...	270	84	9.0	663	--	--	--	--	--	--
AUG										
29...	300	98	8.3	690	.01	.00	.05	.47	.53	.02
29...	280	90	9.3	669	--	--	--	--	--	--

TRANSPARENCY,
SECCHI DISK
(FEET)

DATE		
DEC. 6		42
JUNE 1		14
AUG. 29		9

* Samples and field data collected by U.S. Bureau of Reclamation.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COLORADO RIVER MAIN STEM

09423050 COLORADO RIVER LAGOON NORTH OF RIVIERA, AZ (LAT 35°07'23", LONG 114°36'42")

WATER-QUALITY RECORDS

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

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
UCT 14...	1200	1000	--	22.5	330	79	32	100
MAY 04...	1115	1070	8.2	21.0	320	80	29	110
JUL 20...	--	1080	--	--	330	83	30	96

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACU3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
UCT 14...	2.4	4.8	130	300	91	12	698	.09
MAY 04...	2.7	6.9	120	280	82	3.9	666	.08
JUL 20...	2.3	4.9	120	280	92	7.8	668	.08

09423060 COLORADO RIVER BELOW LAGOON NORTH OF RIVIERA, AZ (LAT 35°07'15", LONG 114°37'55")

WATER-QUALITY RECORDS

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

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
UCT 14...	1130	1040	--	17.5	340	83	31	110
MAY 04...	1015	1030	8.2	16.5	280	69	27	100
JUL 20...	--	1080	--	--	330	84	30	100

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACU3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
UCT 14...	2.6	4.7	130	290	89	9.2	697	.26
MAY 04...	2.6	7.5	120	220	89	5.3	592	.12
JUL 20...	2.4	5.0	120	280	90	8.8	673	.24

CARSON RIVER BASIN

315

10305500 EAST FORK CARSON RIVER NEAR MARKLEEVILLE, CA (LAT 38°41'20", LONG 119°45'44")

WATER-QUALITY RECORDS

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

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)
APR 11...	1145	E401	121	7.5	6.5	6	10.6	42
SEP 13...	1415	E126	89	7.7	9.5	0	8.8	32

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	ALKA- LINITY (MG/L AS CaCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
APR 11...	12	2.9	9.0	.6	48	2.2	96
SEP 13...	8.4	2.7	5.7	.4	39	.2	76

* DATA FROM CALIF. DEPT. OF WATER RESOURCES.
E: ESTIMATED.

PYRAMID AND WINNEMUCCA LAKES BASIN

10336700 INCLINE CREEK NEAR CRYSTAL BAY, NV (LAT 39°14'25", LONG 119°56'38")

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CUN- DUCT- ANCE (MICRO- MHOS)	FIELD PH (UNITS)	WATER TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
JUN 20...	1351	15	39	7.8	12.0	8.9	14	4.1
SEP 19...	1340	3.7	74	8.3	7.0	10.1	27	7.3

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)	ALKA- LITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SU4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
JUN 20...	.9	3.1	.4	.7	21	2.6	.7	.0	17
SEP 19...	2.1	4.6	.4	1.4	34	.9	1.8	.0	26

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- GEN, PHURUS, TOTAL (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)
JUN 20...	42	1.70	.04	.01	.16	.21	.03	10
SEP 19...	65	.66	.11	.01	.56	.68	.02	2

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)
09416000 - MUDDY R NR MOAPA, NV (LAT 36 42 40 LONG 114 41 40)									
OCT , 1977					JUL , 1978				
06...	0930	31	1040	28.5	06...	1120	31	1400	24.0
DEC					AUG				
01...	0930	36	1030	26.0	07...	1500	30	1340	28.5
FEB , 1978					SEP				
02...	1100	39	1060	26.5	07...	1415	32	1350	25.5
09418500 - MEADOW VALLEY WASH NR CALIENTE, NV (LAT 37 33 20 LONG 114 33 50)									
DEC , 1977					JUL , 1978				
21...	1230	1.9	900	7.5	12...	1800	1.6	680	20.5
JAN , 1978					AUG				
24...	1430	3.4	1130	7.0	29...	1840	1.4	700	19.5
FEB					SEP				
21...	1330	8.4	1150	16.0	19...	1730	2.4	790	16.0
09419000 - MUDDY R NR GLENDALE, NV (LAT 36 38 35 LONG 114 32 20)									
OCT , 1977					JUL , 1978				
06...	1225	31	1480	24.0	06...	1120	31	1400	24.0
DEC					AUG				
01...	1130	33	1540	17.0	07...	1500	29	1340	28.5
28...	1400	45	1360	18.0	SEP				
FEB , 1978					07...	1415	32	1350	25.5
02...	1230	42	1530	19.0					
10243700 - CLEVE C NR ELY, NV (LAT 39 12 50 LONG 114 32 20)									
DEC , 1977					APR , 1978				
19...	1450	8.0	62	.0	19...	1410	15	98	8.0
JAN , 1978					JUL				
19...	1450	5.7	54	3.0	24...	1550	8.9	80	16.0
FEB					AUG				
28...	1040	6.0	60	1.0	23...	1330	8.3	58	14.0
10244720 - FRANKLIN R NR ARTHUR, NV (LAT 40 49 25 LONG 115 08 10)									
OCT , 1977					MAY , 1978				
03...	1020	.92	205	9.5	15...	1015	51	72	6.0
NOV					JUN				
21...	1035	1.4	194	.5	13...	1125	53	49	9.5
DEC					JUL				
22...	1045	1.1	173	.0	19...	1340	10	91	17.5
MAR , 1978					AUG				
13...	1330	1.9	173	1.5	31...	1340	2.0	221	18.0
APR									
10...	1025	9.6	128	7.0					
10244745 - OVERLAND C NR RUBY VALLEY, NV (LAT 40 27 30 LONG 115 23 30)									
OCT , 1977					MAY , 1978				
03...	1210	1.5	94	8.5	15...	1215	57	56	7.0
NOV					JUN				
21...	1230	1.5	91	.5	13...	1330	74	52	9.5
DEC					JUL				
22...	1250	2.4	86	.0	19...	1110	21	53	16.5
MAR , 1978					AUG				
13...	1135	3.8	85	.5	31...	1130	3.5	80	13.0
APR									
10...	1430	13	68	9.0					
10246846 - L CURRANT C NR CURRANT, NV (LAT 38 50 50 LONG 115 22 00)									
OCT , 1977					MAY , 1978				
18...	1345	.50	370	12.0	17...	1620	38	119	8.0
DEC					JUL				
20...	1355	.11	281	.5	25...	1025	9.3	353	9.5
FEB , 1978					AUG				
28...	1350	.75	385	1.5	22...	1420	1.3	337	13.0
APR									
20...	1250	26	332	9.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)
10249200 - MCCLUSKY CREEK NR AUSTIN, NV (LAT 39 56 23 LONG 116 31 14)									
MAR , 1978					MAY , 1978				
09...	1210	.38	561	6.5	30...	1125	2.6	391	10.5
29...	1505	12	264	12.0	JUL				
APR					06...	1045	1.1	495	13.5
03...	1435	5.0	341	4.5	AUG				
MAY					17...	1030	.06	510	12.0
01...	1150	15	300	5.5					
10249280 - KINGSTON C BL COUGAR CANYON NR AUSTIN, NV (LAT 39 12 45 LONG 117 06 45)									
OCT , 1977					MAY , 1978				
17...	1235	4.2	409	9.5	25...	1500	36	431	10.0
DEC					JUL				
08...	1135	3.6	432	5.0	18...	1530	14	407	11.0
JAN , 1978					AUG				
23...	1530	3.0	396	2.5	22...	1500	10	468	17.5
APR									
03...	1515	5.2	399	7.5					
10291500 - BUCKEYE C NR BRIDGEPORT, CA (LAT 38 14 20 LONG 119 19 30)									
OCT , 1977					JUN , 1978				
12...	1500	7.4	108	11.0	22...	0830	294	33	4.0
NOV					JUL				
28...	1400	10	113	4.5	31...	1400	149	40	19.0
FEB , 1978					AUG				
01...	1310	13	105	.5	30...	0830	51	65	8.0
MAY					SEP				
05...	1300	100	63	4.5	26...	1445	37	77	11.5
25...	1800	129	58	9.5					
10293500 - E WALKER R AB STROSNIDER D NR MASON, NV (LAT 38 48 45 LONG 119 02 50)									
OCT , 1977					APR , 1978				
19...	1400	23	322	14.0	12...	1400	246	310	14.0
DEC					MAY				
21...	1340	31	390	3.0	11...	1225	545	281	15.0
JAN , 1978					JUN				
12...	1340	18	435	3.0	07...	1415	255	209	22.5
FEB					JUL				
13...	1310	18	402	2.5	10...	1150	293	181	20.0
MAR					SEP				
10...	1400	33	390	12.0	13...	1240	143	237	17.5
10295500 - L WALKER R NR BRIDGEPORT, CA (LAT 38 21 30 LONG 119 26 30)									
NOV , 1977					MAY , 1978				
23...	1320	16	292	3.0	15...	1215	165	88	7.5
FEB , 1978					JUN				
23...	1020	15	389	.0	22...	1130	192	63	8.5
MAR					SEP				
29...	0840	49	217	3.0	27...	1430	28	174	15.5
10296500 - W WALKER R NR COLEVILLE, CA (LAT 38 30 55 LONG 119 27 15)									
NOV , 1977					JUN , 1978				
23...	1020	22	192	3.0	23...	1145	1190	41	8.5
FEB , 1978					JUL				
23...	1300	49	166	6.0	26...	1330	73	44	12.5
MAR					AUG				
29...	1205	273	127	7.0	30...	1250	152	104	16.0
APR					SEP				
26...	1200	347	111	5.5	27...	1200	106	116	13.0

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)
10297500 - W WALKER R AT HOYE BRIDGE NR WELLINGTON, NV (LAT 38 43 40 LONG 119 25 40)									
OCT , 1977					JUN , 1978				
20...	0915	12	414	10.5	08...	0835	529	151	15.0
JAN , 1978					JUL				
10...	1105	16	428	3.0	11...	0950	696	118	18.5
MAR					AUG				
10...	1025	17	431	9.0	09...	1130	570	112	20.0
APR					SEP				
12...	1230	150	253	14.0	12...	1030	189	149	10.5
MAY									
11...	1300	456	219	15.0					
10300000 - W WALKER R NR HUDSON, NV (LAT 38 48 35 LONG 119 13 35)									
OCT , 1977					JUN , 1978				
20...	1300	20	510	17.0	08...	1315	223	239	20.0
DEC					JUL				
05...	1030	29	515	9.0	11...	1155	407	179	20.5
JAN , 1978					21...	1200	360	169	16.0
10...	1300	27	544	6.5	AUG				
MAR					09...	1400	358	183	21.0
10...	1210	27	532	12.0	SEP				
APR					12...	1200	140	328	14.0
12...	1430	92	352	18.5					
MAY									
11...	1620	148	327	18.5					
10300600 - WALKER R NR MASON, NV (LAT 38 55 11 LONG 119 11 20)									
OCT , 1977					MAY , 1978				
19...	1010	20	571	13.0	11...	1100	411	328	12.5
DEC					JUN				
21...	1020	47	630	4.0	07...	1140	264	282	20.5
JAN , 1978					JUL				
12...	1130	28	650	3.5	11...	1320	365	224	19.0
FEB					AUG				
13...	0945	36	648	4.0	09...	1030	381	210	20.0
MAR					SEP				
10...	1515	47	571	14.5	13...	1030	170	333	13.5
APR									
12...	0935	246	348	13.5					
10301710 - WALKER R BLW WEBER RES NR SCHURZ, NV (LAT 39 02 35 LONG 118 51 28)									
OCT , 1977					APR , 1978				
04...	1245	.21	596	18.0	25...	1440	41	362	11.5
17...	1205	11	608	14.0	MAY				
NOV					31...	1335	75	582	16.0
17...	1305	.30	710	5.5	JUN				
DEC					28...	0735	26	563	18.0
02...	1215	.27	750	5.0	AUG				
23...	1300	.24	664	2.5	04...	0950	70	502	24.0
JAN , 1978					SEP				
30...	1350	.22	777	4.0	12...	1035	36	467	16.0
MAR									
02...	1250	.21	554	7.0					
31...	1350	E.20	753	16.0					
10308200 - E F CARSON R BL MARKLEEVILLE C NR MARKLEEVILLECA (LAT 38 42 50 LONG 119 45 50)									
OCT , 1977					JUN , 1978				
27...	1200	26	188	9.0	01...	1300	1385	52	9.0
NOV					27...	1040	917	50	10.5
25...	0945	48	204	3.0	JUL				
JAN , 1978					28...	1040	335	66	14.0
30...	1130	71	203	.5	AUG				
FEB					30...	1020	133	96	12.0
27...	1030	144	177	4.0	SEP				
MAR					26...	1035	88	108	12.5
28...	1210	466	111	7.5					
MAY									
10...	1045	1120	63	5.5					

E: ESTIMATED.

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS)	WATER TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS)	WATER TEMPER- ATURE (DEG C)
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10309000 - E F CARSON R NR GARDNERVILLE, NV (LAT 38 50 50 LONG 119 42 10)

OCT , 1977					APR , 1978				
27...	1055	33	--	4.0	27...	1300	562	--	9.5
NOV					MAY				
28...	1145	54	--	5.5	05...	1155	994	--	4.5
DEC					15...	1300	1980	--	--
30...	1415	131	--	3.0	JUN				
JAN , 1978					07...	1005	1810	48	7.0
30...	1500	90	231	4.5	JUL				
FEB					24...	1010	357	79	19.0
27...	1430	174	--	7.5	AUG				
MAR					29...	1030	131	132	15.0
29...	1130	653	124	7.0					

10309100 - E F CARSON R AT MINDEN, NV (LAT 38 56 48 LONG 119 46 45)

DEC , 1977					MAY , 1978				
06...	1300	.47	274	9.0	19...	1515	882	77	11.0
FEB , 1978					JUN				
13...	1415	63	265	6.0	08...	1500	1350	54	11.5
MAR					AUG				
09...	0920	289	315	3.0	30...	1355	.90	207	24.0
MAY									
11...	1600	754	79	10.5					

10310405 - CARSON R AT GENOA, NV (LAT 38 59 52 LONG 119 49 21)

OCT , 1977					MAY , 1978				
13...	1110	2.7	329	12.0	11...	1100	988	90	8.0
DEC					19...	1050	1010	96	9.5
06...	1000	13	330	4.5	JUN				
JAN , 1978					08...	1115	1440	65	9.5
09...	1105	11	297	3.5	AUG				
FEB					30...	1215	14	283	19.0
13...	1115	113	314	4.5	SEP				
MAR					05...	1430	8.9	309	15.5
09...	1140	273	211	3.5					
APR									
11...	1135	324	170	12.5					

10311100 - KINGS CAN C NR CARSON CITY NEV (LAT 39 09 14 LONG 119 48 24)

OCT , 1977					APR , 1978				
11...	1100	.41	84	10.5	21...	1230	1.2	84	7.5
JAN , 1978					MAY				
17...	1050	1.6	186	2.5	24...	1400	.72	103	8.0
FEB					JUN				
17...	1120	.84	160	2.0	20...	1110	1.7	71	11.5
MAR					JUL				
17...	1015	.91	161	6.0	21...	1130	1.8	70	11.0

10311200 - ASH CAN C NR CARSON CITY (LAT 39 10 35 LONG 119 48 16)

OCT , 1977					APR , 1978				
11...	1015	1.3	89	9.0	21...	1115	2.9	88	11.5
DEC					MAY				
08...	1000	1.4	90	2.0	26...	0855	3.5	73	4.0
FEB , 1978					JUN				
17...	1030	1.7	--	2.0	20...	1005	3.4	64	11.0
MAR					JUL				
17...	0945	2.8	100	4.0	21...	1030	2.2	73	10.0

10312210 - STILLWATER DIVERSION CANAL NR FALLON NV (LAT 39 28 25 LONG 118 35 50)

NOV , 1977					MAY , 1978				
01...	1045	3.5	3250	7.0	03...	1420	34	1080	19.0
DEC					JUN				
01...	1330	1.2	5320	3.5	01...	1230	42	864	24.5
JAN , 1978					JUL				
03...	1455	1.6	5220	1.5	06...	1005	51	759	18.0
FEB					AUG				
02...	1530	2.2	5320	5.5	03...	1105	25	900	22.5
MAR					SEP				
03...	1330	2.6	8190	11.0	06...	1535	38	658	17.5
APR									
03...	1300	34	6830	19.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

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DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS)	WATER TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS)	WATER TEMPER- ATURE (DEG C)
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10312220 - STILLWATER SLOUGH CUTOFF DRAIN NR STILLWATER NV (LAT 39 33 05 LONG 118 31 40)

NOV , 1977					JUL , 1978				
01...	1345	2.0	4230	12.5	26...	1000	39	875	20.5
DEC									
01...	1320	1.6	5420	6.0					

10312240 - PAIUTE DIVERSION DRAIN NR STILLWATER NV (LAT 39 33 30 LONG 118 34 20)

OCT , 1977					JUN , 1978				
13...	1130	.42	5220	13.5	01...	1130	14	1140	19.0
MAY , 1978					JUL				
03...	1105	46	1670	16.0	06...	1200	10	1250	20.0
18...	1300	18	1360	19.0	AUG				
23...	1230	15	1880	16.0	03...	1135	7.9	1080	24.5

10312260 - INDIAN LAKES CANAL NR FALLON NV (LAT 39 34 30 LONG 118 41 30)

OCT , 1977					APR , 1978				
13...	1400	3.2	1190	19.5	03...	1400	2.5	4530	18.5
NOV					MAY				
02...	1315	2.4	1250	14.0	02...	1320	30	910	18.5
DEC					JUN				
01...	1015	1.8	1490	2.5	03...	1215	4.3	459	19.5
JAN , 1978					JUL				
03...	1205	1.5	2310	3.0	05...	1345	8.0	418	24.5
FEB					AUG				
02...	1200	2.1	2290	6.5	03...	1240	12	444	27.0
MAR					SEP				
03...	1005	2.5	2990	8.0	06...	1015	24	551	17.0

10312265 - INDIAN LAKES CA BL EAST LK NR STILLWATER, NV (LAT 39 36 21 LONG 118 34 46)

MAR , 1978					JUL , 1978				
03...	0830	22	2630	15.5	06...	1325	2.4	1920	21.0
MAY					AUG				
05...	1300	16	2590	14.0	03...	1150	.89	2390	24.5
18...	1130	5.0	2530	19.0	SEP				
23...	1100	9.3	2340	14.0	06...	1250	1.5	1510	17.5
JUN									
01...	1000	.74	2620	15.0					

10312270 - PAIUTE DRAIN AT WILDLIFE ENT NR STILLWATER, NV (LAT 39 36 33 LONG 118 33 19)

OCT , 1977				
13...	1130	.40	5220	13.5

10312280 - CARSON R BL FALLON, NV (LAT 39 40 10 LONG 118 39 20)

MAY , 1978					AUG , 1978				
23...	1430	3.8	798	17.0	03...	1210	7.5	625	26.5
31...	1500	13.	614	21.0	SEP				
JUL					06...	1125	3.2	557	17.0
05...	1515	2.7	725	28.0					

10315500 - MARYS R AB HOT SPRINGS C NR DEETH, NV (LAT 41 15 10 LONG 115 15 20)

JAN , 1978					MAY , 1978				
11...	1135	1.4	294	--	24...	1230	266	184	10.0
FEB					JUN				
22...	1055	21	278	2.5	28...	1000	92	194	16.5
MAR					AUG				
23...	1415	125	178	8.5	02...	0915	7.4	331	17.0
APR					SEP				
19...	1020	173	181	9.0	07...	1215	2.7	416	17.0

