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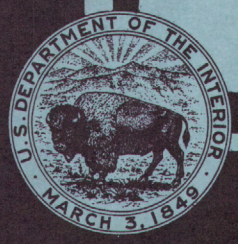

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AZ-75-1

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CALENDAR FOR WATER YEAR 1975

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Water Resources Data for Arizona

Water Year 1975

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16. Abstracts Water resources data for the 1975 water year for Arizona consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels of observation wells. This report contains discharge records for 221 gaging stations, 185 crest-stage partial-record stations, and discharge measurements at 60 miscellaneous sites; stage records at 3 gaging stations; stage and contents records for 10 lakes and reservoirs; 17 supplementary records, included with gaging-station records, consisting of monthend or monthly stage, contents, and evaporation of lakes and reservoirs, diversions, and return flows; water-quality records for 58 continuous-record stations, 4 partial-record stations, and 30 miscellaneous sites; and water levels for 95 observation wells. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating Federal and State agencies in Arizona.

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PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of Arizona and with other agencies by personnel of the Arizona district of the Water Resources Division under the supervision of H. M. Babcock, District Chief, and E. R. Leeson, Regional Hydrologist, and W. H. Robinson, Acting 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 G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

UNITED STATES DEPARTMENT OF THE INTERIOR

THOMAS S. KLEPPE, Secretary

GEOLOGICAL SURVEY

V. E. McKelvey, Director

Prepared in cooperation with

Arizona Water Commission
Arizona Department of Transportation—Highways Division
Arizona Game and Fish Department
Salt River Valley Water Users' Association
Flood Control District of Maricopa County
Gila Valley Irrigation District
San Carlos Irrigation and Drainage District
Lyman Water Company
Show Low Irrigation Company
Pima County
Maricopa County Municipal Water Conservation District No. 1
City of Safford
City of Tucson
Metropolitan Water District of Southern California
Corps of Engineers, U.S. Army
Bureau of Reclamation, U.S. Department of the Interior
Environmental Protection Agency
Soil Conservation Service, U.S. Department of Agriculture

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301 W. Congress Street
Tucson, Arizona 85701

1976

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[Letters after station name designate type of data: (b) biological; (c) chemical; (d) discharge; (e) elevation; (g) gage height; (m) microbiological (bacteria); (p) pesticide; (q) specific conductance (daily); (r) radiochemical; (s) suspended sediment; (t) water temperature (daily); (v) contents]

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WATER RESOURCES DATA FOR ARIZONA, 1975

INTRODUCTION

Water resources data for the 1975 water year for Arizona, as published in this report, consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels of observation wells. Also included are discharge data for crest-stage partial-record stations and water-quality data for partial-record stations. Location of the gaging stations is shown in figures 1, 5, and 6, and of water-quality stations in figures 2 and 5. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements or miscellaneous water-quality analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Arizona.

Records of discharge (or stage) of streams, and contents (or stage) of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." These water-supply papers were in an annual series through water year 1960 and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1970 in a series of water-supply papers entitled, "Ground-Water Levels in the United States."

Beginning with the 1961 water year and continuing through water year 1974, streamflow data have been released by the Geological Survey in annual reports on a State-boundary basis. Beginning with the 1964 water year, water-quality records have been similarly released in separate reports. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year,

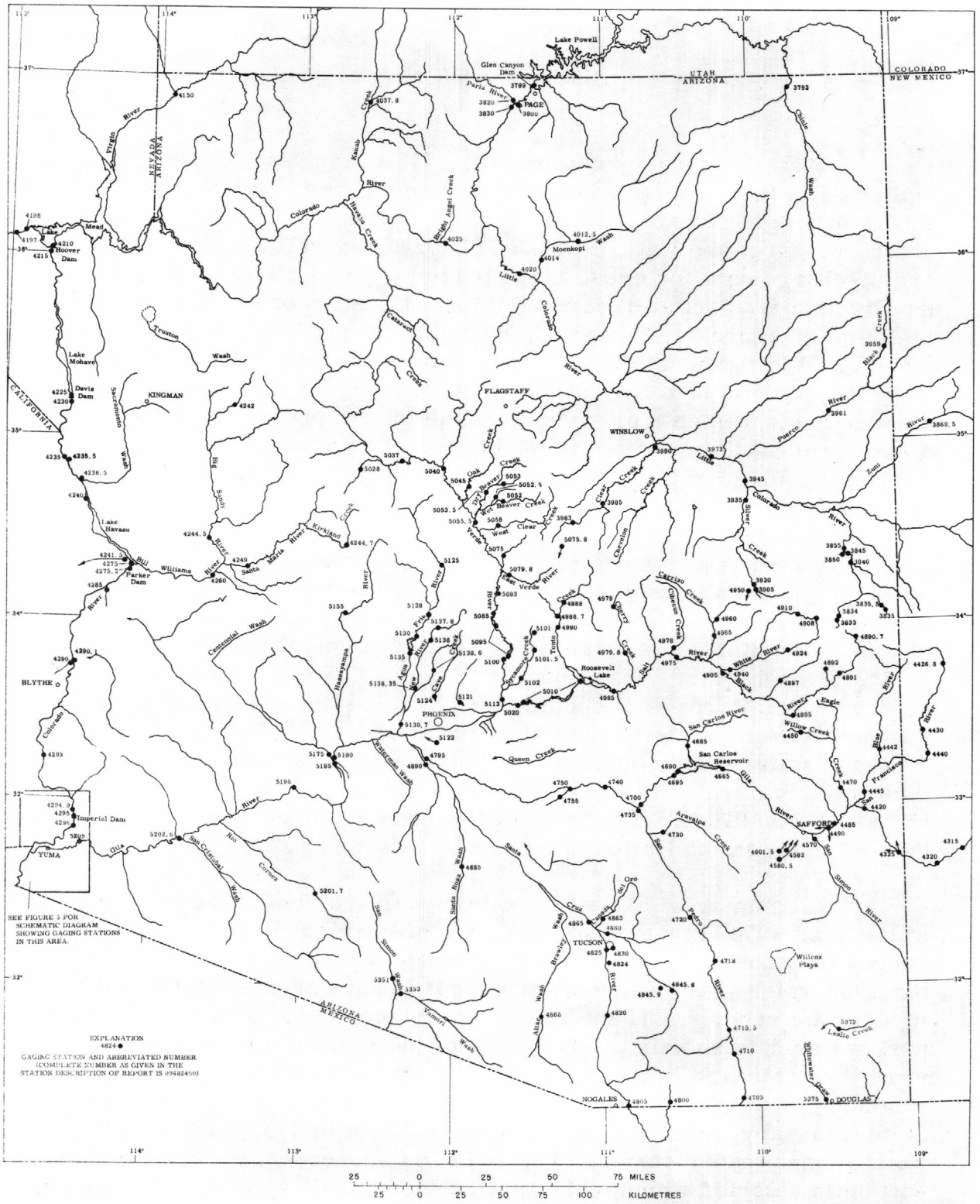

FIGURE 1. --MAP OF ARIZONA SHOWING LOCATION OF GAGING STATIONS.

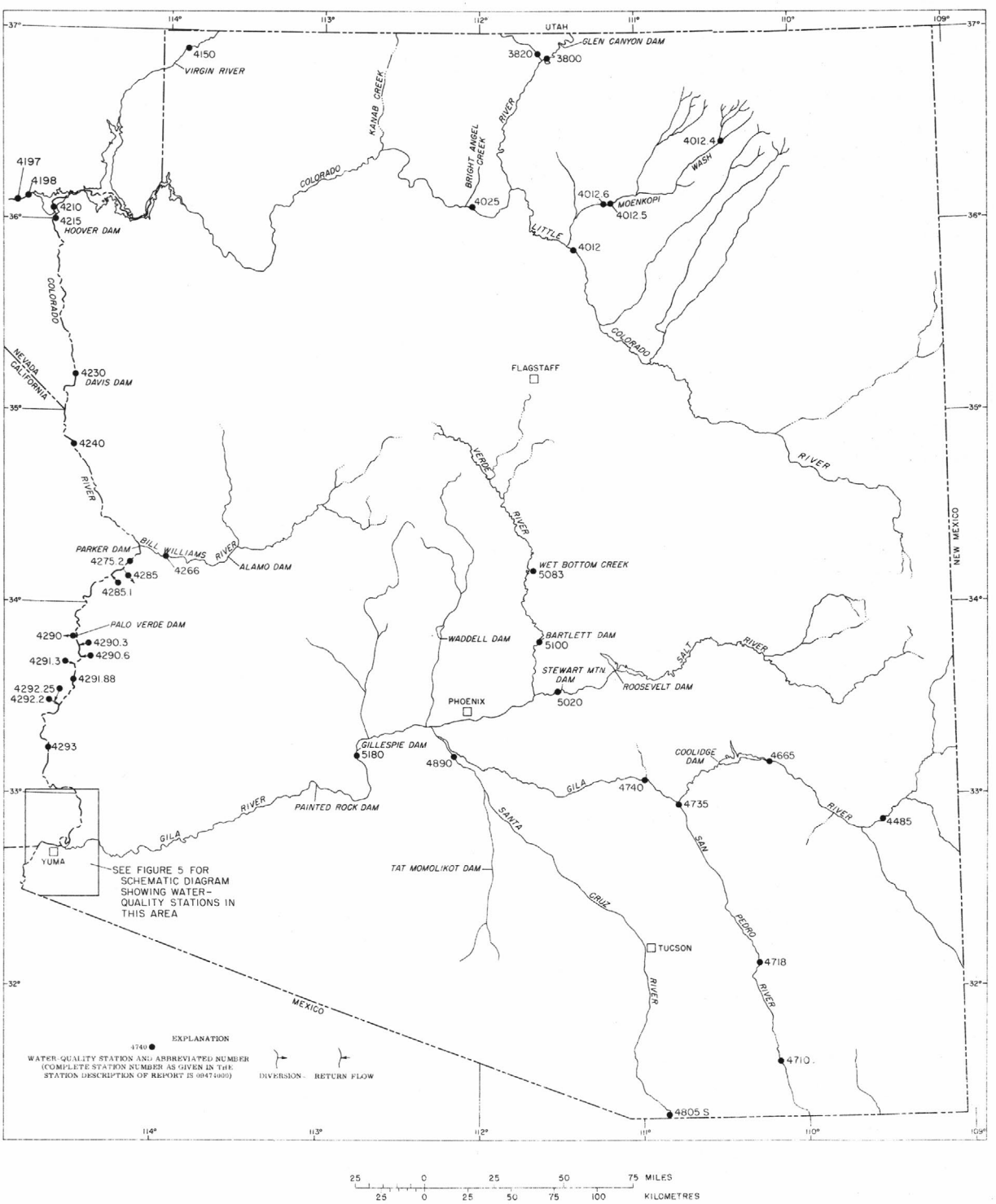

FIGURE 2. --MAP OF ARIZONA SHOWING LOCATION OF WATER-QUALITY STATIONS.

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COOPERATION

The U.S. Geological Survey and organizations of the State of Arizona have had cooperative agreements for the systematic collection of surface-water records since 1912. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Arizona Water Commission, W. E. Steiner, executive director.
Arizona Department of Transportation—Highways Division, W. N. Price, assistant director and State engineer.
Arizona Game and Fish Department, R. A. Jantzen, director.
Salt River Valley Water Users' Association, K. F. Abel, president, and R. J. McMullin, general manager.
Flood Control District of Maricopa County, H. P. Donald, chief engineer and general manager.
Gila Valley Irrigation District, S. L. Pace, president.
San Carlos Irrigation and Drainage District, C. L. Skousen, president, and N. M. Soma, district manager.
Lyman Water Company, C. A. Waite, president.
Show Low Irrigation Company, Chester Adams, secretary-treasurer.
Pima County Board of Supervisors, E. S. Walker, chairman.
Maricopa County Municipal Water Conservation District No. 1, S. L. Libby, president, and J. A. Falbo, secretary-manager.
City of Safford, O. O. Rawson, city manager, and G. B. Smith, manager of utilities and city engineer.
City of Tucson, Lewis Murphy, mayor, and D. K. Massingill, city engineer.

Metropolitan Water District of Southern California, J. H. Lauten, general manager, and C. E. Hildebrand, principal engineer.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 12 gaging stations published in this report; by the Bureau of Reclamation of the U.S. Department of the Interior for 8 stations; by the Soil Conservation Service of the U.S. Department of Agriculture for 1 station; and by the Federal Power Commission for 2 stations. Assistance in collecting records was furnished by the Arizona Public Service Co.

Organizations that supplied data are acknowledged in station descriptions.

DEFINITION OF TERMS

Terms related to streamflow and other hydrologic data, as used in this report, are defined below. Also see table 4, "Factors for conversion of English units to International System (SI) Units," on p. 40.

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 325,851 gallons.

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

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

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming,

rod-shaped bacteria, which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C±1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml (millilitres) of sample.

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

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C±1.0°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 shifting portion of fragmented alluvial material of which the streambed is composed.

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

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

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

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

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

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

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

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.

Continuing-record station is a specified site which meets at least one of the following conditions:

1. Chemical-quality samples collected monthly or more frequently.

2. Water-temperature measurements made once or more times daily.

3. Sediment-discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

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

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

Cubic foot per second (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second, and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

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

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

Instantaneous discharge is the discharge at a given time.

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

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

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

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

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

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

Milligrams per litre (mg/l, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre represents the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per litre by multiplying by the factors in table 1. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2.

Miscellaneous site is a location other than continuous- or partial-record stations where random discharge measurements are made or samples are collected to give better areal coverage of unusual flow events or water-quality conditions in a river basin.

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

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 multi-celled and are counted according to the number of contained cells per sample volume, usually millilitres (ml) or litres (l).

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 metres (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia as NH_4^{+1} . . .	.05544	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})	.00965
Bicarbonate (HCO_3^{-1}) .	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2}) . .	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})* . .	.03640
Carbonate (CO_3^{-2}) . . .	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-1})	.02821	Nitrate (NO_3^{-1})	.01613
Chromium (Cr^{+6})* . . .	.11539	Nitrite (NO_2^{-1})	.02174
Cobalt (Co^{+2})*	.03394	Phosphate (PO_4^{-3}) . .	.03159
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})* . . .	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO_4^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (Zn^{+2})*	.03060

*Constituent reported in micrograms per litre; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million*

(All values calculated to three significant figures)

Range of concentration in 1,000 mg/l	Divide by	Range of concentration in 1,000 mg/l	Divide by
0 - 8	1.00	411 - 424	1.26
8.05 - 24	1.01	427 - 440	1.27
24.2 - 40	1.02	443 - 457	1.28
40.5 - 56	1.03	460 - 473	1.29
56.5 - 72	1.04	476 - 489	1.30
72.5 - 88	1.05	492 - 506	1.31
88.5 - 104	1.06	508 - 522	1.32
105 - 120	1.07	524 - 538	1.33
121 - 136	1.08	540 - 554	1.34
137 - 152	1.09	556 - 570	1.35
153 - 169	1.10	572 - 585	1.36
170 - 185	1.11	587 - 602	1.37
186 - 200	1.12	604 - 617	1.38
201 - 217	1.13	619 - 634	1.39
218 - 232	1.14	636 - 650	1.40
234 - 248	1.15	652 - 666	1.41
250 - 264	1.16	668 - 682	1.42
266 - 280	1.17	684 - 698	1.43
282 - 297	1.18	700 - 715	1.44
299 - 313	1.19	717 - 730	1.45
315 - 329	1.20	732 - 747	1.46
331 - 345	1.21	749 - 762	1.47
347 - 361	1.22	765 - 780	1.48
363 - 378	1.23	782 - 796	1.49
380 - 393	1.24	798 - 810	1.50
395 - 409	1.25		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually millilitres (ml) or litres (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 streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

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

Particle-size classification, as 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, weight, or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

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 per 100 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 per 100 ml of sample.

Runoff in inches (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 discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times milligrams per litre times 0.0027.

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 foot above the bed) expressed as milligrams of dry sediment per litre of water-sediment mixture (mg/l).

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

Seston is the total suspended particulate matter in water. The concentration of particulate matter has a profound effect upon the optical properties of the water, and upon the concentration of dissolved materials in the water. Their concentrations are expressed as number of colonies per 100 ml of sample.

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

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

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimetre at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per litre) is about 65

percent of the specific conductance (in micromhos per centimetre at 25°C). This relation is not constant from stream to stream, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

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

Substrate is the physical surface upon which an organism lives.

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

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

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 location of the thermograph or a digital mechanism that automatically records water temperature 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 water year.

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

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

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

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 summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

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

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

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 that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin. Included in this program in Arizona is station 09508300, Wet Bottom Creek near Childs.

National stream-quality accounting network is designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in stream quality. Included in this network in Arizona are stations 09380000, Colorado River at Lees Ferry; 09401200, Little Colorado River at Cameron; 09421500, Colorado River below Hoover Dam, Ariz.-Nev.; 09426600, Bill Williams River near Planet; 09429490, Colorado River above Imperial Dam, Ariz.-Calif.; 09466500, Gila River at Calva; 09473500, San Pedro River at Winkelman; 09474000, Gila River at Kelvin; 09489000, Santa Cruz River near Laveen; 09502000, Salt River below Stewart Mountain Dam; 09510000, Verde River below Bartlett Dam; 09518000, Gila River above diversions, at Gillespie Dam; 09520700, Gila River near mouth, near Yuma; and 09522000, Colorado River at northerly international boundary above Morelos Dam, near Andrade, Calif.

Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides. Included in this network in Arizona are stations 09429490, Colorado River above Imperial Dam, Ariz.-Calif.; 09518000, Gila River above diversions, at Gillespie Dam; and 09522000, Colorado River at northerly international boundary above Morelos Dam, near Andrade, Calif.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States. Included in this network in Arizona is station 09429490, Colorado River above Imperial Dam, Ariz.-Calif.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example, ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in μg/l (micrograms per litre), radium as radium-226 in PC/L, (pCi/l, picocuries per litre), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per litre (μg/l). Gross alpha and beta radioactivity associated with the fine-grained (silt and clay sized) sediments in the samples are also determined.

A 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).

Tritium network is a network of tritium-sampling 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. Included in this network in Arizona is station 09429490, Colorado River above Imperial Dam, Ariz.-Calif.

Tritium concentrations are reported in terms of tritium units (TU); one TU is equal to 3.2436 picocuries per litre.

DOWNSTREAM ORDER AND STATION NUMBERS

Records are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the lists of gaging stations and water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station, partial-record station, and water-quality 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 continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the 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 09402500, includes the part number "09" and a 6-digit station number. In this report the complete number 09402500 appears just to the left of the station name. 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. All records for a drainage basin encompassing more than one State could 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 MISCELLANEOUS SURFACE-WATER-QUALITY SITES

Downstream order station numbers are not assigned to miscellaneous surface-water sites where only random water-quality samples or discharge measurements are taken.

The miscellaneous surface-water-quality site numbering system of the Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the 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 is a sequential number for sites within a 1-second grid. For example, the station number for a miscellaneous surface-water-quality site with lat 34°28'47", long 112°41'04" would be 342847112410400. In the event that the latitude-longitude coordinates for two or more miscellaneous sites are the same, sequential numbers "01," "02," etc., are assigned.

NUMBERING SYSTEM FOR GROUND-WATER WELLS

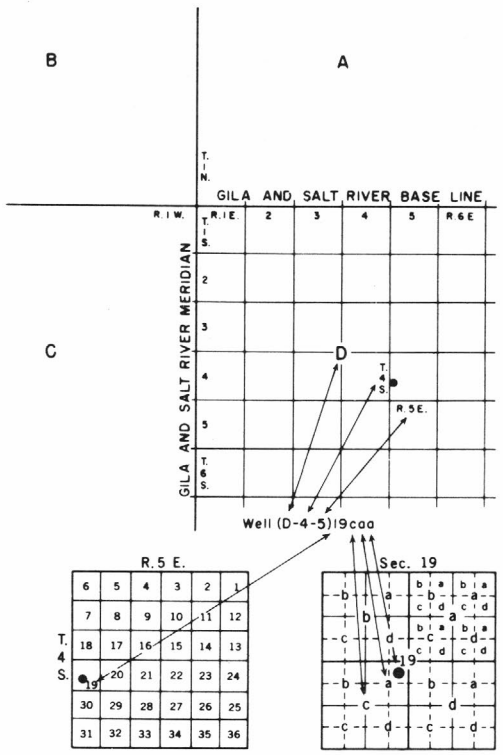
The well-numbering system of the Geological Survey is the same as that for miscellaneous surface-water-quality sites described in the above section, except that in Arizona the 2-digit sequential number is used to identify deepenings of a well. Initially, all wells are assigned a sequential number of 01. Subsequent deepenings are indicated by sequential numbers of 02, 03, etc.

In addition to the well number based on latitude and longitude, a local well number is given, as illustrated in figure 3.

EXPLANATION OF SURFACE-WATER RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that gives a continuous graph of the fluctuations (for digital recorders, a tape punched at 15-, 30-, or 60-minute intervals) or from direct readings on a nonrecording gage. Measurements of discharge are made using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurement of stream discharge. (See also SELECTED REFERENCES.) Surface areas of lakes or



The well numbers used by the Geological Survey in Arizona are in accordance with the Bureau of Land Management's system of land subdivision. The land survey in Arizona is based on the Gila and Salt River meridian and base line, which divide the State into four quadrants. These quadrants are designated counterclockwise by the capital letters A, B, C, and D. All land north and east of the point of origin is in A quadrant, that north and west in B quadrant, that south and west in C quadrant, and that south and east in D quadrant. The first digit of a well number indicates the township, the second the range, and the third the section in which the well is situated. The lowercase letters a, b, c, and d after the section number indicate the well location within the section. The first letter denotes a particular 160-acre tract, the second the 40-acre tract, and the third the 10-acre tract. These letters also are assigned in a counterclockwise direction, beginning in the northeast quarter. If the location is known within the 10-acre tract, three lowercase letters are shown in the well number. In the example shown, well number (D-4-5)19caa designates the well as being in the NE$\frac{1}{4}$NE$\frac{1}{4}$SW$\frac{1}{4}$ sec. 19, T. 4 S., R. 5 E. Where more than one well is within a 10-acre tract, consecutive numbers beginning with 1 are added as suffixes.

reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For a stream-gaging station, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The application of the daily mean gage heights to the rating table gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on 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 determing discharge. Information required for determining 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 determining 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 being 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. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements.

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, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of basic data. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the inside of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, and general remarks. 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." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous

gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey, unless otherwise qualified. 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. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or the minimum contents), and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year" the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record" the data given are for the period of record given in the PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds 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. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of water-quality records 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 also given under "REMARKS."

Previously published 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 "REVISIONS (WATER YEARS)" 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, 1933 stands for the

water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that 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.

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

Skeleton capacity tables are published for all reservoirs for which records of contents are published on a daily basis.

The daily tables for stream-gaging stations give the discharge corresponding to the daily mean gage height unless there are large or rapid changes in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day. For digital recorders, the daily mean discharge is always the average of the discharges at each punched reading. For stations equipped with nonrecording gages, the daily discharge corresponds to once-daily readings of the gage or to the mean of twice-daily readings; but for periods of rapidly changing stage the discharge is determined from a gage-height graph based on gage readings.

The daily tables for reservoir stations give the contents corresponding to the water-surface elevation at a given time, usually at 2400 each day. For some reservoirs the elevation at a given time is given in the daily table.

The monthly summary is given below the daily table. For stream-gaging stations 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 rainfall on the drainage basin is usually less than 20 inches.

For reservoir stations the monthly summary gives the elevation (or gage height) at the end of the month and the change in contents during the month. If elevation or gage height is given in the daily table, the monthly summary gives the contents at the end of the month, rather than the elevation or gage height. For some reservoirs a tabulation of monthly evaporation from the water surface also is included.

In the yearly summary below the monthly summary, the figures following MAX are the maximum daily discharges for the calendar and water years; likewise, those following MIN are the minimum daily discharges.

For reservoir stations the yearly summary gives the change in contents for the calendar year and for the water year. For some reservoirs the yearly evaporation also is included.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can 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 and 1:30 p. m. is 1330.

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

Surface-water data collected at partial-record stations and at miscellaneous sites are given in two tables at the end of this report. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at miscellaneous sites.

Accuracy of Data

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

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

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. 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 and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may differ greatly from natural runoff, due to the effects of diversion, consumptive use, regulation, evaporation, or other factors. However, because all the effects cannot be measured or evaluated, satisfactory adjustments generally cannot be made. For some stations, available figures of diversions or change in contents of reservoirs are included as supplemental data. Even at those stations where adjustments can be made, large errors in computed runoff may occur, if adjustments or unadjusted losses are large compared to the observed discharge.

Publications

In each water-supply paper entitled "Surface Water Supply of the United States" there is a list of the numbers of preceding water-supply papers containing surface-water data for the area covered by that

report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Arizona for the period October 1960 to September 1965 are in Water-Supply Papers 1925 and 1926. Records for the period October 1965 to September 1970 are in Water-Supply Papers 2125 and 2126.

Two series of summary reports entitled "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950, and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for Arizona are compiled in Water-Supply Paper 1313 through September 1950, and in Water-Supply Paper 1733 for October 1950 to September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other Data Available

More detailed information than that published for most of the gaging stations, such as 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.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in

conjunction with the computations of the chemical constituents and sediment loads in this report.

Descriptive statements are given for water-quality stations located at or near gaging stations. Given are location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks, in a format similar to that used for gaging stations.

Water-quality information is presented for chemical, biological, and microbiological quality, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium-adsorption ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton and periphyton organisms. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder (thermograph) furnished information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the U. S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per litre (mg/l) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per litre. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3.

In October 1968, the Geological Survey began reporting minor chemical constituents in micrograms per litre instead of milligrams per litre (see table 1).

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*

(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

* °C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown and others (1970). The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory (1971). Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar (1967), Lamar and others (1965), and Goerlitz and Brown (1972). The collection and analysis of aquatic biological and microbiological samples are described by Slack and others (1973).

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 the 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.

The dissolved-solids content of water is determined either directly by the "residue on evaporation" method (a water sample is filtered, evaporated to dryness, heated to 180°C, the residue weighed) or is calculated by summing the concentrations of individual constituents determined in a comprehensive analysis. During the evaporation of a water sample, approximately one half of the bicarbonate (usually a major dissolved-solids component) is lost as carbon dioxide gas and water vapor, and half is converted to carbonate and retained in the residue. Therefore, when the dissolved solids is calculated by summing individual constituents, the bicarbonate value, in mg/l, is multiplied by 0.492 in order to reflect this loss and to make the calculated sum and "residue on evaporation" values comparable.

When the dissolved-solids concentration is reported in an analysis in terms of "residue at 180°C" and "sum of constituents," the value for "tons per acre-foot" is calculated using the "residue at 180°C."

Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water

temperatures are taken about the same time each day when sample is collected. Large streams have a small diurnal temperature change while small, 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 continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day.

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 section.

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 are collected, daily loads of suspended sediment are 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 observation, 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 periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

Publications

The annual series of water-supply papers that contain information on quality of surface waters in Arizona are listed below.

Water year	WSP No.	Water year	WSP No.	Water year	WSP No.
1941	942	1951	1200	1961	1885
1942	950	1952	1253	1962	1945
1943	970	1953	1293	1963	1951
1944	1022	1954	1353	1964	1958
1945	1030	1955	1403	1965	1965
1946	1050	1956	1453	1966	1995
1947	1102	1957	1523	1967	2015
1948	1133	1958	1574	1968	2098
1949	1163	1959	1645	1969	2148
1950	1189	1960	1745	1970	2158

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of Data

Only ground-water level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on the grid system of latitude and longitude; and (2) a local number (see fig. 3) that is provided for continuity with older reports and for other use as dictated by local needs.