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)
10316500 - LAMOILLE C NR LAMOILLE, NV (LAT 40 41 30 LONG 115 28 30)									
OCT , 1977					APR , 1978				
03...	1450	5.2	192	12.0	11...	1200	18	197	6.5
NOV					MAY				
11...	1500	3.7	190	1.5	15...	1440	121	134	7.5
DEC					JUN				
08...	1530	4.1	191	.0	15...	1555	279	102	8.5
JAN , 1978					JUL				
19...	1330	4.0	191	.5	02...	0900	48	109	11.5
FEB					AUG				
28...	1540	4.3	199	--	31...	1540	7.8	181	16.0
MAR									
24...	1445	9.2	189	8.0					
10317400 - N F HUMBOLDT R NR N FORK, NV (LAT 41 34 30 LONG 115 54 40)									
OCT , 1977					MAY , 1978				
07...	1215	.11	238	9.0	30...	1320	33	95	7.0
JAN , 1978					JUN				
04...	1345	.99	168	1.0	27...	0940	11	112	10.5
FEB					JUL				
23...	1110	2.9	161	.5	27...	1200	2.8	169	18.0
APR					SEP				
04...	1035	17	108	4.0	12...	0945	1.4	201	20.0
27...	1210	454	98	1.0					
10317500 - N F HUMBOLDT R AT DEVILS GATE NR HALLECK, NV (LAT 41 10 50 LONG 115 29 35)									
OCT , 1977					MAY , 1978				
03...	1250	8.0	366	19.0	05...	1035	250	240	3.0
DEC					24...	0950	127	309	11.0
08...	1040	14	362	.0	JUN				
JAN , 1978					28...	1320	331	368	22.0
11...	1310	25	344	--	AUG				
FEB					02...	1100	3.6	298	25.0
24...	1315	24	340	5.0	SEP				
MAR					07...	0940	15	385	17.0
23...	1115	366	283	7.0					
APR									
12...	1455	271	243	10.5					
10318500 - HUMBOLDT R NR ELKO, NV (LAT 40 56 00 LONG 115 38 00)									
OCT , 1977					APR , 1978				
03...	1200	1.7	477	12.0	20...	0830	417	375	10.5
NOV					MAY				
09...	0910	6.4	518	4.0	23...	1410	389	495	16.0
DEC					JUN				
19...	1425	39	509	.0	15...	1030	650	434	18.5
MAR , 1978					AUG				
01...	1500	119	510	4.5	21...	1140	1.8	510	21.0
24...	1010	487	427	8.0					
10320000 - S F HUMBOLDT R AB DIXIE C NR ELKO, NV (LAT 40 41 05 LONG 115 48 45)									
OCT , 1977					MAR , 1978				
07...	0920	9.4	527	5.0	30...	1015	179	333	10.0
NOV					MAY				
09...	1520	14	470	3.0	05...	1425	197	350	1.0
DEC					23...	1015	309	238	12.0
27...	1600	20	485	.0	JUN				
JAN , 1978					16...	1130	720	190	11.0
19...	1100	32	471	1.0	SEP				
MAR					20...	1050	29	400	10.5
06...	1035	146	567	4.5					

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)
10321000 - HUMBOLDT R NR CARLIN, NV (LAT 40 43 40 LONG 116 00 30)									
OCT , 1977					MAR , 1978				
06...	0835	17	506	10.5	24...	1240	557	407	10.0
NOV					APR				
09...	1250	26	496	--	20...	1345	579	389	12.0
DEC					JUL				
19...	1105	26	551	.0	07...	0945	370	384	17.5
JAN , 1978					AUG				
24...	1610	64	527	.0	22...	1155	19	550	19.5
FEB					SEP				
27...	1220	156	541	6.5	21...	1440	52	498	16.5
10322500 - HUMBOLDT R AT PALISADE, NV (LAT 40 36 25 LONG 116 12 05)									
NOV , 1977					APR 1978				
29...	1100	67	577	6.0	27...	1225	924	351	7.5
DEC					MAY				
27...	1210	78	569	2.5	30...	1435	641	433	16.5
JAN , 1978					JUL				
30...	1215	88	558	2.5	27...	0800	97	486	22.0
MAR					SEP				
30...	1315	912	403	12.5	27...	1540	73	532	21.0
10323500 - HUMBOLDT R NR ARGENTA, NV (LAT 40 40 45 LONG 116 38 45)									
OCT , 1977					APR , 1978				
06...	1000	.79	580	9.0	20...	1200	653	443	14.0
NOV					MAY				
12...	1335	19	593	7.0	25...	0910	589	426	11.0
JAN , 1978					JUN				
09...	1305	84	590	--	15...	1340	899	365	18.0
FEB					JUL				
13...	1335	157	593	3.0	07...	1145	373	403	20.0
MAR					AUG				
09...	1505	401	580	7.0	18...	0755	14	591	11.0
27...	1220	792	444	12.5					
10324500 - ROCK C NR BATTLE MOUNTAIN, NV (LAT 40 49 30 LONG 116 34 45)									
OCT , 1977					MAR , 1978				
04...	1145	.70	424	11.0	29...	1115	151	192	11.0
NOV					MAY				
17...	1105	2.1	474	3.0	05...	1435	400	200	5.5
JAN , 1978					12...	1030	181	190	12.0
09...	1100	5.0	414	--	JUN				
FEB					15...	1125	28	348	16.0
13...	1150	15	402	5.0	AUG				
MAR					03...	0930	.23	459	20.0
14...	1030	78	245	.5					
10325000 - HUMBOLDT R AT BATTLE MOUNTAIN, NV (LAT 40 40 00 LONG 116 55 50)									
OCT , 1977					MAR , 1978				
06...	1130	1.8	918	12.0	28...	1305	956	420	13.0
NOV					APR				
22...	1200	32	671	2.0	21...	1245	602	425	11.5
DEC					MAY				
30...	1010	65	606	3.0	02...	1430	1370	434	12.5
JAN , 1978					JUN				
26...	0940	100	600	.0	20...	0950	863	415	18.5
FEB					AUG				
28...	1025	157	621	4.5	03...	1110	52	600	23.0
10326800 - FISH CREEK NR BATTLE MOUNTAIN, NV (LAT 40 10 16 LONG 117 12 23)									
OCT , 1977					APR , 1978				
18...	1215	.82	603	8.5	11...	1330	9.1	396	17.0
NOV					21...	1450	10	394	14.0
30...	1240	.41	608	9.5	MAY				
DEC					02...	1130	15	344	10.0
30...	1145	.84	620	5.0	JUN				
JAN , 1978					01...	0935	15	318	8.5
26...	1205	.76	609	5.5	JUL				
FEB					07...	1335	16	588	25.5
28...	1225	.77	618	11.0	AUG				
MAR					09...	1015	.85	616	20.5
28...	1325	5.4	404	17.0					

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
10327500 - HUMBOLDT R AT COMUS, NV (LAT 41 00 00 LONG 117 19 00)									
OCT , 1977					MAR , 1978				
06...	1340	.20	2110	15.0	28...	1210	684	429	8.5
NOV					MAY				
30...	0915	19	751	3.5	24...	1245	612	470	11.5
DEC					JUL				
30...	0910	54	713	1.0	21...	1020	173	181	21.5
JAN , 1978					AUG				
26...	0920	81	646	.0	24...	1055	9.9	800	18.5
MAR									
09...	1115	342	614	7.0					
10328450 - N F L HUMBOLDT R NR PARADISE VALLEY, NV (LAT 41 29 30 LONG 117 07 30)									
NOV , 1977					MAY , 1978				
29...	1340	3.1	277	5.0	02...	1415	88	131	10.0
DEC					JUN				
28...	1255	4.2	268	.0	02...	1140	32	138	13.5
JAN , 1978					AUG				
23...	1350	6.1	234	.0	07...	1300	.28	237	28.5
MAR					SEP				
07...	1545	35	140	6.5	18...	1400	1.7	317	9.0
15...	1320	18	199	2.5					
21...	1110	130	135	8.0					
10328475 - S F L HUMBOLDT R NR PARADISE VALLEY, NV (LAT 41 27 00 LONG 117 06 00)									
NOV , 1977					MAY , 1978				
29...	1240	.00	615	6.5	02...	1240	101	233	8.5
JAN , 1978					JUN				
23...	1215	2.3	589	.0	02...	1025	33	195	14.5
MAR					AUG				
07...	1400	27	424	6.0	07...	1130	1.7	293	26.5
15...	1420	14	336	3.0	SEP				
20...	1440	33	260	--	18...	1215	2.5	300	7.0
28...	1255	71	227	6.0					
10329000 - L HUMBOLDT R NR PARADISE VALLEY, NV (LAT 41 24 55 LONG 117 22 22)									
OCT , 1977					MAY , 1978				
06...	0830	7.3	409	10.0	01...	1220	98	304	15.0
DEC					JUN				
28...	1440	7.6	416	8.5	22...	1100	55	306	19.5
MAR , 1978					AUG				
21...	1250	7.7	421	15.5	22...	1130	6.9	418	17.5
28...	1505	70	373	8.0					
10329500 - MARTIN C NR PARADISE VALLEY, NV (LAT 41 32 00 LONG 117 25 40)									
OCT , 1977					MAY , 1978				
06...	1000	6.7	260	12.5	01...	1500	146	109	13.0
DEC					JUN				
01...	1135	11	216	10.0	22...	0850	54	109	14.0
28...	1600	12	200	6.0	JUL				
JAN , 1978					20...	1510	12	--	26.0
23...	1610	22	189	4.0	SEP				
MAR					18...	1545	7.7	249	16.0
07...	1405	70	138	8.0					
22...	1025	271	110	7.0					
28...	1530	159	114	13.5					
10336715 - MARLETTE C NR CARSON CITY, NV (LAT 39 10 20 LONG 119 54 25)									
JAN , 1978					APR , 1978				
11...	1435	4.9	45	2.0	24...	1105	3.5	45	1.5
MAR					AUG				
29...	1340	5.0	46	2.0	08...	1530	.05	56	12.0
10348000 - TRUCKEE R AT RENO, NV (LAT 39 31 55 LONG 119 47 05)									
OCT , 1977					APR , 1978				
14...	1030	18	414	9.0	18...	0915	746	105	9.5
DEC					MAY				
20...	1010	100	195	1.0	15...	1015	2720	76	8.5
JAN , 1978					AUG				
19...	1130	364	174	4.0	29...	1045	214	134	15.5
FEB									
17...	1050	396	141	2.5					

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)
10348460 - FRANKTOWN C NR CARSON CITY, NV (LAT 39 12 12 LONG 119 52 17)									
OCT , 1977					MAY , 1978				
12... 1310	.93	65	10.5		24... 1015	7.1	35	5.5	
FEB , 1978					AUG				
28... 1300	1.9	64	2.0		03... 1115	1.1	62	15.0	
APR					SEP				
24... 1245	3.1	50	2.5		20... 1330	1.0	87	12.0	
10348900 - GALENA C NR STEAMBOAT, NV (LAT 39 21 45 LONG 119 49 30)									
OCT , 1977					APR , 1978				
25... 1230	4.2	75	9.0		28... 1300	3.0	79	8.5	
NOV					JUN				
22... 1245	2.4	77	2.5		28... 1200	17	47	10.5	
DEC					JUL				
21... 1300	.69	87	.0		20... 1130	14	54	15.0	
JAN , 1978					AUG				
20... 1200	.85	100	3.0		07... 1130	9.6	59	14.5	
FEB					25... 1355	6.6	64	9.0	
22... 1245	.81	98	4.0		SEP				
MAR					21... 1515	7.1	71	9.0	
28... 1230	2.0	100	8.5						
10349300 - STEAMBOAT C AT STEAMBOAT, NV (LAT 39 22 40 LONG 119 44 33)									
OCT , 1977					APR , 1978				
11... 1350	.40	466	14.0		28... 1105	2.8	369	13.5	
25... 1000	.77	417	13.5		JUN				
NOV					28... 0930	2.4	219	16.0	
22... 1030	4.7	367	4.5		JUL				
DEC					20... 1000	26	255	15.0	
21... 1125	3.7	344	4.0		AUG				
JAN , 1978					25... 1015	2.7	271	10.0	
20... 1310	7.4	322	9.0		SEP				
FEB					21... 1035	6.6	225	10.0	
22... 1000	5.6	319	6.0						
MAR									
28... 1000	4.8	310	9.5						
10353000 - E F QUINN R NR MC DERMITT, NV (LAT 41 59 00 LONG 117 35 00)									
OCT , 1977					MAY , 1978				
04... 1420	3.2	234	--		18... 1000	58	123	8.5	
NOV					JUN				
30... 1630	7.7	204	5.5		21... 1345	11	157	22.0	
DEC					AUG				
29... 1005	11	185	3.5		08... 1455	1.8	222	24.0	
JAN , 1978					SEP				
25... 1035	13	172	1.0		20... 0950	3.8	227	9.0	
MAR									
08... 1250	79	128	7.5						
29... 0935	169	90	13.5						
10353600 - KINGS R NR OROVADA, NV (LAT 41 54 25 LONG 118 18 30)									
OCT , 1977					MAR , 1978				
05... 1335	1.4	164	14.0		29... 1030	51	120	6.0	
NOV					MAY				
30... 1245	2.2	157	5.0		03... 1410	37	123	15.0	
DEC					JUN				
29... 1315	2.2	154	.5		01... 1430	13	101	12.0	
JAN , 1978					AUG				
24... 1325	3.4	178	.0		23... 1010	1.8	170	12.5	
MAR									
16... 0800	9.7	154	.5						
10353650 - QUINN R NR DENIO, NV (LAT 41 27 50 LONG 118 16 50)									
MAY , 1978					JUN , 1978				
03... 0920	111	607	12.0		01... 1300	14	742	17.5	
11... 1250	159	669	12.0		21... 0940	.74	870	19.0	
19... 1430	77	685	16.0						
25... 0815	34	692	8.0						

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	WATER TEMPER- ATURE (DEG C)
10353700 - LEONARD C NR DENIO, NV (LAT 41 31 40 LONG 118 42 45)									
OCT , 1977					MAY , 1978				
05...	1110	1.7	195	8.5	03...	1115	17	176	10.5
NOV					12...	1250	18	149	13.5
30...	0945	2.1	198	2.0	JUN				
DEC					21...	1020	14	116	13.5
29...	1030	2.5	199	1.0	AUG				
JAN , 1978					08...	0945	4.6	144	17.0
24...	1000	.36	307	.0	SEP				
MAR					14...	0950	4.6	167	5.0
08...	1015	10	237	4.5					
29...	1340	12	213	13.5					
13161500 - BRUNEAU R AT ROWLAND, NV (LAT 41 56 00 LONG 115 40 25)									
OCT , 1977					MAY , 1978				
12...	1130	14	222	6.0	09...	1300	284	118	6.5
DEC					JUN				
14...	1050	29	204	4.5	14...	1115	233	92	10.5
FEB , 1978					JUL				
01...	1220	26	198	1.5	18...	1010	36	155	16.5
MAR					AUG				
10...	1300	107	141	--	10...	1140	11	197	22.0
APR					SEP				
04...	1350	315	126	5.5	12...	1210	22	208	11.5
13174500 - OWYHEE R NR GOLD CREEK, NV (LAT 41 41 20 LONG 115 50 38)									
OCT , 1977					JUN , 1978				
07...	1050	23	234	6.0	05...	1450	67	199	11.5
28...	1140	3.6	235	9.0	27...	1105	211	203	14.5
DEC					AUG				
01...	1245	.64	233	1.0	30...	1210	72	229	16.0
13176000 - OWYHEE R AB CHINA DIV DAM NR OWYHEE, NV (LAT 41 55 20 LONG 116 04 10)									
OCT , 1977					APR , 1978				
07...	0920	35	258	5.5	27...	1210	448	119	1.0
24...	1340	16	289	8.0	MAY				
DEC					30...	1040	224	148	6.0
01...	1040	20	309	1.0	JUN				
JAN , 1978					27...	1430	262	213	17.5
04...	1105	23	280	.5	JUL				
26...	1205	27	279	.0	27...	0830	149	230	18.0
FEB					AUG				
23...	1330	40	249	3.0	30...	1315	75	243	18.0
MAR									
30...	1405	401	120	7.5					
13177800 - S F OWYHEE R NR WHITEROCK, NV (LAT 41 48 00 LONG 116 29 00)									
OCT , 1977					APR , 1978				
12...	1300	26	406	--	05...	1120	287	254	7.0
NOV					MAY				
16...	1320	34	203	5.0	04...	1345	881	250	7.0
JAN , 1978					JUN				
06...	1310	44	438	2.5	16...	1130	--	429	17.5
FEB					AUG				
17...	1110	51	440	.0	03...	0935	39	455	21.5
MAR					SEP				
15...	1140	112	340	5.0	15...	1350	30	552	19.0

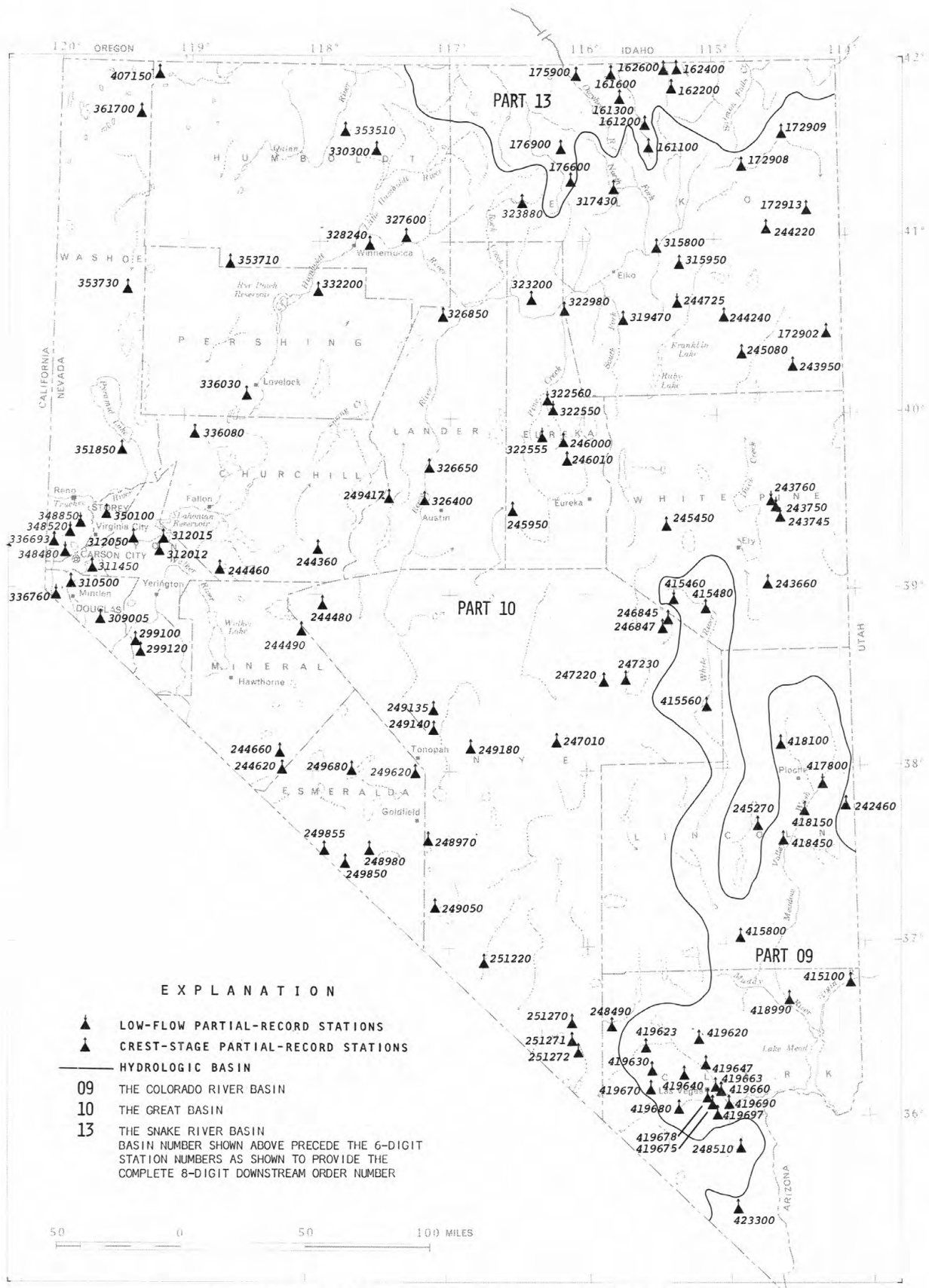


FIGURE 8.--STREAMFLOW PARTIAL-RECORD STATIONS LISTED IN THIS REPORT.

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 analysis, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow 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 a better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the State at low-flow partial-record stations are given in the following table. Generally, this category is used mostly for low-flow analysis when streamflow is primarily from ground-water storage so that the low-flow potentiality of the stream may be obtained by comparison with a nearby stream where continuous records are available. In this State, measurements are included at various stages so that a general picture of the annual streamflow characteristics may be obtained by similar comparison. 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 ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
Virgin River basin						
09415460	White River near Red Mountain, near Preston, Nev.	Lat 38°56'35", long 115°20'25", in NW¼SE¼ sec.33, T.13 N., R.59 E., White Pine County, at camp-site 8.0 mi (12.9 km) northwest of State Highway 6 and 15 mi (24 km) northwest of Preston.	18.6	1965-78	12-20-77	0.65
					4-20-78	46.4
					7-25-78	7.28
09417800	Meadow Valley Wash at Echo Point, near Ursine, Nev.	Lat 37°54'30", long 114°15'40", in SW¼SW¼ sec.28, T.1 N., R.69 E., Lincoln County, at Echo Point, above Echo Reservoir, and 6.0 mi (9.7 km) southwest of Ursine.	354	1970-78	3-29-78	25.4
					6-01-78	1.15
					7-13-78	0.72
					8-30-78	0.31
					9-20-78	0.40
Spring Valley						
10243745	Odgers Creek near McGill, Nev.	Lat 39°24'08", long 114°31'48", in NE¼ sec.27, T.18 N., R.66 E., White Pine County, at mouth of canyon, and 14 mi (23 km) east of McGill.	3.9	1973-78	4-19-78	1.98
					5-18-78	5.35
					7-24-78	2.77
10243750	Bassett Creek near McGill, Nev.	Lat 39°26'20", long 114°32'30", in NW¼SW¼ sec.10, T.18 N., R.66 E., White Pine County, 2.4 mi (3.9 km) upstream from State secondary 739 and	6.5	1968-78	4-19-78	4.40
					5-18-78	15.7
					7-24-78	4.97
10243760	Piermont Creek near McGill, Nev.	Lat 39°29'05", long 114°33'00", in NE¼ sec.28, T.19 N., R.66 E., White Pine County, at mouth of canyon, just above diversion, and 14 mi (23 km) northeast of McGill.	7.5	1972-78	4-19-78	4.95
					5-18-78	11.2
					7-24-78	1.53
Ruby Valley						
10244725	Lutts Creek near Ruby Valley, Nev.	Lat 40°36'10", long 115°17'20", in NW¼NW¼ sec.2, T.31 N., R.59 E., Elko County, 0.8 mi (1.3 km) west of McCrea Ranch and 13.5 mi (21.7 km) northeast of Ruby Valley Post Office.	7.56	1965-78	4-10-78	8.72
					5-15-78	40.0
					7-19-78	8.24
Humboldt River basin						
10322550	Henderson Creek near Palisade, Nev.	Lat 40°01'50", long 116°14'40", in SE¼ sec.20, T.25 N., R.51 E., Eureka County, 1.5 mi (2.4 km) upstream from Pete Hanson Creek, 11 mi (18 km) from mouth, and 42 mi (68 km) south of Palisade.	150	1972-78	11-29-77	0
					4-03-78	0.07
					5-12-78	2.24
					7-05-78	0
10322555	Pete Hanson Creek near Eureka, Nev.	Lat 39°53'10", long 116°22'00", in sec.8, T.23 N., R.50 E., Eureka County, above diversions, 13 mi (21 km) from mouth, 52 mi (84 km) south of Palisade, and 33 mi (53 km) northwest of Eureka.	5.0	1972-78	10-13-77	0.26
					11-29-77	0.06
					4-03-78	2.66
					5-12-78	8.86
					7-05-78	1.42
10322560	Pete Hanson Creek near Palisade, Nev.	Lat 40°02'35", long 116°15'45", in SW¼ sec.18, T.25 N., R.51 E., Eureka County, 0.5 mi (0.8 km) above mouth, and 40 mi (64 km) south of Palisade.	67	1972-78	10-04-77	0
					4-03-78	0.63
					5-30-78	2.02
					8-05-78	0

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at low-flow partial-record stations during water year 1978--Continued

Station no.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
Pyramid and Winnemucca Lakes basin						
10336760	Edgewood Creek at Stateline, Nev.	Lat 38°58'00", long 119°56'10", in NE¼NE¼ sec.27, T.13 N., R.18 E., Douglas County, on upstream side of culvert on U.S. Highway 50 and 0.5 mi (0.8 km) northeast of Stateline.	5.5	1967-78	1-19-78 3-22-78 4-26-78 6-20-78 7-31-78	3.27 6.05 6.70 2.71 1.86
10348480	McCrays Canyon near Carson City, Nev.	Lat 39°12'13", long 119°52'48", in SW¼SW¼ sec.32, T.16 N., R.19 E., Washoe County, 0.5 mi (0.8 km) upstream from mouth, and 6.5 mi (10.5 km) west-northwest of Carson City.	.64	1974-78	5-24-78 6-23-78 8-03-78 9-20-78	2.01 1.71 0.30 0.20
10348520	Ophir Creek near Steamboat, Nev.	Lat 39°17'25", long 119°49'50", in SE¼SE¼ T.17 N., R.19 E., Washoe County, at toe of hill, and 8.0 mi (12.9 km) southwest of Steamboat.	4.2	1972-78	2-23-78 4-28-78	0.50 5.60
10348850	Browns Creek near Steamboat, Nev.	Lat 39°20'28", long 119°49'05", in SE¼NW¼ sec.14, T.17 N., R.19 E., Washoe County, 1.5 mi (2.4 km) upstream from mouth and 5.0 mi (8.0 km) south- west of Steamboat.	3.6	1972-78	2-23-78 5-28-78	4.60 8.61

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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. The years given in the period of record represent water year for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Virgin River basin							
09415100	Pulsipher Wash near Mesquite, Nev.	Lat 36°48'04", long 114°06'37", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.18, T.13 S., R.71 E., Clark County, at culvert on U.S. Highway 91 and 2.5 miles west of Mesquite.	4.58	1963-78	9-14-78	-	a205
09415480	White River tributary near Preston, Nev.	Lat 38°53'30", long 115°11'40", in N $\frac{1}{2}$ sec.23, T.12 N., R.60 E., White Pine County, at culvert on U.S. Highway 6, 2 miles upstream from White River, and 7.5 miles west of Preston.	b26	1962-78	3- -78	-	a1.5
09415560	White River tributary near Sunnyside, Nev.	Lat 38°19'30", long 115°02'50", Nye County, about 0.4 mile downstream from ford on State Highway 38, 8 miles south of Sunnyside, and 37 miles south of Lund.	b20	1967-78	1978	-	0
09415600	Pahranagat Valley trib. nr Hiko, Nev.	Lat 37°29'20", long 115°20'10", in NE $\frac{1}{4}$ sec.27, T.5 S., R.59 E., Lincoln County, on left bank tributary on upstream side of culvert on State Highway 25, 10 mi southwest of Hiko, and 47 mi west of Caliente.	b17	1963-78 ‡	1978	-	0
09415800	Muddy River tributary near Alamo, Nev.	Lat 37°02'00", long 114°58'50", Lincoln County, at abandoned culvert on former U.S. Highway 93 and 25 miles southeast of Alamo.	b2	1964-78	1978	-	a15
09418100	Patterson Wash tributary near Pioche, Nev.	Lat 38°09'00", long 114°35'10", Lincoln County, at culvert on U.S. Highway 93 and 15 miles northwest of Pioche.	b5	1964-78	1978	-	0
09418150	Casleton Wash near Panaca, Nev.	Lat 37°45'46", long 114°25'44", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.24, T.2 S., R.68 E., Lincoln County, 0.35 mile upstream from bridge on U.S. Highway 93, 3 miles southwest of Panaca.	70.2	1963-78	2-10-78	3.30	a60
09418450	Meadow Valley Wash tributary near Caliente, Nev.	Lat 37°36'00", long 114°39'30", in sec.13, T.4 S., R.65 E., Lincoln County, at abandoned culvert, about 100 ft upstream from U.S. Highway 93, 1.2 miles east of Oak Springs Summit, and 8 miles west of Caliente.	0.23	1964-78	3- -78	4.48	26
09418990	Weiser Wash near Glendale, Nev.	Lat 36°40'05", long 114°32'10", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.31, T.14 S., R.67 E., Clark County, at culvert on Interstate Highway 15 and 2 miles east of Glendale.	b43	1966-78	1- 4-78	-	a1
Las Vegas Valley							
09419620	Mormon Wells Wash near Las Vegas, Nev.	Lat 36°26'45", long 115°15'10", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.17 S., R.60 E., Clark County, above Mormon Wells road crossing, 6 miles east of Corn Creek Springs National Fish and Wildlife Service Headquarters, and 20 miles north of Las Vegas.	b115	1962-78	3- 4-78	-	a2
09419623	Deer Creek near Charleston Park, Nev.	Lat 36°18'45", long 115°37'10", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.7, T.19 S., R.57 E., Clark County, 200 ft upstream from culvert on Deer Creek Springs Road and 4.0 miles northeast of Charleston Park.	1.27	1967-78	6- -78	-	a10

‡ Operated as a continuous-record station.

a Estimated.

b Approximately.

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Las Vegas Valley--Continued							
09419630	Telephone Canyon near Charleston Park, Nev.	Lat 36°16'20", long 115°32'30", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.25, T.19 S., R.57 E., Clark County, at culvert on State Highway 39 and 5.8 miles east of Charleston Park.	7.20	1962-78	1978	-	0
09419640	Kyle Canyon near Charleston Park, Nev.	Lat 36°16'40", long 115°28'10", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.22, T.19 S., R.58 E., Clark County, 650 ft below culvert on State Highway 39 and 10 miles east of Charleston Park.	35.9	1961-78	1978	-	a1
09419647	Las Vegas Wash tributary near North Las Vegas, Nev.	Lat 36°18'10", long 115°08'20", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.15, T.19 S., R.61 E., Clark County, 0.5 miles southwest of end of road in Nellis Air Force Base Ground Gunnery Range and 7.5 miles north of North Las Vegas.	b62	1963-78	3- 4-78	-	a30
09419660	Las Vegas Wash tributary near Nellis Air Force Base, Nev.	Lat 36°13'55", long 115°04'05", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.8, T.20 S., R.62 E., Clark County, at culvert on Alternate U.S. Highway 91 and 93 and 1.5 miles southwest of Nellis Air Force Base.	18.1	1961-78	3- 4-78	2.78	a190
09419663	Las Vegas Wash tributary south of Nellis Air Force Base, Nev.	Lat 36°11'40", long 115°01'30", near section line common to secs. 22 and 23, T.20 S., R.62 E., Clark County, 0.1 mile south of Lake Mead Boulevard and 3.7 miles south of main gate of Nellis Air Force Base.	b1.2	1963-78	3- -78	-	a2
09419670	Red Rock Wash near Blue Diamond, Nev.	Lat 36°09'30", long 115°29'45", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.4, T.21 S., R.58 E., Clark County, 0.2 mile southeast of Willow Spring and 9.3 miles northwest of Blue Diamond.	8.09	1962-78	12- -77	-	a150
09419675	Flamingo Wash at Las Vegas, Nev.	Lat 36°06'56", long 115°11'03", in SW $\frac{1}{4}$ sec.17, T.21 S., R.61 E., Clark County, 80 ft upstream from Union Pacific Railroad bridge and 4 miles southwest of Las Vegas Post Office.	b86	1966-78	2-13-78	2.80	a350
09419678	Flamingo Wash near mouth at Las Vegas, Nev.	Lat 36°08'28", long 115°05'47", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.7, T.21 S., R.62 E., Clark County, 120 ft upstream from culvert on U.S. Highway 93, 95, and 466 and 3.2 miles southeast of Las Vegas Post Office.	b117	1969-78	2-13-78	-	a400
09419680	Cottonwood Valley near Blue Diamond, Nev.	Lat 36°00'35", long 115°25'50", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.25, T.22 S., R.58 E., Clark County, at culverts on Cottonwood Valley Road and 3 miles southwest of Blue Diamond.	18.3	1961-78	3- -78	5.49	a50
09419690	Duck Creek at Whitney, Nev.	Lat 36°05'09", long 115°02'00", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.34, T.21 S., R.62 E., Clark County, at culvert on U.S. Highway 93, 95, and 466 and 0.7 mile southeast of Whitney.	239	1961-78	1978	-	a100
09419697	Las Vegas Wash tributary near Henderson, Nev.	Lat 36°01'53", long 115°01'49", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.15, T.22 S., R.62 E., Clark County, at culvert on State Highway 41 and 2.5 miles west of downtown Henderson.	1.17	1967-78	1978	-	0
Piute Valley							
09423300	Piute Wash tributary at Searchlight, Nev.	Lat 35°28'00", long 114°56'20", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.33, T.28 S., R.63 E., Clark County, at culvert on State Highway 68 and 1 mile west of Searchlight.	b3.4	1967-78	8-12-78	10.00	200

a Estimated.

b Approximately.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Great Salt Lake Desert							
10172902	Dead Cedar Wash near Wendover, Utah	Lat 40°25'00", long 114°11'20", in N½ sec.4, T.29 N., R.69 E., Elko County, Nev., at culvert on Alternate U.S. Highway 50 and 23.5 miles southwest of Wendover, Utah.	b5	1961-78	1978	-	0
10172908	Thousand Springs Creek at Wilkins, Nev.	Lat 41°25'15", long 114°45'00", in SE¼ sec.20, T.41 N., R.64 E., Elko County, at culvert on U.S. Highway 93, south of Wilkins, and 24 miles northeast of Wells.	b79	1968-78	1978	3.90	a27
10172909	Burnt Creek near Shores, Nev.	Lat 41°33'35", long 114°29'35", Elko County, at culvert, 16 miles east of Shores, and 40 miles northeast of Wells.	10.5	1968-78	1978	2.72	a1
10172913	Loray Wash tributary near Cobre, Nev.	Lat 41°07'37", long 114°20'40", in SE¼SW¼ sec.36, T.38 N., R.67 E., Elko County, at culvert on State Highway 30 and 3 miles east of Cobre.	b24	1961-78	1978	3.13	a10
Escalante Valley							
10242460	Escalante Valley tributary near Panaca, Nev.	Lat 37°44'10", long 114°08'20", Lincoln County at culvert on State Highway 25, 3.5 miles east of Modena Summit, 5 miles west of Nevada-Utah boundary, and 14 miles east of Panaca.	b7.9	1964-78	9- -78	4.65	22
Spring Valley							
10243660	Connors Pass Creek near Shoshone, Nev.	Lat 39°02'35", long 114°38'00", in SW¼SW¼ sec.25, T.14 N., R.65 E., White Pine County, at culvert on U.S. Highway 6, 50, and 93 and 18.5 miles northwest of Shoshone.	0.45	1962-78	1978	-	0
Antelope Valley (Northern Part)							
10243950	Millick Canyon tributary near Currie, Nev.	Lat 40°13'30", long 114°26'10", near center of sec.8, T.27 N., R.67 E., Elko County, at culvert on Alternate U.S. Highway 50 and 17 miles east of Currie.	b1.4	1965, 1968-78	1978	-	0
Clover and Independence Valleys							
10244220	Maverick Canyon near Oasis, Nev.	Lat 41°04'32", long 114°35'14", in SE¼NE¼ sec.23, T.37 N., R.65 E., Elko County, at culvert on U.S. Highway 40 and 6 miles northwest of Oasis.	3.02	1968-78	1978	-	0
10244240	Clover Valley tributary near Arthur, Nev.	Lat 40°33'35", long 114°57'40", in SE¼SW¼ sec.15, T.31 N., R.62 E., Elko County, at culvert on U.S. Highway 93 and 21 miles southeast of Arthur.	b3	1968-78	1978	-	0
Dixie Valley Basin							
10244360	Dixie Valley tributary near Eastgate, Nev.	Lat 39°17'30", long 117°59'00", in SE¼ sec.36, T.17 N., R.35 E., Churchill County, at culvert on U.S. Highway 50 and 6 miles west of Eastgate.	b11	1961-78	1978	3.92	a10
Rawhide Flats							
10244460	Rawhide Flats tributary near Schurz, Nev.	Lat 39°08'40", long 118°44'55", in S½SW¼ sec.21, T.15 N., R.29 E., Churchill County, at culvert on U.S. Highway 95 and 14 miles north of Schurz.	0.96	1967-78	1978	-	0

a Estimated.

b Approximately.

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Gabbs Valley							
10244480	Gabbs Valley tributary near Gabbs, Nev.	Lat 38°59'45", long 117°59'45", in sec.13, T.13 N., R.35 E., Nye County, at culvert on State Highway 23 and 9 miles northwest of Gabbs.	b7	1965, 1968-78	1978	-	0
10244490	Finger Rock Wash near Gabbs, Nev.	Lat 38°41'20", long 118°01'00", in NW¼NW¼ sec.31, T.10 N., R.36 E., Mineral County, 3.9 miles upstream from State Highway 23, and about 12 miles south of Gabbs.	207	1974-78	9- -78	-	a33
Teels Marsh Valley							
10244620	Teels Marsh tributary at Basalt, Nev.	Lat 38°00'07", long 118°16'48", Mineral County, at culvert on U.S. Highway 6 and 0.75 mile southwest of Basalt.	1.07	1967-78	1978	-	0
Rhodes Salt Marsh Valley							
10244660	Rhodes Salt Marsh tributary near Candelaria, Nev.	Lat 38°09'17", long 118°12'50", Mineral County, at culvert on State Highway 10 and 7 miles west of Candelaria.	b0.4	1961-78	1978	-	0
Step toe Valley basin							
10245080	Nelson Creek tributary near Currie, Nev.	Lat 40°18'00", long 114°46'20", in SE¼ sec.17, T.28 N., R.64 E., Elko County, at culvert on former U.S. Highway 93 and 2.5 miles northwest of Currie.	b0.7	1961-78	1978	-	0
Dry Lake Valley							
10245270	Dry Lake Valley tributary near Caliente, Nev.	Lat 37°37'30", long 114°46'30", in NW¼ sec.11, T.4 S., R.64 E., Lincoln County, at culvert on U.S. Highway 93 and 14.5 miles west of Caliente.	b11	1967-78	1978	-	0
Jakes Valley							
10245450	Illipah Creek tributary near Hamilton, Nev.	Lat 39°21'35", long 115°21'05", in NW¼NE¼ sec.8, T.17 N., R.59 E., White Pine County, at culvert on U.S. Highway 50, 100 ft upstream from Illipah Creek, and 10.5 miles northeast of Hamilton.	5.47	1962-78	1978	-	a0.5
Monitor and Diamond Valleys basin							
10245950	Bean Flat tributary near Austin, Nev.	Lat 39°29'32", long 116°32'00", Eureka County, at culvert on U.S. Highway 50 and 29 miles east of Austin.	b1.1	1961-78	1978	-	0
10246000	Garden Pass Creek tributary near Eureka, Nev.	Lat 39°49'00", long 116°09'52", Eureka County, culvert on State Highway 51 and 24 miles northwest of Eureka.	2.12	1962-78	9- -78	-	a0.3
10246010	Garden Pass Creek near Eureka, Nev.	Lat 39°46'45", long 116°06'23", in NW¼NW¼ sec.22, T.22 N., R.52 E., Eureka County, at culvert on State Highway 51 and 20 miles north of Eureka.	19.2	1965-78	1978	-	a1

a Estimated.

b Approximately.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Hot Creek and Railroad (Northern Part) Valleys							
10246845	Currant Creek tributary near Currant, Nev.	Lat 38°49'10", long 115°19'35", near line common to NW¼NE¼ and NE¼NW¼ sec.15, T.11 N., R.59 E., Nye County, at culvert on U.S. Highway 6 and 9.5 miles northeast of Currant.	3.13	1962-78	1978	2.92	a4
10246847	Currant Creek, below Little Currant Creek, near Currant, Nev.	Lat 38°49'12", long 115°20'43", in NE¼NW¼ sec.16, T.11 N., R.59 E., Nye County, at bridge on U.S. Highway 6, 3.5 miles west of Currant Summit, and 9 miles northeast of Currant.	30.0	1964-78	3- -78	3.66	120
10247010	Hot Creek tributary near Warm Springs, Nev.	Lat 38°12', long 116°13', in sec.15, T.4 N., R.51 E., Nye County, at culvert on State Highway 25, 9 miles east of Warm Springs, and 57 miles east of Tonopah.	0.77	1964-78	1978	-	0
10247220	Black Rock Summit tributary near Currant, Nev.	Lat 38°30'25", long 115°53'20", Nye County, at culvert on U.S. Highway 6 and 28 miles southwest of Currant.	6.35	1967-78	1978	-	0
10247230	Railroad Valley tributary near Currant, Nev.	Lat 38°32'34", long 115°47'52", in NW¼NW¼ sec.21, T.8 N., R.55 E., Nye County, at culvert on U.S. Highway 6 and 22.5 miles southwest of Currant.	0.37	1962-78	1978	-	0
Penoyer Valley basin							
10247860	Penoyer Valley tributary near Tempiute, Nev.	Lat 37°35'07", long 115°40'48", in SE¼NE¼ sec.21, T.4 S., R.56 E., Lincoln County, on left bank upstream side of culvert on State Highway 25, 1 mi northwest of Coyote Summit, and 5.3 mi south of Tempiute.	1.48	1963-78†	1978	-	0
Indian Springs Valley							
10248490	Indian Springs Valley tributary near Indian Springs, Nev.	Lat 36°34'00", long 115°48'40", in NW¼NW¼ sec.16, or SW¼SW¼ sec.9, T.16 S., R.55 E., Clark County, at culvert on U.S. Highway 95 and 8 miles west of Indian Springs.	b29	1964-78	1978	-	0
Stonewall and Sarcobatus Flats basin							
10248970	Stonewall Flat tributary near Goldfield, Nev.	Lat 37°35'40", long 117°12'35", in SE¼NE¼ sec.13, T.4 S., R.42 E., Esmeralda County, at culvert on U.S. Highway 95 and 8 miles south of Goldfield.	0.53	1964-78	1978	-	0
10248980	Lida Pass tributary near Lida, Nev.	Lat 37°26'05", long 117°33'25", in SE¼NE¼ sec.8, T.6 S., R.40 E., Esmeralda County, at culvert on State Highway 3 and 4 miles southwest of Lida.	1.59	1968-78	1978	-	a0.6
10249050	Sarcobatus Flat tributary near Springdale, Nev.	Lat 37°13'18", long 117°07'35", Nye County, at culvert on State Highway 72, at Bonnie Clare, and 24 miles northwest of Springdale.	37.1	1961-78	9- 6-78	-	a0.6
Stone Cabin and Ralston Valleys							
10249135	San Antonio Wash tributary near Tonopah, Nev.	Lat 38°19'37", long 117°07'25", in SE¼SW¼ sec.35, T.6 N., R.43 E., Nye County, at culvert on State Highway 8A and 19 miles north of Tonopah.	3.42	1965-78	1978	-	0
10249140	Ralston Valley tributary near Tonopah, Nev.	Lat 38°17'23", long 117°05'59", in SW¼NE¼ sec.13, T.5 N., R.43 E., Nye County, at culvert on State Highway 8A and 17 miles northeast of Tonopah.	0.20	1961-78	1978	-	0
10249180	Saulsbury Wash near Tonopah, Nev.	Lat 38°07'30", long 116°48'30", in S½SW¼ sec.10, T.3 N., R.46 E., Nye County, at culvert on U.S. Highway 6 and 23 miles east of Tonopah.	b56	1962-78	3- -78	4.33	120

† Operated as a continuous-record station.

a Estimated.

b Approximately.