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

Water-level measurements in this report are given in feet below land-surface datum (lsd); 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. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

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

Publications

Publication of ground-water level data for the United States in water-supply papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single water-supply paper for each year covering the entire Nation was issued (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1970, separate water-supply papers were issued for 6 sections of the United States. Water-level data for Arizona are in the water-supply papers listed below, each report containing one or more calendar years of data. Data in this report are for the 12-month water year ending September 30.

Calendar year	WSP No.	Calendar year	WSP No.	Calendar year	WSP No.	Calendar year	WSP No.
1935	777	1941	941	1947	1101	1953	1270
1936	817	1942	949	1948	1131	1954	1326
1937	840	1943	991	1949	1161	1955	1409
1938	845	1944	1021	1950	1170	1956-60	1770
1939	886	1945	1028	1951	1196	1961-65	1855
1940	911	1946	1076	1952	1226	1966-70	2010

Information about reports and other data on ground water in Arizona may be obtained from the district office, at the address given on the back of the title page.

HYDROLOGIC CONDITIONS

As is common in Arizona, streamflow varied greatly in the 1975 water year—from month to month throughout the year and from place to place in the State. The variations are related to differences in precipitation, temperature, topography, and geology. The yearly mean discharge at six key gaging stations ranged from 61 to 171 percent of the median of yearly mean discharge. The median of the yearly mean discharge is defined as the middle value of discharge when arranged in order of size. For the index stations, the median is computed from the yearly mean discharges for the 1931-60 period of record.

Streamflow was deficient at one of the six index stations in 1975, and excessive at one index station. By contrast, in 1974, streamflow was deficient at five index stations.

Flows were excessive at four index stations in November, and deficient at five index stations in August.

Monthly mean discharge of Gila River at head of Safford Valley was record high in September; records have been collected at this site for more than 60 years.

The yearly mean discharge for the 1975 water year and the relation to the median of yearly mean discharges for the period 1931-60 for six index gaging stations are given below.

Station	Discharge (acre-feet)	Percent of median
Little Colorado River near Cameron	112,400	66
Virgin River at Littlefield	111,200	76
Gila River at head of Safford Valley, near Solomon.	349,000	*171
San Pedro River at Charleston	22,230	†61
Salt River near Roosevelt	610,300	156
Verde River below Tangle Creek, above Horseshoe Dam	270,100	94

*Excessive.
†Deficient.

The discharge of the Colorado River near Grand Canyon was 9,529,000 acre-feet (11,700 hm^3); the flow of the Colorado River at this point is affected by storage in upstream reservoirs, and this gaging station is no longer used as an index station.

The discharge of the Santa Cruz River at Tucson was 5,800 acre-feet (7.15 hm^3) for the 1975 water year, which is 53 percent of the median flow for the period of record, 1906-75. The Santa Cruz River is an intermittent stream subject to large variances in flow, from place to place along the river and from time to time; for example, the flow for 1965 was only 9 percent of median and for 1972 only 52 percent of median, whereas for 1966 and 1968 the flow was 372 and 351 percent of median, respectively.

Storage increased in some major reservoirs during the 1975 water year, and decreased in some reservoirs. Change in contents during the year and percent of average contents on September 30 for the period of record for several reservoirs are shown below.

Reservoir	Change in contents, 1974-75 (acre-feet)	Percent of average contents on September 30
Lake Powell	+2,192,000	--
Lakes Mead-Mohave	+801,000	110
San Carlos Reservoir . . .	-139,700	112
Salt-Verde system	+63,000	150
Lake Pleasant	-37,740	62

Diversions of streamflow for irrigation of Arizona lands during the 1975 water year totaled 3,142,000 acre-feet (3,880 hm^3), slightly less than in 1974. About 1,888,000 acre-feet (2,330 hm^3) was diverted from the Colorado River for use by the Colorado River Indian Reservation, the Gila Project, and the Yuma Project. About 707,100 acre-feet (872 hm^3) of the water diverted from the Colorado River was returned to the river or discharged across the Arizona-Sonora international boundary. About 1,254,000 acre-feet (1,550 hm^3) of streamflow was diverted from the Gila River basin, for use in Safford Valley, on the San Carlos Project, and on the Salt River Project.

Figure 4 shows the discharge for the 1975 water year compared with the median runoff for the period 1931-60 at three representative gaging stations for which long-term records are available.

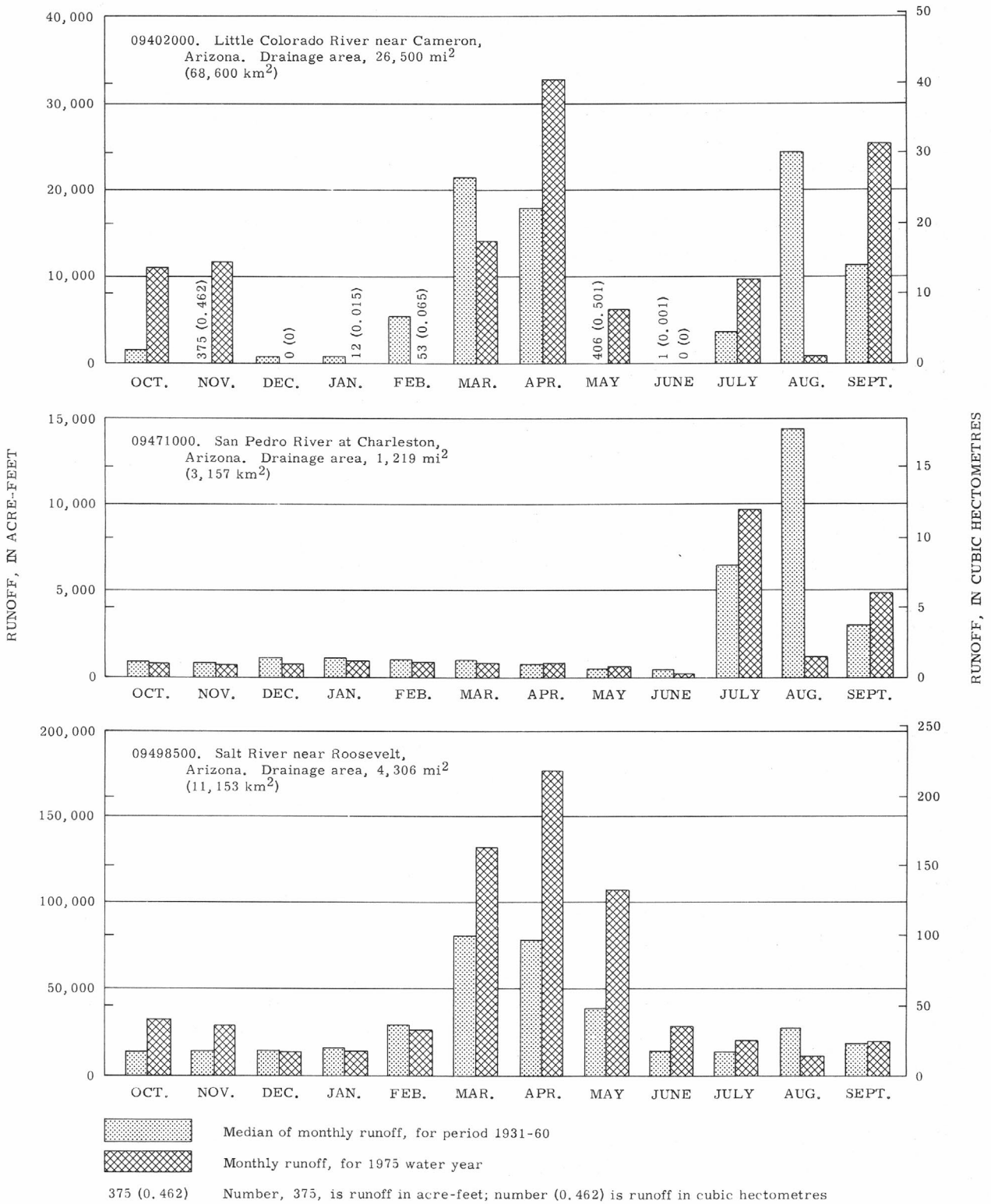


FIGURE 4.--RUNOFF DURING 1975 WATER YEAR COMPARED WITH MEDIAN RUNOFF FOR PERIOD 1931-60 FOR THREE REPRESENTATIVE GAGING STATIONS.

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Table 4.--Factors for conversion of English units to International System (SI) Units

[The following factors may be used to convert the English units published herein to the International System (SI) of Units]

Multiply English units	By	To obtain SI units
feet (ft)	0.3048	meters (m)
miles (mi)	1.609	kilometers (km)
acres	4047	square meters (m^2)
	.4047	square hectometer (hm^2)
	.004047	square kilometers (km^2)
square miles (mi^2)	2.590	square kilometers (km^2)
gallons (gal)	3.785×10^{-3}	cubic meters (m^3)
million gallons (10^6 gal)	3785	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	.02832	cubic meters (m^3)
cfs-day (ft^3/s-day)	2447	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1233	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
cubic feet per second (ft^3/s)	.02832	cubic meters per second (m^3/s)
tons (short)	.9072	tonnes (t)

09379200. Chinle Creek near Mexican Water, Ariz.

LOCATION.--Lat 36°56'38", long 109°42'36", in sec.19, T.41 N., R.25 E. (unsurveyed), Apache County, in Navajo Indian Reservation, in midstream 150 ft (46 m) upstream from bridge on U.S. Highway 160, 3 mi (5 km) upstream from Walker Creek, 4 mi (6 km) southwest of Mexican Water, 5 mi (8 km) downstream from confluence of Chinle Wash and Laguna Creek, and 6 mi (10 km) upstream from Arizona-Utah State line.

DRAINAGE AREA.--3,660 mi^2 (9,480 km^2), approximately, of which 360 mi^2 (932 km^2) is noncontributing.

PERIOD OF RECORD.--October 1964 to current year. Prior to October 1970 published as Chinle Wash near Mexican Water.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,720 ft (1,439 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 18.7 ft^3/s (0.530 m^3/s), 13,550 acre-ft/yr (16.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,680 ft^3/s (104 m^3/s) about July 13 (gage height, 6.1 ft or 1.86 m, from profile past gage), from rating curve extended above 600 ft^3/s (17 m^3/s) on basis of slope-area measurements at gage heights 5.4, 6.1 and 7.55 ft (1.65, 1.86 and 2.301 m); no flow May 26 to July 10.
Period of record: Maximum discharge, 9,880 ft^3/s (280 m^3/s) Sept. 7, 1970 (gage height, 7.55 ft or 2.301 m), from rating curve extended above 600 ft^3/s (17 m^3/s) on basis of slope-area measurements at gage heights 5.4 and 7.55 ft (1.65 and 2.301 m); no flow at times in each year. The flood of Sept. 7, 1970, is the highest since at least 1950 (information from a local resident).

REMARKS.--Records poor. Some diversions upstream for irrigation, stock tanks, and domestic use. Many Farms Reservoir, about 25 mi (40 km) upstream, was built in 1939 with an original capacity of 25,000 acre-ft (30.8 hm^3). The reservoir provides off-channel storage for irrigation of about 1,600 acres (6.48 km^2).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	25	2.7	1.4	3.0	17	50	20		0	14	.90
2	2.0	31	2.2	1.0	4.0	44	27	20		0	2.0	.60
3	2.0	93	2.6	1.6	2.0	223	15	100		0	1.0	0
4	1.8	72	2.7	1.5	5.0	195	10	50		0	.50	0
5	2.1	27	3.0	1.5	4.0	100	6.0	197		0	.50	.90
6	4.3	3.0	10	1.5	4.0	20	175	288		0	.50	1.1
7	2.7	3.0	10	1.5	3.0	13	222	124		0	.50	1.4
8	2.1	14	5.5	1.5	2.0	18	150	20		0	.50	1.8
9	2.2	43	5.5	1.5	2.0	49	60	79		0	.50	173
10	2.7	5.0	4.1	1.5	2.0	34	30	230		0	.50	100
11	5.6	5.0	.70	1.0	2.0	25	10	282		10	.50	18
12	3.7	5.0	1.5	1.0	2.0	30	4.0	230		20	.50	158
13	8.4	5.0	1.4	1.0	2.0	45	2.0	266		2000	.50	168
14	24	5.0	.60	.50	2.0	41	2.0	186		1000	.50	388
15	121	5.0	1.2	.40	2.0	51	2.0	136		450	.50	200
16	17	5.0	1.0	.30	2.0	272	2.0	108		150	.50	60
17	9.0	5.0	1.0	.30	2.0	64	2.0	172		80	.50	10
18	2.0	5.0	1.0	.30	2.0	15	2.0	238		35	.50	7.0
19	2.0	4.8	1.2	.30	2.0	4.0	2.0	100		10	.50	7.0
20	2.0	4.8	1.0	.50	2.0	4.0	2.0	50		8.0	.50	6.0
21	2.0	4.3	1.4	1.0	2.0	1.0	2.0	20		7.0	.30	6.0
22	2.0	4.3	2.1	1.0	2.0	1.0	2.0	9.0		6.0	.30	6.0
23	2.0	4.8	1.1	1.0	2.0	1.0	2.0	4.0		5.0	.30	5.0
24	28	5.2	1.1	1.0	2.0	1.0	2.0	2.0		4.5	.30	5.0
25	10	4.5	2.7	1.0	2.0	1.0	2.0	1.0		2.7	.30	4.5
26	3.0	4.0	2.4	2.0	1.9	4.0	2.0	0		2.1	.30	4.0
27	19	2.4	2.2	3.0	36	4.0	111	0		1.4	.80	3.7
28	189	4.0	2.2	6.0	18	5.9	213	0		1.1	.80	3.5
29	118	2.7	1.2	4.0	---	48	100	0		1.7	.70	3.0
30	526	3.7	1.4	6.0	---	29	20	0		122	.90	2.7
31	184	---	1.5	4.0	---	56	---	0	---	90	1.1	---
TOTAL	1301.0	405.5	78.20	50.10	116.9	1415.9	1231.0	2932.0	0	4006.5	31.60	1345.10
MEAN	42.0	13.5	2.52	1.62	4.18	45.7	41.0	94.6	0	129	1.02	44.8
MAX	526	93	10	6.0	36	272	222	288	0	2000	14	388
MIN	1.4	2.4	.60	.30	1.9	1.0	2.0	0	0	0	.30	0
AC-FT	2580	804	155	99	232	2810	2440	5820	0	7950	63	2670

CAL YR 1974	TOTAL	3067.58	MEAN	8.40	MAX	526	MIN 0	AC-FT 6080
WTR YR 1975	TOTAL	12913.80	MEAN	35.4	MAX	2000	MIN 0	AC-FT 25610

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1000	4.13	646	9-14	1200	3.92	507
*7-13	unknown	†6.1	3,680				

* About.
† From profile past gage.
NOTE.--No gage-height record July 2-23.

09379900. Lake Powell at Glen Canyon Dam, Ariz.

LOCATION.--Lat 36°56'12", long 111°29'00", in sec.24, T.41 N., R.8 E., Coconino County, at Glen Canyon Dam on Colorado River, 900 ft (270 m) upstream from bridge on U.S. Highway 89, 1.4 mi (2.3 km) downstream from Wahweap Creek, 2 mi (3 km) northwest of Page, and 12 mi (19 km) downstream from Utah-Arizona State line.

DRAINAGE AREA.--107,700 sq mi (278,900 km^2), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Sept. 1, 1964, nonrecording gage at same site and datum.

EXTREMES (at 2400).--Current year: Maximum contents, 21,177,000 acre-ft (26,100 hm^3) July 25 (elevation, 3,674.93 ft or 1,120.119 m); minimum, 17,199,000 acre-ft (21,200 hm^3) Feb. 28 (elevation, 3,645.34 ft or 1,111.100 m).
Period of record: Maximum contents, 21,177,000 acre-ft (26,100 hm^3) July 25, 1975 (elevation, 3,674.93 ft or 1,120.119 m); minimum since power pool level was reached (Aug. 16, 1964), 4,166,000 acre-ft (5,140 hm^3) Mar. 18, 1965 (elevation, 3,490.76 ft or 1,063.984 m).

REMARKS.--Reservoir is formed by concrete-arch gravity dam; storage began Mar. 13, 1963; dam completed September 1963. Total capacity, 27,000,000 acre-ft (33,300 hm^3), consisting of the following: dead storage, 1,998,000 acre-ft (2,460 hm^3) below elevation 3,370 ft (1,027 m)—sill of outlet gates; usable contents, 25,002,000 acre-ft (30,800 hm^3) between elevations 3,370 ft (1,027 m) and 3,700 ft (1,128 m)—top of conservation pool. Reservoir is used for power development, to provide storage replacement for upstream irrigation development, and to meet downstream requirements under the Colorado River Compact of 1922. Figures given herein represent usable contents; prior to Oct. 1, 1968, figures of total contents were published (prior to sealing of diversion tunnel July 7, 1965, all storage was usable).

COOPERATION.--Records furnished by Bureau of Reclamation.

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

3,645	17,157,000	3,660	19,099,000
3,650	17,789,000	3,665	19,779,000
3,655	18,436,000	3,675	21,187,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18,003	17,881	17,722	17,554	17,263	17,208	17,292	17,513	18,558	20,366	21,164	20,724
2	17,996	17,873	17,722	17,540	17,274	17,214	17,289	17,514	18,601	20,413	21,166	20,697
3	17,985	17,861	17,718	17,517	17,278	17,223	17,289	17,528	18,643	20,448	21,168	20,678
4	17,973	17,873	17,708	17,499	17,277	17,229	17,291	17,550	18,677	20,501	21,164	20,645
5	17,980	17,864	17,704	17,482	17,271	17,237	17,297	17,544	18,715	20,560	21,141	20,617
6	17,968	17,849	17,695	17,462	17,268	17,243	17,312	17,547	18,771	20,607	21,131	20,592
7	17,955	17,838	17,702	17,443	17,268	17,253	17,299	17,547	18,835	20,665	21,109	20,561
8	17,957	17,825	17,701	17,415	17,269	17,258	17,297	17,549	18,922	20,696	21,086	20,561
9	17,953	17,822	17,702	17,401	17,273	17,272	17,302	17,545	19,005	20,745	21,067	20,533
10	17,946	17,826	17,698	17,373	17,256	17,282	17,301	17,549	19,094	20,786	21,047	20,508
11	17,946	17,821	17,683	17,347	17,259	17,278	17,304	17,549	19,179	20,837	21,021	20,498
12	17,939	17,816	17,683	17,322	17,259	17,282	17,307	17,565	19,259	20,896	21,011	20,472
13	17,936	17,816	17,672	17,296	17,262	17,282	17,313	17,572	19,327	20,942	21,000	20,479
14	17,930	17,816	17,662	17,286	17,268	17,278	17,316	17,600	19,388	20,985	20,982	20,488
15	17,916	17,807	17,666	17,277	17,269	17,264	17,316	17,622	19,433	21,018	20,969	20,478
16	17,904	17,808	17,653	17,272	17,282	17,261	17,319	17,657	19,466	21,046	20,966	20,465
17	17,898	17,818	17,641	17,261	17,277	17,254	17,314	17,692	19,545	21,067	20,956	20,451
18	17,893	17,809	17,625	17,266	17,271	17,256	17,319	17,742	19,649	21,092	20,934	20,444
19	17,895	17,808	17,626	17,277	17,254	17,254	17,329	17,786	19,734	21,116	20,919	20,427
20	17,896	17,798	17,613	17,276	17,239	17,256	17,346	17,853	19,810	21,139	20,906	20,401
21	17,891	17,789	17,611	17,269	17,226	17,262	17,353	17,909	19,915	21,161	20,898	20,379
22	17,875	17,777	17,626	17,257	17,216	17,273	17,356	17,965	19,972	21,161	20,883	20,352
23	17,866	17,772	17,620	17,249	17,219	17,279	17,366	18,061	20,020	21,171	20,869	20,326
24	17,858	17,780	17,618	17,242	17,218	17,291	17,382	18,134	20,052	21,171	20,866	20,301
25	17,858	17,768	17,624	17,247	17,211	17,317	17,399	18,210	20,082	21,177	20,847	20,275
26	17,866	17,749	17,604	17,256	17,206	17,297	17,423	18,273	20,122	21,172	20,837	20,251
27	17,872	17,734	17,597	17,253	17,201	17,292	17,450	18,313	20,163	21,165	20,819	20,246
28	17,872	17,740	17,589	17,251	17,199	17,287	17,483	18,356	20,225	21,155	20,793	20,246
29	17,893	17,727	17,584	17,251	------	17,288	17,493	18,414	20,275	21,165	20,771	20,228
30	17,879	17,720	17,579	17,246	------	17,293	17,509	18,465	20,320	21,162	20,757	20,202
31	17,880	------	17,568	17,254	------	17,294	------	18,515	------	21,159	20,741	------
MAX	18,003	17,881	17,722	17,554	17,282	17,317	17,509	18,515	20,320	21,177	21,168	20,724
MIN	17,858	17,720	17,568	17,242	17,199	17,208	17,289	17,513	18,558	20,366	20,741	20,202
(†)	3,650.71	3,649.46	3,648.27	3,645.78	3,645.34	3,646.10	3,647.81	3,655.60	3,668.90	3,674.81	3,671.89	3,668.06
(‡)	-130,000	-160,000	-152,000	-314,000	-55,000	+95,000	+215,000	+1,006,000	+1,805,000	+839,000	-418,000	-539,000

CAL YR 1974 ..... ‡ -73,000
WTR YR 1975 ..... ‡ +2,192,000

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

09380000. Colorado River at Lees Ferry, Ariz.

LOCATION.--Lat 36°51'53", long 111°35'15", in NE¼SE¼ sec.13, T.40 N., R.7 E., Coconino County, in Navajo Indian Reservation, on left bank at head of Marble Gorge at Lees Ferry, just upstream from Paria River, 16 mi (26 km) downstream from Glen Canyon Dam, 28 mi (45 km) downstream from Utah-Arizona State line, and 61.5 mi (99.0 km) upstream from little Colorado River.

DRAINAGE AREA.--107,900 mi^2 (279,500 km^2), approximately.

PERIOD OF RECORD.--January 1895 to current year. Calendar year estimates and monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 3,106.16 ft (946.758 m) above mean sea level. Prior to Jan. 19, 1923, nonrecording gages or reference points within 400 ft (120 m) of present gage, at different datums.

AVERAGE DISCHARGE.--51 years, corrected, (1911-62), 17,850 ft^3/s (505.5 m^3/s), 12,923,000 acre-ft/yr (15,900 hm^3/yr); 11 years (1964-75), 12,280 ft^3/s (347.8 m^3/s), 8,897,000 acre-ft/yr (10,970 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 28,400 ft^3/s (804 m^3/s) May 7 (gage height, 11.79 ft or 3.594 m); minimum daily discharge, 2,010 ft^3/s (56.9 m^3/s) Feb. 2.

Period of record: Maximum discharge, 220,000 ft^3/s (6,230 m^3/s) June 18, 1921 (gage height, 26.5 ft or 8.08 m, from floodmarks), from rating curve extended above 120,000 ft^3/s (3,400 m^3/s) on basis of discharge computed for station near Grand Canyon; minimum daily, 700 ft^3/s (19.8 m^3/s) Jan. 23, 24, 1963.

Maximum discharge since at least 1868, about 300,000 ft^3/s (8,500 m^3/s) July 7, 1884 (gage height, 31.5 ft or 9.60 m, present site and datum, from floodmark at mouth of Paria River), from rating curve extended above 120,000 ft^3/s (3,400 m^3/s) on basis of discharge computed for flood of June 18, 1921, for station near Grand Canyon.

REMARKS.--Records excellent above 8,000 cfs and good below. Flow completely regulated by Lake Powell 16 mi (26 km) upstream since Mar. 13, 1963. Many diversions above station for irrigation, municipal, and industrial use. Records of chemical analyses, water temperatures, and suspended-sediment loads for the current water year are published on following pages.

REVISIONS (WATER YEARS).--WSP 859: 1921-23. WSP 1313: 1914-21

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,630	14,400	5,800	8,570	4,530	5,820	9,180	16,700	16,300	19,900	15,300	16,000
2	8,230	13,500	10,100	13,600	2,010	5,480	9,600	15,800	14,900	20,000	13,800	18,900
3	9,130	9,520	9,100	16,700	6,250	8,410	6,840	12,000	16,800	21,000	14,000	17,700
4	10,400	15,800	10,400	16,700	9,990	7,860	5,070	10,400	20,200	17,200	16,400	19,200
5	8,160	14,900	8,980	14,300	11,300	8,670	3,560	17,300	21,400	18,700	21,400	18,600
6	6,290	18,900	12,200	15,200	8,330	8,310	5,180	17,800	21,500	18,900	22,000	15,900
7	9,070	17,600	7,560	16,200	7,800	5,550	7,520	21,200	18,100	20,200	21,800	14,300
8	8,930	15,900	4,690	19,500	7,100	2,960	7,970	19,700	17,000	23,100	23,200	19,400
9	9,190	14,200	8,750	18,400	7,170	2,900	6,520	16,900	16,200	21,800	21,400	19,700
10	9,640	8,530	7,680	19,700	11,200	10,800	8,160	13,500	16,100	21,200	21,300	19,500
11	9,470	11,700	14,300	22,800	10,700	11,100	9,090	12,600	16,400	19,800	21,400	18,500
12	6,800	10,900	10,400	20,200	10,000	11,200	7,730	15,600	15,900	18,800	16,800	16,800
13	5,340	10,100	10,400	21,500	5,900	13,200	6,230	14,800	18,300	12,200	15,300	10,400
14	10,500	10,400	8,870	13,400	7,670	13,600	8,990	14,600	17,100	18,800	15,600	6,860
15	14,100	9,590	8,100	12,600	8,850	12,200	8,970	14,900	16,100	19,100	15,600	11,200
16	13,900	8,230	13,100	8,660	8,270	11,400	8,310	15,100	18,600	20,800	13,900	15,500
17	10,500	4,410	12,700	10,600	9,160	14,600	7,730	12,900	17,200	19,400	12,700	15,100
18	10,000	10,700	11,700	6,040	13,800	11,600	7,430	10,800	13,300	21,100	15,900	16,100
19	6,270	11,700	10,400	2,480	15,900	9,980	6,880	15,500	9,950	21,400	17,500	14,800
20	5,680	13,000	10,600	8,230	17,400	8,800	6,090	12,100	12,400	19,100	16,300	19,100
21	12,200	12,500	6,630	11,600	16,800	5,390	7,540	12,100	14,300	21,800	14,000	16,400
22	13,500	12,100	4,070	15,300	13,700	3,450	7,330	13,200	11,100	18,100	13,100	20,900
23	14,900	10,700	10,000	10,600	7,440	2,330	8,750	13,900	15,200	22,800	13,900	19,000
24	13,500	5,100	10,300	9,290	10,500	2,680	6,460	11,400	20,100	21,600	12,900	19,900
25	10,700	13,400	3,760	6,360	11,900	5,570	6,430	9,650	20,300	19,000	13,900	21,400
26	6,910	17,900	8,970	2,970	13,100	9,220	6,480	11,600	18,700	19,300	14,800	15,700
27	4,190	16,000	10,300	10,400	12,500	14,200	6,300	16,900	17,500	20,600	16,400	12,200
28	10,300	5,280	9,320	9,160	10,900	11,200	10,100	17,600	13,600	20,700	16,900	8,920
29	10,700	10,000	5,060	8,620	------	5,750	12,400	15,100	15,400	22,400	20,400	14,500
30	13,200	11,100	8,670	10,000	------	4,110	12,500	14,400	17,800	18,400	13,400	14,700
31	12,400	------	11,500	7,640	------	7,580	------	13,700	------	18,300	13,700	------
TOTAL	303,730	358,060	284,410	387,320	280,170	255,920	231,340	449,750	497,750	615,500	515,000	487,180
MEAN	9,798	11,940	9,175	12,490	10,010	8,255	7,711	14,510	16,590	19,850	16,610	16,240
MAX	14,900	18,900	14,300	22,800	17,400	14,600	12,500	21,200	21,500	23,100	23,200	21,400
MIN	4,190	4,410	3,760	2,480	2,010	2,330	3,560	9,650	9,950	12,200	12,700	6,860
AC-FT	602,400	710,200	564,100	768,200	555,700	507,600	458,900	892,100	987,300	1,221M	1,022M	966,300

CAL YR 1974 TOTAL 4,480,770 MEAN 12,280 MAX 25,000 MIN 1,410 AC-FT 8,888,000
WTR YR 1975 TOTAL 4,666,130 MEAN 12,780 MAX 23,200 MIN 2,010 AC-FT 9,255,000

09380000. Colorado River at Lees Ferry, Ariz.
(National stream-quality accounting network station)

LOCATION.--Lat 36°51'53", long 111°35'15", in NE¼SE¼ sec.13, T.40 N., R.7 E., Coconino County, in Navajo Indian Reservation, at gaging station at head of Marble Gorge at Lees Ferry, 0.8 mi (1.3 km) upstream from Paria River, 16 mi (26 km) downstream from Glen Canyon Dam, 28 mi (45 km) downstream from Utah-Arizona State line, and 61.5 mi (99.0 km) upstream from Little Colorado River.