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Smith Creek Valley							
10249417	Smith Creek Valley tributary near Austin, Nev.	Lat 39°32'21", long 117°28'26", in NE¼SE¼ sec.4, T.19 N., R.40 E., Lander County, at culvert on U.S. Highway 50 and 22 miles west of Austin.	0.62	1968-78	1978	-	0
Ione and Big Smoky (Tonopah Flat) Valleys							
10249620	Big Smoky Valley tributary near Tonopah, Nev.	Lat 38°01'52", long 117°13'52", in SW¼NE¼ sec.14, T.2 N., R.42 E., Esmeralda County, at culvert on U.S. Highway 95 and 2.5 miles south of Tonopah.	2.39	1961-78	3- -78	-	a0.5
10249680	Big Smoky Valley tributary near Blair Junction, Nev.	Lat 38°01'52", long 117°42'35", Esmeralda County, at culvert on U.S. Highway 6 and 95 and 3.5 miles east of Blair Junction.	11.4	1961-78	1978	-	0
Fish Lake Valley and Columbus Salt Marsh							
10249850	Palmetto Wash tributary near Lida, Nev.	Lat 37°26'30", long 117°41'25", in SW¼SE¼ sec.6, T.6 S., R.39 E., Esmeralda County, at culvert on State Highway 3, 7 miles west of Lida Summit, and 11 miles west of Lida.	4.73	1967-78	1978	-	a0.5
10249855	Palmetto Wash tributary near Oasis, Calif.	Lat 37°27'25", long 117°46'10", in W¼SW¼ sec.33, T.5 S., R.38 E., Esmeralda County, Nev., at culvert on State Highway 3 and 8 miles south-east of Oasis, Calif.	b0.24	1968-78	1978	-	0
Death Valley basin							
10251220	Amargosa River near Beatty, Nev.	Lat 36°52'06", long 116°45'34", in NW¼NE¼ sec.30, T.12 S., R.47 E., Nye County, on left bank, 170 ft downstream from airport road, and 2.8 miles south of Beatty.	b470	1963-68†, 1969-78	3- 4-78	c3.00	a650
10251270	Amargosa River tributary near Mercury, Nev.	Lat 36°33'40", long 116°06'00", in sec.14, T.16 S., R.52 E., Nye County, at culvert on U.S. Highway 95 and 9 miles southwest of Mercury.	110	1963-78	1978	-	0
10251271	Amargosa River tributary No. 1 near Johnnie, Nev.	Lat 36°27'36", long 116°06'28", in NE¼SE¼ sec.22, T.17 S., R.52 E., Nye County, at culvert on State Highway 16 and 3.5 miles northwest of Johnnie.	2.21	1967-78	2-10-78	3.33	all
10251272	Amargosa River tributary No. 2 near Johnnie, Nev.	Lat 36°26'09", long 116°04'28", in W¼NE¼ sec.36, T.17 S., R.52 E., Nye County, at culvert on State Highway 16 and 1.2 miles north of Johnnie.	2.49	1968-78	2- -78	-	a1
Pahrump Valley basin							
10251980	Lovell Wash near Blue Diamond	Lat 36°00'10", long 115°38'38", in NE¼SW¼ sec.25, T.22 S., R.56 E., Clark County, on right bank 0.2 mile downstream from county road, 13.7 miles west of Blue Diamond.	2.30	1965-78#	8- 4-78	-	a40
Walker Lake basin							
10299100	Desert Creek near Wellington, Nev.	Lat 38°38'55", long 119°19'30", in SW¼SW¼ sec.8, T.9 N., R.24 E., Lyon County, on left bank 10 ft above diversion and 8 miles southeast of Wellington.	50.4	1965-69†, 1970-78	6- -78	1.90	45
10299120	O'Banion Canyon near Wellington, Nev.	Lat 38°38'05", long 119°15'50", Lyon County, at culvert on State Highway 22 and 10 miles southeast of Wellington.	5.05	1965-78	1978	-	0
10302010	Reese River Canyon near Schurz, Nev.	Lat 38°51'00", long 118°46'55", in NE¼NW¼ sec.6, T.11 N., R.29 E., Mineral County, at abandoned culvert on former U.S. Highway 95, 6 miles south of Schurz.	b14	1963-78#	1978	5.78	a100

† Operated as a continuous-record station.

a Estimated.

b Approximately.

c From high-water marks.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Carson River basin							
10309005	Bodie Flat tributary near Gardnerville, Nev.	Lat 38°50'08", long 119°37'52", in NW¼NE¼ sec.9, T.11 N., R.21 E., Douglas County, at culvert on U.S. Highway 395 and 9 miles southeast of Gardnerville.	0.46	1967-78	1978	-	0
10310500	Clear Creek near Carson City, Nev.	Lat 39°06'48", long 119°47'50", in NE¼NW¼ sec.1, T.14 N., R.19 E., Carson City, 3 miles upstream from mouth and 3.5 miles southwest of Carson City.	15.5	1948-62†, 1963-78	1978	-	a6
10311450	Brunswick Canyon near New Empire, Nev.	Lat 39°10'20", long 119°41'10", in NW¼NE¼ sec.13, T.15 N., R.20 E., Carson City, 0.3 mile upstream from mouth and 2.5 miles east of New Empire.	12.7	1966-78	1978	-	a1.5
10312012	Adrian Valley tributary near Wabuska, Nev.	Lat 39°12'55", long 119°12'25", in NE¼SE¼ sec.31, T.16 N., R.25 E., Lyon County, at culvert on Alternate U.S. Highway 95 and 4.8 miles northwest of Wabuska.	5.75	1968-78	1978	-	0
10312015	Adrian Valley tributary near Weeks, Nev.	Lat 39°13'45", long 119°13'40", in NW¼NW¼ sec.30, T.16 N., R.25 E., Lyon County, at abandoned culvert on former Alternate U.S. Highway 95 and 4.6 miles southeast of Weeks.	0.12	1968-78	1978	-	0
10312050	Lahontan Reservoir tributary near Silver Springs, Nev.	Lat 39°22'40", long 119°19'00", in SE¼SW¼ sec.32, T.18 N., R.24 E., Lyon County, at culvert on private road, 0.3 mile south of U.S. Highway 50, and 5.5 miles southwest of Silver Springs.	4.39	1962-78	1978	-	0
Humboldt River basin							
10315800	Humboldt River tributary near Halleck, Nev.	Lat 40°58'10", long 115°26'50", in NW¼NW¼ sec.33, T.36 N., R.58 E., Elko County, at culvert on Interstate Highway 80 and 1.5 miles north of Halleck.	b3	1966-78	1978	-	0
10315950	Secret Creek tributary near Arthur, Nev.	Lat 40°52'00", long 115°15'40", in S½SE¼ sec.36, T.35 N., R.59 E., Elko County, at culvert on and 12 miles southeast of Halleck.	b3	1967-78	1978	-	a1
10317430	Jim Creek near Tuscarora, Nev.	Lat 41°17'50", long 115°47'30", in SW¼ sec.4, T.39 N., R.55 E., Elko County, at culvert on State Highway 43 and 23 miles east of Tuscarora.	b25	1962, 1966-78	3- -78	4.06	47
10319470	Willow Creek tributary near Jiggs, Nev.	Lat 40°30'47", long 115°39'42", in SW¼NW¼ sec.3, T.30 N., R.56 E., Elko County, at culvert on State Highway 46 and 6 miles north of Jiggs.	0.82	1962-78	1978	-	0
10322980	Cole Creek near Palisade, Nev.	Lat 40°35'05", long 116°08'55", in SE¼NE¼ sec.7, T.31 N., R.52 E., Eureka County, at culvert on State Highway 20 and 3.2 miles southeast of Palisade.	11.4	1962-78	4- 9-78	4.43	a26
10323200	Bob Creek near Beowawe, Nev.	Lat 40°39'35", long 116°24'30", in NE¼SE¼ sec.11, T.32 N., R.49 E., Eureka County, at culvert on Interstate Highway 80 and 6 miles northeast of Beowawe.	13.9	1962-78	4- -78	3.08	40
10323880	Willow Creek above Willow Creek Reservoir, near Tuscarora, Nev.	Lat 41°13'00", long 116°28'00", in SW¼NE¼ sec.36, T.39 N., R.48 E., Elko County, 4 miles upstream from dam and 14.5 miles southwest of Tuscarora.	b81	1968-78	3- -78	3.07	a500
10326400	Reese River tributary near Austin, Nev.	Lat 39°28'29", long 117°19'10", in NE¼NW¼ sec.36, T.19 N., R.41 E., Lander County, at culvert on U.S. Highway 50 and 14 miles west of Austin.	8.27	1968-78	1978	-	0

† Operated as a continuous-record station.

a Estimated.

b Approximately.

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Humboldt River basin--continued							
10326650	Silver Creek near Austin, Nev.	Lat 39°43'10", long 117°10'04", in NW¼ sec.5, T.21 N., R.43 E., Lander County, at culvert on State Highway 8A and 16.5 miles north of Austin.	b25	1961-78	1978	2.14	8
10326850	Reese River tributary near Battle Mountain, Nev.	Lat 40°32'30", long 117°03'00", in SW¼ sec.20, T.31 N., R.44 E., Lander County, at culvert on State Highway 8A and 9 miles southwest of Battle Mountain.	b0.2	1962-78	3- -78	-	a0.3
10327600	Humboldt River tributary near Golconda, Nev.	Lat 41°00'40", long 117°21'20", in E½ sec.9, T.36 N., R.41 E., Humboldt County, at culvert on State Highway 18 and 8 miles northeast of Golconda.	b3.4	1962-78	1978	-	0
10328240	Humboldt River tributary near Bliss, Nev.	Lat 40°59'55", long 117°39'30", in SE¼NE¼ sec.14, T.36 N., R.38 E., Humboldt County, at culvert on Interstate Highway 80 and 5 miles northeast of Winnemucca.	b1.9	1968-78	1978	-	0
10330300	Mullinix Creek near Paradise Valley, Nev.	Lat 41°30'40", long 117°32'25", in NE¼NE¼ sec.23, T.42 N., R.39 E., Humboldt County, at culvert on State Highway 8B and 1.2 miles north of Paradise Valley.	27.3	1962-78	1978	5.68	280
10332200	Raspberry Creek near Mill City, Nev.	Lat 40°47'14", long 117°59'54", in SW¼SW¼ sec.25, T.34 N., R.35 E., Pershing County, at culvert on access road, upstream from Cosgrove Interchange on Interstate Highway 80, and 8.5 miles northeast of Mill City.	9.38	1961-78	1978	3.60	a2
10336030	Toulon Drain tributary near Lovelock, Nev.	Lat 40°06'30", long 118°33'25", in NW¼SE¼ sec.24, T.26 N., R.30 E., Pershing County, at culvert on Interstate Highway 80 and 7.5 miles southwest of Lovelock.	0.80	1962-78	1978	-	0
10336080	Humboldt Slough tributary near Bradys Hot Springs, Nev.	Lat 39°51'05", long 118°55'40", in NE¼NE¼ sec.22, T.23 N., R.27 E., Churchill County, at culvert on U.S. Highway 40 and 95 and 6.5 miles northeast of Bradys Hot Springs.	11.0	1962-78	1978	-	0
Pyramid and Winnemucca Lakes basin							
10336693*	Wood Creek near Crystal Bay, Nev.	Lat 39°15'40", long 119°57'25", in SE¼SE¼ sec.9, T.16 N., R.18 E., Washoe County, at culvert on State Highway 27 and 3.5 miles northeast of Crystal Bay.	1.69	1967-78	5- -78	4.70	31
10350100	Long Valley Creek near Happy Valley, Nev.	Lat 39°28'55", long 119°37'10", in NE¼SW¼ sec.27, T.19 N., R.21 E., Storey County, 2 miles southeast of Happy Valley and 8 miles southeast of Sparks.	82.6	1967-78	3- -78	2.25	85
10351850	Pyramid Lake tributary near Nixon, Nev.	Lat 39°51'30", long 119°28'32", in SW¼SE¼ sec.14, T.23 N., R.22 E., Washoe County, at bridge on Southern Pacific Railroad and 6.5 miles west of Nixon.	1.94	1968-78	12-17-77	-	a10
Black Rock Desert basin							
10353510	Eagle Creek near Orovida, Nev.	Lat 41°39'05", long 117°46'40", in SW¼NE¼ sec.35, T.44 N., R.37 E., Humboldt County, at culvert on U.S. Highway 95 and 5.6 miles north of Orovida.	3.44	1962-78	5- -78	5.60	1.9
10353710	Black Rock Desert tributary near Sulphur, Nev.	Lat 40°54'00", long 118°37'40", Humboldt County, at culvert on State Highway 49 and 7.5 miles east of Sulphur.	b33	1967-78	1978	2.13	a2
10353730	Dry Creek near Gerlach, Nev.	Lat 40°43'43", long 119°27'07", in SE¼NE¼ sec.23, T.33 N., R.23 E., Washoe County, 1 mile north of State Highway 81 and 7.5 miles west of Gerlach.	b3.5	1968-78	1978	-	a0.5

* Also published as a miscellaneous site.

a Estimated.

b Approximately.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Guano Valley Basin							
10361700	Badger Creek tributary near Vya, Nev.	Lat 41°43'20", long 119°22'20", in NE¼ sec.22, T.44 N., R.23 E., Washoe County, at culvert on State Highway 8A, 27 miles northeast of Vya, and 43 miles southwest of Denio.	7.7	1963, 1964-72†, 1973-78	1978	-	a20
Tumtum Lake basin							
10407150	Big Spring Reservoir tributary near Denio, Nev.	Lat 41°56'53", long 119°17'51", Humboldt County, at culvert on State Highway 8A, 3.4 miles southwest of Nevada-Oregon State line, and 35 miles west of Denio.	1.02	1963-78	1978	-	0
Bruneau River basin							
13161100	Bruneau River near Charleston, Nev.	Lat 41°30'50", long 115°27'05", in SE¼SW¼ sec.20, T.42 N., R.58 E., Elko County, 600 ft downstream from road, 11.5 miles south of Charleston, and 25 miles south of Jarbidge.	b44	1962-78	3- -78	12.04	a20
13161200	Seventy Six Creek near Charleston, Nev.	Lat 41°42'40", long 115°28'57", in NE¼ sec.13, T.44 N., R.57 E., Elko County, at culvert, 3.5 miles northeast of Charleston, and 12 miles south of Jarbidge.	3.52	1963-78	1978	-	6
13161300	Meadow Creek near Rowland, Nev.	Lat 41°54'00", long 115°40'40", in SW¼ sec.5, T.46 N., R.56 E., Elko County, at culvert and 2.5 miles south of Rowland.	57.8	1963-78	1978	11.50	180
13161600	McDonald Creek near Rowland, Nev.	Lat 41°55'10", long 115°46'20", in SW¼NE¼ sec.33, T.47 N., R.55 E., Elko County, at culvert and 5 miles west of Rowland.	10.8	1963-78	1978	7.34	38
13162200	Jarbidge River at Jarbidge, Nev.	Lat 41°51'45", long 115°25'40", in NW¼ sec.21, T.46 N., R.58 E., Elko County, at bridge and 1.0 mile south of Jarbidge.	22.6	1964-78	6- -78	14.76	125
13162400	Buck Creek near Jarbidge, Nev.	Lat 41°58'45", long 115°25'55", in NW¼ sec.9, T.47 N., R.58 E., Elko County, at culvert, at Diamond A Ranch, and 7.2 miles north of Jarbidge.	20.2	1963-78	1978	17.59	120
13162600	Columbet Creek near Jarbidge, Nev.	Lat 41°58'00", long 115°29'05", in NW¼ sec.13, T.47 N., R.57 E., Elko County, at culvert and 7 miles northwest of Jarbidge.	3.37	1963-78	1978	7.25	9
Owyhee River basin							
13175900	Reed Creek near Owyhee, Nev.	Lat 41°53'45", long 116°03'40", in SW¼SE¼ sec.7, T.46 N., R.53 E., Elko County, at culvert on State Highway 11A and 3.8 miles southeast of Owyhee.	6.51	1963-78	5- -78	3.21	22
13176600	Taylor Canyon tributary near Tuscarora, Nev.	Lat 41°14'10", long 116°02'10", in S¼ sec.29, T.39 N., R.53 E., Elko County, at culvert on State Highway 11 and 11 miles southeast of Tuscarora.	b1.2	1967-78	3- -78	2.90	4
13176900	Jack Creek below Schoonover Creek, near Tuscarora, Nev.	Lat 41°30'30", long 116°04'20", in NW¼SE¼ sec.25, T.42 N., R.52 E., Elko County, 0.2 mile downstream from Schoonover Creek, 2 miles upstream from mouth, and 16 miles northeast of Tuscarora.	19.8	1962-69†, 1970-78	5- -78	1.74	a120

† Operated as a continuous-record station.

a Estimated.

b Approximately.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1978

Measurements of streamflow at miscellaneous sites during the water year are given in the following table. Generally, this category of measurements represents base flow conditions and were made when streamflow was primarily from ground-water storage to give areal coverage to low-flow and drought conditions. However, where miscellaneous measurements were made to document peak flows, verify existing stage-discharge relationships, or meet other project needs, appropriate footnotes are used.

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
Steptoe Valley basin						
Gleeson Creek	Steptoe Valley	Lat 39°15'03", long 119°52'57", in NW¼SE¼ sec.16, T.16 N., R.63 E., White Pine County, 10 ft (3 m) southwest of the Grand Central Motel in Ely.	--	1976	12-21-77	0
Walker Lake basin						
10299100 Desert Creek	West Walker River	Lat 38°38'55", long 119°19'30", in SW¼SW¼ sec.8, T.9 N., R.24 E., Lyon County, Hydrologic Unit 16050302, on left bank, 10 ft (3 m) upstream from diversion, 0.5 mi (0.8 km) upstream from Desert Creek Ranch, and 8 mi (13 km) southeast of Wellington.	50.4	1965-69† 1970-78†	9-12-78	5.06
Walker River	Walker Lake	Lat 39°02'42", long 118°51'31", in NE¼SW¼ sec.28, T.14 N., R.28 E., Mineral County, Hydrologic Unit 16050303, 50 ft (15 m) downstream from Weber Dam and 8.5 mi (13.7 km) northwest of Schurz.	--	1977	10-04-77 10-17-77 11-17-77 12-02-77 12-23-77 1-30-78 3-02-78 4-25-78 5-31-78 6-28-78 8-04-78 9-12-78	0.21 10.9 0.32 0.27 0.24 0.22 0.21 40.6 75.1 26.4 70.4 36.0
Walker River	Walker Lake	Lat 39°00'51", long 118°51'37", in SE¼SW¼ sec.4, T.13 N., R.28 E., Mineral County, Hydrologic Unit 16050303, 2 mi (3.2 km) downstream from Weber Reservoir and 6 mi (9.7 km) northwest of Schurz.	--	1977	10-04-77 10-17-77 12-23-77 1-30-78 3-02-78 3-31-78 4-25-78 5-31-78 6-28-78 8-04-78 9-12-78	0.06 10.3 0.94 0.70 0.74 1.05 44.8 72.5 26.2 70.2 38.6
Humboldt River basin						
10319500 Huntington Creek	South Fork Humboldt River	Lat 40°33'45", long 115°43'00", in NW¼NW¼ sec.19, T.31 N., R.56 E., Elko County, Hydrologic Unit 16040103, on right bank 500 ft (150 m) downstream from mouth of right bank tributary, 1.6 mi (2.6 km) downstream from Willow Creek, 5.5 mi (8.8 km) upstream from mouth, and 6 mi (10 km) west of Lee.	a770	1949-72‡ 1973-75, 1977	6-16-78	161
Owyhee River basin						
South Fork Owyhee River	Owyhee River	Lat 41°25'40", long 116°10'40", in NW¼NW¼ sec.30, T.41 N., R.52 E., Elko County, 0.2 mi (0.3 km) downstream from Hot Creek, 2.8 mi (4.5 km) west of Spanish Ranch headquarters, and 8 mi (13 km) north of Tuscarora.	a330	1960-73‡ 1974-75	8-03-78	12.0

† Operated as a crest-stage partial-record station.

‡ Operated as a continuous-record station.

a Approximately.

STATE OF NEVADA

HYDROGRAPHIC AREAS

1-NORTHWEST REGION

1. Pueblo V.
2. Continental Lake V.
3. Gridley Lake V.
4. Virgin V.
5. Sage Hen V.
6. Guano V.
7. Swan Lake V.
8. Massacre Lake V.
9. Long V.
10. Macy Flat
11. Coleman V.
12. Mosquito V.
13. Warner V.
14. Surprise V.
15. Boulder V.
16. Duck Lake V.

2-BLACK ROCK DESERT REGION

17. Pilgrim Flat
18. Painters Flat
19. Dry V.
20. Sano V.
21. Smoke Creek Desert
22. San Emidio Desert
23. Granite Basin
24. Hualapai Flat
25. High Rock Lake V.
26. Mud Meadow
27. Summit Lake V.
28. Black Rock Desert
29. Pine Forest V.
30. Kings River V.
(A) Rio King Subarea
(B) Sod House Subarea
31. Desert V.
32. Silver State V.
33. Quinn River V.
(A) Oroveda Subarea
(B) McDermitt Subarea

3-SNAKE RIVER BASIN

34. Little Owyhee River Area
35. South Fork Owyhee River Area
36. Independence V.
37. Owyhee River Area
38. Bruneau River Area
39. Jarbidge River Area
40. Salmon Falls Creek Area
41. Goose Creek Area

4-HUMBOLDT RIVER BASIN

42. Marys River Basin
43. Starr V. Area
44. North Fork Area
45. Lamoille V.
46. South Fork Area
47. Huntington V.
48. Dixie Creek —
Tenmile Creek Area
49. Elko Segment
50. Susie Creek Area
51. Maggie Creek Area
52. Marys Creek Area
53. Pine V.
54. Crescent V.
55. Carico Lake V.
56. Upper Reese River V.
57. Antelope V.
58. Middle Reese River V.
59. Lower Reese River V.
60. Whirlwind V.
61. Boulder Flat
62. Rock Creek V.
63. Willow Creek V.
64. Clovers Area
65. Pumpnickel V.
66. Kelly Creek Area
67. Little Humboldt V.
68. Hardscrabble Area
69. Paradise V.
70. Winnemucca Segment
71. Grass V.
72. Imlay Area
73. Lovelock V.
(A) Oreana Subarea
74. White Plains

5-WEST CENTRAL REGION

75. Bradys Hot Springs Area
76. Fernley Area
77. Fireball V.
78. Granite Springs V.
79. Kumiva V.

6-TRUCKEE RIVER BASIN

80. Winnemucca Lake V.
81. Pyramid Lake V.
82. Dodge Flat
83. Tracy Segment

84. Warm Springs V.
85. Spanish Springs V.
86. Sun V.
87. Truckee Meadows
88. Pleasant V.
89. Washoe V.
90. Lake Tahoe Basin
91. Truckee Canyon Segment

7-WESTERN REGION

92. Lemmon V.
(A) Western Part
(B) Eastern Part
93. Antelope V.
94. Bedell Flat
95. Dry V.
96. Newcomb Lake V.
97. Honey Lake V.
98. Skedaddle Creek V.
99. Red Rock V.
100. Cold Spring V.

8-CARSON RIVER BASIN

101. Carson Desert
102. Churchill V.
103. Dayton V.
104. Eagle V.
105. Carson Valley

9-WALKER RIVER BASIN

106. Antelope V.
107. Smith V.
108. Mason V.
109. East Walker Area
110. Walker Lake V.
(A) Schurz Subarea
(B) Lake Subarea
(C) Whisky Flat —
Hawthorne Subarea

10-CENTRAL REGION

111. Alkali V. (Mineral)
(A) Northern Part
(B) Southern Part
112. Mono V.
113. Huntoon V.
114. Teels Marsh V.
115. Adobe V.
116. Queen V.
117. Fish Lake V.
118. Columbus Salt Marsh V.
119. Rhodes Salt Marsh V.
120. Garfield Flat
121. Soda Spring V.
(A) Eastern Part
(B) Western Part
122. Gabbs V.
123. Rawhide Flats
124. Fairview V.
125. Stingaree V.
126. Cowkick V.
127. Eastgate V. Area
128. Dixie V.
129. Buena Vista V.
130. Pleasant V.
131. Buffalo V.
132. Jersey V.
133. Edwards Creek V.
134. Smith Creek V.
135. Ione V.
136. Monte Cristo V.
137. Big Smoky V.
(A) Tonopah Flat
(B) Northern Part
138. Grass V.
139. Kobeh V.
140. Monitor V.
(A) Northern Part
(B) Southern Part
141. Ralston V.
142. Alkali Spring V. (Esmeralda)
143. Clayton V.
144. Lida V.
145. Stonewall Flat
146. Sarcobatus Flat
147. Gold Flat
148. Cactus Flat
149. Stone Cabin V.
150. Little Fish Lake V.
151. Antelope V. (Eureka & Nye)
152. Stevens Basin
153. Diamond V.
154. Newark V.
155. Little Smoky V.
(A) Northern Part
(B) Central Part
(C) Southern Part
156. Hot Creek V.
157. Kawich V.

158. Emigrant V.
(A) Groom Lake V.
(B) Papoose Lake V.
159. Yucca Flat
160. Frenchman Flat
161. Indian Springs V.
162. Pahump V.
163. Mesquite V. (Sandy V.)
164. Ivanpah V.
(A) Northern Part
(B) Southern Part
165. Jean Lake V.
166. Hidden V. (South)
167. Eldorado V.
168. Three Lakes V. (Northern Part)
169. Tikapoo V. (Tickaboo V.)
170. Penoyer V. (Sand Spring V.)
171. Coal V.
172. Garden V.
173. Railroad V.
(A) Southern Part
(B) Northern Part
174. Jakes V.
175. Long V.
176. Ruby V.
177. Clover V.
178. Butte V.
(A) Northern Part (Round V.)
(B) Southern Part
179. Steptoe V.
180. Cave V.
181. Dry Lake V.
182. Delamar V.
183. Lake V.
184. Spring V.
185. Tippet V.
186. Antelope V. (White Pine & Elko)
(A) Southern Part
(B) Northern Part
187. Goshute V.
188. Independence V. (Pequop V.)

11-GREAT SALT LAKE BASIN

189. Thousand Springs V.
(A) Herrell Siding—Brush Creek Area
(B) Toano—Rock Spring Area
(C) Rocky Butte Area
(D) Montello—Crittenden Creek Area (Montello V.)
190. Grouse Creek V.
191. Pilot Creek V.
192. Great Salt Lake Desert
193. Deep Creek V.
194. Pleasant V.
195. Snake V.
196. Hamlin V.

12-ESCALANTE DESERT

197. Escalante Desert

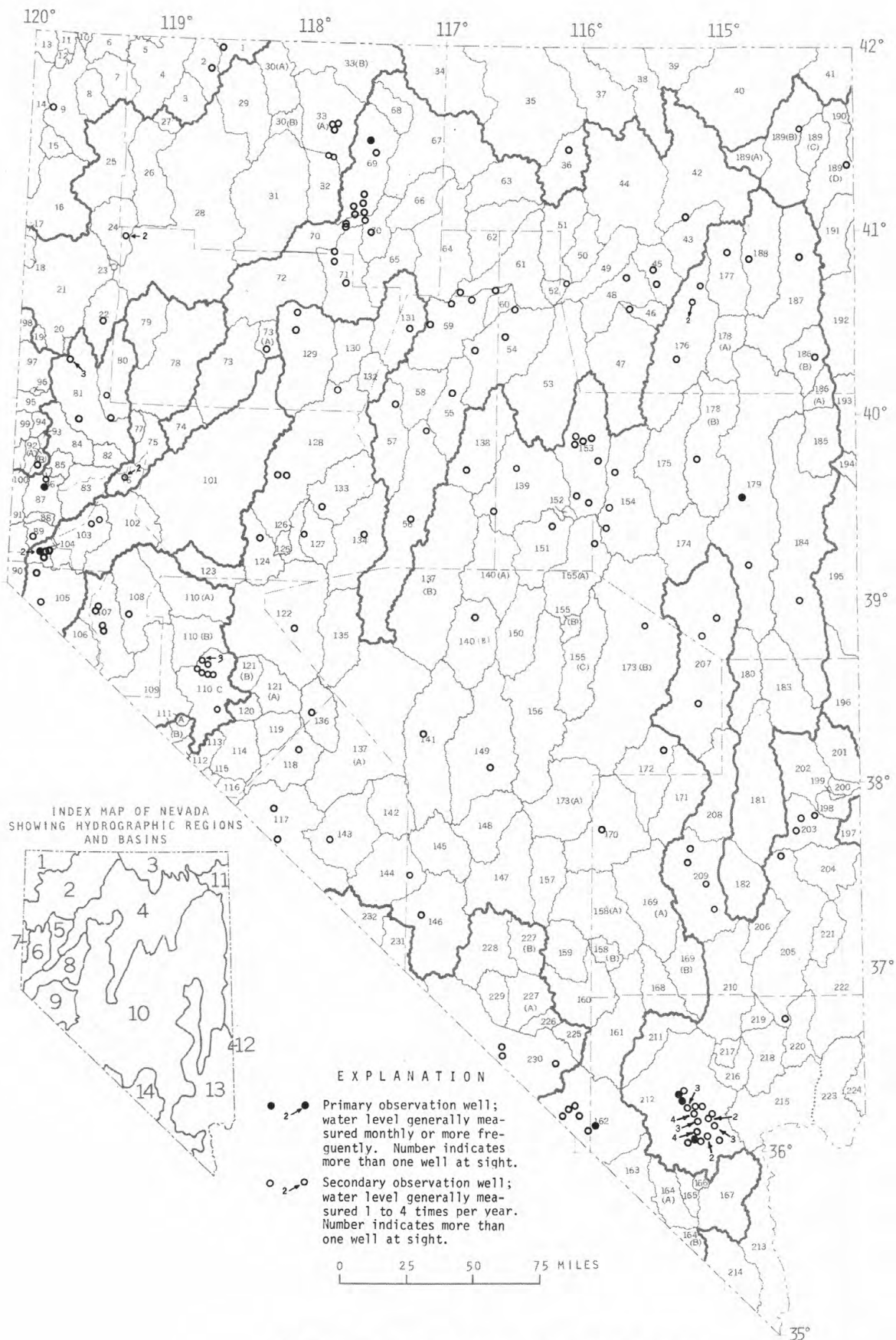
13-COLORADO RIVER BASIN

198. Dry V.
199. Rose V.
200. Eagle V.
201. Spring V.
202. Patterson V.
203. Panaca V.
204. Clover V.
205. Lower Meadow Valley Wash
206. Kane Springs V.
207. White River V.
208. Pahroc V.
209. Pahrnagat V.
210. Coyote Spring V.
211. Three Lakes V. (Southern Part)*
212. Las Vegas V.
213. Colorado River V.
214. Piute V.
215. Black Mountains Area
216. Garnet V. (Dry Lake V.)*
217. Hidden V. (North)*
218. California Wash
219. Muddy River Springs Area (Upper Moapa V.)
220. Lower Moapa V.
221. Tule Desert
222. Virgin River V.
223. Gold Butte Area
224. Greasewood Basin

14-DEATH VALLEY BASIN

225. Mercury V.
226. Rock V.
227. Fortymile Canyon
(A) Jackass Flats
(B) Buckboard Mesa
228. Oasis V.
229. Crater Flat
230. Amargosa Desert
231. Grapevine Canyon
232. Oriental Wash

*Noncontributing part of the Colorado River Basin



PARADISE VALLEY

412910117321001. Local number, 69 N42 E39 25C1.

LOCATION.--Lat 41°29'10", long 117°32'10", Hydrologic Unit 16040109, in Humboldt County.

Owner: U.S. Bureau of Land Management.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Dug unused well, diameter 6 ft (2 m), depth 17.4 ft (5.30 m), cased with iron.

DATUM.--Altitude of land-surface datum is 4,523 ft (1,378 m). Measuring point: Top of concrete floor, 5.20 ft (1.58 m) below land-surface datum.

REMARKS.--In Paradise Valley.

PERIOD OF RECORD.--1945 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.72 ft (0.52 m) below land-surface datum, June 24, 1975; lowest measured 11.03 ft (3.36 m) below land-surface datum, Nov. 16, 1961.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 26	8.91	Jan. 23	7.81	Apr. 27	2.00	July 20	3.83
Nov. 29	8.87	Feb. 23	6.55	May 24	3.54	Aug. 22	6.31
Dec. 28	8.83	Mar. 23	2.46	June 22	3.18	Sept. 20	7.27

TRUCKEE MEADOWS

393150119452801. Local number, 87 N19 E20 08ACCL.

LOCATION.--Lat 39°31'50", long 119°45'28", Hydrologic Unit 16050102, in Washoe County.

Owner: J. G. Morrison.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in (0.15 m), depth 42 ft (13 m), cased to 42 ft (13 m).

DATUM.--Altitude of land-surface datum is 4,415 ft (1,346 m). Measuring point: Top of casing, 0.40 ft (0.12 m) above land-surface datum.

REMARKS.--In Truckee Meadows.

PERIOD OF RECORD.--1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.44 ft (0.44 m) below land-surface datum, Aug. 14, 1958; lowest measured 17.60 ft (5.36 m) below land-surface datum, Mar. 21, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 25	9.20	Jan. 25	8.75	Apr. 28	8.20	July 20	6.90
Nov. 22	7.20	Feb. 22	7.60	May 25	6.89	Aug. 25	7.55
Dec.	--	Mar. 28	10.51	June 28	6.59	Sept. 27	6.37

EAGLE VALLEY

391046119465902. Local number, 104 N15 E20 07BCDD2.

LOCATION.--Lat 39°10'46", long 119°46'59", Hydrologic Unit 16050201, in Carson City.

Owner: U.S. Geological Survey.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in (0.05 m), depth 85 ft (25.91 m), cased to 85 ft (25.91 m), perforated 83 to 85 ft (25.30 to 25.91 m).

DATUM.--Altitude of land-surface datum is 4,802 ft (1,464 m). Measuring point: Hole in plastic cap, at land-surface datum.

REMARKS.--Eagle Valley; drilled as replacement well for well 391046119465901.

PERIOD OF RECORD.--1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.40 ft (10.01 m) below land-surface datum, Aug. 1, 1977; lowest measured, 74.70 ft (22.77 m) below land-surface datum, Sept. 27, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 25	65.87	Jan. 25	65.30	Apr. 28	68.14	July 20	70.80
Nov. 22	65.40	Feb. 23	67.50	May 25	69.00	Aug. 28	71.03
Dec. 21	65.43	Mar. 28	67.70	June 28	69.93	Sept. 27	74.70

391044119470201. Local number, 104 N15 E20 07CBAA1.

LOCATION.--Lat 39°10'44", long 119°47'02", Hydrologic Unit 16050201, in Carson City.

Owner: James Harkenrider, formerly Dr. Evan Allred.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled domestic well, diameter 8 in (0.20 m), depth 105 ft (32 m), cased to 105 ft (32 m), perforated 85 to 105 ft (25.91 to 32 m).

DATUM.--Altitude of land-surface datum is 4,802 ft (1,464 m). Measuring point: Top of casing, through center hole, 1.00 ft (0.30 m) above land-surface datum.

REMARKS.--In Eagle Valley.

PERIOD OF RECORD.--1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 58.68 ft (17.88 m) below land-surface datum, Dec. 27, 1976; lowest measured, 75.40 ft (22.98 m) below land-surface datum, Aug. 28, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 25	65.10	Jan. 25	70.00	Apr. 28	69.28	July 20	70.80
Nov. 27	65.70	Feb. 23	66.90	May 25	65.62	Aug. 28	75.40
Dec. 21	66.31	Mar. 29	67.10	June 28	69.87	Sept. 27	72.30

GROUND-WATER LEVELS

FAHRUMP VALLEY

360836115531701. Local number, 162 S21 E54 10ACCI.

LOCATION.--Lat 36°08'36", long 115°53'17", Hydrologic Unit 16060015, in Clark County.

Owner: E. S. Bowman.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 14 in (0.36 m), depth 800 ft (244 m), cased to 472 ft (144 m), perforated 100 to 450 ft (30 to 137 m).

DATUM.--Altitude of land-surface datum is 2,885 ft (879 m). Measuring point: Edge of recorder shelf 1.20 ft (0.37 m) above land-surface datum.

REMARKS.--State Engineer well no. 22, measurements supplied by Office of the Nevada State Engineer.

PERIOD OF RECORD.--1944, 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.34 ft (8.64 m) below land-surface datum, Oct. 13, 1944; lowest measured, 110.94 ft (33.81 m) below land-surface datum, Sept. 14, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, AT NOON FROM RECORDER GRAPH, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
5	108.96	103.48	100.49	98.72	98.20	97.72	101.29	99.74	105.74	108.86	110.80	--
10	108.04	103.09	100.76	99.18	97.82	--	101.40	99.33	105.86	108.36	110.25	110.91
15	107.46	102.43	100.36	97.99	98.21	--	101.63	--	--	109.35	109.41	110.47
20	106.18	102.04	100.61	97.87	97.87	99.25	102.07	--	106.10	109.66	110.44	110.19
25	104.84	100.95	100.23	97.86	97.58	99.81	101.75	--	107.71	110.13	--	109.05
EOM	103.94	100.48	99.68	98.33	97.48	99.14	100.48	--	108.35	110.22	--	--

STEPTOE VALLEY

393310114475002. Local number, 179 N20 E64 32C2.

LOCATION.--Lat 39°33'10", long 114°47'50", Hydrologic Unit 16060008, in White Pine County.

Owner: U.S. Geological Survey.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled test well, diameter 10 in (0.25 m), depth 110 ft (34 m), cased.

DATUM.--Altitude of land-surface datum is 6,070 ft (1,850 m). Measuring point: Top of casing, 1.00 ft (0.30 m) above land-surface datum.

REMARKS.--In Steptoe Valley.

PERIOD OF RECORD.--1918, 1949-57, 1959, 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.07 ft (3.37 m) below land-surface datum, May 19, 1978; lowest measured, 17.87 ft (5.45 m) below land-surface datum, Dec. 17, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 20	12.14	Jan. 20	11.56	Apr. 21	11.19	July 26	12.64
Nov.	--	Feb. 27	11.52	May 19	11.07	Aug. 23	12.49
Dec. 21	11.66	Mar.	--	June 22	11.60	Sept.	--

LAS VEGAS VALLEY

361843115161001. Local number 212 S19 E60 09BCC1.

LOCATION.--Lat 36°18'43", long 115°16'10", Hydrologic Unit 15010015, in Clark County.

Owner: J. P. Goumond.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in (0.25 m), depth 830 ft (252.98 m), cased to 140 ft (43 m).

DATUM.--Altitude of land-surface datum is 2,510 ft (765 m). Measuring point: Top of casing 0.50 ft (0.15 m) above land-surface datum.

REMARKS.--State Engineer well no. 427, measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.65 ft (13.30 m) below land-surface datum, June 3, 1946; lowest measured 161.70 ft (49.29 m) below land-surface datum, Sept. 10, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, AT NOON FROM RECORDER GRAPH, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.
5	150.66	149.72	149.50	148.55	148.02	--	--	151.73	154.06	155.27	155.86	161.11
10	151.40	150.85	150.04	148.30	147.99	--	--	152.79	154.60	155.83	--	161.70
15	151.62	--	149.26	148.45	147.83	--	--	152.31	154.54	155.64	156.31	160.40
20	152.00	149.67	149.68	148.46	148.06	--	--	152.63	154.64	--	--	--
25	150.54	149.45	148.92	148.80	147.77	--	--	153.18	155.09	--	156.22	--
EOM	150.02	149.32	148.74	148.40	147.96	--	--	--	155.04	--	156.82	--

GROUND-WATER LEVELS

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LAS VEGAS VALLEY--Continued

36161115151301. Local number, 212 S19 E60 27BDC1.

LOCATION.--Lat 36°16'11", long 115°15'13", Hydrologic Unit 15010015, in Clark County.

Owner: U.S. Geological Survey.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 905 ft (276 m), cased to 84 ft (26 m).

DATUM.--Altitude of land-surface datum is 2,360.80 ft (719.33 m). Measuring point: 1.45 ft (0.44 m) above land-surface datum.

REMARKS.--Measurements supplied by Office of Nevada State Engineer.

PERIOD OF RECORD.--1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.90 ft (14.29 m) above land-surface datum, June 3, 1946; lowest measured, 79.32 ft (24.18 m) below land-surface datum, Sept. 25, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 24	69.42	Jan. 30	66.78	Apr. 24	69.72	July 31	78.37
Nov. 28	68.74	Feb. 28	65.54	May 30	72.37	Aug. 28	76.78
Dec. 19	67.66	Mar. 27	67.15	June 26	78.55	Sept. 25	79.32

360349115100001. Local number, 212 S22 E61 04BCB1.

LOCATION.--Lat 36°03'49", long 115°10'00", Hydrologic Unit 15010015, in Clark County.