DRAINAGE AREA.--107,900 mi^2 (279,500 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: January to July 1926, October 1926 to June 1927, October 1928 to September 1930, November 1942 to October 1945, October 1947 to current year.
Water temperatures: July 1949 to current year.
Sediment records: October 1928 to December 1933, November 1942 to September 1944, October 1947 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 1,010 micromhos May 23; minimum daily, 700 micromhos Dec. 30, 31.
Water temperatures: Maximum, 10.5°C on Sept. 10; minimum, 7.0°C Jan. 12, Feb. 5, 14, 18, 24.
Period of record:
Specific conductance: Maximum daily, 1,260 micromhos Apr. 20, 21, 1967; minimum daily, 460 micromhos Aug. 10, 1965.
Water temperatures: Maximum, 21.0°C on several days during August, September, and October, 1965, 1967, 1968; minimum, 2.0°C on Jan. 29, 30, 1970.

REMARKS.--Because of the regulation of flow by Glen Canyon Dam since Mar. 13, 1963, and the subsequent initial filling of Lake Powell, extreme values for the period of record include only those obtained after July 31, 1965, at which time a normal flow release pattern was begun.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.										
29...	0930	1680	8.7	--	--	--	--	67	23	69
NOV.										
27...	1300	25000	8.0	--	--	--	--	65	22	68
DEC.										
30...	1345	13400	7.3	100	10	10	0	64	22	64
JAN.										
31...	1430	11300	8.1	--	--	--	--	64	23	69
MAR.										
24...	1230	4740	7.3	90	40	0	0	76	27	81
APR.										
30...	1300	17200	7.9	--	--	--	--	75	28	80
MAY										
30...	1330	14500	7.6	--	--	--	--	69	27	78
JUNE										
30...	1530	25700	7.9	50	30	0	0	72	28	78
JULY										
30...	1200	22900	8.0	--	--	--	--	71	25	73
AUG.										
30...	1000	4430	5.9	--	--	--	--	69	25	74
SEP.										
29...	1330	23000	7.3	100	20	10	10	70	26	68

09380000. Colorado River at Lees Ferry, Ariz.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
29...	3.5	159	--	200	40	.3	.55	.03	494	492
NOV.										
27...	3.6	157	--	200	44	.1	.32	.01	516	490
DEC.										
30...	3.7	154	--	210	42	.2	.35	.01	510	491
JAN.										
31...	3.5	154	0	210	44	.2	.41	.00	518	500
MAR.										
24...	3.3	172	0	240	57	.3	.58	.00	602	579
APR.										
30...	3.9	173	0	240	56	.3	.61	.01	614	579
MAY										
30...	4.0	169	0	240	54	.3	.50	.01	587	566
JUNE										
30...	3.8	166	0	240	52	.3	.42	.01	593	566
JULY										
30...	4.1	162	0	220	49	.4	.26	.00	563	532
AUG.										
30...	--	160	0	220	47	.3	.49	--	559	526
SEP.										
29...	3.4	158	0	220	47	.2	.45	.00	535	522

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
OCT.									
29...	.67	260	130	1.9	800	7.4	7.5	30	8.0
NOV.									
27...	.70	250	120	1.9	800	7.2	8.0	100	8.0
DEC.									
30...	.69	250	120	1.8	800	8.0	9.5	2	--
JAN.									
31...	.70	250	130	1.9	750	8.4	8.0	2	--
MAR.									
24...	.82	300	160	2.0	905	8.0	8.0	1	--
APR.									
30...	.84	300	160	2.0	930	7.9	8.0	1	--
MAY									
30...	.80	280	140	2.0	890	8.0	8.5	2	--
JUNE									
30...	.81	300	160	2.0	860	8.0	10.0	1	--
JULY									
30...	.77	280	150	1.9	840	8.0	10.0	1	--
AUG.									
30...	.76	280	140	1.9	780	8.3	9.5	1	--
SEP.									
29...	.73	280	150	1.8	810	8.0	10.0	0	--

09380000. Colorado River at Lees Ferry, Ariz.--Continued

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)
OCT.									
29...	0930	.54	.01	.55	.22	.77	3.4	.01	--
NOV.									
27...	1300	--	.00	.38	.31	.69	3.1	.03	--
DEC.									
30...	1345	--	.00	.38	.28	.66	2.9	.02	--
JAN.									
31...	1430	.41	.00	.41	.23	.64	2.8	.01	--
MAR.									
24...	1230	--	.00	.59	.20	.79	3.5	.00	--
APR.									
30...	1300	--	.00	.61	.19	.80	3.5	.00	--
MAY									
30...	1330	.50	.00	.58	.26	.84	3.7	.03	--
JUNE									
30...	1530	--	.00	.55	.21	.76	3.4	.00	--
JULY									
30...	1200	--	.00	.26	.21	.47	2.1	.05	--
AUG.									
30...	1000	--	.01	.49	.19	.68	3.0	.00	.00
SEP.									
29...	1330	--	.00	.45	.25	.70	3.1	.01	--

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
18...	0900	--	--	--	--	--	1	1	--
NOV.									
27...	1300	--	--	--	--	--	<1	<1	--
DEC.									
30...	1030	--	.5	.8	1.6	.2	--	--	--
30...	1345	1400	--	--	--	--	<1	2	--
JAN.									
31...	1430	--	--	--	--	--	<1	1	--
MAR.									
24...	1230	1200	--	--	--	--	--	--	14
31...	1720	--	--	--	--	--	<1	56	--
APR.									
30...	1300	510	--	--	--	--	<1	<1	--
MAY									
30...	1330	--	--	--	--	--	82	82	--
JUNE									
30...	1530	1100	--	--	--	--	<1	83	3.8
JULY									
31...	1230	--	--	--	--	--	6	<1	--
AUG.									
30...	1000	120	--	--	--	--	<1	<1	--
SEP.									
03...	0830	--	.1	.1	.100	.1	--	--	--
27...	1330	--	--	--	--	--	<1	<1	--
29...	1330	130	--	--	--	--	--	--	7.1

09380000. Colorado River at Lees Ferry, Ariz.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)
OCT.										
29...	0930	--	--	20	--	--	--	--	--	--
NOV.										
27...	1300	--	--	90	--	--	--	--	--	--
DEC.										
30...	1345	1	1	70	10	0	0	0	0	0
JAN.										
31...	1430	--	--	60	--	--	--	--	--	--
MAR.										
24...	1230	4	4	100	20	1	10	10	<50	1
APR.										
30...	1300	--	--	100	--	--	--	--	--	--
MAY										
30...	1330	--	--	80	--	--	--	--	--	--
JUNE										
30...	1530	1	1	80	<10	0	0	0	<50	0
JULY										
30...	1200	--	--	60	--	--	--	--	--	--
AUG.										
30...	1000	--	--	80	--	--	--	--	--	--
SEP.										
29...	1330	1	1	90	<10	2	16	10	<50	0

DATE	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.									
29...	--	--	--	--	--	--	--	--	--
NOV.									
27...	--	--	--	--	--	--	--	--	--
DEC.									
30...	30	46	100	4	--	.2	8	0	30
JAN.									
31...	--	--	--	--	--	--	--	--	--
MAR.									
24...	20	9	<100	11	.6	.6	6	5	30
APR.									
30...	--	--	--	--	--	--	--	--	--
MAY									
30...	--	--	--	--	--	--	--	--	--
JUNE									
30...	10	3	<100	1	.0	.0	2	2	30
JULY									
30...	--	--	--	--	--	--	--	--	--
AUG.									
30...	--	--	--	--	--	--	--	--	--
SEP.									
29...	10	20	<100	7	--	.0	4	3	30

09380000. Colorado River at Lees Ferry, Ariz.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	795	805	805	---	810	---	---	960	---	935	845	---
2	795	---	805	805	---	---	890	---	880	880	830	835
3	795	---	785	---	820	850	890	910	890	880	755	855
4	---	800	---	805	820	880	---	---	890	---	755	855
5	785	805	800	---	830	875	---	925	880	870	840	850
6	---	785	810	810	825	880	885	950	880	865	850	835
7	805	800	805	810	815	845	885	920	880	865	840	835
8	800	785	810	810	---	---	---	935	885	865	840	850
9	805	---	810	815	---	---	920	935	890	880	840	835
10	805	780	---	840	820	870	890	905	880	880	840	850
11	795	790	---	---	---	880	890	---	880	850	770	830
12	795	---	---	780	830	900	900	910	880	845	860	835
13	805	---	---	810	---	900	---	920	870	850	830	835
14	805	---	---	805	820	895	900	---	865	840	830	---
15	805	---	---	795	---	---	870	890	---	850	840	835
16	810	785	720	790	---	---	850	905	890	855	845	850
17	810	785	730	795	---	910	910	---	885	825	845	835
18	800	775	730	---	850	900	---	915	895	825	860	835
19	800	---	720	---	---	900	920	895	895	840	840	840
20	810	---	730	780	---	905	905	---	880	840	850	850
21	795	---	790	795	830	890	910	---	845	865	840	850
22	795	---	810	810	---	---	930	940	---	860	850	840
23	795	805	800	805	---	---	905	1010	875	875	840	840
24	---	805	800	815	815	905	915	---	875	875	830	835
25	---	---	---	815	---	890	915	925	865	875	835	835
26	---	785	800	780	---	890	---	---	860	875	830	815
27	800	800	800	---	810	870	915	940	865	840	825	800
28	---	---	790	---	810	885	---	935	865	860	825	800
29	800	780	---	---	---	---	930	925	865	855	825	810
30	800	780	700	---	---	965	930	890	860	825	780	830
31	810	---	700	750	---	890	---	---	---	825	830	---
MEAN	801	---	---	---	---	---	---	---	877	859	830	836
YEAR	MAX	1010	MIN	700	MEAN	844						

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	8.0	8.0	---	8.0	---	---	8.5	---	10.0	10.0	---
2	7.5	---	8.0	7.5	---	---	8.0	---	9.0	10.0	10.0	9.5
3	8.0	---	8.0	---	8.0	8.0	8.0	9.0	8.5	10.0	9.5	10.0
4	---	7.5	---	7.5	8.0	7.5	---	---	8.5	---	9.5	10.0
5	8.5	8.0	7.5	---	7.0	7.5	---	8.5	8.0	10.0	10.0	10.0
6	---	8.0	8.0	8.0	7.5	7.5	8.0	9.0	8.5	10.0	9.5	10.0
7	8.0	7.5	9.0	8.5	8.0	7.5	7.5	9.0	9.0	10.0	9.5	10.0
8	7.5	7.5	8.5	8.0	---	---	---	9.0	9.0	10.0	10.0	10.0
9	8.0	---	8.0	8.0	---	---	---	9.0	8.5	10.0	10.0	10.0
10	8.0	8.0	---	8.5	7.5	7.5	8.0	9.0	8.5	9.5	10.0	10.5
11	8.0	8.5	---	---	---	8.0	8.0	---	8.5	10.0	10.0	9.5
12	8.0	---	---	7.0	8.0	8.0	8.0	9.0	9.0	10.0	9.5	9.5
13	8.0	---	---	8.0	---	8.0	---	9.0	9.0	10.0	9.5	10.0
14	8.0	---	---	8.0	7.0	8.0	7.5	---	9.5	10.0	10.0	---
15	8.0	---	---	8.0	---	---	8.0	9.0	---	10.0	10.0	10.0
16	8.0	8.0	8.0	8.0	---	---	8.0	9.0	9.5	10.0	9.5	9.5
17	8.0	8.0	8.5	8.0	---	7.5	7.5	---	9.5	10.0	9.5	9.5
18	7.5	7.5	8.5	---	7.0	7.5	---	9.0	9.0	10.0	10.0	9.5
19	8.0	---	9.0	---	---	8.0	8.5	9.0	9.0	9.5	10.0	9.5
20	8.0	---	9.0	8.0	---	8.0	9.0	---	10.0	9.5	9.5	10.0
21	8.0	---	9.0	8.0	8.0	8.0	8.0	---	10.0	10.0	10.0	10.0
22	8.0	---	9.0	8.0	---	---	8.0	9.0	---	10.0	10.0	10.0
23	7.0	8.5	9.0	8.0	---	---	8.0	9.0	10.0	10.0	9.5	10.0
24	---	8.0	9.0	8.0	7.0	8.0	9.0	---	10.0	10.0	10.0	10.0
25	---	---	---	8.0	---	8.0	8.5	9.0	10.0	10.0	10.0	10.0
26	---	8.0	9.0	8.5	---	8.0	---	---	9.5	10.0	10.0	10.0
27	8.0	8.0	8.5	---	7.5	8.0	8.0	9.0	10.0	10.0	9.0	10.0
28	---	---	8.5	---	7.5	8.0	---	9.0	10.0	10.0	10.0	10.0
29	7.5	8.0	---	---	---	---	8.0	9.0	9.5	10.0	10.0	10.0
30	8.0	8.0	8.5	---	---	8.0	8.0	8.5	10.0	10.0	9.5	10.0
31	8.0	---	9.0	---	---	8.0	---	---	---	10.0	10.0	---
MEAN	8.0	---	---	---	---	---	---	---	9.0	10.0	10.0	10.0
YEAR	MAX	10.5	MIN	7.0	MEAN	9.0						

09380000. Colorado River at Lees Ferry, Ariz.--Continued

PERIODIC DAILY SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.			
05...	8160	2	44
27...	4190	4	45
DEC.			
03...	9100	6	147
16...	13100	10	354
30...	8670	9	211
JAN.			
02...	13600	265	9730
08...	19500	294	15500
13...	21500	303	17600
26...	2970	157	1260
FEB.			
01...	4530	190	2320
12...	10000	228	6160
MAR.			
03...	8410	237	5380
12...	11200	46	1390
17...	14600	278	11000
24...	2680	209	1510
APR.			
02...	9600	19	492
07...	7520	17	345
14...	8990	8	194
21...	7540	13	265
MAY			
03...	12000	16	518
12...	15600	18	758
18...	10800	18	525
27...	16900	20	913
JUNE			
02...	14900	16	644
09...	16200	12	525
16...	18600	18	904
23...	15200	19	780
JULY			
01...	19900	32	1720
07...	20200	131	7140
17...	19400	44	2300
25...	19000	21	1080
AUG.			
01...	15300	66	2730
AUG.			
11...	21400	68	3930
19...	17500	131	6190
25...	13900	152	5700
SEP.			
08...	19400	216	11300
15...	11200	16	484
22...	20900	43	2430

09382000. Paria River at Lees Ferry, Ariz.

LOCATION.--Lat 36°52'20", long 111°35'38", in NW¼NE¼ sec.13, T.40 N., R.7 E., Coconino County, on left bank 0.6 mi (1.0 km) northwest of Lees Ferry, and 1.1 mi (1.8 km) upstream from mouth.

DRAINAGE AREA.--1,410 mi^2 (3,652 km^2).

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,123.40 ft (952.012 m) above mean sea level. Prior to Oct. 5, 1925, nonrecording gage at site 2,000 ft (610 m) upstream at different datum. Oct. 13, 1925, to Sept. 11, 1929, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--52 years, 29.7 ft^3/s (0.841 m^3/s), 21,520 acre-ft/yr (26.5 hm^3/yr); median of yearly mean discharges, 26 ft^3/s (0.74 m^3/s), 18,800 acre-ft/yr (23 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,680 ft^3/s (104 m^3/s) July 30 (gage height, 12.37 ft or 3.770 m); minimum daily, 3.6 ft^3/s (0.102 m^3/s) June 25, 29, July 2.
Period of record: Maximum discharge, 16,100 ft^3/s (456 m^3/s) Oct. 5, 1925, from rating curve extended above 2,000 ft^3/s (57 m^3/s) on basis of float-area measurement of peak flow (previously published maximum for Sept. 12, 1958, is too high); maximum gage height, 16.35 ft (4.983 m) Sept. 1, 1963; minimum daily discharge, 1 ft^3/s (0.03 m^3/s) in most years prior to 1931.

REMARKS.--Records fair. Diversions above station for irrigation of about 3,300 acres (13.4 km^2). Records of water temperatures and suspended-sediment loads for the current water year are published on following pages.

REVISIONS (WATER YEARS).--WSP 1925: 1958(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	32	18	11	26	77	27	12	4.6	3.8	37	4.8
2	6.0	97	18	11	25	57	36	13	4.5	3.6	17	4.8
3	6.5	200	18	10	23	32	25	14	4.8	3.8	13	4.5
4	163	122	19	7.4	23	35	25	13	5.0	4.2	9.4	4.5
5	30	54	24	10	27	25	22	14	5.0	3.9	7.0	4.8
6	14	37	26	8.6	23	34	20	14	5.0	3.8	8.6	4.5
7	11	31	20	9.8	23	40	18	12	5.0	3.8	7.0	4.8
8	10	31	18	19	26	35	14	11	5.0	3.8	5.8	9.5
9	60	43	16	20	28	35	14	9.0	5.2	3.8	5.8	58
10	23	35	17	14	35	34	15	7.8	4.8	8.5	5.8	271
11	16	29	16	11	55	64	20	5.5	4.8	163	6.8	189
12	11	28	17	7.8	34	26	55	5.5	4.5	88	7.8	362
13	10	26	21	8.6	27	26	33	4.8	4.8	232	41	55
14	9.8	26	20	11	26	26	21	4.6	4.5	140	30	52
15	9.8	26	17	9.0	40	33	27	4.4	4.5	20	15	17
16	9.4	25	16	13	45	32	24	4.5	4.2	10	11	9.4
17	9.0	24	26	14	33	37	25	5.2	4.2	7.0	9.4	9.4
18	8.6	22	18	15	25	28	28	6.8	4.5	5.5	5.8	7.0
19	9.0	22	17	16	18	23	23	7.4	4.5	5.2	5.8	4.4
20	9.4	21	16	17	18	30	18	6.8	4.2	5.2	5.2	4.8
21	7.8	20	19	18	21	38	19	6.8	4.2	5.2	34	5.0
22	7.8	21	20	16	11	38	19	6.5	4.2	5.2	215	5.2
23	17	20	19	16	8.0	39	20	5.8	4.0	4.8	46	5.2
24	57	20	11	17	19	24	18	6.0	3.8	4.8	16	5.2
25	20	20	11	24	33	24	16	5.0	3.6	5.2	9.8	5.2
26	10	20	13	39	42	48	18	4.8	3.8	5.2	7.8	5.2
27	74	18	13	53	44	55	19	5.0	4.0	5.2	4.4	5.2
28	88	18	11	39	49	40	18	5.0	3.8	5.2	4.4	5.2
29	295	18	11	26	------	25	14	4.9	3.6	71	5.2	5.2
30	110	18	15	18	------	16	12	4.8	3.8	450	5.2	5.5
31	55	------	18	23	------	21	------	4.7	------	63	4.8	------
TOTAL	1,172.9	1,124	539	532.2	807.0	1,097	665	234.6	132.4	1,343.7	606.8	1,133.3
MEAN	37.8	37.5	17.4	17.2	28.8	35.4	22.2	7.57	4.41	43.3	19.6	37.8
MAX	295	200	26	53	55	77	55	14	5.2	450	215	362
MIN	5.8	18	11	7.4	8.0	16	12	4.4	3.6	3.6	4.4	4.4
AC-FT	2,330	2,230	1,070	1,060	1,600	2,180	1,320	465	263	2,670	1,200	2,250

CAL YR 1974 TOTAL 6,851.8 MEAN 18.8 MAX 295 MIN 3.0 AC-FT 13,590
WTR YR 1975 TOTAL 9,387.9 MEAN 25.7 MAX 450 MIN 3.6 AC-FT 18,620

PEAK DISCHARGE (BASE, 1,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-30	0030	12.37	3,680	9-12	0300	10.70	1,990
9-10	1730	10.15	1,610				

09382000. Paria River at Lees Ferry, Ariz.

LOCATION.--Lat 36°52'20", long 111°35'38", in NW¼NE¼ sec.13, T.40 N., R.7 E., Coconino County, at gaging station 0.6 mi (1.0 km) northwest of Lees Ferry, and 1.1 mi (1.8 km) upstream from mouth.

DRAINAGE AREA.--1,410 mi^2 (3,652 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1947 to February 1950, October 1969 to September 1972.
Specific conductance: October 1964 to current year.
Water temperatures: October 1956 to current year.
Sediment records: October 1947 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 3,600 micromhos Aug. 2; minimum daily, 500 micromhos Sept. 6, 7.
Water temperatures: Maximum observed, 33.5°C Aug. 8; minimum observed, freezing point Dec. 9, 26, Jan. 2, 4, 6, 16, 17.
Sediment concentrations: Maximum daily, 423,000 mg/l July 11; minimum daily, 19 mg/l Sept. 28.
Sediment discharge: Maximum daily, 375,000 tons (340,000 tonnes) July 13; minimum daily, 0.27 ton (0.24 tonnes) Sept. 28.
Period of record:
Specific conductance: Maximum daily, 4,750 micromhos July 19, 1971; minimum daily, 320 micromhos May 21, 1967.
Water temperatures (1956-61, 1965-74): Maximum observed, 38.0°C June 18, 1972; minimum observed, freezing point on many days during winter months.
Sediment concentrations: Maximum daily, 780,000 mg/l Aug. 9, 1968, Oct. 20, 1972; minimum daily, 1 mg/l June 1-10, 1950.
Sediment discharge: Maximum daily, 5,100,000 tons (4,630,000 tonnes) Sept. 12, 1958; minimum daily, 0 ton (0 tonne) on many days of most years.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	960	1400	1300	---	1270	---	---	1000	---	570	2900	---
2	900	---	1320	1350	---	---	1260	---	520	600	3600	590
3	1000	---	1310	---	1220	1400	1200	1090	520	590	3050	550
4	2900	1100	---	1300	1220	1430	---	---	560	---	2400	540
5	2100	1300	1400	---	1250	1400	---	1100	550	600	2000	510
6	---	1420	1400	1320	1200	1350	1220	1100	540	590	1550	500
7	1450	1300	1350	690	1200	1200	1180	1050	560	600	1200	500
8	1260	1470	1250	1300	---	---	1160	1020	540	610	1250	1000
9	800	---	1300	1300	---	---	1220	1040	550	610	1170	1880
10	820	1200	---	1300	1350	1350	1200	1040	550	900	950	2000
11	1350	1300	---	---	---	1400	980	---	550	3570	940	2700
12	1360	---	---	1150	1300	1380	1220	740	550	3500	890	2180
13	1300	---	---	1190	---	---	---	850	550	1200	900	1780
14	1250	---	---	1220	1390	1380	1400	---	560	---	3000	---
15	1100	---	---	1300	---	1300	1600	710	---	2200	2600	1540
16	1100	1390	1400	1220	---	1280	1300	620	810	2200	1600	1350
17	1000	1380	1190	1300	---	1300	1250	---	820	1700	1450	1210
18	1000	1350	1180	---	1300	1400	---	990	820	1750	1500	1300
19	920	---	1200	---	---	1400	1150	900	540	1550	1200	1300
20	960	---	1300	1300	---	1420	1190	---	520	1270	1100	1200
21	900	---	1350	1280	1390	1400	1200	750	550	970	1000	810
22	850	---	1450	1400	---	---	1210	750	---	900	2030	800
23	950	1400	1450	1350	---	---	1020	790	540	750	3300	690
24	---	1410	1380	1300	820	1200	1050	---	570	750	2500	680
25	---	---	---	1220	---	1220	1100	820	560	720	2200	630
26	---	1250	1400	1050	---	1320	---	---	540	710	1800	610
27	1250	1200	1400	---	1390	1450	1050	710	540	700	1200	600
28	---	---	1360	---	1420	1380	---	620	520	1100	1190	580
29	1650	1250	---	---	---	---	1200	650	540	1750	1100	580
30	1400	1350	1600	---	---	1200	1250	600	560	---	870	600
31	1200	---	1550	1200	---	1120	---	550	---	1600	850	---
MEAN	1220	---	---	---	---	---	---	---	575	1230	1720	1040

YEAR MAX 3600 MIN 500 MEAN 1190

09382000. Paria River at Lees Ferry, Ariz.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.0	12.0	3.0	---	7.0	---	---	14.0	---	31.0	26.0	---
2	26.0	---	3.0	0.0	---	---	15.0	---	25.0	31.0	20.0	29.0
3	22.0	---	2.0	---	7.5	10.0	16.0	14.0	26.0	31.5	25.0	24.0
4	28.0	8.0	---	0.0	8.0	10.0	---	---	25.0	---	23.0	26.0
5	18.0	8.5	2.0	---	5.0	9.0	---	11.0	26.0	32.0	31.0	24.0
6	---	11.0	2.0	0.0	9.0	9.0	14.0	15.0	27.0	31.5	26.5	24.0
7	16.0	10.0	1.0	2.0	9.0	12.0	12.0	14.0	27.0	31.0	33.0	23.0
8	22.0	6.5	1.0	4.0	---	---	10.0	20.0	23.5	31.0	33.5	26.5
9	20.0	---	0.0	5.0	---	---	13.0	26.0	27.0	30.5	26.0	24.0
10	20.0	11.0	---	2.0	5.0	13.0	14.0	25.0	23.0	28.0	31.0	23.0
11	20.0	6.0	---	---	---	12.0	14.0	---	25.0	25.0	31.0	20.0
12	18.0	---	---	1.0	6.0	14.5	12.0	25.0	27.0	26.0	30.0	18.0
13	18.0	---	---	1.5	---	---	---	24.0	26.5	23.5	29.0	19.0
14	20.0	---	---	1.0	5.0	10.0	12.0	---	31.0	---	30.0	---
15	18.0	---	---	1.0	---	8.0	15.0	25.0	---	27.0	28.0	22.0
16	20.0	6.0	4.0	0.0	---	8.0	16.0	22.0	21.0	26.0	26.0	20.0
17	18.0	6.0	6.0	0.0	---	10.0	9.5	---	21.0	25.0	26.0	18.0
18	18.0	6.0	5.0	---	5.0	14.0	---	23.0	20.5	24.0	28.0	18.0
19	18.0	---	3.0	---	---	18.0	13.0	26.0	26.0	21.0	27.0	19.0
20	21.0	---	1.0	1.0	---	18.0	18.0	---	30.0	25.0	28.0	23.5
21	20.0	---	1.0	6.0	2.0	16.0	14.5	24.0	33.0	29.5	26.0	23.0
22	20.0	---	1.0	5.0	---	---	16.0	23.0	---	28.0	22.5	23.0
23	19.0	5.0	1.0	7.0	---	---	20.0	23.0	33.0	27.0	26.0	24.0
24	---	5.0	1.0	6.0	3.0	12.0	21.0	---	30.0	29.0	26.0	23.0
25	---	---	---	7.0	---	12.0	20.0	26.0	29.0	29.0	26.0	23.0
26	---	4.0	0.0	8.0	---	10.0	---	---	30.0	29.0	28.0	23.5
27	11.0	3.0	1.0	---	4.0	10.0	16.0	20.0	30.5	28.0	25.0	23.0
28	---	---	1.0	---	3.0	11.0	---	19.0	31.0	27.0	28.0	25.0
29	10.0	3.0	---	---	---	---	14.0	19.5	32.0	27.0	29.5	25.0
30	9.0	2.0	1.0	---	---	16.0	14.0	22.0	30.0	27.0	29.0	26.0
31	10.0	---	2.0	7.0	---	14.0	---	22.0	---	26.0	29.0	---
MEAN	19.0	---	---	---	---	---	---	---	27.5	28.0	27.5	23.0