Owner: Fitzpatrick.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 8 in (0.20 m), depth 355 ft (108 m).

DATUM.--Altitude of land-surface datum is 2,224.91 ft (678.15 m). Measuring point: Top of casing, 0.80 ft (0.24 m) above land-surface datum.

REMARKS.--State Engineer well no. 189, measurements supplied by Office of Nevada State Engineer. Recorder stolen early in July, necessitating measurements by an observer.

PERIOD OF RECORD.--1938 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.40 ft (22.67 m) below land-surface datum, Jan. 25, 1939; lowest measured, 155.62 ft (47.43 m) below land-surface datum. Sept. 25, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, AT NOON FROM RECORDER GRAPH, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
5	--	--	146.42	145.48	144.85	--	145.29	146.54	148.09
10	--	--	146.47	145.21	144.33	144.36	145.36	146.71	148.90
15	--	--	146.31	144.76	144.43	144.35	145.53	146.78	149.03
20	--	--	146.56	144.89	144.32	144.64	146.19	147.36	149.00
25	--	146.89	145.98	144.75	--	144.83	146.59	148.00	149.44
EOM	--	146.99	143.37	144.46	--	145.35	146.48	147.66	149.73

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
July 1	149.58	Aug. 7	150.34	Sept. 5	150.27
17	150.20	14	150.02	11	152.86
24	150.48	21	150.20	18	153.35
31	150.47	28	151.53	25	155.62

[Depth referenced to land surface datum (LSD). County codes: 510, Carson City; 001, Churchill; 003, Clark; 005, Douglas; 027, Pershing; 029, Storey; 031, Washoe; 033, White Pine. Water use codes: H, domestic; I, irrigation; O, observation; A, artesian; U, unknown; W, water table. Interval shown for period of record spans period from earliest measurement to well, D, dry; P, pumping; R, reported.]

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	UNIT	AQUIFER	WELL DEPTH (FT)
1	N47 E30 15C0CD1	415800118370001 PINE FOREST FIRM	13	I	110VLFL	U	200.
2	N45 E28 10CAB 1	415000118440001 ALDER CREEK RNCH	13	S	110VLFL	U	48.
9	N43 E19 33BB 1	413630119520001	31	S	110VLFL	U	70.
22	N30 E23 29A 1	402700119250001	31	S	110VLFL	U	
24	N35 E24 32DDC 1	405200119170001 USGS	27	U	110VLFL	W	15.
24	N35 E24 32DDC 2	405200119170002 USGS	27	U	110VLFL	A	66.
32	N42 E37 32AAC1	412854117495001 E F RUNOW	13	I	110VLFL	U	250.
32	N42 E37 33B0AB1	413310117482002 DREES	13	I	110VLFL	U	95.
33A	N42 E37 03B9AB1	413320117482001 GEORGE REED	13	I	110VLFL	U	160.
33A	N42 E37 04RDCA1	413300117494001 DONALD MORRIS	13	I	110VLFL	U	360.
33A	N44 E37 33AAAA1	412934117483001 ALBISU	13	I	110VLFL	U	550.
36	N41 E52 28AAD2	412534116072602 ELLISON	7	U	110VLFL	U	114.
42	N37 E59 25RCBC1	410400115164001 MARBLE RANCH	7	H	110VLFL	W	14.
45	N33 E58 19ADD01	404350115281001 H CONRAD	7	H	110VLFL	W	16.
45	N34 E57 24CDD1	404822115300801 BALBOA	7	H	110VLFL	A	97.
46	N31 E56 16ADDA1	403400115400001	7	S	110VLFL	U	
48	N33 E56 08CAAD1	404521115395801 MOFAT	7	H	110VLFL	W	12.
52	N33 E52 27DDBA1	404240116025001 CARLIN TOWN GOVT	7	U	110VLFL	U	500.
54	N29 E48 03BDCB1	402450116324001 DEAN RANCH	11	S	110VLFL	A	
54	N29 E48 29CACC2	402100116352001 BEOWAWE FARMS	11	I	110VLFL	U	300.
54	N31 E49 05CACC1	403500116284501 WILLIAM CONNELLY	11	H	110VLFL	W	9.5
55	N26 E45 28CBAC1	400540116550001 FILIPPINI	15	S	110VLFL	U	
56	N18 E43 06D 1	392700117110001 DARRELL BLANTON	15	I	110VLFL	U	241.
56	N24 E43 35CC 1	395335117062401 STIENEN RANCH	15	I	110VLFL	U	202.
57	N25 E41 12BCC 1	400320117190101 USGS	15	U	110VLFL	W	67.5
59	N30 E44 18ADB01	402831117034201 COPPER CYN MINING CO	15	U	110VLFL	U	329.
59	N31 E44 01DACA1	403520117181101 USGS	15	U	110VLFL	W	50.
59	N31 E45 05ABBD1	403539116553201 USGS	15	U	110VLFL	W	12.
59	N32 E47 03DAAC1	404032116391101 USGS	15	U	110VLFL	W	
61	N32 E45 11DACC1	403920116520001 USGS	15	U	110VLFL	U	197.
69	N37 E38 02AAC 1	410704117394001 TOLLHOUSE WELL	13	U	110VLFL	W	79.
69	N37 E38 24ACC 1	410415117384701 USGS	13	U	110VLFL	W	37.5
69	N37 E39 15CBC 1	410448117344901 USGS	13	U	110VLFL	W	30.
69	N38 E39 09CCAB1	411056117354901 DWIGHT C VEDDER	13	S	110VLFL	U	58.
69	N38 E39 28CDD1	410806117353501 W G LONG	13	I	110VLFL	U	256.
69	N41 E40 30AABB1	412421117303301 SHELTON SCHOOL	13	U	110VLFL	W	27.
70	N36 E38 05DDCD1	410111117431801 USGS	13	U	110VLFL	W	23.5
70	N36 E38 168CCA1	405940117423001 GEORGE HAY CO	13	I	110VLFL	U	55.
70	N36 E39 03CBBB1	410131117345901 USGS	13		110VLFL	W	17.3
70	N36 E40 30AACA1	405810117302801 DIAMOND S RANCH	13	U	110VLFL	U	101.3
71	N33 E38 32BABB1	404138117441501 USBLM	27	S	110VLFL	W	54.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS

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007, Elko; 009, Esmeralda; 011, Eureka; 013, Humboldt; 015, Lander; 017, Lincoln; 019, Lyon; 021, Mineral; 023, Nye;
 S, stock; U, unused. Geologic unit codes: 110 VFL, Quaternary period, undifferentiated valley fill. Aquifer codes:
 latest measurement, may include intervals with no record. Water levels above LSD are negative; F indicates flowing

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ALTITUDE (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)				
				HIGHEST	DATE	LOWEST	DATE	CURRENT
16.0		4380.	1968-	45.58	03/20/68	56.80	05/01/69	51.29
8.0		4228.	1968-	4.17	04/14/71	13.76	03/22/77	11.44
6.0		5200.	1968-	10.22	03/13/72	13.32	04/11/78	13.32
6.0		4013.	1966-	45.20	04/09/69	48.37	04/10/78	48.37
1.5		4031.	1967-	3.77	04/16/73	8.40	04/10/78	8.40
1.5		4031.	1967-	-2.25	06/14/67	6.29	04/10/78	6.29
16.0	150.-250.	4200.	1971-	50.96	04/30/73	78.11	04/29/71	57.32
18.0		4220.	1948-	36.54	04/21/48	116.58	03/23/77	72.18
12.0	10.-150.	4260.	1949-	16.55	01/20/50	123.19	03/23/77	94.15
16.0		4235.	1973-	88.02	03/18/74	108.39	03/23/77	95.69
16.0	175.-545.	4280.	1972-	95.69	04/06/78	117.94	03/23/77	95.69
1.5		5700.	1970-	46.59	04/16/71	47.54	03/30/70	47.15
48.0		5350.	1938-	0.32	04/28/69	20.80	02/26/45	3.79
16.0		5950.	1934-	0.09	04/28/46	18.00	11/01/40	10.00
8.0		5550.	1944-	-1.48	01/28/53	7.10	12/26/52	-0.06
6.0		5650.	1964-	78.11	03/02/77	90.92	03/17/70	80.12
42.0		5500.	1944-	4.30	06/28/58	11.48	09/12/60	6.00
20.0		4920.	1938-	2.77	02/20/51	9.05	10/01/44	6.50
8.0		4740.	1973-	-0.09	04/10/78	0.19	04/04/74	-0.09
14.0		4810.	1958-	54.66	04/10/78	69.28	09/28/66	54.66
48.0		4698.	1948-	5.48	04/30/69	8.33	09/22/54	6.70
10.0		5000.	1965-	3.64	04/12/73	10.45	03/23/76	6.76
16.0		5750.	1969-	7.00	03/15/76	8.40	03/14/75	7.41
12.0		6000.	1961-	-1.33	03/19/76	2.78	03/20/68	-0.49
1.5	65.-67.	4948.	1964-	38.83	04/15/70	58.54	08/05/64	44.54
12.0		4609.	1947-	5.25	03/16/51	6.68	09/10/59	6.24
1.5		4557.	1964-	29.81	04/13/71	32.48	05/28/64	30.54
1.5		4545.	1964-	3.82	04/30/69	4.53	10/05/66	4.29
0.38			1960-	2.32	04/30/69	8.30	08/16/60	5.95
6.0		4518.	1949-	4.08	07/10/52	10.88	10/04/61	9.40
6.0		4334.	1970-	32.55	04/18/72	43.71	03/21/77	41.70
1.25		4317.	1962-	19.64	04/18/72	22.29	04/13/78	22.29
1.25	28.-30.	4326.	1968-	22.77	04/18/72	25.49	04/13/78	25.49
10.0	20.-	4317.	1968-	13.41	03/20/75	19.80	03/24/77	19.05
16.0		4317.	1968-	9.86	04/18/72	18.90	04/13/78	18.90
8.0		4414.	1970-	0.69	04/23/71	4.63	03/21/77	1.75
1.25		4400.	1960-	4.86	04/25/69	13.49	09/20/66	8.98
12.0		4292.	1959-	16.13	04/17/74	21.37	04/12/78	21.37
1.25		4350.	1960-	3.11	03/21/62	8.07	09/25/61	5.97
6.0		5200.	1949-	20.17	09/01/58	46.10	03/15/64	32.06
6.0		4431.	1946-	28.40	07/24/46	38.16	03/30/77	38.11

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
71 N34 E37 22ACAA1	404940117475001	J BALLARD	27	U	110VLFL	U	50.
71 N35 E37 34AACCC2	405130117480002		13	U	110VLFL	U	83.
73A N29 E33 33AAAC1	402000118160001	CITY OF LOVELOCK	27		110VLFL	U	395.
76 N20 E25 18CCC 1	393539119133001	JOE GARBARINO	19	U	110VLFL	U	28.
76 N20 E25 18CCC 2	393539119133002	JOE GARBARINO	19	U	110VLFL	U	155.
80 N24 E23 36CBA 1	395422119210701	W J CERESOLA	31	U	110VLFL	U	73.
80 N25 E23 23CDRA1	400100119220001		31		110VLFL	W	11.5
81 N24 E22 31CCC 2	395357119333401	USBIA	31	U	110VLFL	U	226.
81 N27 E21 09BDA 1	401352119380201	USGS	31	U	110VLFL	U	47.4
81 N27 E21 16ARD 1	401245119374401	USGS	31	U	110VLFL	U	44.
81 N28 E21 33CCD 1	401443119381201	USGS	31	U	110VLFL	U	59.6
87 N20 E20 30DA 1	393415119462101	BASQUE CLUB	31	H	110VLFL	U	12.
89 N16 E19 108BD 1	391613119503501	FLYING ME RANCH	31	U	110VLFL	U	94.
92B N21 E19 338BC 1	393850119514901	YORK	31	U	110VLFL	U	165.
103 N17 E23 07DDD 1	392029119260301	UTAH MINING & CONST CO	19	U	110VLFL	U	386.
103 N17 E23 108AA 1	392110119232401	M PHILLIPS	19	I	110VLFL	U	300.
104 N15 E20 08BAAD1	391709119511201	EDITH WATERS	25	H	110VLFL	W	18.3
104 N15 E20 17CACD1	391418119513501	CHILDRENS HOME	25	P	110VLFL	U	595.
104 N15 E20 20CCBB1	391235119521501	PHILIP HARPER	25	I	110VLFL	W	37.5
105 N13 E20 32CAA 1	385630119452001	MACK LAND & CATTLE CO	5	I	110VLFL	U	420.
105 N14 E19 25BA 1	390230119480001	CARSON INDIAN COL	5	I	110VLFL	U	239.
107 N10 E24 04CD 1	384500119182001	WALTER STRAUB	19	U	110VLFL	U	250.
107 N11 E23 03DC 1	385030119232001	V BRYAN	19	I	110VLFL	U	242.
107 N11 E24 32DC 1	384610119190001	A NUTTI	19	I	110VLFL	U	390.
107 N12 E23 24CB 1	385314119205901	THREE DBL BAR RANCH	19	U	110VLFL	U	222.
108 N12 E25 35DC 1	385110119090001	JOHN C BAKER	19	I	110VLFL	U	253.
110C N06 E31 338BD2	382020118310001	BILL MERCHANT	21	U	110VLFL	U	140.
110C N08 E30 03DA 1	383440118365001	U S ARMY AMTN PLANT	21	H	110VLFL	U	852.
110C N08 E30 04AAA 1	383500118390001	USGS	21	U	110VLFL	U	64.
110C N08 E30 18AAD 1	383310118401001	U S ARMY AMTN PLANT	21	I	110VLFL	U	345.
110C N08 E30 210DB 1	383150118380001	U S ARMY AMTN PLANT	21	H	110VLFL	U	394.
110C N08 E30 26DDA 1	383100118355001	U S ARMY AMTN PLANT	21	N	110VLFL	U	423.
110C N08 E31 29CDC 1	383100118330001	U S ARMY AMTN PLANT	21	N	110VLFL	U	452.
110C N09 E30 29D 1	383700118400001	USGS	21	U	110VLFL	W	18.
110C N09 E30 33CA 1	383600118390001	USGS	21	U	110VLFL	W	41.
117 S01 E35 28A 1	374950118051001	REX CLARK	9	S	110VLFL	U	624.
117 S03 E35 14C 1	374030118034004	USRLM	9	U	110VLFL	U	
118 N03 E36 028CB 1	380854117565601		9	U	110VLFL	U	145.
122 N11 E36 18DB 1	384850117581001		23	U	110VLFL	U	
124 N16 E33 02DC 1	391620118143001	C B STARK	1	S	110VLFL	U	441.
127 N17 E35 36AD 1	391749117585101	ANGUS DANGBERG	1	U	110VLFL	U	502.

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ALTITUDE (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
6.0		4329.	1946-	9.31	03/21/56	13.26	04/13/78	13.26	04/13/78
10.0		4302.	1946-	17.68	05/16/46	28.14	10/03/61	27.10	04/13/78
12.0	100.-395.	4300.	1968-	119.10	04/23/69	124.19	04/12/78	124.19	04/12/78
6.0		4134.	1953-	1.96	07/07/55	7.96	03/27/78	7.96	03/27/78
10.0		4135.	1953-	3.33	09/02/53	21.18	03/27/78	21.18	03/27/78
6.0		3845.	1969-	23.65	07/31/69	27.14	07/14/70	24.41	03/27/78
		3800.	1968-	2.47	04/18/73	4.13	06/10/75	3.94	04/10/78
8.0		3988.	1970-	10.25	03/09/72	18.69	04/13/78	18.69	04/13/78
1.5	45.4-47.4	3845.	1967-	5.90	07/28/67	9.46	04/13/78	9.46	04/13/78
1.5	42.-44.	3810.	1967-	16.63	07/28/67	19.15	06/09/75	18.34	04/13/78
1.5	57.6-59.6	3865.	1967-	15.31	07/28/67	18.02	04/13/78	18.02	04/13/78
48.0		4800.	1948-	1.72	04/04/56	15.02	10/06/60	2.66	04/14/78
12.0		5065.	1968-	5.18	03/09/72	7.05	03/21/77	6.10	04/14/78
8.0		4965.	1968-	8.30	03/10/70	12.33	03/15/76	11.16	04/12/78
12.0		4335.	1970-	73.98	08/05/70	80.69	06/30/78	79.54 79.14 78.77 78.54 80.69	11/03/77 12/23/77 02/15/78 04/11/78 06/30/78
12.0		4285.	1969-	48.00	04/01/69	62.53	11/03/77	62.53 60.88 59.51 60.78	11/03/77 12/23/77 02/23/78 04/11/78
60.0		4720.	1952-	0.98	03/13/52	12.99	04/14/78	12.99	04/14/78
18.0		4650.	1952-	1.84	03/13/52	23.80	09/16/64	11.52	04/14/78
48.0		4685.	1962-	20.53	03/29/71	26.60	09/26/66	25.95	04/14/78
18.0		4733.	1951-	7.22	07/11/67	14.17	08/26/60	12.25	04/20/78
12.0		4680.	1951-	6.09	04/04/76	23.00	10/12/61	10.30	04/20/78
14.0		4900.	1948-	60.86	11/30/48	100.64	04/07/78	100.64	04/07/78
12.0		4830.	1951-	45.21	06/17/57	76.16	04/07/78	76.16	04/07/78
16.0		4865.	1948-	23.62	03/03/48	89.21	06/22/61	56.84	04/07/78
16.0		4745.	1972-	4.50	06/23/72	8.35	04/07/78	8.35	04/07/78
16.0		4500.	1953-	3.39	08/18/58	20.44	04/07/78	20.44	04/07/78
8.0		5700.	1951-	42.37	03/12/51	54.65	05/23/78	54.65	05/23/78
18.0		4125.	1954-	47.20	12/09/54	117.86	09/27/65	55.56	04/25/78
1.5	62.-64.	4065.	1968-	31.69	03/18/68	34.23	04/25/78	34.23	04/25/78
18.0		4140.	1952-	95.10	11/21/52	108.76	06/30/76	106.95	04/25/78
18.0		4262.	1952-	199.90	11/21/52	232.69	04/23/73	211.19	04/25/78
18.0		4341.	1952-	245.00	11/21/52	280.23	04/23/73	256.84	04/25/78
18.0		4374.	1952-	242.60	11/21/52	257.29	04/13/70	247.55	04/25/78
1.5	16.-18.	4050.	1968-	8.54	04/23/73	9.30	04/25/78	9.30	04/25/78
1.5	39.-41.	4035.	1968-	18.75	03/18/68	20.97	04/25/78	20.97	04/25/78
16.0	150.-600.	4900.	1948-	28.43	09/14/53	41.45	04/26/78	41.45	04/26/78
12.0		4830.	1948-	38.60	06/21/48	56.45	04/24/75	55.47	04/26/78
16.0		4580.	1968-	41.23	04/14/78	42.73	03/01/72	41.23	04/14/78
10.0		4570.	1961-	36.68	12/13/61	39.57	04/14/78	39.57	04/14/78
8.0		4160.	1955-	216.68	01/13/55	224.94	03/23/64	217.69	04/27/78
8.0		5250.	1950-	27.00	02/01/50	127.50	05/08/75	105.59	04/11/78

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
128 N21 E34 270C 1	393920118084001	GREGORY HOMESTEAD	11	U	110VLFL	U	114.
128 N21 E35 310 1	393840118050001	C B STARK	11	S	110VLFL	U	49.7
128 N26 E39 308 1	400600117380001	LITTLE MCCOY RCH	11	S	110VLFL	U	114.
129 N30 E35 2788AA2	402640118015002	NEILL TALCOTT	11	I	110VLFL	U	0.
129 N31 E35 34C8BD1	403120118015901	GALLIO	11	S	110VLFL	U	40.5
131 N30 E42 24CCAD1	402710117124001	USBLM	11	S	110VLFL	U	54.
133 N19 E37 288CC 1	392903117495001	CHERRY CREEK RCH	11	S	110VLFL	U	260.
134 N17 E40 08C 1	392100117310001	SMITH CREEK RCH	11	S	110VLFL	W	55.
136 N06 E37 21D 1	382200117510001	GRASS VALLEY RCH	11	U	110VLFL	U	300.
138 N21 E46 09D 1	394200116480001	GRASS VALLEY RCH	11	H	110VLFL	W	2.
139 N19 E47 36B 1	392800116380001	DRY CREEK RANCH	11	S	110VLFL	U	102.
139 N21 E49 16C 1	394059116282901	FRED ETCHEGARAY	11	S	110VLFL	W	59.5
140B N12 E47 18C 1	385300116440001	PINE CREEK RANCH	11	S	110VLFL	U	0.
141 N05 E44 328B 1	381500117042001	USBLM	11	U	110VLFL	U	18.
143 S03 E39 16CA 1	374036117392901	USBLM	11	S	110VLFL	U	0.
144 S06 E43 05CAD 1	372700117110001	USBLM	9	S	110VLFL	U	0.
146 S08 E44 08AA 2	371553117034302	DON TERREL	23	U	110VLFL	U	250.
149 N03 E48 32B 1	380400116380001	JOHN J CASEY	23	S	110VLFL	U	150.
151 N18 E51 34D 1	392310116125001	BARTHOLEMAE CORP	11	S	110VLFL	U	134.
153 N19 E53 12C 1	393143115572701	IRENE ANDERSON	11	H	111FLDP	W	7.6
153 N20 E53 31D 1	393310116020001	A C FLORIO	11	S	110VLFL	U	0.
153 N21HE52 01BC 1	394342114385401	USBLM	11	S	110VLFL	W	70.
153 N22 E54 27CA 1	394520115524001	ROBERT STUCKI	11	H	110VLFL	W	94.
153 N23 E53 278B 1	395100115593001	USGS	11	U	110VLFL	W	22.
153 N23 E53 30DD 1	395020116030001	USGS	11	U	110VLFL	W	22.
153 N23 E54 18DB 1	395220115561001	USGS	11	U	110VLFL	W	32.
154 N18 E55 31C 1	392300115493001	FERA	33	S	110VLFL	U	43.
154 N19 E56 30D 2	392850115421002	DON ELDRIDGE	33	S	110VLFL	U	37.
154 N21 E55 09B 1	394200115461001	R W HOOPER	33	H	110VLFL	U	34.
155A N17 E54 29CA 1	391858115550201	USBLM	11	S	110VLFL	U	61.
162 S19 E53 33DAA 1	361523116005101	R S HARMER	23	U	110VLFL	A	775.
162 S20 E52 238BA 1	361204116060301	W M TURNER	23	U	110VLFL	A	500.
162 S20 E53 06CDA 1	361405116033201	ROOKRIDGE & CARRADO	23	U	110VLFL	U	200.
162 S20 E53 14DCB 1	361225115590301	RAY THOMAS	23	H	110VLFL	A	254.
162 S21 E54 19DD 2	360611115561802	TURNER	23	U	110VLFL	W	76.
170 S03 E55 05BDD 1	374256115485501	USBLM	17	S	110VLFL	W	20.
172 N04 E58 36A 1	381000115240001	USBLM	23	S	110VLFL	U	0.
173B N11 E57 09CD 1	384920115343001	USBLM	23	S	110VLFL	U	354.
176 N28 E59 09C 1	401900115200001	RUBY VALLEY NO1	7	S	110VLFL	U	44.
176 N32 E60 29C 1	403639115133001	USGS	7	U	110VLFL	U	202.
176 N32 E60 29C 2	403730115134002	USGS	7	U	110VLFL	W	15.
176 N33 E60 35AD 1	404140115095701	USGS	7	S	110VLFL	U	12.
177 N35 E62 27B 1	405310114574001	USGS	7	U	110VLFL	U	286.
178B N22 E60 26A 1	394600115120001	PARIS WELL	33	U	110VLFL	U	0.
179 N15 E64 07A 1	391100114492001	LLOYD SORENSON	33	I	110VLFL	U	200.