YEAR MAX 33.5 MIN 0.0 MEAN 17.5

SUSPENDED-SEDIMENT CONCENTRATION (MG/L), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	9000	2800	2050	2160	22300	4200	2100	200	143	103000	175
2	107	14800	3600	2750	2020	23400	9600	2400	156	54	121000	154
3	137	28400	4100	2800	1980	19200	6500	3500	185	51	90000	148
4	14000	24300	2900	2800	1420	18200	4300	3300	596	55	47000	155
5	93000	12800	2250	2320	2130	9200	4000	2700	552	63	20000	165
6	51000	10900	2150	2210	1750	8300	4800	3500	237	95	3000	160
7	30000	12300	1700	720	1380	10500	11300	5600	142	65	561	147
8	27000	5700	1300	700	1690	8300	11400	3600	136	30	563	8570
9	91200	21600	1100	1010	1780	7600	4900	1900	131	66	308	93500
10	38000	23400	1400	890	2600	7400	2600	1300	118	4040	147	144000
11	12000	8700	1100	920	3830	9110	5050	1200	115	423000	137	240000
12	4800	4400	1150	810	4720	8000	12600	900	132	251000	117	117000
13	4700	3700	1590	720	3520	9000	12600	814	103	390000	35200	37300
14	3600	3600	1450	800	2130	9500	5100	820	87	370000	67500	60000
15	1700	3500	1100	630	2570	18100	5900	833	100	195000	41000	30000
16	850	3300	1100	620	3100	12400	8200	468	156	60000	8000	21000
17	550	2800	1500	570	2700	5500	14000	450	255	41500	3000	6000
18	320	1700	1200	570	2260	4100	16000	2800	332	13000	2500	3390
19	400	1600	1200	560	1980	4600	14000	2600	80	3000	986	2230
20	360	1900	1300	600	2190	12200	13700	2600	81	998	511	527
21	250	2100	1450	2140	2680	13600	6800	4700	76	566	23100	251
22	280	2100	1200	3370	1810	10700	11600	4800	80	380	163000	125
23	424	1800	1150	3500	710	9700	23500	3300	101	239	143000	55
24	1190	1600	1100	3400	6140	9600	31000	2100	100	235	94000	57
25	270	1250	1100	2630	13400	9600	17100	1400	89	188	57000	48
26	120	950	1150	3390	14100	10300	14000	1100	41	195	32000	31
27	51200	850	1150	3680	18000	10800	20900	1100	61	204	1010	22
28	89000	850	1050	2700	21700	8000	15700	536	63	16000	1010	19
29	134000	850	1050	1640	---	5100	7000	480	55	41800	458	53
30	45000	1700	1750	850	---	3100	4700	448	65	115000	182	20
31	18000	---	2100	1410	---	3700	---	244	---	80300	188	---

YEAR MAX 423000 MIN 19

09382000. Paria River at Lees Ferry, Ariz.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	778	136	61	152	4640	306	68	2.5	1.5	10300	2.3
2	1.7	4580	175	82	136	3600	933	84	1.9	.52	5550	2.0
3	2.4	15700	199	76	123	1660	439	132	2.4	.52	3160	1.8
4	88300	8000	149	63	106	1720	290	116	8.0	.62	1190	1.9
5	7530	1870	146	63	155	621	238	102	7.5	.66	378	2.1
6	1930	1090	151	51	109	762	259	132	3.2	.97	70	1.9
7	891	1030	92	19	92	1130	549	181	1.9	.67	11	1.9
8	729	477	63	36	119	784	431	107	1.8	.31	8.8	505
9	19800	2800	48	54	135	718	185	46	1.8	.68	4.8	22700
10	2360	2210	64	34	246	679	105	27	1.5	98	2.3	289000.0
11	518	681	48	27	569	1640	288	18	1.5	354000.0	2.5	129000.0
12	143	333	53	17	433	562	2070	13	1.6	63600	2.5	186000.0
13	127	260	90	17	257	632	1120	11	1.3	375000.0	8190	6410
14	95	253	78	24	150	667	289	10	1.1	150000.0	5750	8420
15	45	246	50	15	278	1610	430	9.9	1.2	10500	1660	1380
16	22	223	48	22	377	1070	531	5.7	1.8	1620	237	533
17	13	181	105	22	241	549	945	6.3	2.9	784	76	152
18	7.4	101	58	23	153	310	1210	51	4.0	193	39	64
19	9.7	95	55	24	96	286	869	52	.97	42	15	26
20	9.1	108	56	28	106	988	666	48	.92	14	7.2	6.8
21	5.3	113	74	120	152	1360	349	86	.86	7.9	5260	3.4
22	5.9	119	65	153	54	1100	595	84	.91	5.3	100000	1.8
23	55	97	59	158	15	1020	1270	52	1.1	3.1	18100	.77
24	215	86	33	162	529	622	1510	34	1.0	3.0	4060	.80
25	15	68	33	177	1190	622	831	19	.86	2.6	1200	.67
26	3.2	53	40	387	1600	1330	680	14	.42	2.7	674	.44
27	28100	41	40	527	2140	1600	1070	15	.66	2.9	12	.31
28	21100	41	31	284	2870	864	763	7.2	.65	225	12	.27
29	144000	43	31	115	---	344	265	6.4	.53	15900	6.4	.74
30	13400	83	71	41	---	134	152	5.8	.67	165000.0	2.6	.30
31	2670	---	102	111	---	210	---	3.1	---	15600	2.4	---
TOTAL	332104.2	41760	2443	2993	12583	33834	19638	1546.4	57.44	1152610	165983	644220.2

YEAR TOTAL 2409772.69

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ANALYSES MADE IN DISTILLED WATER)

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM
JAN. 26...	1645	48	8.0	3730	483	27	38
JULY 30...	1600	151	27.0	87800	35800	--	--
SEP. 15...	1600	15	22.0	60200	2440	99	91

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
JAN. 26...	56	69	--	85	99	100
JULY 30...	--	81	--	94	99	100
SEP. 15...	67	--	100	--	--	--

09383000. Colorado River at Compact point, near Lees Ferry, Ariz.

LOCATION.--Lat 36°51'05", long 111°36'21", in NE¼SE¼ sec.23, T.40 N., R.7 E., Coconino County, 1.0 mi (1.6 km) downstream from Paria River, 1.4 mi (2.3 km) downstream from gage on Colorado River at Lees Ferry, and 29 mi (47 km) downstream from Utah-Arizona State line.

DRAINAGE AREA.--109,500 mi^2 (283,600 km^2), approximately.

PERIOD OF RECORD.--October 1913 to current year (monthly discharge only). Prior to October 1950, published in WSP 1313.

DETERMINATION OF DISCHARGE.--There is no gage. Monthly and yearly discharge computed as the sum of flow at stations on Colorado River and Paria River at Lees Ferry.

AVERAGE DISCHARGE.--49 years (1913-62), 17,760 ft^3/s (503 m^3/s), 12,870,000 acre-ft/yr (15,900 hm^3/yr); 11 years (1964-75), 12,310 ft^3/s (349 m^3/s), 8,919,000 acre-ft/yr (11,000 hm^3/yr).

REMARKS.--This point on the Colorado River is the dividing point between the Upper Basin and Lower Basin, as defined in the Colorado River Compact of 1922. Flow completely regulated by Lake Powell beginning Mar. 13, 1963. (See elsewhere in this report.)

MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	Mean	Runoff in acre-feet
October	9,836	604,800
November	11,970	712,400
December	9,192	565,200
CAL YR 1974	12,290	8,901,000
January	12,510	769,300
February	10,030	557,300
March	8,291	509,800
April	7,734	460,200
May	14,520	892,500
June	16,600	987,500
July	19,900	1,224,000
August	16,630	1,023,000
September	16,280	968,600
WTR YR 1975	12,810	9,274,000

NOTE.--Record shown is sum of flow at stations on Colorado River and Paria River at Lees Ferry.

09383300. Filler ditch at Greer, Ariz.

LOCATION.--Lat 34°00'58", long 109°27'26", in NE¼SE¼ sec.11, T.7 N., R.27 E., Apache County, in Apache National Forest, on left bank at Greer, 0.1 mi (0.2 km) downstream from point of diversion.

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

GAGE.--Water-stage recorder. Altitude of gage is 8,300 ft (2,530 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 2.33 ft^3/s (0.066 m^3/s), 1,690 acre-ft/yr (2.08 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 19 ft^3/s (0.54 m^3/s) Oct. 7, 1974; no flow for long periods.

REMARKS.--Records poor. Diversion is to supply Greer Lakes, used for recreation and storage for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	13	5.0	0		0	0	.40	.10	0	0	0
2	4.9	13	5.0	0		.70	0	.30	.10	0	0	0
3	4.8	13	5.0	0		1.0	0	.60	.10	.10	0	0
4	4.8	12	5.0	0		.60	.10	.60	.10	.10	0	0
5	4.8	11	5.0	0		.90	.10	.20	.10	.10	0	0
6	9.9	10	5.0	0		.20	.10	.10	.10	.10	0	0
7	19	8.6	5.0	0		0	.10	.10	.10	.10	0	.20
8	12	11	4.0	.50		0	.10	.10	.10	0	0	.40
9	10	11	4.0	.50		0	.10	.10	.10	.10	0	.20
10	10	9.0	3.0	.50		1.0	.10	.10	.10	.10	0	0
11	12	8.0	3.0	.50		.50	.10	.10	.10	.10	.10	0
12	15	7.0	3.0	.30		.10	.10	.10	.10	.10	.10	0
13	12	7.0	3.0	.10		.10	.10	.10	.10	.20	0	0
14	10	7.0	3.0	.10		.10	.10	.10	.10	.10	0	0
15	8.2	6.0	3.0	.10		.10	.10	.10	.10	.10	0	6.1
16	7.3	5.0	1.5	0		.10	0	.20	.10	.10	0	11
17	6.9	5.0	.10	0		.10	0	.40	0	.10	0	11
18	6.5	6.0	.10	0		.10	0	.20	0	.10	0	12
19	6.4	6.0	.10	0		.10	0	.10	0	.10	0	11
20	6.4	6.0	.10	0		.10	.10	.10	0	.10	0	9.8
21	7.7	6.0	.10	0		.10	.60	.10	0	0	0	9.3
22	11	5.0	.10	0		.10	.70	.10	0	.10	0	9.1
23	16	5.0	.10	0		.10	4.5	.10	0	0	0	8.8
24	12	5.0	.10	0		.10	3.0	.10	0	0	0	8.4
25	9.8	5.0	.10	0		.10	.60	.10	0	0	0	8.4
26	11	5.0	.10	0		.10	.60	.10	0	.10	0	8.2
27	13	5.0	0	.50		.10	.50	.10	0	0	0	8.2
28	12	5.0	0	.50		0	.30	.10	0	.10	0	8.0
29	15	5.0	0	.50	---	0	.40	.20	0	0	0	7.7
30	14	5.0	0	0	---	0	.40	.20	0	0	0	7.7
31	14	---	0	0	---	0	---	.10	---	0	0	---
TOTAL	311.3	225.6	63.50	4.10	0	6.50	12.90	5.40	1.60	2.10	.20	145.50
MEAN	10.0	7.52	2.05	.13	0	.21	.43	.17	.053	.068	.007	4.85
MAX	19	13	5.0	.50	0	1.0	4.5	.60	.10	.20	.10	12
MIN	4.8	5.0	0	0	0	0	0	.10	0	0	0	0
AC-FT	617	447	126	8.1	0	13	26	11	3.2	4.2	.4	289

CAL YR 1974 TOTAL 940.80 MEAN 2.58 MAX 19 MIN 0 AC-FT 1870
WTR YR 1975 TOTAL 778.70 MEAN 2.13 MAX 19 MIN 0 AC-FT 1540

09383400. Little Colorado River at Greer, Ariz.

LOCATION.--Lat 34°01'00", long 109°27'24", in NE¼SE¼ sec.11, T.7 N., R.27 E., Apache County, in Apache National Forest, on upstream side of right abutment of culverts on State Highway 373, at Greer, 0.1 mi (0.2 km) downstream from Filler ditch.

DRAINAGE AREA.--30.9 mi^2 (80.0 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 8,283 ft (2,524.7 m), above mean sea level.

AVERAGE DISCHARGE.--15 years, 15.6 ft^3/s (0.442 m^3/s), 11,300 acre-ft/yr (13.9 hm^3/yr); median of yearly mean discharges, 14 ft^3/s (0.40 m^3/s), 10,100 acre-ft/yr (12 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 231 ft^3/s (6.54 m^3/s) Apr. 26 (gage height, 3.17 ft or 0.966 m); minimum daily, 3.0 ft^3/s (0.085 m^3/s) Dec. 11-15.
Period of record: Maximum discharge, 615 ft^3/s (17.4 m^3/s) Oct. 20, 1972 (gage height, 5.65 ft or 1.722 m), from rating curve extended above 150 ft^3/s (4.25 m^3/s) on basis of partially estimated culvert computation of peak flow; minimum daily, 0.8 ft^3/s (0.023 m^3/s) Oct. 11-14, 1962, Oct. 22-29, Nov. 4, 9, 14, 20, 25, 1967.

REMARKS.--Records good except those for winter periods, which are poor. Filler ditch diverts water from river 0.1 mi (0.2 km) above station. (See preceding page.)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	5.0	5.0	4.0	5.0	7.0	7.0	116	44	17	12	12
2	3.3	5.0	4.5	4.0	5.0	7.0	7.0	116	48	17	12	13
3	3.3	5.0	4.0	4.0	5.0	7.0	8.0	110	55	17	12	13
4	3.3	5.0	4.0	4.0	5.0	7.0	9.0	101	58	17	11	16
5	3.3	5.0	4.0	4.0	5.0	8.0	9.0	74	59	16	11	15
6	7.5	5.0	4.0	4.0	5.0	8.0	9.0	63	59	15	12	18
7	13	5.0	4.0	5.0	5.0	8.0	9.0	64	56	15	12	36
8	6.2	6.0	4.0	5.0	5.0	8.0	8.0	62	55	16	13	36
9	6.2	6.0	4.0	5.0	5.0	8.0	9.0	60	55	15	13	48
10	6.5	6.0	4.0	4.0	5.0	8.0	9.0	59	52	14	15	36
11	7.5	6.0	3.0	4.0	5.0	8.0	9.0	64	50	19	19	30
12	9.3	6.0	3.0	4.0	5.0	8.0	8.6	63	46	24	20	30
13	8.6	6.0	3.0	4.0	5.0	7.0	8.2	67	44	26	18	27
14	7.9	6.0	3.0	4.0	5.0	7.0	8.6	69	41	22	16	24
15	6.8	6.0	3.0	5.0	5.0	7.0	9.7	74	41	19	16	17
16	6.2	6.0	4.0	5.0	5.0	7.0	12	83	40	18	15	9.7
17	6.2	5.0	5.0	5.0	5.0	7.0	14	84	41	20	15	9.7
18	6.2	5.0	5.0	5.0	5.0	7.0	14	74	42	18	13	11
19	5.7	5.0	5.0	5.0	5.0	8.0	12	66	41	17	13	9.7
20	5.7	5.0	5.0	5.0	5.0	8.0	17	62	30	15	16	7.9
21	5.4	5.0	5.0	5.0	5.0	8.0	29	58	27	14	18	6.8
22	6.8	5.0	5.0	5.0	5.0	8.0	66	53	25	13	15	6.5
23	8.2	5.0	5.0	4.0	5.0	7.0	92	48	22	13	15	6.0
24	7.1	5.0	5.0	4.0	5.0	7.0	117	47	21	12	13	5.1
25	6.2	4.0	5.0	5.0	6.0	7.0	149	44	19	12	13	5.1
26	5.1	4.0	5.0	5.0	6.0	8.0	162	46	18	15	12	4.5
27	4.8	4.0	5.0	6.0	6.0	8.0	127	50	18	15	12	4.5
28	4.8	4.0	5.0	6.0	6.0	7.0	106	51	18	16	12	4.0
29	6.0	4.0	5.0	6.0	---	7.0	110	58	18	15	12	4.0
30	5.0	4.0	5.0	6.0	---	7.0	110	52	17	13	12	4.0
31	5.0	---	5.0	6.0	---	7.0	---	45	---	12	12	---
TOTAL	190.4	153.0	135.5	147.0	144.0	231.0	1265.1	2083	1160	507	430	469.5
MEAN	6.14	5.10	4.37	4.74	5.14	7.45	42.2	67.2	38.7	16.4	13.9	15.7
MAX	13	6.0	5.0	6.0	6.0	8.0	162	116	59	26	20	48
MIN	3.3	4.0	3.0	4.0	5.0	7.0	7.0	44	17	12	11	4.0
AC-FT	378	303	269	292	286	458	2510	4130	2300	1010	853	931

CAL YR 1974 TOTAL 2842.8 MEAN 7.79 MAX 26 MIN 2.5 AC-FT 5640
WTR YR 1975 TOTAL 6915.5 MEAN 18.9 MAX 162 MIN 3.0 AC-FT 13720

PEAK DISCHARGE (BASE, 60 CFS).--Apr. 26 (1900) 231 cfs (3.17 ft); Sept. 9 (0200) 72 cfs (1.65 ft).

09383500. Nutrioso Creek above Nelson Reservoir, near Springerville, Ariz.

LOCATION.--Lat 34°01'49", long 109°11'09", in NE¼SW¼ sec.4, T.7 N., R.30 E., Apache County, in Apache National Forest, on right bank 2.4 mi (3.9 km) upstream from dam on Nelson Reservoir and 9 mi (14 km) southeast of Springerville.

DRAINAGE AREA.--83.4 mi^2 (216.0 km^2).

PERIOD OF RECORD.--June 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,421.7 ft (2,262.13 m).

AVERAGE DISCHARGE.--8 years, 6.50 ft^3/s (0.184 m^3/s), 4,710 acre-ft/yr (5.81 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 142 ft^3/s (4.02 m^3/s) Apr. 25 (gage height, 8.04 ft or 2.451 m); no flow at times.
Period of record: Maximum discharge, 439 ft^3/s (12.4 m^3/s) Apr. 28, 1973 (gage height, 9.72 ft or 2.963 m), from rating curve extended above 190 ft^3/s (5.4 m^3/s) on basis of slope-area measurement at gage height 8.96 ft (2.731 m); no flow at times during most years.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	5.2	1.0	.50	1.2	5.4	21	57	6.0	.23	.71	0
2	.08	5.4	1.2	.60	1.2	7.8	20	55	5.0	.27	.44	.18
3	.08	6.9	1.2	.80	1.2	8.6	20	51	3.5	.27	.35	.90
4	.08	7.1	1.0	.80	1.2	9.0	25	47	2.5	.56	.39	.77
5	.04	5.2	1.0	.80	1.2	14	30	42	2.5	.71	0	.71
6	.20	4.6	1.0	.80	1.3	16	36	34	1.5	.71	0	.97
7	1.8	4.3	1.0	.80	1.4	14	40	30	1.5	1.3	0	.97
8	1.9	3.6	1.0	.90	1.4	24	35	28	1.2	.71	0	1.4
9	.60	7.1	1.0	1.0	1.5	35	32	25	1.0	.60	.64	14
10	.35	11	1.0	1.0	1.5	24	31	25	.70	.90	.77	11
11	.64	8.0	1.0	1.0	1.5	22	28	25	.60	1.4	.60	6.0
12	1.2	7.1	1.2	1.0	1.5	16	27	24	.50	.90	.56	6.0
13	1.5	6.6	1.2	1.0	1.5	16	25	23	.50	.77	.56	15
14	2.0	6.6	1.0	1.0	1.5	16	22	21	.50	.64	.52	8.8
15	1.6	6.4	1.2	1.0	1.5	15	19	21	.50	.64	.97	6.9
16	1.0	5.8	1.2	1.0	1.5	12	28	21	.52	.71	.77	4.8
17	.80	4.6	1.2	1.0	1.2	12	39	26	.48	1.0	.64	3.8
18	.60	4.3	1.1	1.0	1.0	9.4	36	24	.23	1.2	.44	4.1
19	.50	4.5	1.0	1.0	1.0	11	30	20	.35	1.5	.23	7.2
20	.31	4.0	1.0	1.0	1.0	16	40	17	.35	1.0	.44	6.9
21	.27	3.6	1.1	1.0	1.0	23	54	14	.35	.97	1.5	5.6
22	1.2	3.6	1.0	1.0	1.2	25	76	12	.44	.77	1.2	4.0
23	2.1	3.3	.60	1.0	1.5	24	86	13	.39	.56	.84	3.1
24	2.4	2.8	.50	1.0	1.5	18	82	11	.31	.52	.56	2.8
25	2.4	2.0	.50	1.0	2.0	21	91	10	.23	.60	.27	2.5
26	1.8	1.2	.60	1.0	3.0	24	96	9.0	.23	1.0	.31	2.2
27	2.5	1.0	.70	1.0	3.5	17	80	9.0	.27	1.2	.18	2.2
28	3.6	1.2	.80	1.0	4.2	20	59	8.0	.18	1.1	.31	1.8
29	6.2	1.1	1.0	1.0	---	20	63	8.0	.23	1.2	.27	1.0
30	6.4	1.0	1.0	1.1	---	18	56	7.0	.18	1.5	.04	.97
31	4.6	---	.80	1.2	---	21	---	7.0	---	1.1	0	---
TOTAL	48.88	139.1	30.10	29.30	44.2	534.2	1327	724.0	32.74	26.54	14.51	126.57
MEAN	1.58	4.64	.97	.95	1.58	17.2	44.2	23.4	1.09	.86	.47	4.22
MAX	6.4	11	1.2	1.2	4.2	35	96	57	6.0	1.5	1.5	15
MIN	.04	1.0	.50	.50	1.0	5.4	19	7.0	.18	.23	0	0
AC-FT	97	276	60	58	88	1060	2630	1440	65	53	29	251

CAL YR 1974 TOTAL 495.12 MEAN 1.36 MAX 11 MIN 0 AC-FT 982
WTR YR 1975 TOTAL 3077.14 MEAN 8.43 MAX 96 MIN 0 AC-FT 6100

PEAK DISCHARGE (BASE, 40 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-9	0130	7.21	59	4-25	2300	8.04	142
4-7	0200	6.95	44				

NOTE.--No gage-height record Dec. 25 to Feb. 12.

09383550. Nutrioso Creek below Nelson Reservoir, near Springerville, Ariz.

LOCATION.--Lat 34°03'36", long 109°11'40", in SE¼NE¼ sec.29, T.8 N., R.30 E., Apache County, in Apache National Forest, on right bank about 200 ft (60 m) downstream from dam on Nelson Reservoir and 7 mi (11 km) southeast of Springerville.

DRAINAGE AREA.--86.8 mi^2 (224.8 km^2)

PERIOD OF RECORD.--July 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,364.8 ft (2,244.79 m).

AVERAGE DISCHARGE.--8 years, 6.20 ft^3/s (0.176 m^3/s), 4,490 acre-ft/yr (5.54 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 135 ft^3/s (3.82 m^3/s) Apr. 26 (gage height, 6.12 ft or 1.865 m); minimum daily, 0.09 ft^3/s (0.003 m^3/s) Sept. 14-16, 20.
Period of record: Maximum discharge, 465 ft^3/s (13.2 m^3/s) Apr. 29, 1973 (gage height, 7.03 ft or 2.143 m), from rating curve extended above 150 ft^3/s (4.2 m^3/s) on basis of slope-area measurement at gage height 7.02 ft (2.140 m); no flow Dec. 10, 1967, to Jan. 3, 1968, Sept. 11-13, 17, 18, 1968.

REMARKS.--Records good except those for January and June, which are fair. Flow regulated by Nelson Reservoir, 200 ft (60 m) upstream, minor stock ponds, and a small lake in Nutrioso.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.18	.20	.20	.33	.18	23	57	5.5	3.3	.16	.12
2	.18	.18	.20	.20	.24	.20	22	57	4.2	9.9	.14	.12
3	.18	.18	.20	.20	.24	.20	24	56	2.6	5.9	.16	.12
4	.14	.18	.20	.20	.22	.18	25	50	1.3	5.8	.16	.12
5	.14	.18	.20	.20	.20	.18	29	42	1.0	5.8	.16	.11
6	.18	.16	.20	.20	.20	.18	34	36	.45	4.9	.16	.11
7	.18	.16	.24	.20	.20	.20	39	31	.36	4.9	.18	.11
8	.18	.14	.24	.20	.20	4.1	34	29	.22	3.5	.18	.12
9	.22	.16	.24	.20	.20	27	30	25	.12	4.7	.16	.12
10	.22	.16	.27	.20	.18	22	31	26	.11	6.4	.16	.11
11	.22	.18	.24	.20	.18	20	28	25	.11	5.1	.16	.11
12	.22	.20	.27	.20	.18	16	25	25	.12	4.9	.16	.11
13	.22	.20	.24	.20	.20	14	24	25	.11	4.9	.16	.10
14	.27	.20	.24	.20	.20	16	21	24	.11	3.8	.16	.09
15	.24	.22	.24	.20	.20	14	18	23	.10	1.2	.16	.09
16	.22	.27	.24	.20	.18	13	22	22	.14	.27	.16	.09
17	.22	.27	.24	.20	.18	11	30	24	.50	1.6	.16	.10
18	.22	.24	.24	.20	.16	9.9	32	25	.14	.12	.16	.12
19	.22	.22	.24	.20	.16	11	27	20	.11	.12	.18	.10
20	.22	.20	.24	.20	.16	13	31	18	.11	.14	.18	.09
21	.22	.20	.24	.20	.16	18	42	10	.11	.14	.16	.10
22	.20	.18	.24	.20	.14	22	63	7.1	.11	.20	.14	.10
23	.18	.18	.24	.20	.18	24	86	9.9	.11	.69	.14	.10
24	.16	.18	.24	.20	.18	19	86	9.3	.12	.11	.14	.10
25	.16	.20	.24	.20	.18	24	95	8.2	.12	.12	.12	.10
26	.18	.20	.22	.20	.16	29	108	7.1	.14	.14	.12	.11
27	.20	.20	.22	.20	.16	20	108	5.1	.14	.14	.12	.11
28	.20	.20	.20	.20	.16	21	63	3.8	.14	.16	.12	.11
29	.20	.20	.20	.20	---	21	63	5.5	.16	.18	.12	.11
30	.18	.20	.20	.20	---	21	62	7.8	.16	2.9	.12	.11
31	.18	---	.20	.20	---	25	---	7.1	---	9.5	.12	---
TOTAL	6.15	5.80	7.06	6.20	5.33	435.32	1325	720.9	18.72	91.43	4.68	3.21
MEAN	.20	.19	.23	.20	.19	14.0	44.2	23.3	.62	2.95	.15	.11
MAX	.27	.27	.27	.20	.33	29	108	57	5.5	9.9	.18	.12
MIN	.14	.14	.20	.20	.14	.18	18	3.8	.10	.11	.12	.09
AC-FT	12	12	14	12	11	863	2630	1430	37	181	9.3	6.4

CAL YR 1974 TOTAL 166.46 MEAN .46 MAX 5.5 MIN .03 AC-FT 331
WTR YR 1975 TOTAL 2629.80 MEAN 7.20 MAX 108 MIN .09 AC-FT 5220

09384000. Little Colorado River above Lyman Reservoir, near St. Johns, Ariz.

LOCATION.--Lat 34°19'50", long 109°21'18", in NE¼SE¼ sec.27, T.11 N., R.28 E., Apache County, on right bank 1.9 mi (3.1 km) downstream from Coyote Creek, 5 mi (8 km) upstream from Lyman Dam, and 12 mi (19 km) south of St. Johns.