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ALTITUDE (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
11.0		3500.	1955-	28.04	06/07/56	32.33	04/27/78	32.33	04/27/78
8.0		3480.	1955-	32.33	03/23/64	35.93	03/17/66	35.09	04/27/78
6.0		3730.	1968-	76.25	03/20/68	96.54	05/02/78	96.54	05/02/78
16.0		4240.	1963-	12.97	04/12/78	21.57	03/21/65	12.97	04/12/78
6.0		4300.	1961-	28.96	03/22/72	45.84	03/22/68	29.22	04/12/78
6.0		4634.	1947-	10.30	03/16/49	13.25	09/21/55	11.32	04/11/78
6.0		5360.	1974-	169.13	03/02/77	176.56	03/16/74	169.83	04/11/78
6.0		6054.	1966-	6.96	03/21/77	11.93	03/22/74	7.14	04/11/78
8.0		5312.	1968-	72.14	04/23/73	73.64	03/06/75	73.35	04/26/78
48.0		6000.	1968-	23.41	05/01/73	36.92	03/19/68	24.13	04/11/78
8.0		6260.	1960-	47.31	04/28/73	56.70	03/16/74	52.17	04/12/78
6.0		6179.	1953-	39.15	03/02/53	46.35	03/24/64	42.53	04/12/78
24.0		6820.	1968-	0.85	04/18/78	4.65	05/18/74	0.85	04/18/78
		5800.	1951-	11.57	03/21/74	12.85	09/11/51	12.25	04/07/78
6.0		4325.	1967-	44.75	01/19/67	52.65	03/20/69	45.98	04/26/78
8.0		4622.	1967-	287.12	02/15/68	292.75	03/19/69	289.17	03/11/78
14.0		4001.	1968-	34.84	04/15/68	36.26	03/09/77	36.22	03/11/78
6.0		5500.	1962-	109.91	06/20/62	113.42	05/04/72	110.94	04/14/78
6.0		6330.	1951-	93.69	03/16/66	96.11	04/19/71	94.69	04/12/78
30.0		6500.	1962-	4.76	04/28/73	7.41	03/24/64	5.06	04/12/78
6.0		6100.	1951-	155.46	09/06/57	193.92	03/17/74	176.70	04/12/78
8.0		5888.	1965-	48.78	04/08/66	59.34	04/12/78	59.34	04/12/78
12.0		5858.	1949-	5.49	08/11/49	32.72	04/12/78	32.72	04/12/78
1.5	20.-22.	5820.	1964-	11.60	04/22/69	16.52	05/20/64	13.24	04/12/78
1.5	20.-22.	5821.	1964-	14.05	04/22/70	17.10	05/20/64	14.90	04/12/78
1.5	30.-32.	5800.	1964-	16.74	04/28/73	29.57	05/20/64	17.65	04/12/78
36.0		5930.	1951-	33.19	09/15/54	43.96	09/11/63	34.87	04/12/78
42.0		5900.	1964-	22.11	04/20/71	39.01	11/12/64	33.01	04/12/78
60.0		5950.	1951-	10.67	03/26/56	20.80	10/12/62	13.31	04/12/78
48.0		5987.	1962-	50.49	10/20/65	62.82	09/11/63	51.35	04/12/78
12.0		2607.	1947-	-23.55	11/20/47	40.91	04/06/78	40.91	04/06/78
14.0	32.-500.	2531.	1954-	30.00	07/16/54	47.00	12/26/58	42.61	04/06/78
14.0	30.-168.	2558.	1952-	15.43	02/02/59	25.02	04/06/78	25.02	04/06/78
8.0		2679.	1945-	-23.20	03/06/45	90.61	02/27/75	86.32	04/06/78
10.0		2684.	1959-	38.70	01/30/59	46.60	04/06/78	46.60	04/06/78
8.0		5080.	1968-	18.73	01/18/77	22.27	03/23/73	20.68	03/28/78
10.0		5200.	1963-	24.30	05/09/63	26.62	04/22/71	25.71	04/13/78
6.0		5072.	1948-	170.92	03/23/77	177.61	09/16/49	171.05	04/14/78
48.0		6150.	1948-	113.53	04/10/78	114.77	03/07/77	113.53	04/10/78
6.0		6000.	1949-	1.08	04/10/78	5.35	09/21/61	1.08	04/10/78
1.5		6000.	1949-	0.75	03/31/70	7.48	09/21/61	2.14	04/10/78
14.0		6000.	1948-	4.80	06/10/49	12.53	09/21/61	7.10	04/10/78
6.0		5650.	1941-	6.38	04/04/72	11.07	05/03/55	9.47	04/18/78
6.0		6190.	1967-	59.85	04/21/69	65.32	04/13/78	65.32	04/13/78
16.0		6500.	1951-	31.76	04/23/70	41.83	03/10/61	37.90	04/13/78

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
184 N13 E67 08D	1 390000114282001	A SCHAURMAN	33	S	110VLFL	W	45.
186B N28 E68 08D	1 401900114200001	HIGHWAY WELL	7	S	110VLFL	U	
187 N34 E67 06A	2 405110114262002	WESTERN PACIFIC RR	7	N	110VLFL	U	250.
188 N34 E63 01D	1 405100114480001	WESTERN PACIFIC RR	7		110VLFL	U	320.
189B N43 E66 25D	1 413444114261701	ECCLES RANCH	7	U	110VLFL	W	28.
189D N40 E69 13D	1 412100114060001	GAMBLE RANCH	7	S	110VLFL	U	
203 S01 E68 33B	1 374910114231001	LAVON PHILLIPS	17	I	110VLFL	U	120.
203 S02 E68 08B	5 374750114242001	USGS	17	U	110VLFL	U	110.
203 S03 E67 02A	1 374317114265801	GRANT LEE	17	I	110VLFL	U	225.
205 S04 E67 18B	1 373627114315301	EMORY CONAWAY	17	I	110VLFL	U	165.
205 S14 E66 15A	1 364321114351001	USGS	3	U	110VLFL	W	29.8
207 N09 E61 07B	1 382432115095801	LLOYD SORENSON	23	S	110VLFL	W	43.
207 N11 E61 35A	1 384640115045001	PUBLIC DOMAIN	33	S	110VLFL	U	
207 N12 E62 18D	1 385400115024001	USGS	33	U	110VLFL	U	108.
209 S04 E60 02A	2 373806115125102	NEIL STEWART	17	U	110VLFL	U	403.
209 S04 E60 34A	2 373330115142002	W U SCHOFIELD	17	I	110VLFL	W	96.
209 S06 E61 18D	2 372500115104002	KENT WHIPPLE	17	U	110VLFL	W	41.
209 S08 E61 02C	1 371640115072001	LAMB	17	I	110VLFL	U	92.
212 S19 E60 04DAB	1 361939115154801	NEV DIV FORESTRY	3	I	110VLFL	A	780.
212 S20 E60 01A0C	1 361416115123701	ANN JONES	3	U	110VLFL	U	148.
212 S20 E60 02BDD	1 361400115141301		3	U	110VLFL	U	275.
212 S20 E60 02DDD	1 361359115133101	ARTHUR E GREY	3	U	110VLFL	A	707.
212 S20 E61 02DBB	1 361419115072201	HARTWELL & LOWE	3	U	110VLFL	A	785.
212 S20 E61 04BDC	1 361426115095001		3	U	110VLFL	U	270.
212 S20 E61 07CCB	1 361301115115401	ROGERS ROCKING CHAIR RCH	3	U	110VLFL	U	300.
212 S20 E61 17CAD	1 361209115104601		3	U	110VLFL	U	150.
212 S20 E61 17CDB	1 361222115105601	LVVWD	3	U	110VLFL	U	655.
212 S20 E61 21BAB	1 361145115094801	VEGAS HEIGHTS WATER ASSOC	3	U	110VLFL	A	400.
212 S20 E61 32CDC	1 360941115104801	KENNETH SEARLES	3	H	110VLFL	A	665.
212 S20 E62 20ADA	1 361156115034801		3	U	110VLFL	W	155.
212 S20 E62 29DCA	1 361036115040401		3	U	110VLFL	W	98.
212 S20 E62 32BBB	1 361025115044701	E B GRUBB	3	U	110VLFL	A	500.
212 S21 E61 03ABB	2 360931115083802	W PARK	3	U	110VLFL	A	807.

DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ALTITUDE (FT AB LSD)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
36.0		5800.	1951-	11.23	04/21/69	18.60	09/23/61	12.23	04/13/78
6.0		5640.	1948-	97.64	03/11/77	104.71	09/15/49	99.07	04/21/78
16.0		5550.	1948-	26.85	03/27/51	30.72	09/17/64	29.96	04/18/78
12.0		5610.	1968-	13.87	03/18/76	15.14	03/28/68	13.90	04/18/78
60.0		5250.	1967-	8.36	04/29/69	15.21	02/28/68	13.54	04/18/78
6.0		4800.	1968-	5.69	03/13/74	16.98	03/13/75	15.04	04/18/78
10.0	60.-80.	4784.	1946-	30.32	04/25/46	40.68	01/19/77	39.12	03/29/78
8.0		5000.	1950-	10.72	03/20/50	22.82	08/27/64	17.00	03/29/78
10.0		4605.	1962-	20.74	02/24/62	23.78	03/29/78	23.78	03/29/78
14.0		4360.	1963-	16.75	03/29/78	26.26	11/18/65	16.75	03/29/78
0.4		1800.	1961-	14.65	01/08/71	21.18	05/10/61	16.14	04/06/78
48.0		5400.	1965-	30.00	03/12/68	31.83	03/24/65	31.35	04/13/78
6.0		5400.	1953-	3.20	03/16/76	13.66	10/13/62	7.15	04/13/78
6.0		5600.	1962-	44.97	04/24/70	53.51	04/13/78	53.51	04/13/78
12.0		4200.	1973-	88.60	03/23/73	135.07	01/18/77	133.32	03/28/78
10.0		4000.	1955-	60.39	09/15/55	72.73	02/22/65	70.89	03/28/78
6.0		3500.	1960-	5.85	02/23/63	11.76	01/18/77	10.50	03/28/78
10.0		3020.	1952-	17.33	03/23/73	28.06	02/24/76	23.04	03/28/78
16.0		2454.	1946-	-30.60	04/05/46	71.11	07/10/78	67.60 64.67 71.11	10/28/77 03/10/78 07/10/78
8.0		2125.	1974-	97.30	03/04/74	115.02	07/10/78	111.39 115.02	02/28/78 07/10/78
10.0		2305.	1971-	127.00	03/05/71	166.60	07/10/78	158.91 166.60	02/28/78 07/10/78
10.0		2207.	1955-	86.32	02/10/55	276.73	07/10/78	270.22 265.31 276.73	10/12/77 02/28/78 07/10/78
8.0	90.-110. 390.-430.	1900.	1949-	-14.20	12/29/49	60.85	11/16/70	31.60 29.44 29.57	10/12/77 02/27/78 07/10/78
13.0		2103.	1976-	75.70	03/04/76	79.43	07/11/78	78.67 79.43	02/28/78 07/11/78
10.0		2228.	1970-	51.40	02/01/70	68.17	07/12/78	67.27 68.17	02/28/78 07/12/78
8.0		2138.	1973-	62.20	02/21/73	67.10	07/11/78	66.32 67.10	02/28/78 07/11/78
10.0	550.-640.	2146.	1974-	124.39	03/04/74	167.96	07/11/78	154.33 167.96	02/28/78 07/11/78
10.0	148.-400.	2064.	1971-	52.17	02/21/73	77.14	07/12/78	65.42 77.14	02/28/78 07/12/78
10.0	570.-650.	2102.	1946-	-81.30	02/27/46	108.19	08/07/75	69.28 61.88 79.36	10/12/77 03/02/78 07/10/78
8.0		1790.	1970-	70.00	03/04/70	86.39	10/12/77	86.39 77.43 78.26	10/12/77 02/27/78 07/10/78
8.0		1766.	1971-	61.51	02/27/78	75.06	10/12/77	75.06 61.51 63.80	10/12/77 02/27/78 07/10/78
8.0		1772.	1914-	9.30	08/07/14	49.93	10/02/72	39.00 37.13 35.90	10/12/77 02/27/78 07/10/78
12.0		2014.	1944-	-38.11	03/06/44	57.41	08/21/73	56.31 43.20 55.31	10/12/77 03/02/78 07/12/78

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS--Continued

LOCAL WELL NO	SITE ID	OWNER	COUNTY	USE	GEOLOGIC UNIT	AQUIFER	WELL DEPTH (FT)
212 S21 E61 04AAD 1	360910115092001	HOME LUMBER	3	U	110VLFL	A	793.
212 S21 E61 16BBD 1	360720115093701	HUGHES TOOL CO	3	U	110VLFL	U	972.
212 S21 E61 22BBA 1	360649115090001	LUVWD	3	U	110VLFL	A	1200.
212 S21 E61 22CCC 1	360600115091001	A P BAKER	3	U	110VLFL	A	500.
212 S21 E61 29AAC 1	360543115101301	MORRIS WOLLMAN	3	U	110VLFL	A	540.
212 S21 E61 36ADC 2	360449115061201	USGS	3	U	110VLFL	U	25.9
212 S21 E62 09ABB 1	360833115031901	USGS	3	U	110VLFL	U	37.
212 S21 E62 10ACA 1	360826115020001	NEVADA POWER CO	3	U	110VLFL	A	715.
212 S21 E62 10ACD 1	360817115020301	NEVADA POWER CO	3	U	110VLFL	W	30.
212 S21 E62 29CCB 1	360520115045301	J R BOND	3	U	110VLFL	A	404.
212 S22 E60 01DDD 1	360318115123501	LUVWD	3	U	110VLFL	W	1071.
212 S22 E61 03CCB 1	360340115090801	GEORGE CROCKETT	3	I	110VLFL	A	575.
212 S22 E62 01CBC 1	360345115002901	RAY PLUMBER	3	U	110VLFL	A	1135.
230 S16 E49 18DC 1	363310116294001	USBLM	23	U	110VLFL	U	348.
230 S16 E49 31BA 1	363120116300001	GORDON BETTLES	23	U	110VLFL	U	162.
230 S17 E52 08CDB 1	362929116085701	HERSHEL & ETAL CLARK	23	I	110VLFL	U	246.

GROUND-WATER LEVELS, SECONDARY OBSERVATION WELLS--Continued

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DIAM- ETER (IN)	PERFORATED INTERVAL (FT)	ALTITUDE (FT AB LSN)	PERIOD OF RECORD	WATER LEVELS (FT BELOW LAND SURFACE)					
				HIGHEST	DATE	LOWEST	DATE	CURRENT	DATE
10.0		2039.	1944-	-46.50	02/21/52	72.63	07/13/78	69.41 72.63	10/12/77 07/13/78
10.0		2081.	1971-	72.33	02/23/71	121.89	07/13/78	82.49 121.89	03/08/78 07/13/78
16.0	318.-399. 700.-786.	2041.	1963-	53.00	05/15/63	114.61	07/11/78	48.53 114.61	03/10/78 07/11/78
6.0		2072.	1951-	-24.70	02/15/51	93.72	07/10/78	87.50 39.14 93.72	10/12/77 02/28/78 07/10/78
8.0		2140.	1970-	64.00	02/01/70	113.95	07/12/78	71.71 113.95	03/07/78 07/12/78
1.5	22.9-25.9	1948.	1977-	17.00	08/03/77	19.99	07/10/78	18.80 19.99	02/23/78 07/10/78
1.5	34.-37.	1715.	1977-	14.89	07/10/78	17.00	08/03/77	15.26 14.89	02/28/78 07/10/78
12.75	50.-80.	1705.	1972-	13.36	03/03/76	19.97	02/22/72	16.30 15.05 16.32 14.66	10/12/77 02/28/78 03/16/78 07/10/78
14.0		1695.	1973-	6.18	11/27/74	9.81	10/12/77	9.81 8.89 7.47	10/12/77 02/28/78 03/16/78
6.0		1840.	1963-	-5.30	05/14/74	10.10	02/23/73	-1.00 -1.85	02/25/78 07/10/78
16.0	250.-1055.	2363.	1963-	232.00	03/30/63	276.72	07/11/78	270.00 276.72	03/10/78 07/11/78
10.0		2150.	1946-	4.42	08/27/49	101.83	10/02/72	82.89 77.55 87.56	10/28/77 03/16/78 07/11/78
8.0		1681.	1946-	-70.00	05/28/76	6.70	07/12/78	-69.50 -69.80 6.70	10/12/77 02/26/78 07/12/78
12.0		2375.	1955-	103.10	02/12/55	111.19	03/05/76	110.97	03/11/78
16.0		2326.	1952-	66.10	05/07/52	73.84	03/11/78	73.84	03/11/78
12.0		2395.	1960-	33.24	02/16/65	57.28	03/08/77	35.15	03/11/78

QUALITY OF GROUND WATER

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

STATION NUMBER	STATION NAME	COUNTY	GEO-LOGIC UNIT	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	DEPTH OF WELL, TOTAL (FEET)
350723114364201	213 S32 E66 33AAA 1 JOHN KNIGHT WELL	003	111FLDP	77-10-14	507.00	50
	213 S32 E66 33AAA 1 JOHN KNIGHT WELL	003	111FLDP	78-05-04	507.00	50
	213 S32 E66 33AAA 1 JOHN KNIGHT WELL	003	111FLDP	78-07-20	507.00	50
350726114375501	213 S32 E66 3388B 1 CROMER WELL	003	111FLDP	77-10-14	511.00	96
	213 S32 E66 3388B 1 CROMER WELL	003	111FLDP	78-05-04	511.00	96
	213 S32 E66 3388B 1 CROMER WELL	003	111FLDP	78-07-20	511.00	96
350910114344001	213 S32 E66 2488A 1 SUNDANCE SHORES WELL	003	110VLFL	77-10-14	727.00	480
	213 S32 E66 2488A 1 SUNDANCE SHORES WELL	003	110VLFL	78-05-04	727.00	480
	213 S32 E66 2488A 1 SUNDANCE SHORES WELL	003	110VLFL	78-07-20	727.00	480
350920114341901	213 S32 E66 13CDD 1 NEVADA CLUB WELL	003	111FLDP	77-10-14	520.00	64
	213 S32 E66 13CDD 1 NEVADA CLUB WELL	003	111FLDP	78-05-04	520.00	64
	213 S32 E66 13CDD 1 NEVADA CLUB WELL	003	111FLDP	78-07-20	520.00	64
350937114341501	213 S32 E66 1308B 1 RIVERSIDE TRAILER COURT	003	111FLDP	77-10-14	521.00	89
	213 S32 E66 1308B 1 RIVERSIDE TRAILER COURT	003	111FLDP	78-05-04	521.00	89
	213 S32 E66 1308B 1 RIVERSIDE TRAILER COURT	003	111FLDP	78-07-20	521.00	89
414604115424001	45N 55E 25DAA1S	007	110ALVM	78-06-28	7020.00	--
415036115145201	46N 60E 13ACC1S	007	110ALVM	78-06-27	8280.00	--

STATION NUMBER	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICROMHOS)	WATER TEMPERATURE (DEG C)	HARDNESS (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)	ALKALINITY (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
350723114364201	77-10-14	1300	--	450	120	37	110	2.3	4.5	--	370
	78-05-04	1280	--	440	120	35	110	2.3	5.0	150	370
	78-07-20	1260	--	440	120	33	110	2.3	4.5	160	340
350726114375501	77-10-14	1020	--	370	97	31	110	2.5	3.4	160	310
	78-05-04	1120	--	320	77	31	110	2.7	4.7	150	300
	78-07-20	1190	--	380	100	32	110	2.5	3.5	180	300
350910114344001	77-10-14	1190	--	260	74	19	160	4.3	3.6	130	200
	78-05-04	1320	--	220	65	15	140	4.1	3.6	110	210
	78-07-20	1200	--	280	79	19	140	3.7	3.8	120	190
350920114341901	77-10-14	1360	--	--	--	--	--	--	--	--	340
	78-05-04	1400	--	--	--	--	--	--	--	--	320
	78-07-20	--	--	--	--	--	--	--	--	--	310
350937114341501	77-10-14	1360	--	430	120	32	120	2.5	4.5	120	340
	78-05-04	1320	--	430	120	31	130	2.7	5.0	140	310
	78-07-20	--	--	430	120	31	120	2.5	4.9	150	320
414604115424001	78-06-28	419	6.5	240	65	19	3.8	.1	.6	220	7.7
415036115145201	78-06-27	35	4.0	5	1.9	.0	1.7	.3	2.8	11	2.7

QUALITY OF GROUND WATER

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

STATION NUMBER	DATE OF SAMPLE	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)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)
350723114364201	77-10-14	120	--	17	--	.11	--	--	--
	78-05-04	110	--	8.7	847	.01	--	--	--
	78-07-20	110	--	16	827	.00	--	--	--
350726114375501	77-10-14	84	--	19	753	.09	--	--	--
	78-05-04	88	--	19	719	.14	--	--	--
	78-07-20	95	--	18	767	.01	--	--	--
350910114344001	77-10-14	190	--	28	760	1.5	--	--	--
	78-05-04	170	--	26	703	.94	--	--	--
	78-07-20	190	--	27	729	1.4	--	--	--
350920114341901	77-10-14	170	--	--	--	--	--	--	--
	78-05-04	140	--	--	--	--	--	--	--
	78-07-20	130	--	--	--	--	--	--	--
350937114341501	77-10-14	150	--	17	858	.02	--	--	--
	78-05-04	150	--	9.4	839	.01	--	--	--
	78-07-20	140	--	16	841	.01	--	--	--
414604115424001	78-06-28	1.8	.1	13	248	.41	.00	0	20
415036115145201	78-06-27	.4	.1	33	49	.04	.01	0	2

STATION NUMBER	DATE OF SAMPLE	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	TRITIUM TOTAL (PCI/L)
350723114364201	77-10-14	--	--	--
	78-05-04	--	--	--
	78-07-20	--	--	--
350726114375501	77-10-14	--	--	--
	78-05-04	--	--	--
	78-07-20	--	--	--
350910114344001	77-10-14	--	--	--
	78-05-04	--	--	--
	78-07-20	--	--	--
350920114341901	77-10-14	--	--	--
	78-05-04	--	--	--
	78-07-20	--	--	--
350937114341501	77-10-14	--	--	--
	78-05-04	--	--	--
	78-07-20	--	--	--
414604115424001	78-06-28	10	.0	384
415036115145201	78-06-27	2	.0	191

CHANGES IN SELECTED WATER-QUALITY PARAMETERS

NEW TERMINOLOGY -- FIRST LINE
 OLD TERMINOLOGY -- SECOND LINE

ALDRIN, SUSPENDED TOTAL (UG/L)
 ALDRIN, SUSPENDED (UG/L)

ALPHA, SUSPENDED TOTAL (PCI/L)
 ALPHA, SUSPENDED (PCI/L)

ALPHA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 ALPHA, SUSPENDED, COUNTING ERROR (PCI/L)

ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
 ALUMINUM, TOTAL (UG/L AS AL)

ALUMINUM, SUSPENDED RECOVERABLE (UG/L AS AL)
 ALUMINUM, SUSPENDED (UG/L AS AL)

ALUMINUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AL)
 ALUMINUM, TOTAL IN BOTTOM MATERIAL (UG/G AS AL)

ANTIMONY, SUSPENDED TOTAL (UG/L AS SB)
 ANTIMONY, SUSPENDED (UG/L AS SB)

AROCLOR, SUSPENDED TOTAL, 1248 PCB SERIES (UG/L)
 AROCLOR, SUSPENDED, 1248 PCB SERIES (UG/L)

AROCLOR, SUSPENDED TOTAL, 1254 PCB SERIES (UG/L)
 AROCLOR, SUSPENDED, 1254 PCB SERIES (UG/L)

AROCLOR, SUSPENDED TOTAL, 1260 PCB SERIES (UG/L)
 AROCLOR, SUSPENDED, 1260 PCB SERIES (UG/L)

ARSENIC, SUSPENDED TOTAL (UG/L AS AS)
 ARSENIC, SUSPENDED (UG/L AS AS)

BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
 BARIUM, SUSPENDED (UG/L AS BA)

BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
 BARIUM, TOTAL (UG/L AS BA)

BARIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BA)
 BARIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BA)

BERYLLIUM, SUSPENDED RECOVERABLE (UG/L AS BE)
 BERYLLIUM, SUSPENDED (UG/L AS BE)

BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)
 BERYLLIUM, TOTAL (UG/L AS BE)

BERYLLIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BE)
 BERYLLIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BE)

BETA, SUSPENDED TOTAL (PCI/L)
 BETA, SUSPENDED (PCI/L)

BETA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 BETA, SUSPENDED, COUNTING ERROR (PCI/L)

BISMUTH, SUSPENDED TOTAL (UG/L AS BI)
 BISMUTH, SUSPENDED (UG/L AS BI)

BORON, SUSPENDED RECOVERABLE (UG/L AS B)
 BORON, SUSPENDED (UG/L AS B)

BORON, TOTAL RECOVERABLE (UG/L AS B)
 BORON, TOTAL (UG/L AS B)

BORON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS B)
 BORON, TOTAL IN BOTTOM MATERIAL (UG/G AS B)

CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)
 CADMIUM, SUSPENDED (UG/L AS CD)

CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)
 CADMIUM, TOTAL (UG/L AS CD)

CADMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CD)
 CADMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CD)

CALCIUM, TOTAL RECOVERABLE (MG/L AS CA)
 CALCIUM, TOTAL (MG/L AS CA)

CHANGES IN SELECTED WATER-QUALITY PARAMETERS--Continued

NEW TERMINOLOGY -- FIRST LINE
OLD TERMINOLOGY -- SECOND LINE

CALCIUM 45, SUSPENDED TOTAL (PCI/L)
CALCIUM 45, SUSPENDED (PCI/L)

CALCIUM 45, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
CALCIUM 45, SUSPENDED, COUNTING ERROR (PCI/L)

CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
CARBON, ORGANIC, SUSPENDED (MG/L AS C)

CARBON, INORGANIC, SUSPENDED TOTAL (MG/L AS C)
CARBON, INORGANIC, SUSPENDED (MG/L AS C)

CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
CARBON, ORGANIC, SUSPENDED (MG/L AS C)

CARBON, INORGANIC PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS C)
CARBON, INORGANIC PLUS ORGANIC, SUSPENDED (MG/L AS C)

CESIUM, SUSPENDED TOTAL (UG/L AS CS)
CESIUM, SUSPENDED (UG/L AS CS)

CESIUM 137, SUSPENDED TOTAL (PCI/L)
CESIUM 137, SUSPENDED (PCI/L)

CESIUM 137, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
CESIUM 137, SUSPENDED, COUNTING ERROR (PCI/L)

CESIUM 134, SUSPENDED TOTAL (PCI/L)
CESIUM 134, SUSPENDED (PCI/L)

CESIUM 134, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
CESIUM 134, SUSPENDED, COUNTING ERROR (PCI/L)

CHLORDANE, SUSPENDED TOTAL (UG/L)
CHLORDANE, SUSPENDED (UG/L)

CHROMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CR)
CHROMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CR)

CHROMIUM, SUSPENDED RECOVERABLE (UG/L AS CR)
CHROMIUM, SUSPENDED (UG/L AS CR)

CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
CHROMIUM, TOTAL (UG/L AS CR)

COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)
COBALT, SUSPENDED (UG/L AS CO)

COBALT, TOTAL RECOVERABLE (UG/L AS CO)
COBALT, TOTAL (UG/L AS CO)

COBALT, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CO)
COBALT, TOTAL IN BOTTOM MATERIAL (UG/G AS CO)

COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)
COPPER, SUSPENDED (UG/L AS CU)

COPPER, TOTAL RECOVERABLE (UG/L AS CU)
COPPER, TOTAL (UG/L AS CU)

COPPER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CU)
COPPER, TOTAL IN BOTTOM MATERIAL (UG/G AS CU)

DDD, SUSPENDED TOTAL (UG/L)
DDD, SUSPENDED (UG/L)

DDE, SUSPENDED TOTAL (UG/L)
DDE, SUSPENDED (UG/L)

DDT, SUSPENDED TOTAL (UG/L)
DDT, SUSPENDED (UG/L)

DIAZINON, SUSPENDED TOTAL (UG/L)
DIAZINON, SUSPENDED (UG/L)

DIELDRIN, SUSPENDED TOTAL (UG/L)
DIELDRIN, SUSPENDED (UG/L)

ENDRIN, SUSPENDED TOTAL (UG/L)
ENDRIN, SUSPENDED (UG/L)

CHANGES IN SELECTED WATER-QUALITY PARAMETERS--Continued

NEW TERMINOLOGY -- FIRST LINE
 OLD TERMINOLOGY -- SECOND LINE

GALLIUM, SUSPENDED TOTAL (UG/L AS GA)
 GALLIUM, SUSPENDED (UG/L AS GA)

GERMANIUM, SUSPENDED TOTAL (UG/L AS GE)
 GERMANIUM, SUSPENDED (UG/L AS GE)

GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
 (PCI/L AS U NATURAL)
 GROSS ALPHA RADIOACTIVITY, SUSPENDED
 (PCI/L AS U NATURAL)

GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
 (PCI/G AS U NATURAL)
 GROSS ALPHA RADIOACTIVITY, SUSPENDED
 (PCI/G AS U NATURAL)

GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
 (UG/G AS U NATURAL)
 GROSS ALPHA RADIOACTIVITY, SUSPENDED
 (UG/G AS U NATURAL)

GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
 (UG/L AS U NATURAL)
 GROSS ALPHA RADIOACTIVITY, SUSPENDED
 (UG/L AS U NATURAL)

GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
 (PCI/L AS SR/YT-90)
 GROSS BETA RADIOACTIVITY, SUSPENDED
 (PCI/L AS SR/YT-90)

GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
 (PCI/L AS CS-137)
 GROSS BETA RADIOACTIVITY, SUSPENDED
 (PCI/L AS CS-137)

GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
 (PCI/G AS SR/YT-90)
 GROSS BETA RADIOACTIVITY, SUSPENDED
 (PCI/G AS SR/YT-90)

GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
 (PCI/G AS CS-137)
 GROSS BETA RADIOACTIVITY, SUSPENDED
 (PCI/G AS CS-137)

HEPTACHLOR, SUSPENDED TOTAL (UG/L)
 HEPTACHLOR, SUSPENDED (UG/L)

HEPTACHLOR EPOXIDE, SUSPENDED TOTAL (UG/L)
 HEPTACHLOR EPOXIDE, SUSPENDED (UG/L)

IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
 IRON, SUSPENDED (UG/L AS FE)

IRON, TOTAL RECOVERABLE (UG/L AS FE)
 IRON, TOTAL (UG/L AS FE)

IRON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS FE)
 IRON, TOTAL IN BOTTOM MATERIAL (UG/G AS FE)

IRON 59, SUSPENDED TOTAL (PCI/L)
 IRON 59, SUSPENDED (PCI/L)

IRON 59, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 IRON 59, SUSPENDED, COUNTING ERROR (PCI/L)

ISODRIN, SUSPENDED TOTAL (UG/L)
 ISODRIN, SUSPENDED (UG/L)

LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
 LEAD, SUSPENDED (UG/L AS PB)

LEAD, TOTAL RECOVERABLE (UG/L AS PB)
 LEAD, TOTAL (UG/L AS PB)

LEAD, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS PB)
 LEAD, TOTAL IN BOTTOM MATERIAL (UG/G AS PB)

LINDANE, SUSPENDED TOTAL (UG/L)
 LINDANE, SUSPENDED (UG/L)

CHANGES IN SELECTED WATER-QUALITY PARAMETERS--Continued

NEW TERMINOLOGY -- FIRST LINE
OLD TERMINOLOGY -- SECOND LINE

LITHIUM, SUSPENDED RECOVERABLE (UG/L AS LI)
LITHIUM, SUSPENDED (UG/L AS LI)

LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)
LITHIUM, TOTAL (UG/L AS LI)

MAGNESIUM, SUSPENDED RECOVERABLE (MG/L AS MG)
MAGNESIUM, SUSPENDED (MG/L AS MG)

MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)
MAGNESIUM, TOTAL (MG/L AS MG)

MALATHION, SUSPENDED TOTAL (UG/L)
MALATHION, SUSPENDED (UG/L)

MANGANESE, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MN)
MANGANESE, TOTAL IN BOTTOM MATERIAL (UG/G AS MN)

MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)
MANGANESE, SUSPENDED (UG/L AS MN)

MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
MANGANESE, TOTAL (UG/L AS MN)

MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)
MERCURY, SUSPENDED (UG/L AS HG)

MERCURY, TOTAL RECOVERABLE (UG/L AS HG)
MERCURY, TOTAL (UG/L AS HG)

MERCURY, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS HG)
MERCURY, TOTAL IN BOTTOM MATERIAL (UG/G AS HG)

METHYL PARATHION, SUSPENDED TOTAL (UG/L)
METHYL PARATHION, SUSPENDED (UG/L)

MIREX, SUSPENDED TOTAL (UG/L)
MIREX, SUSPENDED (UG/L)

MOLYBDENUM, SUSPENDED RECOVERABLE (UG/L AS MU)
MOLYBDENUM, SUSPENDED (UG/L AS MU)

MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MU)
MOLYBDENUM, TOTAL (UG/L AS MU)

MOLYBDENUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MU)
MOLYBDENUM, TOTAL IN BOTTOM MATERIAL (UG/G AS MU)

NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
NICKEL, SUSPENDED (UG/L AS NI)

NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
NICKEL, TOTAL (UG/L AS NI)

NICKEL, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS NI)
NICKEL, TOTAL IN BOTTOM MATERIAL (UG/G AS NI)

NITROGEN, AMMONIA PLUS ORGANIC, DISSOLVED (MG/L AS N)
NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)

NITROGEN, AMMONIA PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS N)
NITROGEN, KJELDAHL, SUSPENDED (MG/L AS N)

NITROGEN, AMMONIA PLUS ORGANIC, TOTAL (MG/L AS N)
NITROGEN, KJELDAHL, TOTAL (MG/L AS N)

NITROGEN, AMMONIA PLUS ORGANIC,
TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
NITROGEN, KJELDAHL, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)

PARATHION, SUSPENDED TOTAL (UG/L)
PARATHION, SUSPENDED (UG/L)

PCB, SUSPENDED TOTAL (UG/L)
PCB, SUSPENDED (UG/L)

RADIUM 226, SUSPENDED TOTAL (PCI/L)
RADIUM 226, SUSPENDED (PCI/L)

RHODAMINE WT, SUSPENDED TOTAL (UG/L)
RHODAMINE WT, SUSPENDED (UG/L)

CHANGES IN SELECTED WATER-QUALITY PARAMETERS--Continued

NEW TERMINOLOGY -- FIRST LINE
 OLD TERMINOLOGY -- SECOND LINE

RUBIDIUM, SUSPENDED TOTAL (UG/L AS RB)
 RUBIDIUM, SUSPENDED (UG/L AS RB)

SCANDIUM 46, SUSPENDED TOTAL (PCI/L)
 SCANDIUM 46, SUSPENDED (PCI/L)

SCANDIUM 46, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 SCANDIUM 46, SUSPENDED, COUNTING ERROR (PCI/L)

SELENIUM, SUSPENDED TOTAL (UG/L AS SE)
 SELENIUM, SUSPENDED (UG/L AS SE)

SELENIUM 75, SUSPENDED TOTAL (PCI/L)
 SELENIUM 75, SUSPENDED (PCI/L)

SELENIUM 75, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 SELENIUM 75, SUSPENDED, COUNTING ERROR (PCI/L)

SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
 SILVER, SUSPENDED (UG/L AS AG)

SILVER, TOTAL RECOVERABLE (UG/L AS AG)
 SILVER, TOTAL (UG/L AS AG)

SILVER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AG)
 SILVER, TOTAL IN BOTTOM MATERIAL (UG/G AS AG)

SILVER 110, SUSPENDED TOTAL (PCI/L)
 SILVER 110, SUSPENDED (PCI/L)

SILVER 110, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 SILVER 110, SUSPENDED, COUNTING ERROR (PCI/L)

SILVEX, SUSPENDED TOTAL (UG/L)
 SILVEX, SUSPENDED (UG/L)

SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED TOTAL (MG/L)
 SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED (MG/L)

STRONTIUM, SUSPENDED RECOVERABLE (UG/L AS SR)
 STRONTIUM, SUSPENDED (UG/L AS SR)

STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)
 STRONTIUM, TOTAL (UG/L AS SR)

STRONTIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS SR)
 STRONTIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS SR)

STRONTIUM 90, SUSPENDED TOTAL (PCI/L)
 STRONTIUM 90, SUSPENDED (PCI/L)

STRONTIUM 90, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 STRONTIUM 90, SUSPENDED, COUNTING ERROR (PCI/L)

SULFUR 35, SUSPENDED TOTAL (PCI/L)
 SULFUR 35, SUSPENDED (PCI/L)

SULFUR 35, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 SULFUR 35, SUSPENDED, COUNTING ERROR (PCI/L)

TIN, SUSPENDED RECOVERABLE (UG/L AS SN)
 TIN, SUSPENDED (UG/L AS SN)

TIN, TOTAL RECOVERABLE (UG/L AS SN)
 TIN, TOTAL (UG/L AS SN)

TITANIUM, SUSPENDED TOTAL (UG/L AS TI)
 TITANIUM, SUSPENDED (UG/L AS TI)

TOXAPHENE, SUSPENDED TOTAL (UG/L)
 TOXAPHENE, SUSPENDED (UG/L)

TRITIUM, SUSPENDED TOTAL (PCI/L)
 TRITIUM, SUSPENDED (PCI/L)

TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 TRITIUM, SUSPENDED, COUNTING ERROR (PCI/L)

TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (TRITIUM UNITS)
 TRITIUM, SUSPENDED, COUNTING ERROR (TRITIUM UNITS)

CHANGES IN SELECTED WATER-QUALITY PARAMETERS--Continued

NEW TERMINOLOGY -- FIRST LINE
OLD TERMINOLOGY -- SECOND LINE

TRITIUM, SUSPENDED TOTAL (TRITIUM UNITS)
TRITIUM, SUSPENDED (TRITIUM UNITS)

URANIUM, NATURAL, SUSPENDED TOTAL (UG/L AS U NATURAL)
URANIUM, NATURAL, SUSPENDED (UG/L AS U NATURAL)

VANADIUM, SUSPENDED TOTAL (UG/L AS V)
VANADIUM, SUSPENDED (UG/L AS V)

ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)
ZINC, SUSPENDED (UG/L AS ZN)

ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
ZINC, TOTAL (UG/L AS ZN)

ZINC, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS ZN)
ZINC, TOTAL IN BOTTOM MATERIAL (UG/G AS ZN)

ZIRCONIUM, SUSPENDED TOTAL (UG/L AS ZR)
ZIRCONIUM, SUSPENDED (UG/L AS ZR)

2,4-D, SUSPENDED TOTAL (UG/L)
2,4-D, SUSPENDED (UG/L)

2,4,5-T, SUSPENDED TOTAL (UG/L)
2,4,5-T, SUSPENDED (UG/L)

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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)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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