DRAINAGE AREA.--747 mi^2 (1,935 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 5,988.8 ft (1,825.39 m) above mean sea level. Prior to July 25, 1940, water-stage recorder at site 600 ft (180 m) upstream at datum 1.70 ft (0.518 m) higher. Aug. 2 to Oct. 27, 1940, nonrecording gage at site within 1 mi (1.6 km) upstream at different datum.

AVERAGE DISCHARGE.--35 years, 21.2 ft^3/s (0.600 m^3/s), 15,360 acre-ft/yr (18.9 hm^3/yr); median of yearly mean discharges, 15 ft^3/s (0.42 m^3/s), 10,900 acre-ft/yr (13 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,600 ft^3/s (45.3 m^3/s) Sept. 12 (gage height, 18.6 ft or 5.67 m, from graph recorded to 18.4 ft (5.61 m); minimum daily, 1.9 ft^3/s (0.054 m^3/s) Jan. 13, 16-19.
Period of record: Maximum discharge, 16,000 ft^3/s (453 m^3/s) July 25, 1940 (gage height, 17.1 ft or 5.21 m, present datum, from floodmarks), by slope-area measurement of peak flow and reservoir inflow studies; maximum gage height, 18.6 ft (5.67 m), Sept. 12, 1975 (from graph recorded to 18.4 ft or 5.61 m); no flow at times.

REMARKS.--Records poor. Flow regulated by many small reservoirs—combined capacity, about 15,500 acre-ft (19.1 hm^3). Diversions for irrigation of about 6,700 acres (27.1 km^2) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	5.0	5.0	4.1	4.8	9.2	52	247	29	9.2	8.4	10
2	6.0	5.0	4.6	4.1	4.8	9.6	52	250	27	10	8.4	10
3	5.8	5.0	4.3	3.8	5.0	9.2	52	235	28	13	8.4	17
4	4.8	5.3	5.0	3.8	5.3	9.2	52	226	31	14	7.2	18
5	4.3	5.3	5.3	3.6	5.8	8.8	58	175	30	9.6	4.1	21
6	4.6	5.5	5.3	3.6	5.8	8.4	62	120	29	8.4	3.3	23
7	5.0	5.5	5.5	3.6	6.0	8.4	76	91	31	8.4	3.3	25
8	6.8	5.8	5.3	3.4	6.4	7.2	74	87	32	8.4	3.6	37
9	5.5	5.5	5.3	3.4	6.4	25	72	84	32	9.2	5.0	57
10	3.8	5.5	5.3	2.8	7.2	44	74	77	32	94	5.5	58
11	3.8	5.5	5.0	2.6	7.6	55	74	72	28	37	6.0	37
12	4.5	5.5	5.0	2.5	7.6	46	74	72	22	12	8.4	202
13	4.3	5.3	5.0	1.9	7.6	39	69	66	18	24	8.8	58
14	4.1	5.3	4.6	2.0	8.4	37	66	62	17	125	9.6	18
15	4.1	5.0	4.3	2.0	8.8	37	62	58	15	58	9.2	10
16	4.3	5.0	4.3	1.9	8.8	37	58	56	16	14	9.6	4.5
17	4.1	4.8	4.1	1.9	8.8	37	79	65	16	11	9.6	4.3
18	3.8	4.8	4.3	1.9	8.8	37	98	76	18	73	8.8	9.0
19	3.6	4.6	4.1	1.9	8.4	34	91	66	18	5.5	8.8	73
20	4.1	4.8	4.1	2.0	8.8	37	93	60	19	3.6	9.2	32
21	3.8	4.8	4.1	2.2	8.4	41	114	55	14	4.1	14	9.6
22	3.8	4.6	4.6	2.3	7.6	44	172	47	14	4.1	12	6.0
23	4.0	5.3	4.8	2.2	7.6	45	271	41	14	4.8	12	5.5
24	4.0	5.5	4.3	2.3	8.4	45	354	36	7.6	5.5	11	5.0
25	4.0	5.5	4.6	3.1	9.2	42	434	30	5.8	6.4	10	4.6
26	4.0	5.5	4.6	3.6	9.6	48	458	27	7.2	6.8	7.6	4.1
27	4.5	5.3	4.6	3.6	9.2	53	414	27	6.4	7.6	13	4.3
28	4.5	5.5	4.6	3.4	9.2	48	256	29	6.4	7.6	13	4.3
29	4.5	5.3	4.8	3.8	---	52	241	62	5.8	7.6	14	4.6
30	4.5	5.3	4.6	4.1	---	52	235	65	8.0	9.2	15	5.0
31	5.0	---	4.1	4.6	---	52	---	52	---	8.4	12	---
TOTAL	140.0	156.8	145.4	92.0	210.3	1057.0	4341	2716	577.2	619.4	278.8	776.9
MEAN	4.52	5.23	4.69	2.97	7.51	34.1	145	87.6	19.2	20.0	8.99	25.9
MAX	6.8	5.8	5.5	4.6	9.6	55	458	250	32	125	15	202
MIN	3.6	4.6	4.1	1.9	4.8	7.2	52	27	5.8	3.6	3.3	4.1
AC-FT	278	311	288	182	417	2100	8610	5390	1140	1230	553	1540

CAL YR 1974 TOTAL 1588.52 MEAN 4.35 MAX 201 MIN .20 AC-FT 3150
WTR YR 1975 TOTAL 11110.80 MEAN 30.4 MAX 458 MIN 1.9 AC-FT 22040

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-26	0600	16.71	585	7-18	0200	17.37	688
7-10	2100	18.00	1,370	9-12	1700	a18.6	1,600
7-14	2200	18.15	1,330				

a From graph recorded to 18.4 ft.

09384500. Lyman Reservoir near St. Johns, Ariz.

LOCATION.--Lat 34°22'06", long 109°22'55", in SW¼NE¼ sec.9, T.11 N., R.28 E., Apache County, in control tower of Lyman Dam on Little Colorado River, 9.5 mi (15.3 km) south of St. Johns.

DRAINAGE AREA.--790 mi^2 (2,046 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 5,923.7 ft (1,805.54 m) above mean sea level.

EXTREMES.--Current year: Maximum contents, 25,800 acre-ft (31.8 hm^3) May 20-22; maximum gage height, 53.40 ft (16.276 m) May 22; minimum contents, 10,800 acre-ft (13.3 hm^3) Oct. 4, 5; minimum gage height, 39.62 ft (12.076 m) Oct. 5.
Period of record: Maximum contents, 32,200 acre-ft (39.7 hm^3) May 6, 1973 (gage height, 57.93 ft or 17.657 m); no storage at times in recent years.

REMARKS.--Reservoir is formed by an earthfill and rockfill dam, rubble faced; dam completed and storage began in 1920; original dam washed out Apr. 14, 1915. Crest of permanent spillway raised from 50.0 ft (15.24 m) to 56.8 ft (17.31 m) during March and April 1949. Capacity, 30,600 acre-ft (37.7 hm^3) between gage heights 20.0 ft (6.10 m)—bottom of Lyman Canal—and 56.8 ft (17.31 m)—average elevation of spillway crest. Contents between gage heights 14.0 ft (4.27 m)—12.0 ft (3.66 m) above sill of outlet gates—and 20.0 ft (6.10 m), 790 acre-ft (0.974 hm^3), not available for release to Lyman Canal but can be released to river channel. Figures given herein represent contents above gage height 20.0 ft (6.10 m), bottom of Lyman Canal. Water is used for irrigation in vicinity of St. Johns.

Capacity table (gage height, in feet, and contents, in acre-feet)

35	7,220	50	21,400
40	11,200	55	28,000
45	15,800		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10900	11000	11000	11100	11400	12000	14200	23700	---	23500	22200	19200
2	10900	11000	11000	11100	11400	12000	14300	24100	---	23300	22200	19100
3	10900	11100	11000	11100	11400	12100	14400	24400	---	23300	22100	19000
4	10800	11100	11000	11100	11400	12100	14500	24800	---	23200	22100	18900
5	10800	11100	11000	11100	11400	12200	14600	25000	---	23100	22000	18700
6	10900	11100	11000	11100	11400	12200	14800	25100	---	23000	21800	18700
7	10900	11100	11000	11100	11400	12300	14900	25200	---	22900	21700	18600
8	11000	11100	11000	11200	11400	12300	15100	25300	---	22800	21700	18600
9	11000	11100	11000	11200	11400	12300	15300	25400	---	22800	21500	18600
10	11000	11100	11000	11200	11400	12400	15500	25400	---	22900	21400	18700
11	11000	11100	11000	11200	11400	12400	15600	25400	25100	22900	21300	18700
12	11000	11100	11000	11200	11500	12500	15800	25400	25100	22800	21200	19500
13	11000	11100	11000	11200	11500	12500	15900	25500	25000	22800	21100	19900
14	11000	11100	11000	11200	11500	12600	16100	25500	25000	22900	21000	19900
15	11000	11100	11000	11200	11500	12600	16200	25600	24900	23000	20900	19900
16	11000	11100	11000	11200	11600	12600	16300	25600	24800	23000	20800	20000
17	11000	11100	11000	11200	11600	12700	16400	25600	---	23100	20700	20000
18	11000	11100	11000	11200	11600	12700	16600	25700	---	23200	20600	20200
19	11000	11100	11000	11200	11600	12800	16800	25700	---	23200	20400	20600
20	11000	11100	11000	11300	11600	12800	17000	25800	---	23100	20400	20900
21	11000	11100	11000	11300	11700	12900	17100	25800	---	23100	20300	20800
22	11000	11100	11000	11300	---	13000	17500	25800	---	23000	20200	20900
23	11000	11100	11000	11300	---	13100	18100	---	---	22800	20100	20900
24	11000	11000	11000	11300	---	13200	18900	---	---	22700	20000	20900
25	11000	11000	11000	11300	---	13300	19800	---	---	22600	19900	20900
26	11000	11000	11000	11300	---	13400	20800	---	---	22600	19800	20900
27	11000	11000	11000	11300	---	13600	21700	---	---	22500	19700	20800
28	11000	11000	11000	11400	12000	13700	22300	---	---	22400	19600	20800
29	11000	11000	11000	11400	---	13800	22800	---	---	22400	19500	20800
30	11000	11000	11000	11400	---	13900	23200	---	23600	22300	19400	20800
31	11000	---	11000	11400	---	14000	---	25600	---	22300	19300	---
MAX	11000	11100	11000	11400	---	14000	23200	---	---	23500	22200	20900
MIN	10800	11000	11000	11100	---	12000	14200	---	---	22300	19300	18600
(†)	39.86	39.85	39.87	40.25	---	43.16	51.45	---	---	50.69	48.18	49.50
(‡)	+100	0	0	+400	+600	+2,000	+9,200	+2,400	-2,000	-1,300	-3,000	+1,500

CAL YR 1974..... ‡ -12,300
WTR YR 1974..... ‡ +9,900

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

09385000. Lyman Canal below Lyman Reservoir, near St. Johns, Ariz.

LOCATION.--Lat 34°22'05", long 109°22'55", in SW¼NE¼ sec.9, T.11 N., R.28 E., Apache County, on right bank 45 ft (14 m) downstream from outlet tunnel in Lyman Dam and 9.5 mi (15.3 km) south of St. Johns.

PERIOD OF RECORD.--June 1950 to June 1954, April 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,943.4 ft (1,811.55 m) above mean sea level.

AVERAGE DISCHARGE.--23 years (1950-53, 1955-75), 11.4 ft^3/s (0.323 m^3/s), 8,260 acre-ft/yr (10.2 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 74 ft^3/s (2.10 m^3/s) July 3-5, Aug. 8, 9, 1952; no flow for long periods in each year.

REMARKS.--Records good. Canal diverts water from Lyman Reservoir for irrigation of about 1,500 acres (6.07 km^2) in vicinity of St. Johns. No diversion between reservoir outlet and station. A feeder ditch 9 mi (14 km) downstream diverts up to 400 acre-ft/yr (0.493 hm^3/yr) from Lyman Canal to Little Reservoir.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	16	41	42	16	40
2							0	17	40	42	16	40
3							0	17	39	42	16	40
4							0	17	31	42	16	40
5							0	18	28	42	22	40
6							0	23	28	41	27	39
7							0	29	28	41	40	39
8							0	31	27	41	42	39
9							0	37	26	41	41	34
10							0	39	25	41	41	17
11							0	37	25	39	42	17
12							0	36	25	34	42	17
13							0	35	25	34	42	18
14							0	27	25	34	42	17
15							0	25	25	28	42	18
16							0	25	25	21	42	0
17							0	25	25	20	42	0
18							0	25	22	20	42	0
19							0	25	23	24	41	.10
20							0	25	25	24	41	.10
21							0	19	29	29	41	.10
22							0	17	29	32	41	.10
23							0	16	29	41	41	.10
24							0	22	34	45	41	.10
25							0	24	35	45	41	.10
26							10	34	37	45	41	.10
27							16	42	42	45	40	.10
28							16	42	42	44	40	.10
29					---		16	42	42	24	40	.10
30					---		16	42	42	15	40	.10
31		---			---		---	42	---	16	40	---
TOTAL	0	0	0	0	0	0	74	872	919	1074	1141	456.20
MEAN	0	0	0	0	0	0	2.47	28.1	30.6	34.6	36.8	15.2
MAX	0	0	0	0	0	0	16	42	42	45	42	40
MIN	0	0	0	0	0	0	0	16	22	15	16	0
AC-FT	0	0	0	0	0	0	147	1730	1820	2130	2260	905

CAL YR 1974 TOTAL 4559.00 MEAN 12.5 MAX 49 MIN 0 AC-FT 9040
WTR YR 1975 TOTAL 4536.20 MEAN 12.4 MAX 45 MIN 0 AC-FT 9000

09385500. Little Colorado River below Lyman Reservoir, near St. Johns, Ariz.

LOCATION.--Lat 34°22'05", long 109°22'56", in SW¼NE¼ sec.9, T.11 N., R.28 E., Apache County, on right bank 65 ft (20 m) downstream from outlet tunnel in Lyman Dam, and 9.5 mi (15.3 km) south of St. Johns.

DRAINAGE AREA.--790 mi^2 (2,046 km^2).

PERIOD OF RECORD.--April 1941 to June 1954, April 1955 to current year.

GAGE.--Water-stage recorder and concrete control for determination of quantity of water released to river channel. Datum of gage is 5,925.35 ft (1,806.047 m) above mean sea level. Water-stage recorder on Lyman Reservoir for determination of flow in spillway channel 0.4 mi (0.6 km) north, in SW¼ sec.4, T.11 N., R.28 E.

AVERAGE DISCHARGE.--32 years (1941-53, 1955-75), 3.27 ft^3/s (0.093 m^3/s), 2,370 acre-ft/yr (2.92 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 5.7 ft^3/s (0.161 m^3/s) July 17-20; minimum daily, 0.12 ft^3/s (0.003 m^3/s) Mar. 28-30, Apr. 5, 6, 22, 23.
Period of record: Maximum discharge observed, 603 ft^3/s (17.1 m^3/s) May 8, 1941 (including 546 ft^3/s or 15.5 m^3/s of spilled water); no flow at times prior to 1960.

REMARKS.--Records good. Records show all water spilled and released from Lyman Reservoir to the river channel, but do not include flow diverted to Lyman Canal. (See preceding page.) No flow over Lyman Dam spillway this year. Since 1929 spill has occurred only during periods Apr. 8 to about May 6, 1932, Apr. 30 to May 13, 1941, Apr. 5-23, 1966, Apr. 29 to May 26, 1973. Except for periods of flow over spillway, flow is completely regulated by many reservoirs—combined capacity, 46,900 acre-ft (57.8 hm^3)—the largest of which is Lyman Reservoir. (See elsewhere in this report.) Diversions above station for irrigation of about 8,200 acres (33.2 km^2), including 1,500 acres (6.07 km^2) served by Lyman Canal. Flow past this station, supplemented by spring inflow downstream and feeder ditch diversions from Lyman Canal, used to irrigate an additional 2,000 acres (8.09 km^2) in vicinity of St. Johns.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.59	.44	.51	.18	.22	.22	.15	.89	2.8	5.1	4.2	3.4
2	.59	.45	.51	.18	.22	.22	.18	1.8	2.8	5.1	4.2	3.9
3	.59	.45	.51	.18	.22	.22	.18	2.6	2.8	5.1	4.2	4.2
4	.59	.44	.44	.18	.22	.22	.15	2.6	2.6	5.1	4.5	4.2
5	.59	.44	.31	.18	.22	.22	.12	2.8	2.6	5.1	4.8	4.5
6	.59	.37	.26	.18	.22	.22	.12	3.0	2.8	5.1	4.5	4.5
7	.59	.37	.26	.18	.22	.22	.15	3.2	2.8	5.1	5.1	4.2
8	.59	.37	.26	.18	.22	.22	.15	3.2	3.0	5.1	5.1	2.8
9	.59	.37	.26	.18	.22	.22	.18	3.2	3.7	5.1	5.1	1.5
10	.51	.37	.26	.18	.22	.22	.18	3.2	4.8	5.1	5.1	1.2
11	.51	.37	.26	.18	.22	.26	.18	3.2	4.8	5.1	4.8	1.2
12	.51	.37	.26	.15	.22	.26	.18	3.4	4.8	5.4	4.8	1.2
13	.51	.37	.26	.15	.22	.26	.18	3.4	4.8	5.4	4.8	1.2
14	.51	.37	.26	.15	.18	.26	.22	3.4	4.8	5.4	4.8	1.1
15	.51	.37	.26	.15	.18	.26	.18	3.4	4.8	5.4	4.5	1.1
16	.51	.37	.26	.15	.18	.22	.18	3.2	5.1	5.4	4.2	.90
17	.51	.37	.26	.15	.18	.22	.18	3.4	4.5	5.7	4.2	.80
18	.51	.37	.26	.15	.18	.22	.22	3.4	4.2	5.7	4.5	.80
19	.51	.37	.26	.15	.18	.22	.22	3.4	4.2	5.7	4.5	.80
20	.51	.37	.26	.15	.18	.22	.18	3.2	4.2	5.7	4.5	.80
21	.59	.44	.26	.15	.18	.22	.15	3.2	4.2	5.4	4.5	.80
22	.59	.44	.22	.15	.18	.22	.12	2.8	4.2	5.4	4.5	.80
23	.59	.44	.22	.15	.22	.22	.12	2.8	4.5	5.4	4.5	.80
24	.59	.44	.22	.15	.22	.22	.15	2.8	4.8	5.4	4.5	.80
25	.59	.51	.22	.15	.22	.22	.15	2.6	4.8	5.4	4.5	.80
26	.59	.51	.22	.15	.22	.15	.44	2.8	4.8	5.1	4.2	.80
27	.59	.51	.22	.15	.22	.15	1.0	2.8	4.8	5.1	4.2	.80
28	.59	.51	.22	.18	.22	.12	1.0	2.8	4.8	5.1	3.9	.70
29	.59	.51	.18	.18	---	.12	.78	2.6	4.5	5.1	3.9	.70
30	.59	.51	.18	.18	---	.12	.89	2.6	5.1	4.5	3.9	.70
31	.59	---	.18	.18	---	.15	---	2.8	---	4.2	3.4	---
TOTAL	17.41	12.59	8.52	5.10	5.80	6.51	8.28	90.49	123.4	162.0	138.4	52.00
MEAN	.56	.42	.27	.16	.21	.21	.28	2.92	4.11	5.23	4.46	1.73
MAX	.59	.51	.51	.18	.22	.26	1.0	3.4	5.1	5.7	5.1	4.5
MIN	.51	.37	.18	.15	.18	.12	.12	.89	2.6	4.2	3.4	.70
AC-FT	35	25	17	10	12	13	16	179	245	321	275	103

CAL YR 1974 TOTAL 642.29 MEAN 1.76 MAX 6.4 MIN .15 AC-FT 1270
WTR YR 1975 TOTAL 630.50 MEAN 1.73 MAX 5.7 MIN .12 AC-FT 1250

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, N. MEX.
(Formerly published as Zuni River above Zuni Reservoir)

LOCATION.--Lat 35°06'03", long 108°45'00", in NE¼ sec.17, T.10 N., R.18 W., McKinley County, on Zuni Indian Reservation, on right bank, 50 ft (15 m) upstream from concrete ford on State Highway 36, 0.8 mi (1.3 km) upstream from flow line of Black Rock Reservoir, 2.3 mi (3.7 km) northeast of Black Rock, and 5.9 mi (9.5 km) northeast of Zuni Pueblo.

DRAINAGE AREA.--810 mi² (2,100 km²), approximately.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,450 ft (1,966 m) from topographic map.

AVERAGE DISCHARGE.--6 years, 10.2 ft³/s (0.289 m³/s), 7,390 acre-ft/yr (9.11 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 535 ft³/s (15.2 m³/s) Oct. 12 (gage height, 4.60 ft or 1.402 m), from rating curve extended as explained below; no flow for many days.
Period of record: Maximum discharge, 5,200 ft³/s (147 m³/s) Aug. 4, 1974 (gage height, 6.61 ft or 2.015 m), from rating curve extended above 670 ft³/s (19.0 m³/s) on basis of slope-area measurements at gage heights 4.05 ft (1.234 m), 3.94 ft (1.201 m), 5.16 ft (1.573 m), and 6.61 ft (2.015 m); no flow for many days.

REMARKS.--Records fair except those for April, August, and winter period, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	9.1	1.1	.90	1.2	4.4	19	16	0	0	.43	.41
2	0	8.6	1.0	.90	1.2	4.8	17	16	0	0	.39	3.2
3	0	8.3	1.1	.80	1.3	5.0	17	16	0	0	.22	3.2
4	0	7.9	1.0	.80	1.3	5.6	17	18	0	0	0	2.8
5	0	7.3	1.2	1.0	1.2	8.5	18	18	0	0	0	2.2
6	0	7.0	1.1	1.3	1.4	10	18	17	0	0	0	2.0
7	8.4	6.3	1.0	1.3	1.4	11	18	16	2.0	0	0	2.3
8	1.8	6.3	1.1	1.2	2.0	12	35	12	1.7	0	0	18
9	.03	6.3	1.0	1.0	2.4	15	20	8.7	.22	0	.12	10
10	7.3	4.6	.90	1.0	2.4	14	20	5.1	.25	0	.48	13
11	5.5	3.9	1.0	1.0	2.0	16	25	4.3	.36	0	4.0	25
12	58	3.7	1.1	1.0	1.9	17	25	3.9	0	0	5.3	55
13	3.9	3.7	1.0	1.1	2.0	17	40	2.9	0	0	4.7	26
14	4.4	4.8	.90	1.1	2.0	17	30	2.0	0	6.9	.51	32
15	4.0	2.9	1.0	1.1	2.2	17	20	1.7	0	3.2	0	20
16	3.1	2.4	1.0	1.0	1.7	17	20	1.7	0	.50	0	17
17	2.7	2.3	1.0	1.0	1.3	17	20	1.5	0	2.6	0	14
18	2.5	8.9	1.0	1.0	1.6	16	19	1.2	0	1.3	0	12
19	2.4	2.7	1.1	1.0	1.4	16	18	.94	0	.75	0	12
20	2.3	1.8	1.0	1.0	1.2	16	18	.80	0	.52	0	12
21	2.4	1.9	1.1	1.0	2.2	16	17	.66	0	.30	0	9.0
22	2.5	1.7	1.2	1.0	1.9	16	16	.72	0	.30	0	5.0
23	3.0	1.9	.70	1.0	2.3	17	15	.60	0	.50	0	1.0
24	5.3	1.4	.80	1.0	2.0	16	15	.51	0	.50	0	.50
25	4.2	1.3	1.0	1.1	2.9	17	15	.51	0	2.4	0	.15
26	8.3	1.4	.90	1.2	3.9	17	15	.51	0	2.5	0	5.3
27	9.1	1.3	.80	1.3	5.4	20	15	.30	0	.50	0	1.1
28	8.3	1.4	.90	1.2	4.4	20	15	.20	0	1.2	0	.35
29	12	1.2	1.0	1.2	---	19	15	.10	0	1.6	0	.30
30	10	1.1	1.0	1.2	---	17	15	0	0	.94	0	.30
31	9.1	---	.90	1.2	---	19	---	0	---	.66	0	---
TOTAL	180.53	123.4	30.90	32.90	58.1	450.3	587	167.85	4.53	27.17	16.15	305.11
MEAN	5.82	4.11	1.00	1.06	2.08	14.5	19.6	5.41	.15	.88	.52	10.2
MAX	58	9.1	1.2	1.3	5.4	20	40	18	2.0	6.9	5.3	55
MIN	0	1.1	.70	.80	1.2	4.4	15	0	0	0	0	.15
AC-FT	358	245	61	65	115	893	1160	333	9.0	54	32	605

CAL YR 1974 TOTAL 1140.05 MEAN 3.12 MAX 401 MIN 0 AC-FT 2260
WTR YR 1975 TOTAL 1983.94 MEAN 5.44 MAX 58 MIN 0 AC-FT 3940

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-12	0700	4.60	535	9-12	0100	3.64	176
7-14	1830	3.68	117	9-26	0430	3.21	108
9- 8	1800	3.52	156				

09390500. Show Low Creek near Lakeside, Ariz.

LOCATION.--Lat 34°10'46", long 109°59'14", in NW¼ sec.14, T.9 N., R.22 E., Navajo County, on left bank 1 mi (2 km) upstream from pumping plant on Show Low Lake, 1.9 mi (3.1 km) northwest of Lakeside, 2.2 mi (3.5 km) upstream from Jaques Dam, and 6 mi (10 km) southeast of Show Low.

DRAINAGE AREA.--68.6 mi^2 (177.7 km^2).

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

GAGE.--Water-stage recorder and concrete-dam control with V-notch sharp-crested weir. Altitude of gage is 6,610 ft (2,015 m), from topographic map.

AVERAGE DISCHARGE.--22 years, 11.1 ft^3/s (0.314 m^3/s), 8,040 acre-ft/yr (9.91 hm^3/yr); median of yearly mean discharges, 7.7 ft^3/s (0.22 m^3/s), 5,600 acre-ft/yr (6.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 405 ft^3/s (11.5 m^3/s) Mar. 9 (gage height, 3.82 ft or 1.164 m); minimum daily, 0.40 ft^3/s (0.011 m^3/s) Oct. 20.
Period of record: Maximum discharge, 5,450 ft^3/s (154 m^3/s) Dec. 26, 1971 (gage height, 9.53 ft or 2.905 m), from rating curve extended above 2,500 ft^3/s (71 m^3/s) on basis of slope-area measurement of peak flow; no flow Oct. 5, 6, Dec. 10-19, 1964, Jan. 4-15, 1970.

REMARKS.--Records fair. Record shows inflow to Show Low Lake. Flow partly regulated by several small reservoirs, largest of which are Rainbow Lake and Scott Reservoir, combined capacity, 2,400 acre-ft (2.96 hm^3). Diversions for irrigation of about 250 acres (1.01 km^2) above station.

REVISIONS (WATER YEARS).--WSP 1513: 1954-56. WSP 1926: Drainage area. WRD Ariz. 1971: 1970(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	9.4	.76	.50	6.0	150	145	6.9	5.4	11	5.9	4.9
2	4.4	6.5	.66	.50	6.0	150	76	6.4	5.5	11	5.9	5.0
3	4.2	6.2	.57	.50	5.5	150	116	5.8	5.3	12	5.7	5.2
4	4.0	5.8	.52	.50	5.1	108	187	5.5	5.4	8.6	5.6	5.4
5	3.8	4.7	1.3	.50	4.2	91	149	5.8	5.4	8.5	5.4	5.2
6	4.0	3.8	1.5	.50	3.5	117	89	4.5	4.8	8.2	5.6	5.9
7	4.5	2.9	1.1	.50	3.0	89	70	3.9	4.8	8.2	5.9	6.0
8	4.2	2.1	.93	.50	2.8	157	53	3.9	4.9	10	5.7	5.5
9	4.3	1.9	.78	.50	3.0	260	60	3.7	5.2	8.8	5.1	5.5
10	2.6	1.8	.59	.50	4.2	146	125	3.5	5.5	8.4	5.3	5.5
11	1.4	1.5	.48	.50	4.2	80	118	3.1	4.8	9.7	5.6	5.5
12	1.2	1.1	.50	.50	3.3	54	135	2.9	4.5	9.2	5.6	5.5
13	1.0	.89	.50	.50	3.6	76	97	2.7	4.7	8.6	5.4	5.5
14	.91	.76	.50	.50	4.9	84	83	2.1	4.8	6.9	5.0	5.5
15	.75	.84	.50	.50	6.9	93	80	2.2	4.8	4.4	4.9	5.5
16	.67	.83	.50	.50	6.1	87	69	2.2	4.0	4.2	5.0	5.5
17	.63	.86	.50	.50	5.5	77	60	2.3	4.0	3.9	5.0	5.5
18	.63	.87	.50	.50	4.4	57	44	2.6	4.0	3.9	4.9	5.5
19	.56	.88	.50	.50	4.0	77	38	2.8	4.2	3.9	5.2	5.5
20	.40	.65	.50	.50	4.0	113	33	3.2	4.2	3.8	5.5	5.5
21	.45	.66	.50	.50	4.2	110	35	3.0	5.6	3.9	6.4	5.5
22	.86	.79	.50	.50	82	101	37	3.4	6.9	4.0	6.1	5.5
23	1.6	.61	.50	.60	116	68	32	3.9	4.3	3.9	5.8	5.5
24	1.6	.54	.50	.80	129	62	23	3.1	4.4	5.1	5.5	5.5
25	1.3	.55	.50	1.0	150	60	18	3.9	4.4	5.4	5.3	5.5
26	1.0	.60	.50	2.3	150	76	15	4.7	4.6	5.6	5.2	5.5
27	1.1	.60	.50	9.3	150	43	12	4.8	11	6.3	5.0	5.5
28	.83	.79	.50	9.1	150	40	9.5	5.5	11	6.5	4.8	5.5
29	119	.79	.50	7.8	---	50	8.3	5.9	11	7.2	4.8	5.5
30	25	.77	.50	6.8	---	51	7.5	5.7	11	6.6	4.8	5.5
31	14	---	.50	6.0	---	128	---	5.5	---	6.0	4.8	---
TOTAL	215.49	60.98	19.19	54.70	1021.4	3005	2024.3	125.4	170.4	213.7	166.7	164.1
MEAN	6.95	2.03	.62	1.76	36.5	96.9	67.5	4.05	5.68	6.89	5.38	5.47
MAX	119	9.4	1.5	9.3	150	260	187	6.9	11	12	6.4	6.0
MIN	.40	.54	.48	.50	2.8	40	7.5	2.1	4.0	3.8	4.8	4.9
AC-FT	427	121	38	108	2030	5960	4020	249	338	424	331	325

CAL YR 1974 TOTAL 2063.06 MEAN 5.65 MAX 119 MIN .40 AC-FT 4090
WTR YR 1975 TOTAL 7241.36 MEAN 19.8 MAX 260 MIN .40 AC-FT 14360

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1100	3.57	286	3-9	0215	3.82	405
(a)	unknown	b3.50	255	4-3	2330	3.62	309

a Occurred during period Feb. 25 to Mar. 2; probably Mar 2.
b From high-water mark.

09392000. Show Low Creek below Jaques Dam, near Show Low, Ariz.

LOCATION.--Lat 34°11'47", long 110°00'13", in NW¼ sec.10, T.9 N., R.22 E., Navajo County, on right bank just downstream from Jaques Dam, 3.5 mi (5.6 km) northwest of Lakeside, and 4.5 mi (7.2 km) southeast of Show Low.

DRAINAGE AREA.--73.0 mi^2 (189 km^2).

PERIOD OF RECORD.--November 1941 to January 1945, June 1953 to September 1955 (monthly discharge only), October 1955 to current year. Monthly discharge only November 1941 to January 1945, published in WSP 1313. Published as "at Jaques damsite, near Lakeside" 1941-45.

GAGE.--Water-stage recorder and sharp-crested weir, with periodic supplementary lake elevation readings for flow over concrete spillway. Altitude of gage is 6,530 ft (1,990 m), from topographic map. November 1941 to January 1945 nonrecording gage at site 100 ft (30 m) upstream at different datum.

AVERAGE DISCHARGE.--22 years (1953-75), 6.11 ft^3/s (0.173 m^3/s), 4,430 acre-ft/yr (5.46 hm^3/yr); median of yearly mean discharges, 2.9 ft^3/s (0.08 m^3/s), 2,100 acre-ft/yr (2.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 275 ft^3/s (7.79 m^3/s) Apr. 3 (lake elevation, about 6,570.6 ft or 2,002.72 m); no flow July 15, 16.
1941-45: Maximum daily discharge, 304 ft^3/s (8.61 m^3/s) Mar. 6, 1943; no flow Aug. 8, 9, 1943.
1953-75: Maximum discharge, about 2,500 ft^3/s (71 m^3/s), spillway flow entering 0.2 mi (0.3 km) downstream from station, Dec. 26, 1971 (lake elevation unknown); no flow at times.

REMARKS.--Records good except those for period of spill, which are poor. Record since 1953 shows release from Show Low Lake. Flow regulated by several reservoirs, largest of which are Show Low Lake, completed in 1953; Rainbow Lake, completed prior to 1941; and Scott Reservoir, completed in 1946 (combined capacity, 8,800 acre-ft or 10.9 hm^3). Diversions for irrigation of about 250 acres (1.0 km^2) above Show Low Lake and diversion by pumping of floodwater stored in Show Low Lake to Forestdale Creek in Salt River basin (see record for Forestdale Creek diversion from Show Low Creek, near Show Low, elsewhere in this report).

REVISIONS.--WSP 1926: Drainage area.

09391000. SHOW LOW LAKE.--A lake on Show Low Creek, formed by Jaques Dam, in NW¼ sec.10, T.9 N., R.22 E., Navajo County, 4.5 mi (7.2 km) southeast of Show Low; dam completed and storage began in spring of 1953. Total capacity to spillway, 6,176 acre-ft (7.62 hm^3), consisting of 1,070 acre-ft (1.32 hm^3) dead storage below elevation 6,535.0 ft (1,991.87 m), sill of outlet structure, and 5,106 acre-ft (6.30 hm^3) usable storage between elevations 6,535.0 and 6,570.0 ft (1,991.87 and 2,002.54 m), sill of overflow spillway. Capacity table prepared by Leeds, Hill, and Jewett, consulting engineers, from surveys by the firm. Water cannot be pumped when lake elevation is below 6,538.5 ft (1,992.93 m), sill of intake to pumping plant, but can be released to river channel down to elevation 6,535.0 ft (1,991.87 m). Partial listing of periodic observations made by Navapache Electric Co. and Geological Survey were as follows:

Date	Elevation (feet)	Usable contents (acre-feet)	Date	Elevation (feet)	Usable contents (acre-feet)
Nov. 4, 1974	6,540.45	554	Apr. 23, 1975	6,570.0	5,110
Nov. 23	6,539.0	397	May 1	6,568.1	4,740
Dec. 3	6,539.1	408	May 31	6,558.7	3,080
Jan. 3, 1975	6,539.45	446	June 30	6,548.5	1,540
Feb. 3	6,540.5	560	July 31	6,539.4	440
Mar. 3	6,551.4	1,950	Aug. 2	6,538.8	376
Mar. 22	6,570.0	5,110	Sept. 2	b6,538.5	345
Mar. 31	6,570.2	5,140	Oct. 1	6,538.5	345
Apr. 4	a6,570.5	5,200			

a Maximum observed.
b Minimum observed.

09392000. Show Low Creek below Jaques Dam, near Show Low, Ariz.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	.01	1.1	.44	.52	.60	120	5.4	5.3	6.9	6.0	6.0
2	3.7	.01	.52	.44	.52	.60	70	5.3	5.5	6.9	6.0	6.0
3	3.7	.01	.52	.44	.52	.60	70	5.3	5.6	6.9	6.0	6.2
4	3.7	.01	.52	.44	.52	.67	150	5.3	5.6	6.9	6.1	6.2
5	3.7	.01	.52	.44	.52	.69	140	5.3	5.6	6.9	6.2	6.2
6	3.7	.01	.52	.44	.52	.69	80	5.3	5.6	6.9	6.2	2.0
7	1.8	.01	.52	.44	.52	.69	50	5.3	5.6	6.7	6.2	1.5
8	.79	.01	.52	.44	.52	.69	30	5.3	5.6	5.9	6.2	4.7
9	.79	.01	.50	.44	.52	.69	20	5.3	5.7	5.8	6.2	4.7
10	.79	.01	.44	.44	.52	.77	80	5.3	5.8	5.8	6.2	4.9
11	.77	.01	.44	.44	.52	.79	90	5.3	6.0	5.8	6.2	4.9
12	.74	.01	.44	.44	.52	.79	120	5.2	6.4	5.8	6.2	4.5
13	.71	.01	.44	.44	.52	.79	80	5.1	6.4	5.8	6.2	.69
14	.69	.01	.44	.44	.52	.79	70	5.1	6.4	1.8	6.2	.69
15	.69	.01	.44	.44	.52	.79	50	5.4	6.4	0	6.2	.69
16	.69	.01	.44	.44	.52	.79	30	5.6	6.4	0	6.2	.69
17	.28	.01	.44	.44	.52	.79	20	5.6	6.4	.86	6.2	.66
18	.01	.01	.44	.44	.52	.79	15	5.4	6.4	4.4	6.2	.60
19	.01	.01	.44	.44	.52	.79	10	5.3	6.4	5.1	6.2	.60
20	.01	.01	.44	.44	.52	.79	5.0	5.4	6.4	5.1	6.2	.60
21	.01	.01	.44	.47	.52	.87	5.0	5.3	6.4	5.1	6.2	.60
22	0	.01	.44	.49	.52	.89	5.0	5.3	6.4	5.5	5.7	.60
23	0	.01	.44	.50	.52	30	3.0	5.3	6.4	6.2	5.3	.60
24	0	.01	.44	.52	.52	40	4.3	5.3	6.3	6.2	5.3	.60
25	0	.01	.44	.52	.52	40	4.9	5.3	6.2	6.2	5.3	.60
26	0	.01	.44	.52	.52	70	4.9	5.2	6.2	6.2	5.5	.60
27	0	.01	.44	.52	.52	15	4.9	5.3	6.2	6.2	6.0	.60
28	.01	.01	.44	.52	.57	15	5.1	5.3	6.2	6.2	6.0	.60
29	.01	.01	.44	.52	---	15	5.5	5.3	6.3	6.2	6.0	.60
30	.01	.81	.44	.52	---	20	5.4	5.3	6.8	6.2	6.0	3.3
31	.01	---	.44	.52	---	100	---	5.3	---	6.1	6.0	---
TOTAL	31.02	1.10	14.92	14.42	14.61	361.35	1348.0	164.7	182.9	166.56	186.6	71.72
MEAN	1.00	.037	.48	.47	.52	11.7	44.9	5.31	6.10	5.37	6.02	2.39
MAX	3.7	.81	1.1	.52	.57	100	150	5.6	6.8	6.9	6.2	6.2
MIN	0	.01	.44	.44	.52	.60	3.0	5.1	5.3	0	5.3	.60
AC-FT	62	2.2	30	29	29	717	2670	327	363	330	370	142

CAL YR 1974 TOTAL 947.46 MEAN 2.60 MAX 6.0 MIN 0 AC-FT 1880
WTR YR 1975 TOTAL 2557.90 MEAN 7.01 MAX 150 MIN 0 AC-FT 5070

NOTE.--Spill occurred Mar. 23 to Apr. 22 (release through dam of 0.89 ft^3/s occurred during this period).

09393500. Silver Creek near Snowflake, Ariz.

LOCATION.--Lat 34°40'00", long 110°02'30", in SW¼NW¼ sec.29, T.15 N., R.22 E., Navajo County, on left bank 6 mi (10 km) upstream from mouth and 11 mi (18 km) north of Snowflake.

DRAINAGE AREA.--886 mi^2 (2,295 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 5,204.1 ft (1,586.21 m) above mean sea level.

AVERAGE DISCHARGE.--25 years, 17.0 ft^3/s (0.481 m^3/s), 12,320 acre-ft/yr (15.2 hm^3/yr); median of yearly mean discharges, 13 ft^3/s (0.37 m^3/s), 9,400 acre-ft/yr (12 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 990 ft^3/s (28.0 m^3/s) Oct. 29 (gage height, 5.8 ft or 1.77 m); no flow Apr. 24.
Period of record: Maximum discharge, 10,100 ft^3/s (286 m^3/s) Jan. 19, 1952 (gage height, 18.0 ft or 5.49 m), from rating curve extended above 4,400 ft^3/s (125 m^3/s) on basis of peak discharge for former station near Woodruff; no flow for several days in water years 1971, 1974, and 1975.

REMARKS.--Records good except those for January, which are poor. Diversions for irrigation above station of about 6,600 acres (26.7 km^2). Flow regulated by several reservoirs—combined capacity, about 13,700 acre-ft (16.9 hm^3), excluding Lone Pine Reservoir, but including 6,176 acre-ft (7.62 hm^3) in Show Low Lake.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	22	3.9	1.1	2.5	2.0	1.6	1.4	1.6	.57	3.6	1.2
2	3.2	19	4.9	1.1	2.5	1.9	.79	.87	1.9	4.6	3.6	49
3	2.8	18	4.1	1.1	2.5	1.7	.33	.87	1.4	2.8	1.7	51
4	3.0	15	4.0	.96	2.5	1.4	3.4	1.1	.87	3.4	1.3	8.8
5	3.2	7.5	3.9	.79	2.5	1.2	63	.71	1.7	2.0	.71	5.4
6	3.4	6.9	3.2	.79	2.5	1.4	34	.45	3.2	2.6	1.7	6.9
7	5.7	6.3	2.4	1.4	2.6	.96	14	.51	3.9	3.6	1.0	8.2
8	21	6.0	2.4	1.7	2.4	.71	9.9	1.1	1.5	3.0	.79	54
9	6.6	6.0	2.4	1.0	2.2	.64	6.6	1.1	1.1	1.0	2.2	120
10	5.7	5.4	1.9	1.0	2.0	.64	5.4	.64	1.0	4.4	73	30
11	6.0	5.1	1.7	1.0	1.7	.64	9.9	1.0	2.2	2.6	16	15
12	6.0	5.4	2.0	1.2	1.6	.57	68	1.4	1.9	5.4	14	60
13	16	5.4	1.6	1.4	1.4	.57	83	3.0	3.2	48	4.6	137
14	13	4.3	1.6	2.0	1.9	.57	62	2.4	3.2	15	4.6	129
15	11	4.3	2.0	2.5	3.4	.57	43	3.0	3.9	12	4.4	52
16	7.5	3.4	2.0	2.5	3.6	.57	25	1.5	2.0	5.1	4.9	25
17	4.9	4.4	2.0	2.5	4.3	.57	12	2.6	2.8	16	4.1	18
18	3.9	4.9	2.2	2.5	3.6	21	6.9	1.9	2.6	25	1.7	95
19	3.6	4.9	2.2	2.5	2.8	15	3.6	1.6	3.0	5.1	2.2	177
20	3.4	4.4	1.7	2.5	3.2	8.9	1.9	.96	3.2	3.0	1.3	220
21	8.9	4.4	1.4	2.5	3.4	4.3	.79	.96	2.2	1.3	4.6	81
22	11	4.1	1.0	2.5	3.6	1.7	.45	1.2	3.2	3.2	8.8	56
23	9.2	3.6	.96	2.5	3.4	.96	.13	.71	3.2	3.0	7.2	19
24	7.8	3.0	.96	2.5	3.0	.64	0	.87	2.8	2.6	2.6	9.9
25	5.1	3.0	1.0	2.5	2.6	.39	.18	3.0	2.0	2.4	1.9	7.5
26	4.1	3.6	1.0	2.5	2.2	.28	.10	4.1	.87	3.4	1.9	6.0
27	4.1	3.2	1.0	2.5	2.0	.28	4.3	1.2	.64	1.4	3.4	4.3
28	6.3	3.4	.96	2.5	2.0	.13	4.3	.71	2.6	1.9	3.6	4.9
29	357	3.6	1.1	2.5	---	1.1	3.9	3.0	2.0	2.6	2.4	3.9
30	77	3.9	1.5	2.5	---	2.4	2.6	1.9	1.3	2.8	1.4	3.6
31	30	---	1.2	2.5	---	2.2	---	1.1	---	5.6	1.7	---
TOTAL	653.8	194.4	64.18	59.04	73.9	75.89	471.07	46.86	66.98	195.37	186.90	1458.6
MEAN	21.1	6.48	2.07	1.90	2.64	2.45	15.7	1.51	2.23	6.30	6.03	48.6
MAX	357	22	4.9	2.5	4.3	21	83	4.1	3.9	48	73	220
MIN	2.8	3.0	.96	.79	1.4	.13	0	.45	.64	.57	.71	1.2
AC-FT	1300	386	127	117	147	151	934	93	133	388	371	2890

CAL YR 1974 TOTAL 1959.79 MEAN 5.37 MAX 357 MIN 0 AC-FT 3890
WTR YR 1975 TOTAL 3546.99 MEAN 9.72 MAX 357 MIN 0 AC-FT 7040

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

09394500. Little Colorado River at Woodruff, Ariz.

LOCATION.--Lat 34°46'58", long 110°02'37", in NE¼SW¼ sec.17, T.16 N., R.22 E., Navajo County, on left bank at county road bridge in Woodruff, 3.7 mi (6.0 km) downstream from Silver Creek.

DRAINAGE AREA.--8,100 mi² (21,000 km²), approximately.

PERIOD OF RECORD.--March to May 1905; June to July 1905 (gage heights only); August 1905 to May 1907; July 1907 to April 1908, July to October 1908, December 1908, and December 1915 to September 1916 (gage heights only); October 1916 to August 1917 (monthly discharge only); September 1917 to March 1918, December 1918 to December 1919, April 1929 to December 1933, September 1935 to current year. Published as "near Woodruff" 1916-19, 1929-48.

GAGE.--Water-stage recorder. Datum of gage is 5,130.3 ft (1,563.72 m) above mean sea level. See WSP 1733 for history of changes prior to Sept. 22, 1949.

AVERAGE DISCHARGE.--46 years (1905-6, 1916-17, 1929-33, 1935-75), 52.5 ft³/s (1.487 m³/s), 38,040 acre-ft/yr (46.9 hm³/yr); median of yearly mean discharges, 45 ft³/s (1.27 m³/s), 32,600 acre-ft/yr (40.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,800 ft³/s (79.3 m³/s) Oct. 29 (gage height, 14.17 ft or 4.319 m); minimum daily, 0.70 ft³/s (0.020 m³/s) June 5.
Period of record: Maximum discharge not determined, occurred Jan. 19, 1916; maximum discharge recorded, 25,000 ft³/s (708 m³/s) Dec. 5, 1919; maximum gage height, 22.50 ft (6.858 m) from floodmark, Sept. 30, 1971; no flow at times in most years prior to 1960 and in 1974.

REMARKS.--Records fair except those for November to March, and September, which are poor. Diversions above station for irrigation of about 22,000 acres (89.0 km²) including a pump installation 1,000 ft (305 m) upstream installed in spring of 1973. Some regulation by reservoirs above station; combined capacity, about 73,000 acre-ft (90.0 hm³), excluding Lone Pine Reservoir.

REVISIONS (WATER YEARS).--WSP 1049: 1917. WSP 1213: 1906, 1919(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	50	5.6	6.0	6.0	5.0	5.6	5.6	4.0	3.6	13	3.2
2	6.9	30	6.0	6.5	6.0	5.0	7.5	4.8	4.8	2.8	9.5	20
3	4.6	25	7.0	5.5	6.0	5.0	5.2	4.4	4.4	16	8.5	100
4	3.6	20	6.5	5.0	6.0	4.5	3.2	4.8	2.8	4.8	7.0	100
5	3.2	15	6.5	5.0	6.0	4.0	57	4.8	.70	4.0	4.4	20
6	3.2	11	6.5	4.8	6.0	4.0	40	4.4	1.1	4.0	1.1	20
7	4.0	11	6.5	5.2	6.0	4.0	23	4.0	5.2	4.8	1.6	20
8	322	9.5	6.0	5.6	6.0	3.8	15	4.4	4.8	4.8	5.6	50
9	302	9.0	5.5	5.5	6.0	3.5	13	4.8	4.0	5.6	15	200
10	25	8.5	5.5	5.0	6.0	3.5	43	4.8	4.0	8.0	160	100
11	15	7.5	5.5	5.0	5.5	3.5	47	4.8	4.0	8.0	97	50
12	15	7.5	5.5	5.0	5.0	3.5	65	4.8	2.8	10	99	100
13	41	8.0	5.5	5.0	5.0	3.5	97	5.2	5.2	125	16	300
14	24	7.5	5.5	5.5	4.8	3.5	91	5.6	3.6	36	8.5	300
15	18	6.5	5.5	6.0	6.5	3.5	57	6.0	5.6	20	8.5	100
16	12	6.0	5.5	6.0	9.0	3.5	33	6.0	2.4	48	6.0	180
17	8.0	6.5	5.5	6.0	23	3.5	23	3.6	1.5	79	7.0	202
18	4.8	7.5	5.5	6.0	23	13	12	6.0	2.8	350	6.0	215
19	4.8	8.0	5.5	6.0	16	20	7.5	3.2	4.8	50	4.4	400
20	4.4	7.5	5.5	6.0	10	13	5.6	4.8	5.6	10	5.6	500
21	5.2	7.0	5.0	6.0	9.0	9.0	4.4	4.0	2.8	5.0	4.4	200
22	15	6.5	5.0	6.0	8.0	5.6	4.0	4.0	1.8	4.4	72	150
23	68	6.0	5.0	6.0	8.0	4.4	3.6	4.4	5.6	3.6	35	100
24	73	5.2	5.0	6.0	8.0	3.6	3.6	2.4	5.2	3.6	16	80
25	16	4.8	5.0	6.0	7.0	3.2	3.6	4.0	4.8	2.8	8.5	45
26	7.5	4.8	5.0	6.0	6.0	3.2	3.6	5.2	4.0	4.8	4.4	25
27	16	5.2	5.0	6.0	6.0	2.8	4.4	3.2	2.4	13	4.4	17
28	85	4.8	5.0	6.0	5.5	2.8	6.5	1.6	1.8	8.5	5.6	10
29	1800	5.2	5.0	6.0	---	2.8	7.0	4.8	4.4	15	5.6	7.5
30	1350	5.6	5.0	6.0	---	4.0	6.5	4.4	3.6	29	2.8	6.0
31	100	---	5.0	6.0	---	5.2	---	1.5	---	22	3.2	---
TOTAL	4364.1	316.6	171.6	176.6	225.3	159.4	697.8	136.3	110.50	906.1	645.6	3620.7
MEAN	141	10.6	5.54	5.70	8.05	5.14	23.3	4.40	3.68	29.2	20.8	121
MAX	1800	50	7.0	6.5	23	20	97	6.0	5.6	350	160	500
MIN	3.2	4.8	5.0	4.8	4.8	2.8	3.2	1.5	.70	2.8	1.1	3.2
AC-FT	8660	628	340	350	447	316	1380	270	219	1800	1280	7180

CAL YR 1974 TOTAL 9576.30 MEAN 26.2 MAX 1800 MIN 0 AC-FT 18990
WTR YR 1975 TOTAL 11530.60 MEAN 31.6 MAX 1800 MIN .70 AC-FT 22870

PEAK DISCHARGE (BASE, 1,900 CFS).--Oct. 29 (1715) 2,800 cfs (14.17 ft).

09395900. Black Creek near Lupton, Ariz.

LOCATION.--Lat 35°27'09", long 109°07'30", in E½NE¼ sec.26, T.24 N., R.30 E. (unsurveyed), Apache County, in Navajo Indian Reservation, on downstream end of center bridge pier on State Highway 166, 7 mi (11 km) upstream from West Fork, and 8 mi (13 km) northwest of Lupton, and 16 mi (26 km) south of Window Rock.

DRAINAGE AREA.--500 mi^2 (1,300 km^2), approximately.

PERIOD OF RECORD.--August 1964 to December 1972, May 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,550 ft (1,996 m), from topographic map. Prior to May 1974 at site 160 ft (49 m) downstream at same datum.

AVERAGE DISCHARGE.--9 years, 8.62 ft^3/s (0.244 m^3/s), 6,250 acre-ft/yr (7.71 hm^3/yr).

EXTREMES.--May to September 1974: Maximum discharge during period, 1,600 ft^3/s (45.3 m^3/s) Aug. 5 (gage height, 8.10 ft or 2.469 m), from rating curve extended above 10 ft^3/s (0.28 m^3/s) on basis of slope-area estimate of peak flow; no flow for many days.
Water year 1975: Maximum discharge, 865 ft^3/s (24.5 m^3/s) Sept. 8 (gage height, 7.01 ft or 2.137 m), from rating curve extended above 10 ft^3/s (0.28 m^3/s) on basis of slope-area estimate at gage height 8.10 ft (2.477 m); no flow for many days.
Period of record: Maximum discharge, 5,470 ft^3/s (155 m^3/s) Aug. 1, 1964 (gage height, 7.8 ft or 2.38 m, site then in use), from rating curve extended above 900 ft^3/s (25 m^3/s) on basis of contracted-opening measurement of peak flow; no flow for many days in each year.

REMARKS.--Records poor. Small diversions above station for irrigation and stock water. Red Lake, near headwaters 35 mi (56 km) upstream, was built in 1954, with capacity of 9,700 acre-ft (12.0 hm^3), but silting may have reduced this amount.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	2.0	0
2										0	2.9	0
3										0	2.0	0
4										0	2.0	0
5										0	40	0
6										0	1.0	0
7										0	.50	0
8										0	.10	0
9										0	0	0
10										0	0	0
11										0	0	0
12										0	0	0
13										0	0	0
14										0	0	0
15										20	0	.20
16										50	0	1.0
17										20	0	.80
18										13	0	1.0
19										42	0	17
20										26	0	.10
21										2.1	0	0
22										1.5	0	0
23										1.5	0	0
24										2.3	0	0
25										2.1	0	0
26										2.1	0	0
27										2.0	0	0
28										2.0	0	0
29										2.2	0	0
30										2.0	0	0
31									---	2.0	0	---
TOTAL								0	0	192.8	50.50	20.10
MEAN								0	0	6.22	1.63	.67
MAX								0	0	50	40	17
MIN								0	0	0	0	0
AC-FT								0	0	382	100	40

PEAK DISCHARGE (BASE, 1,500 CFS).--Aug. 5 (1330) 1,600 cfs (8.10 ft).

09395900. Black Creek near Lupton, Ariz.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.0	.10	0	1.0	16	14	5.0		0	0	0
2	0	.80	.10	0	1.0	13	10	5.0		0	0	0
3	0	.60	.10	0	0	10	8.0	2.0		0	0	0
4	0	.20	.10	0	0	8.0	16	2.0		0	0	0
5	0	.20	.10	0	0	5.0	10	8.0		0	0	0
6	1.6	.20	.10	0	1.0	2.0	8.0	2.0		0	0	3.0
7	.50	.20	0	0	2.0	1.0	8.0	6.0		0	0	5.9
8	0	.20	0	0	2.0	2.0	10	7.9		0	0	57
9	0	.20	0	0	4.0	6.1	13	4.0		3.0	0	40
10	1.1	.20	0	0	2.0	16	15	2.0		5.1	0	5.0
11	3.5	.20	0	0	2.0	15	10	1.0		46	11	1.0
12	5.0	.20	0	0	3.0	10	5.0	0		20	2.0	24
13	2.9	.20	0	0	3.0	8.0	10	0		5.0	0	103
14	2.0	.20	0	0	3.0	8.0	5.0	0		2.0	0	70
15	.50	.20	0	0	2.0	7.0	0	0		0	0	10
16	0	.20	0	0	1.0	15	0	0		10	0	2.0
17	0	.20	0	0	0	15	0	0		2.0	0	0
18	0	.20	0	0	0	16	0	0		0	0	0
19	0	.20	0	0	0	16	0	0		0	0	0
20	0	.20	0	0	0	16	0	0		0	0	10
21	1.0	.20	0	0	0	17	0	0		0	0	1.0
22	3.0	.20	0	0	0	15	0	0		0	.40	0
23	4.6	.20	0	0	0	10	0	0		0	.20	0
24	8.5	.20	0	0	0	10	0	0		0	0	0
25	7.5	.20	0	0	0	7.0	0	0		0	0	0
26	6.0	.20	0	0	0	10	17	0		0	0	0
27	16	.20	0	0	12	19	22	0		0	0	0
28	4.8	.20	0	0	16	18	19	0		17	0	0
29	193	.10	0	0	---	10	15	0		5.0	0	0
30	6.0	.10	0	2.0	---	9.0	10	0		2.0	0	0
31	2.0	---	0	1.0	---	8.0	---	0	---	0	0	---
TOTAL	269.50	7.60	.60	3.0	55.0	338.1	225.0	44.9	0	117.1	13.60	331.9
MEAN	8.69	.25	.019	.097	1.96	10.9	7.50	1.45	0	3.78	.44	11.1
MAX	193	1.0	.10	2.0	16	19	22	8.0	0	46	11	103
MIN	0	.10	0	0	0	1.0	0	0	0	0	0	0
AC-FT	535	15	1.2	6.0	109	671	446	89	0	232	27	658

WTR YR 1975 TOTAL 1406.30 MEAN 3.85 MAX 193 MIN 0 AC-FT 2790

PEAK DISCHARGE (BASE, 1,500 CFS).--No peak above base.

NOTE.--No gage-height record during periods of low flow.

09396100. Puerco River near Chambers, Ariz.

LOCATION.--Lat 35°10'42", long 109°27'15", in SW¼NW¼ sec.35 (revised), T.21 N., R.27 E., Apache County, on upstream side of right abutment of Atchison, Topeka, and Santa Fe Railway Co. bridge, 1.5 mi (2.4 km) southwest of Chambers.

DRAINAGE AREA.--2,160 mi^2 (5,600 km^2), approximately.

PERIOD OF RECORD.--Water years 1971-72 (annual maximums only), January 1973 to current year (discharge above 500 ft^3/s or 14 m^3/s only).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,705 ft (1,738.9 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 7,510 ft^3/s (213 m^3/s) Sept. 9 (gage height, 5.1 ft or 1.55 m, from floodmark).
Period of record: Maximum discharge, 17,800 ft^3/s (504 m^3/s) Sept. 30, 1971 (gage height, 9.65 ft or 2.941 m); no flow observed on many days each year.

REMARKS.--Records poor. Only daily discharges above 500 ft^3/s (14 m^3/s) are published. Small diversions above station for irrigation and livestock. Red Lake, near the headwaters of Black Creek, was built in 1954, with a capacity of 9,700 acre-ft (12.0 hm^3), but capacity may have been reduced by silting.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-									-		-
2	-									-		-
3	-									-		-
4	-									-		-
5	-									-		-
6	-									-		-
7	-									-		-
8	700									-		-
9	-									-		2400
10	-									-		-
11	-									-		-
12	-									1190		-
13	-									-		-
14	-									-		-
15	-									-		-
16	-									-		-
17	-									-		-
18	-									1160		-
19	-									-		-
20	-									-		-
21	-									-		-
22	-									-		-
23	-									-		-
24	-									-		-
25	-									-		-
26	-									-		-
27	-									-		-
28	-									-		-
29	2000									-		-
30	1200									-		-
31	-									-		---
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-
MEAN	-	-	-	-	-	-	-	-	-	-	-	-
MAX	-	-	-	-	-	-	-	-	-	-	-	-
MIN	-	-	-	-	-	-	-	-	-	-	-	-
AC-FT	-	-	-	-	-	-	-	-	-	-	-	-

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10- 8	unknown	a4.36	6,020	7-18	0400	a3.9	5,130
10-29	b0500	a4.96	7,220	9- 9	b0400	c5.1	7,510
7-12	0500	3.00	3,510				

a From high-water mark in gage well.
b About.
c From floodmark.
NOTE.--No gage-height record from Oct. 1 to Nov. 8, May 8 to June 18, Aug. 22 to Sept. 30. Daily discharges above 500 cfs probably occurred during period Sept. 13-20.

09397300. Little Colorado River near Joseph City, Ariz.

LOCATION.--Lat 34°54'04", long 110°15'17", in NE¼SE¼ sec.6, T.17 N., R.20 E., Navajo County, on right bank just upstream from diversion dam, 5.4 mi (8.7 km) west of Holbrook, 5.7 mi (9.2 km) southeast of Joseph City, and 8.5 mi (13.7 km) downstream from Puerco River.

DRAINAGE AREA.--12,200 mi^2 (31,600 km^2), approximately.

PERIOD OF RECORD.--July 1973 to current year (daily discharge only for those days on which instantaneous discharge exceeds 500 ft^3/s or 14 m^3/s).

GAGE.--Water-stage recorder and concrete diversion dam. Datum of gage is 5,031.10 ft (1,533.479 m) above mean sea level (Corps of Engineers bench mark).

EXTREMES.--Current year: Maximum discharge, 20,600 ft^3/s (583 m^3/s) Oct. 29 (gage height, 6.90 ft or 2.103 m), from rating curve extended above 800 ft^3/s (23 m^3/s) on basis of slope-area measurement at gage height 6.82 ft (2.079 m).
Period of record: Maximum discharge, 20,600 ft^3/s (583 m^3/s) Oct. 29, 1974 (gage height, 6.90 ft or 2.103 m), from rating curve extended above 800 ft^3/s (23 m^3/s) on basis of slope-area measurement at gage height 6.82 ft (2.079 m).
A discharge of 60,000 ft^3/s (1,700 m^3/s) was determined for peak of Sept. 19, 1923 at Holbrook (see prior records for sta 09397000, Little Colorado River at Holbrook, for this peak and other peaks 1905-6, 1949-73).

REMARKS.--Records poor. Published record includes only those days when instantaneous discharge over the crest of the dam exceeds 500 ft^3/s (14 m^3/s). Diversions above station for irrigation of about 23,000 acres (93 km^2), diversions at dam on right bank of most low flows for irrigation of about 1,500 acres (6.07 km^2) in vicinity of Joseph City. Some regulation by reservoirs; combined capacity of principal reservoirs, about 83,000 acre-ft (100 hm^3).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-									-		-
2	-									-		-
3	-									-		-
4	-									-		-
5	-									-		-
6	-									-		-
7	-									-		-
8	219									-		-
9	803									-		1,730
10	-									-		448
11	-									-		274
12	-									77		288
13	-									620		711
14	-									-		1,050
15	-									-		1,100
16	-									820		400
17	-									415		-
18	-									1,480		100
19	-									-		1,400
20	-									-		800
21	-									-		400
22	-									-		-
23	91									-		-
24	-									-		-
25	-									-		-
26	-									-		-
27	241									-		-
28	684									-		-
29	8,000				------					-		-
30	3,700				------					-		-
31	450	------			------		------		------	-		------
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-
MEAN	-	-	-	-	-	-	-	-	-	-	-	-
MAX	8,000	-	-	-	-	-	-	-	-	1,480	-	1,730
MIN	-	-	-	-	-	-	-	-	-	-	-	-
AC-FT	-	-	-	-	-	-	-	-	-	-	-	-

PEAK DISCHARGE (BASE, 5,000 CFS).--Oct. 29 (1300) 20,600 cfs (6.90 ft), including about 15,000 cfs from Leroux Wash; Sept. 9 (1330) 6,950 cfs (4.40 ft). Peak discharge for discontinued sta 09397000 for Oct. 29 was about 6,000 cfs at 1030 hours; peak discharge for Sept. 9 was equivalent to that for this station.

09398300. Blue Ridge Reservoir near Pine, Ariz.

LOCATION.--Lat 34°33'19", long 111°11'00", in NE¼SE¼ sec.33, T.14 N., R.11 E., Coconino County, in Coconino National Forest, on upstream side of left end of spillway structure of Blue Ridge Dam on East Clear Creek, at mouth of General Springs Canyon, 7.3 mi (11.7 km) east of Clints Well and 20 mi (32 km) northeast of Pine.

DRAINAGE AREA.--71.1 mi² (184.1 km²).

PERIOD OF RECORD.--December 1964 to March 1965 (periodic elevations only), April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,620 ft (2,018 m) above mean sea level; gage readings have been reduced to elevations above mean sea level. Prior to Apr. 2, 1965, nonrecording-gage readings (at intervals of 3 to 8 days) at datum of mean sea level.

EXTREMES.--Current year: Maximum contents, 15,010 acre-ft (18.51 hm³) Apr. 26 (elevation, 6,720.02 ft or 2,048.262 m, from high-water mark); minimum, 2,100 acre-ft (2.59 hm³) Jan. 22-27; minimum elevation, 6,639.72 ft (2,023.787 m) Jan. 27.
Period of record: Maximum contents, about 16,000 acre-ft (19.7 hm³) Dec. 30, 1965, based on outflow studies and weather records; minimum since reservoir filled (April 1965), 1,850 acre-ft (2.28 hm³) Dec. 12, 1967 (elevation, 6,636.68 ft or 2,022.860 m)

REMARKS.--Reservoir is formed by a concrete arch dam. Dam completed and storage began in December 1964. Total capacity is 19,500 acre-ft (24.0 hm³) at elevation 6,735 ft (2,053 m), of which 15,000 acre-ft (18.5 hm³) is usable storage below 6,720 ft (2,048 m)—crest of spillway, Drawdown below elevation 6,640 ft (2,024 m)—capacity, 2,120 acre-ft (2.61 hm³)—for diversion to East Verde River is not permitted. Figures given herein represent total contents. Reservoir is used as a basin for pumping water to East Verde River. (See records for East Verde River diversion from East Clear Creek, near Pine.)

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on surveys by Leeds, Hill, and Jewett, Inc., January 1962)

6,630	1,400	6,700	10,260
6,640	2,120	6,720	15,000
6,660	3,920	6,730	17,960
6,680	6,580		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	2,210	2,190	-	2,130	-	-	-	13,640	11,170	-	6,760
2	-	2,260	2,180	-	2,140	-	-	-	13,560	11,100	-	6,690
3	-	2,320	2,180	-	2,140	-	-	-	13,480	11,010	-	6,620
4	-	2,360	2,180	-	2,150	-	-	-	13,400	10,940	-	6,560
5	-	2,380	2,180	-	2,150	-	-	-	13,330	10,860	-	6,500
6	-	2,410	2,180	-	2,160	-	-	-	13,250	10,790	-	6,450
7	-	2,420	2,180	-	2,160	-	-	-	13,180	10,730	-	6,400
8	-	2,450	2,180	-	2,160	-	-	-	13,120	10,650	-	6,340
9	-	2,510	2,180	-	2,170	-	-	-	13,030	10,580	-	6,270
10	-	2,540	2,180	-	2,170	-	-	-	12,940	10,510	-	6,210
11	-	2,540	2,180	-	2,180	-	-	-	12,860	10,440	-	-
12	-	2,520	2,180	-	2,190	-	-	-	12,780	10,390	8,150	-
13	-	2,510	2,170	-	2,210	-	-	-	12,700	10,320	8,080	-
14	-	2,490	2,170	-	2,220	-	-	-	12,610	10,250	8,010	-
15	-	2,460	2,170	2,110	2,230	-	-	-	12,520	10,180	7,940	-
16	-	2,440	2,170	2,110	2,240	-	-	-	12,430	10,110	7,870	5,830
17	-	2,410	2,160	2,110	2,250	-	-	-	12,330	-	7,790	5,770
18	-	2,380	2,160	2,110	2,260	4,970	-	-	12,240	-	7,720	5,700
19	-	2,360	2,160	2,110	2,270	5,140	-	14,580	12,160	-	7,650	5,640
20	-	2,340	2,160	2,110	2,270	5,370	-	14,510	12,070	-	7,580	5,570
21	-	2,320	-	2,110	2,290	5,630	-	14,450	11,980	-	7,500	5,500
22	-	2,300	-	2,100	2,300	5,900	-	14,370	11,900	-	7,430	5,440
23	-	2,270	-	2,100	-	6,050	-	14,340	11,810	-	7,360	5,370
24	-	2,250	-	2,100	-	6,160	-	14,270	11,720	-	7,300	5,300
25	-	2,220	-	2,100	-	6,310	-	14,190	11,630	-	7,230	5,240
26	-	2,200	-	2,100	-	6,510	-	14,100	11,550	-	7,160	5,180
27	-	2,190	-	2,100	-	-	-	14,010	11,470	-	7,090	5,100
28	-	2,190	-	2,110	a 2,960	-	-	13,950	11,390	-	7,020	5,030
29	2,140	2,190	-	2,120	------	-	-	13,880	11,320	-	6,960	4,960
30	2,170	2,190	-	2,130	------	-	a14,180	13,790	11,250	-	6,890	4,900
31	2,190	------	a2,150	2,130	------	a 7,520	------	13,710	------	a9,020	6,920	------
MAX	-	2,540	2,190	-	-	-	-	-	13,640	11,170	-	6,760
MIN	-	2,190	2,150	2,100	2,130	-	-	-	11,250	-	6,920	4,900
(†)	6,640.92	6,640.83	-	6,640.14	-	-	-	6,715.05	6,704.66	-	6,681.52	6,667.97
(‡)	+10	0	-40	-20	+830	+4,560	+6,660	-470	-2,460	-2,230	-2,100	-2,020

CAL YR 1974 ..... ‡ -80
WTR YR 1975 ..... ‡ +2,720

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.
a Interpolated.
NOTE.--No elevations recorded for many days during the year.

09398500. Clear Creek below Willow Creek, near Winslow, Ariz.

LOCATION.--Lat 34°40'03", long 111°00'25", in SW¼SE¼ sec.19, T.15 N., R.13 E., Coconino County, in Sitgreaves National Forest, on right bank 2 mi (3 km) downstream from Willow Creek and 30 mi (48 km) southwest of Winslow.

DRAINAGE AREA.--321 mi^2 (831 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,957 ft (1,815.7 m), from Topographic Division by photogrammetry.

AVERAGE DISCHARGE (unadjusted for diversion or storage).--28 years, 77.4 ft^3/s (2.192 m^3/s), 56,080 acre-ft/yr (69.1 hm^3/yr); median of yearly mean discharges, 54 ft^3/s (1.53 m^3/s), 39,100 acre-ft/yr (48 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 920 ft^3/s (26.0 m^3/s) Apr. 26 (gage height, 7.84 ft or 2.390 m); no flow for many days.
Period of record: Maximum discharge, 16,400 ft^3/s (464 m^3/s) Jan. 18, 1952 (gage height, 21.5 ft or 6.55 m), from rating curve extended above 6,000 ft^3/s (170 m^3/s); no flow at times in most years.

REMARKS.--Records fair except those for period of doubtful gage-height record, which are poor. Flow is partially controlled by Blue Ridge Reservoir (usable capacity 15,000 acre-ft or 18.5 hm^3) about 20 mi (32 km) upstream. (See sta 09398300.) Diversion to East Verde River from Blue Ridge Reservoir. (See sta 09507580.)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.20		0	31	97	181				
2		0	.12		0	59	74	145				
3		0	.08		0	119	85	120				
4		0	.03		0	150	112	120				
5		0	.03		0	149	188	101				
6		0	0		0	153	247	70				
7		0	0		0	137	239	44				
8		0	.04		0	137	160	33				
9		1.7	.36		0	477	111	30				
10		30	.30		0	430	108	28				
11		29	.18		0	256	85	28				
12		17	.10		0	159	81	26				
13		14	.03		.62	144	74	21				
14		11	0		8.4	110	82	16				
15		8.8	0		11	86	188	12				
16		7.9	0		10	87	463	7.7				
17		7.3	0		10	91	545	6.4				
18		6.7	0		8.1	90	375	4.1				
19		5.5	0		5.8	118	294	2.4				
20		4.0	0		7.7	233	300	.97				
21		3.5	0		8.1	313	460	.16				
22		3.2	0		7.7	367	702	.03				
23		2.7	0		7.9	254	769	0				
24		1.9	0		9.8	177	695	0				
25		1.6	0		8.6	187	691	0				
26		1.6	0		7.7	263	743	0				
27		1.3	0		8.6	224	420	0				
28		1.1	0		16	170	298	0				
29		.76	0		------	108	289	0				
30		.43	0		------	84	239	0				
31		------	0		------	85	------	0	------			------
TOTAL	0	160.99	1.47	0	136.02	5,648	9,214	996.75	0	0	0	0
MEAN	0	5.37	.047	0	4.86	176	307	32.2	0	0	0	0
MAX	0	30	.36	0	16	477	769	181	0	0	0	0
MIN	0	0	0	0	0	31	74	0	0	0	0	0
AC-FT	0	319	2.9	0	270	10,810	18,280	1,980	0	0	0	0

CAL YR 1974 TOTAL 8,792.89 MEAN 24.1 MAX 515 MIN 0 AC-FT 17,440
WTR YR 1975 TOTAL 15,957.24 MEAN 43.7 MAX 769 MIN 0 AC-FT 31,650

PEAK DISCHARGE (BASE, 500 CFS).--Mar. 9 (1345) 622 cfs (7.08 ft); Apr. 26 (0645) 920 cfs (7.84 ft).

NOTE. --Doubtful gage-height record Apr. 16 to May 2.

09399000. Clear Creek near Winslow, Ariz.

LOCATION.--Lat 34°58'10", long 110°38'40", in SE¼SE¼ sec.9, T.18 N., R.16 E., Navajo County, on right bank 10 ft (3.0 m) downstream from bridge on State Highway 99, 1.5 mi (2.4 km) upstream from mouth, and 5 mi (8 km) southeast of Winslow.

DRAINAGE AREA.--607 mi^2 (1,572 km^2).

PERIOD OF RECORD.--June to December 1906, January 1907 to January 1909 (gage heights only), March 1929 to February 1934, September 1935 to current year.

GAGE.--Water-stage recorder with diversion dam 1,200 ft (366 m) downstream as control. Datum of gage is 4,861.32 ft (1,481.730 m) above mean sea level. See WSP 1713, 1733, or 1926 for history of changes prior to July 10, 1931.

AVERAGE DISCHARGE.--44 years (1929-33, 1935-75), 77.1 ft^3/s (2.183 m^3/s), 55,860 acre-ft/yr (68.9 hm^3/yr); median of yearly mean discharges, 56 ft^3/s (1.59 m^3/s), 40,600 acre-ft/yr (50 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,940 ft^3/s (112 m^3/s) Sept. 12 (gage height, 8.95 ft or 2.728 m); no flow for many days.
Period of record: Maximum discharge, 50,000 ft^3/s (1,420 m^3/s) Apr. 4, 1929 (gage height, 18.1 ft or 5.52 m, present datum), from rating curve extended above 13,500 ft^3/s (382 m^3/s) on basis of velocity-area studies and verified by slope-area measurement at gage height 13.4 ft (4.08 m); no flow for many days in most years.
Floodmarks 3 ft (0.9 m) higher than stage of flood of Apr. 4, 1929, were found 1,850 ft (564 m) downstream from gage in 1929.

REMARKS.--Records fair except for those below 2 ft^3/s (0.05 m^3/s), which are poor. Records show discharge over dam and do not include flow in canal that diverts at dam or leakage through dam. Storage in and diversion from Blue Ridge Reservoir near Pine about 50 mi (80 km) upstream. (See sta 09398300.)

REVISIONS (WATER YEARS).--WSP 859: 1929.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0		0	.19	.92	3.6	80	359	.61	.94	.75	2.5
2	0		0	.23	.92	4.0	80	334	.49	1.0	.71	3.6
3	0		0	.19	1.1	4.0	70	327	.41	1.1	.71	2.7
4	0		0	.16	1.3	4.2	80	303	.35	1.3	.71	.91
5	0		.03	.15	1.5	4.2	90	300	.36	1.4	.75	.41
6	0		.05	.19	1.5	3.4	106	286	.42	1.6	.82	.16
7	0		.06	.21	1.7	3.5	233	245	.46	1.7	.88	103
8	0		.05	.26	1.9	4.3	242	173	.51	2.0	.96	109
9	0		.07	.44	2.1	45	200	128	.59	2.0	1.0	131
10	.01		.06	.44	2.2	257	146	104	.57	2.2	1.0	31
11	0		.07	.38	2.2	467	146	92	.56	5.0	1.1	15
12	0		.10	.30	2.5	338	132	86	.59	12	1.1	653
13	0		.09	.27	1.0	212	94	85	.58	5.5	1.1	187
14	0		.10	.26	.78	155	94	82	.56	10	1.2	27
15	0		.11	.31	.97	122	58	73	.58	5.1	1.2	14
16	0		.14	.47	1.2	95	100	64	.62	3.6	1.2	8.9
17	0		.16	.56	1.4	75	441	53	.61	3.2	1.1	6.9
18	0		.15	.60	1.5	71	538	46	.62	2.9	1.1	12
19	0		.18	.60	1.5	71	448	41	.68	2.5	1.2	13
20	0		.19	.66	1.7	70	399	32	.73	2.3	1.3	4.9
21	.25		.20	.75	2.0	140	420	29	.75	2.2	1.5	2.6
22	.44		.23	.78	2.0	313	538	26	.77	2.1	1.5	1.9
23	.20		.28	.80	2.0	391	734	22	.77	2.0	1.6	1.7
24	.05		.25	.83	2.2	348	791	19	.78	2.1	1.6	1.6
25	0		.20	.90	2.5	240	706	17	.80	1.9	1.5	2.1
26	0		.20	.96	2.7	154	627	14	.85	.93	1.6	2.2
27	0		.18	.99	3.0	200	653	11	.92	.72	1.7	2.1
28	0		.18	1.0	3.4	198	448	7.2	.92	.71	1.7	2.1
29	.17		.19	.98	------	139	392	1.9	.91	.77	1.7	2.2
30	.16		.17	.99	------	115	372	1.2	.92	.82	1.8	2.4
31	.08	------	.15	.96	------	86	------	.81	------	.77	1.9	------
TOTAL	1.36	0	3.84	16.81	49.69	4,333.2	9,458	3,362.11	19.29	82.36	37.99	1,346.88
MEAN	.044	0	.12	.54	1.77	140	315	108	.64	2.66	1.23	44.9
MAX	.44	0	.28	1.0	3.4	467	791	359	.92	12	1.9	653
MIN	0	0	0	.15	.78	3.4	58	.81	.35	.71	.71	.16
AC-FT	2.7	0	7.6	33	99	8,590	18,760	6,670	38	163	75	2,670

CAL YR 1974 TOTAL 7,089.40 MEAN 19.4 MAX 486 MIN 0 AC-FT 14,060
WTR YR 1975 TOTAL 18,711.53 MEAN 51.3 MAX 791 MIN 0 AC-FT 37,110

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-10	1900	6.61	538	9- 7	2115	6.91	800
4-18	0845	6.68	602	9-12	1630	8.95	3,940
4-24	0445	6.99	880				

09401200. Little Colorado River at Cameron, Ariz.
(National stream-quality accounting network station)

LOCATION.--Lat 35°52'40", long 111°24'40", in NE¼SE¼ sec.22, T.29 N., R.9 E. (unsurveyed), Coconino County, at bridge on U.S. Highway 89 at Cameron, in Navajo Indian Reservation, 2.5 mi (4.0 km) upstream from Moenkopi Wash, 12 mi (19.3 km) upstream from gaging station 09402000 Little Colorado River near Cameron, and 57.5 mi (92.5 km) upstream from mouth.

DRAINAGE AREA.--24,000 mi² (62,000 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1950 to September 1958, October 1974 to current year.
Specific conductance: October 1964 to September 1970.
Water temperatures: October 1951 to September 1970.
Sediment records: October 1947 to September 1970.

REMARKS.--Streamflow ungaged. No flow for extended periods each year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT. 17...	1100	73	11	--	--	--	--	23	3.0	180
NOV. 26...	1330	1.0	11	--	--	--	--	44	8.7	210
MAR. 26...	1130	390	5.3	60000	60	5000	10	22	3.9	58
APR. 30...	1000	520	5.3	--	--	--	--	12	2.2	37
JULY 29...	1100	110	16	--	--	--	--	5.8	1.2	94
SEP. 12...	1130	266	9.4	--	--	--	--	39	7.5	180

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT. 17...	5.6	189	--	130	120	.8	.86	.09	589
NOV. 26...	3.4	166	--	160	190	.7	.03	.04	750
MAR. 26...	3.2	101	0	28	65	.4	.13	.09	229
APR. 30...	1.7	95	0	16	23	.2	.97	.08	144
JULY 29...	1.3	189	5	40	23	.8	.72	.21	330
SEP. 12...	4.2	193	0	210	90	.8	2.0	.01	690

DATE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)
OCT. 17...	571	.80	70	0	9.4	900	--	12.0	340000
NOV. 26...	710	1.02	150	10	7.6	1300	--	8.0	10
MAR. 26...	236	.31	71	0	3.0	389	8.3	11.0	3400
APR. 30...	149	.20	39	0	2.6	275	8.3	7.0	1800
JULY 29...	284	.45	19	0	9.3	400	9.4	27.0	13000
SEP. 12...	645	.94	130	0	6.9	1100	7.2	22.0	200000

09401200. Little Colorado River at Cameron, Ariz.--Continued

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.								
17...	1100	--	.01	.96	24	25	110	9.8
NOV.								
26...	1330	--	.01	.04	.27	.31	1.4	.09
MAR.								
26...	1130	.04	.09	.11	4.5	4.6	20	1.4
APR.								
30...	1000	--	.01	.08	2.3	2.4	11	.99
JULY								
29...	1100	--	.06	.85	1.7	2.6	11	2.9
SEP.								
12...	1130	2.0	.04	2.1	1.0	3.1	14	1.5

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)
OCT.										
17...	1100	--	--	250	--	--	--	--	--	--
NOV.										
26...	1330	--	--	300	--	--	--	--	--	--
MAR.										
26...	1130	110	0	70	10	1	50	10	90	0
APR.										
30...	1000	--	--	50	--	--	--	--	--	--
JULY										
29...	1100	--	--	190	--	--	--	--	--	--
SEP.										
12...	1130	--	--	220	--	--	--	--	--	--

DATE	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.									
17...	--	--	--	--	--	--	--	--	--
NOV.									
26...	--	--	--	--	--	--	--	--	--
MAR.									
26...	100	35	200	3	.3	.1	3	1	10
APR.									
30...	--	--	--	--	--	--	--	--	--
JULY									
29...	--	--	--	--	--	--	--	--	--
SEP.									
12...	--	--	--	--	--	--	--	--	--

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
17...	1100	--	--	--	--	--	7800	8100	--
NOV.									
26...	1330	--	--	--	--	--	88200	84	--
MAR.									
26...	1130	1500	--	--	--	--	--	--	50
31...	1400	--	--	--	--	--	260	740	--
APR.									
30...	1000	0	.4	.7	.0	.0	370	920	--
JULY									
29...	1100	0	--	--	--	--	--	45000	--
SEP.									
12...	1130	0	--	--	--	--	28000	220000	--

09401250. Moenkopi Wash near Moenkopi, Ariz.

LOCATION.--Lat 36°06'36", long 111°09'19", in SW¼ sec.31, T.32 N., R.12 E. (unsurveyed), Coconino County, in Navajo Indian Reservation, on right bank 2.5 mi (4.0 km) upstream from bridge on State Highway 264, 3.8 mi (6.1 km) east of Moenkopi, 10 mi (16 km) downstream from Begashibito Wash.

DRAINAGE AREA.--1,650 mi^2 (4,270 km^2), approximately.

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,680 ft (1,426 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 2,380 ft^3/s (67.4 m^3/s) Sept. 13 (gage height, 4.70 ft or 1.433 m), from floodmarks near staff gage; no flow for many days.
Period of record: Maximum discharge, 2,380 cfs (67.4 m^3/s) Sept. 13, 1975 (gage height, 4.70 ft or 1.433 m), from floodmarks near staff gage; no flow at times each year.
A discharge of 15,100 ft^3/s (428 m^3/s) occurred Aug. 4, 1929, at site about 6 mi (10 km) downstream.

REMARKS.--Records poor. Records of periodic chemical analyses and daily suspended-sediment loads are published on following pages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	3.0	2.0	3.0	3.0	2.0	2.3	1.4	1.3	0	3.0	.13
2	1.0	2.0	2.0	6.0	2.0	2.0	2.2	1.4	2.0	0	2.0	.21
3	1.0	15	2.0	4.0	3.0	2.0	2.0	1.4	1.0	0	2.0	.27
4	.90	5.0	2.0	4.0	3.0	2.0	2.0	1.3	1.0	0	2.0	.53
5	1.0	2.0	2.0	4.0	3.0	2.0	2.0	1.4	1.0	.15	2.0	.53
6	2.0	2.0	2.0	3.0	2.0	2.0	2.0	1.8	1.0	3.0	1.0	.44
7	2.0	2.0	2.0	3.0	2.0	2.5	2.0	1.5	.90	.86	.80	.57
8	2.0	1.8	2.0	3.0	2.0	2.5	2.0	1.5	.80	.66	.50	6.3
9	2.0	2.5	2.0	3.0	2.0	2.8	2.0	2.0	.70	1.0	.50	50
10	2.0	2.2	2.0	3.0	2.0	2.5	2.0	2.0	.70	.44	.50	46
11	2.0	1.9	2.0	3.0	2.0	2.5	2.0	2.0	.48	44	.20	8.7
12	2.0	1.9	2.0	4.0	2.0	3.2	2.0	2.0	.53	300	2.8	35
13	2.0	1.9	3.0	3.0	2.0	3.5	2.0	2.0	.53	500	1.0	595
14	2.0	1.9	2.0	5.0	2.0	3.5	2.0	2.0	.44	52	.48	179
15	2.0	1.9	2.0	6.0	2.0	3.7	2.0	2.0	.25	460	.31	20
16	2.0	2.0	3.0	6.0	2.0	4.3	2.0	3.0	.11	10	.27	6.3
17	2.0	2.0	3.0	5.0	2.0	4.1	2.0	3.0	0	130	.27	2.5
18	2.0	2.0	3.0	5.0	2.0	2.8	2.0	3.0	0	10	.27	102
19	2.0	2.0	3.0	3.0	2.0	2.5	2.0	3.0	.07	6.0	.19	260
20	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.0	.53	4.0	.05	30
21	2.0	2.0	2.0	2.0	2.0	1.8	2.0	2.0	.31	3.0	.43	90
22	3.0	2.0	2.0	2.0	2.0	1.6	2.0	1.4	.05	2.0	.96	6.0
23	18	2.0	2.0	2.0	2.0	1.6	2.0	1.5	0	2.0	.57	3.5
24	8.6	2.0	2.0	2.0	2.0	1.5	2.0	1.4	0	2.0	.31	1.6
25	3.5	2.0	2.0	3.0	2.0	1.5	2.0	1.3	0	2.0	.17	1.4
26	1.5	2.0	6.0	4.0	2.0	1.8	1.0	1.3	0	1.0	.09	1.1
27	1.9	2.0	4.0	3.0	2.0	2.2	1.0	1.2	0	4.0	.09	.86
28	38	2.0	5.0	2.0	2.0	2.5	2.0	1.3	0	3.0	.13	.86
29	20	2.0	4.0	2.0	------	2.8	2.0	1.4	0	150	.09	.86
30	15	2.0	4.0	2.0	------	2.3	1.5	1.4	0	6.0	.07	.86
31	9.2	------	3.0	3.0	------	2.3	------	1.3	------	4.0	.09	------
TOTAL	155.60	77.0	81.0	105.0	60.0	76.5	58.0	55.2	13.70	1,701.11	23.14	1,450.52
MEAN	5.02	2.57	2.61	3.39	2.14	2.47	1.93	1.78	.46	54.9	.75	48.4
MAX	38	15	6.0	6.0	3.0	4.3	2.3	3.0	2.0	500	3.0	595
MIN	.90	1.8	2.0	2.0	2.0	1.5	1.0	1.2	0	0	.05	.13
AC-FT	309	153	161	208	119	152	115	109	27	3,370	46	2,880

CAL YR 1974 TOTAL 1,255.69 MEAN 3.44 MAX 240 MIN 0 AC-FT 2,490
WTR YR 1975 TOTAL 3,856.77 MEAN 10.6 MAX 595 MIN 0 AC-FT 7,650

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-12	1730	*4.50	2,020	9-13	1930	†4.1	1,400
9-13	0030	*4.70	2,380	9-18	2300	†4.1	1,400

* From floodmarks near staff gage.
† About.

09401260. Moenkopi Wash at Moenkopi, Ariz.

LOCATION.--Lat 36°06'18", long 111°12'04", in NW¼ sec.3, T.31 N., R.11 E. (unsurveyed), Coconino County, in Navajo Indian Reservation at highway bridge on State Highway 264, 1.3 mi (2.1 km) southeast of Moenkopi, 12.5 mi (20.1 km) downstream from Begashibito Wash, 2.5 mi (4.0 km) downstream from gaging station 09401250.

DRAINAGE AREA.--1,650 mi^2 (4,270 km^2), approximately, at gaging station.

PERIOD OF RECORD.--Specific conductance: October 1973 to current year.
Water temperature: October 1973 to current year.
Sediment records: October 1973 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 4,070 micromhos July 14; minimum daily, 810 micromhos Jan. 27.
Water temperatures: Maximum observed, 33.0°C July 9, Aug. 22; minimum observed, 1.0°C Nov. 30, Dec. 14, 25, 31, Jan. 3, 10, 11.
Sediment concentrations: Maximum daily, 188,000 mg/l July 12; minimum daily, no flow on many days.
Sediment discharge: Maximum daily, 242,000 tons (220,000 tonnes) July 13; minimum daily, 0 ton (0 tonne) on many days.
Period of record:
Specific conductance: Maximum daily, 4,070 micromhos July 14, 1975; minimum daily, 810 micromhos Jan. 27, 1975.
Water temperatures: Maximum observed, 33.0°C July 9, Aug. 22, 1975; minimum observed, freezing point on many days during winter months.
Sediment concentrations: Maximum daily, 188,000 mg/l July 12, 1975; minimum daily, no flow on many days.
Sediment discharge: Maximum daily, 242,000 tons (220,000 tonnes) July 13, 1975; minimum daily, 0 ton (0 tonne) on many days.

REMARKS.--Sediment loads are computed using discharge at sta 09401250. No appreciable inflow between gaging station and sampling site.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	1750	1050	1010	1000	1100	1150	990	1000	---	1570	---
2	1000	1550	1010	1000	1000	2500	1180	980	1010	---	1650	---
3	1050	1930	1000	890	1000	2200	1150	1200	1020	---	1790	1200
4	1100	1480	990	1020	1010	2200	1120	1200	1110	---	1800	---
5	1080	1350	990	1050	980	2200	1300	1110	1100	---	1820	---
6	1050	1300	990	1010	1000	1500	1300	1040	1150	---	2000	---
7	1000	1210	990	1040	980	1200	1300	1020	1180	2600	2000	1420
8	1020	1200	1000	950	990	1250	1300	990	1190	2800	2050	1210
9	1000	1180	980	890	980	1240	1380	980	1080	2350	2150	1900
10	1000	1190	1150	1000	1020	1240	1200	940	1100	3200	---	2600
11	980	1200	1190	1070	1000	1310	1190	960	1150	2320	---	2600
12	1000	1100	1180	1150	1010	1210	1200	960	1190	3930	1950	2400
13	1000	1190	1050	1100	1010	1150	1190	980	1190	2690	2100	1340
14	1020	1080	1190	1180	1010	1650	1190	1020	1150	4070	2000	1350
15	1150	1080	1180	1140	1000	1800	1270	980	1220	2080	2000	1780
16	1150	1090	1200	1000	1010	1590	1320	1070	1400	2130	2050	1800
17	980	1080	1010	990	1070	2100	1320	1070	1580	1480	2000	1750
18	950	1050	1000	990	1070	2500	1320	1070	---	1850	2050	1650
19	950	1100	1000	890	1100	2100	1140	980	---	1950	2100	2400
20	950	1100	990	890	1050	1960	1200	950	---	1950	---	1480
21	960	1080	950	900	1010	1700	1160	1150	---	1900	---	1980
22	1700	1080	910	900	1020	1450	1160	1100	---	1900	1570	1800
23	2100	1080	1090	920	1190	1400	1160	1000	---	1900	---	1650
24	2250	1070	1090	920	1150	1300	1180	970	---	1900	1950	1600
25	2450	1100	1200	870	1010	1300	1180	970	---	1900	1950	1770
26	1650	1020	1300	830	1000	1300	1500	1010	---	2000	1970	1500
27	1460	1020	1250	810	1070	1280	1350	1010	---	1850	---	1420
28	2930	1020	1250	890	1130	1210	1220	1010	---	1600	---	1390
29	2070	1020	1100	890	---	1210	1200	1010	---	1980	---	1300
30	1800	1150	1100	940	---	1210	1150	1050	---	1770	---	1250
31	1600	---	1010	950	---	1200	---	1010	---	1600	---	---
MEAN	1340	1190	1080	970	1030	1570	1230	1030	---	2230	---	1700
YEAR	MAX	4070	MIN	810	MEAN	1350						

09401260. Moenkopi Wash at Moenkopi, Ariz.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.0	9.5	5.0	2.0	6.0	14.0	5.0	18.0	30.0	---	21.0	---
2	10.0	6.0	5.0	2.0	6.0	10.0	2.0	25.0	16.0	---	23.0	---
3	13.0	8.5	5.0	1.0	4.0	4.0	7.0	12.0	12.0	---	18.0	11.0
4	9.0	7.5	7.0	2.0	5.0	10.0	12.0	16.0	12.0	---	19.0	---
5	11.0	7.0	8.0	2.0	8.0	11.0	6.0	8.0	14.0	---	20.0	---
6	10.0	3.0	6.0	3.0	6.0	11.0	10.0	12.5	14.0	---	21.0	---
7	13.0	10.0	6.0	3.0	7.0	13.0	11.0	7.0	15.0	28.0	20.0	22.0
8	13.0	11.0	6.0	3.0	8.0	11.0	7.0	26.0	25.0	19.0	20.0	22.0
9	12.0	5.0	5.0	3.0	7.0	11.0	9.0	24.0	28.0	33.0	20.0	18.0
10	12.0	9.0	5.0	1.0	9.0	10.0	20.0	10.0	18.0	27.0	---	20.0
11	17.0	5.0	7.0	1.0	10.0	10.0	19.0	22.0	26.0	24.5	---	18.0
12	13.0	11.0	8.0	2.0	9.0	11.0	16.0	26.0	24.0	23.5	21.0	16.0
13	11.0	5.0	3.0	2.0	8.0	13.0	18.0	29.0	28.0	23.0	19.0	12.0
14	9.0	5.0	1.0	3.0	10.0	10.0	21.0	11.0	29.0	24.0	20.0	15.0
15	7.0	6.0	3.0	2.0	8.0	15.0	20.0	14.0	19.0	22.5	19.0	16.0
16	7.0	4.0	4.0	3.0	10.0	6.0	18.0	22.0	14.0	22.5	28.0	17.0
17	8.0	8.0	3.0	2.0	8.0	14.0	10.0	12.0	14.0	23.0	17.0	18.0
18	9.0	4.0	3.0	2.0	8.0	17.0	7.0	30.0	---	19.0	16.0	17.0
19	9.0	5.0	3.0	2.0	10.0	12.0	20.0	14.0	---	19.0	16.0	17.0
20	12.0	3.0	3.0	2.0	8.0	16.0	19.0	11.0	---	20.0	---	18.0
21	11.0	4.0	3.0	2.0	6.0	17.0	26.0	8.0	---	20.0	---	14.0
22	12.0	12.0	4.0	2.0	7.0	7.0	20.0	8.0	---	28.0	33.0	12.0
23	11.5	5.0	4.0	3.0	8.0	15.0	18.0	10.0	---	29.0	---	12.0
24	12.5	2.0	3.0	4.0	7.0	15.0	22.0	29.0	---	22.0	16.0	13.0
25	13.0	6.5	1.0	2.0	10.0	11.0	10.0	19.0	---	22.0	15.0	12.0
26	12.5	8.0	2.0	4.0	12.0	12.0	18.0	14.0	---	25.0	15.0	12.0
27	12.5	7.0	2.0	2.0	12.0	7.0	19.0	22.0	---	20.0	---	13.0
28	11.5	6.0	2.0	3.0	11.0	6.0	22.0	24.0	---	28.0	---	14.0
29	9.0	5.0	2.0	4.0	---	6.0	19.0	12.0	---	21.5	---	18.0
30	8.5	1.0	2.0	3.0	---	2.0	11.0	18.0	---	19.0	---	23.0
31	10.0	---	1.0	3.0	---	6.0	---	16.0	---	21.0	---	---
MEAN	11.0	6.5	4.0	2.5	8.0	10.5	14.5	17.0	---	23.5	---	16.0
YEAR	MAX	33.0	MIN	1.0	MEAN	12.0						

SUSPENDED-SEDIMENT CONCENTRATION (MG/L), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	700	10000	455	225	696	380	399	126	102	0	68	10
2	670	26000	542	228	912	3110	362	202	84	0	36	20
3	630	44500	660	297	515	2550	444	189	123	0	24	22
4	540	16000	643	389	494	2520	374	205	135	0	132	40
5	520	4000	1130	286	523	2400	366	226	118	50	66	40
6	625	1900	395	163	407	1200	333	287	144	2000	37	50
7	790	810	381	165	508	900	320	204	124	502	40	188
8	980	750	464	320	485	890	317	129	139	418	52	11700
9	900	1100	610	277	455	840	328	114	124	861	45	93400
10	850	1230	606	509	535	790	276	130	108	495	30	74900
11	810	720	533	331	514	700	304	242	131	61200	10	66000
12	710	570	428	318	337	610	438	134	124	188000	80	66300
13	920	630	567	391	422	850	446	134	87	179000	102	108000
14	1340	670	349	306	432	1020	502	127	147	143000	38	93000
15	1030	570	501	344	457	1100	293	104	95	130000	70	55000
16	850	560	578	202	332	2370	243	148	136	86000	36	28000
17	750	520	542	239	339	4480	260	150	0	97000	67	5000
18	670	480	606	364	340	2410	268	133	0	80000	75	15400
19	630	470	495	261	230	1120	307	144	10	37000	52	137000
20	610	463	615	350	238	900	315	141	85	6000	20	89000
21	890	414	797	352	218	636	270	193	50	1240	50	105000
22	7000	528	740	343	214	492	310	304	10	100	76	45000
23	55600	553	513	385	372	509	153	162	0	46	50	14000
24	40800	435	509	460	358	370	172	157	0	38	42	2700
25	31000	438	152	691	261	415	173	136	0	118	42	436
26	10000	663	258	1440	356	408	177	167	0	149	42	321
27	10700	978	154	1200	237	426	156	110	0	153	40	111
28	87000	560	240	687	393	567	180	133	0	66	30	103
29	55900	540	263	758	---	577	159	105	0	104000	30	72
30	31600	426	309	749	---	578	260	149	0	31000	10	22
31	22500	---	292	796	---	364	---	185	---	3910	5	---
YEAR	MAX	188000	MIN	0								

09401260. Moenkopi Wash at Moenkopi, Ariz.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	81	2.5	1.8	5.6	2.1	2.5	.48	.36	0	.55	0
2	1.8	140	2.9	3.7	4.9	17	2.2	.76	.45	0	.19	.01
3	1.7	1800	3.6	3.2	4.2	14	2.4	.71	.33	0	.13	.02
4	1.3	216	3.5	4.2	4.0	14	2.0	.72	.36	0	.71	.06
5	1.4	22	6.1	3.1	4.2	13	2.0	.85	.32	.02	.36	.06
6	3.4	10	2.1	1.3	2.2	6.5	1.8	1.4	.39	16	.10	.06
7	4.3	4.4	2.1	1.3	2.7	6.1	1.7	.83	.30	1.2	.09	.29
8	5.3	3.6	2.5	2.6	2.6	6.0	1.7	.52	.30	.74	.07	788
9	4.9	7.4	3.3	2.2	2.5	6.4	1.8	.62	.23	2.3	.06	12800
10	4.6	7.3	3.3	4.1	2.9	5.3	1.5	.70	.20	.59	.04	9270
11	4.4	3.7	2.9	2.7	2.8	4.7	1.6	1.3	.17	12800	.01	1550
12	3.8	2.9	2.3	3.4	1.8	5.3	2.4	.72	.18	169000.0	.60	9430
13	5.0	3.2	4.6	3.2	2.3	8.0	2.4	.72	.12	242000.0	.28	200000.0
14	7.2	3.4	1.9	4.1	2.3	9.6	2.7	.69	.17	23000	.05	44900
15	5.6	2.9	2.7	5.6	2.5	11	1.6	.56	.06	161000.0	.06	2970
16	4.6	3.0	4.7	3.3	1.8	28	1.3	1.2	.04	2320	.03	476
17	4.0	2.8	4.4	3.2	1.8	50	1.4	1.2	0	34000	.05	34
18	3.6	2.6	4.9	4.9	1.8	18	1.4	1.1	0	2160	.05	49000
19	3.4	2.5	4.0	2.1	1.2	7.6	1.7	1.2	0	599	.03	105000.0
20	3.3	2.5	3.3	1.9	1.3	5.3	1.7	.76	.12	65	0	7210
21	4.8	2.2	4.3	1.9	1.2	3.1	1.5	1.0	.04	10	.06	25500
22	57	2.9	4.0	1.9	1.2	2.1	1.7	1.1	0	.54	.20	729
23	3210	3.0	2.8	2.1	2.0	2.2	.83	.66	0	.25	.08	132
24	996	2.3	2.7	2.5	1.9	1.5	.93	.59	0	.21	.04	12
25	293	2.4	.82	5.6	1.4	1.7	.93	.48	0	.64	.02	1.6
26	41	3.6	4.2	16	1.9	2.0	.48	.59	0	.40	.01	.95
27	55	5.3	1.7	9.7	1.3	2.5	.42	.36	0	1.7	.01	.26
28	11400	3.0	3.2	3.7	2.1	3.8	.97	.47	0	.53	.01	.24
29	3200	2.9	2.8	4.1	---	4.4	.86	.40	0	72000	.01	.17
30	1330	2.3	3.3	4.0	---	3.6	1.1	.56	0	502	0	.05
31	559	---	2.4	6.4	---	2.3	---	.65	---	42	0	---
TOTAL	21221.3	2351.1	99.82	119.8	68.37	267.1	47.52	23.87	4.14	719523.11	3.9	469804.77

YEAR TOTAL 1213534.80

09401400. Moenkopi Wash near Tuba City, Ariz.

LOCATION.--Lat 36°01'25", long 111°23'48", in sec.35, T.31 N., R.9 E. (unsurveyed), Coconino County, on Navajo Indian Reservation, on downstream side of bridge on U.S. Highway 89, 3,500 ft (1,070 m) downstream from Hamblin Wash, 11 mi (18 km) upstream from mouth, and 12 mi (19 km) southwest of Tuba City.

DRAINAGE AREA.--2,500 mi^2 (6,500 km^2), approximately, of which about 1,200 mi^2 (3,100 km^2) is partly or entirely noncontributing.

PERIOD OF RECORD.--June 1941 to December 1953 (published as "near Tuba"), February 1965 to current year. Records for July 1926 to June 1941 at site 8 mi (13 km) upstream not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 4,309 ft (1,313.4 m) above mean sea level. June 23, 1941, to Dec. 10, 1953, at site 2,500 ft (760 m) upstream at datum 4,310.96 ft (1,313.981 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--22 years (1941-53, 1965-75), 15.6 ft^3/s (0.442 m^3/s), 11,300 acre-ft/yr (13.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,200 ft^3/s (34.0 m^3/s) July 15 (gage height, 11.19 ft or 3.411 m), from rating curve extended above 400 ft^3/s (11 m^3/s) on basis of slope-area measurement of peak flow; no flow for many days.
Period of record: Maximum discharge, 12,100 ft^3/s (343 m^3/s) Oct. 19, 1972 (gage height, 16.98 ft or 5.176 m, from floodmarks in recorder shelter); no flow for many days in each year.
A discharge of 15,100 ft^3/s (428 m^3/s) occurred 8 mi (13 km) upstream (published as "near Tuba City") Aug. 4, 1929, from rating curve extended above 200 ft^3/s (5.7 m^3/s) on basis of slope-area measurement of peak flow; this is maximum discharge for period 1926-41.

REMARKS.--Records poor. Diversions above station for irrigation of about 500 acres (2.0 km^2); no known diversions below station.

REVISIONS.--WSP 1213: 1943 (M). WSP 1926: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	3.0	2.0	.20	3.1	3.6	.30	.10		0	0	.50
2	2.0	1.5	2.0	.20	2.8	3.5	.30	.10		0	0	0
3	2.0	1.5	2.0	.20	2.6	3.4	.30	.20		0	0	0
4	2.0	1.5	2.0	.20	2.3	3.3	.30	.20		0	0	0
5	1.5	1.5	2.0	.20	2.0	3.2	.20	.20		0	0	0
6	1.0	1.5	3.0	.20	1.9	2.8	.20	1.1		0	0	0
7	.50	1.5	2.0	.20	1.8	2.4	.20	1.6		0	0	0
8	.24	2.0	1.5	.20	1.7	2.4	.20	1.5		60	0	0
9	.20	2.0	.80	.20	1.6	2.4	.20	1.4		3.4	0	16
10	.20	2.0	.20	.20	1.5	2.3	.30	1.3		3.5	0	18
11	.20	2.0	.20	.20	1.4	2.3	.40	1.2		50	1.0	17
12	.20	2.4	.20	.20	1.3	2.3	.50	1.1		96	4.0	19
13	.20	1.8	.20	.20	1.2	2.2	.60	1.0		436	2.0	307
14	.20	1.8	.20	.20	1.0	2.2	.70	.90		87	2.0	236
15	.20	2.0	.20	.20	.90	2.2	.80	.90		396	1.5	50
16	.20	2.4	.20	.20	.85	2.1	.90	1.0		38	1.5	2.0
17	.30	3.0	.20	.20	.80	2.1	1.0	1.0		304	1.5	2.0
18	.30	3.3	.20	.20	.75	2.1	1.0	1.1		73	1.0	1.5
19	.30	2.4	.20	3.0	.70	2.0	.90	1.2		20	1.0	139
20	.50	2.0	.20	3.5	.65	2.0	.70	1.3		15	.50	138
21	.70	2.0	.20	4.0	.60	1.6	.60	1.3		10	.50	20
22	.90	1.9	.20	4.5	.60	1.3	.50	1.2		6.0	.50	10
23	1.0	1.9	.20	5.4	.60	1.0	.40	1.0		2.0	.50	8.0
24	2.0	1.7	.20	5.3	1.5	.90	.30	.80		2.0	.50	1.0
25	5.0	1.5	.20	5.1	4.0	.90	.30	.70		2.0	.50	1.0
26	10	1.8	.20	4.8	3.9	.90	.20	.60		2.0	.50	1.0
27	20	1.8	.20	4.5	3.8	.90	.20	.50		2.0	.50	1.0
28	30	1.8	.20	4.2	3.7	.80	.10	.40		2.0	.50	1.0
29	70	2.0	.20	4.0	------	.80	.10	.30		104	.50	1.0
30	11	2.0	.20	3.7	------	.80	.10	.20		72	.50	1.0
31	5.0	------	.20	3.4	------	.80	------	0	------	11	.50	------
TOTAL	169.84	59.5	21.70	59.00	49.55	61.50	12.80	25.40	0	1,796.9	21.50	991.00
MEAN	5.48	1.98	.70	1.90	1.77	1.98	.43	.82	0	58.0	.69	33.0
MAX	70	3.3	3.0	5.4	4.0	3.6	1.0	1.6	0	436	4.0	307
MIN	.20	1.5	.20	.20	.60	.80	.10	0	0	0	0	0
AC-FT	337	118	43	117	98	122	25	50	0	3,560	43	1,970

CAL YR 1974 TOTAL 1,326.14 MEAN 3.63 MAX 300 MIN 0 AC-FT 2,630
WTR YR 1975 TOTAL 3,268.69 MEAN 8.96 MAX 436 MIN 0 AC-FT 6,480

PEAK DISCHARGE (BASE, 1,400 CFS).--No peak above base.

NOTE.--No gage-height record for entire year except for all or part of July 8-19, 29-31, Aug. 11, 12, Sept. 10-14, 19-21. Discharge for periods of no gage-height record was estimated on the basis of numerous discharge measurements, observations of no flow, field estimates of flow, wire-weight gage readings, and records for upstream station.

09402000. Little Colorado River near Cameron, Ariz.

LOCATION.--Lat 35°55'35", long 111°34'00", in NW¼ sec.5, T.29 N., R.8 E. (unsurveyed), Coconino County, in Navajo Indian Reservation, on left bank 3 mi (5 km) downstream from Coconino damsite, 9.5 mi (15.3 km) downstream from Moenkopi Wash, 9.5 mi (15.3 km) northwest of Cameron, and 45 mi (72 km) upstream from mouth.

DRAINAGE AREA.--26,500 mi^2 (68,600 km^2), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 3,979.2 ft (1,212.86 m) above mean sea level.

AVERAGE DISCHARGE.--28 years, 226 ft^3/s (6.400 m^3/s), 163,700 acre-ft/yr (202 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,100 ft^3/s (116 m^3/s) Nov. 1 (gage height, 8.65 ft or 2.637 m); no flow for many days.
Period of record: Maximum discharge, 24,900 ft^3/s (705 m^3/s) Jan. 21, 1952 (gage height, 20.7 ft or 6.31 m); no flow at times in each year.
A discharge of about 120,000 ft^3/s (3,400 m^3/s) occurred on Sept. 19 or 20, 1929, based on discharge at Grand Falls.

REMARKS.--Records fair. Diversions above station for irrigation of about 32,000 acres (130 km^2), and for municipal uses. Some regulation by reservoirs above station (combined capacity of principal reservoirs, about 127,000 acre-ft or 157 hm^3). Records of periodic chemical analyses taken upstream at Cameron appear elsewhere in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3,530		0	2.0	0	291	425		0	60	0
2	1.0	1,220		0	.70	0	206	375		0	40	0
3	.50	497		0	.30	0	180	333		0	20	0
4	.20	234		0	1.4	2.5	149	292		0	10	0
5	.10	108		0	2.4	11	171	242		0	5.0	0
6	0	110		0	1.8	9.9	177	226		0	2.0	0
7	0	69		0	1.1	7.0	133	198		0	1.0	0
8	0	52		0	.80	35	376	198		0	0	86
9	114	40		0	1.0	79	770	180		54	0	36
10	29	31		0	1.4	69	722	154		30	0	233
11	383	21		0	1.2	72	644	119		2.6	0	1,150
12	86	16		0	.70	517	485	86		349	0	695
13	45	12		0	1.0	590	475	64		880	0	805
14	22	8.6		0	.80	400	333	45		177	0	1,340
15	13	6.6		0	1.4	420	352	35		567	0	752
16	98	5.4		0	2.0	254	360	30		250	146	1,080
17	82	4.0		0	2.6	195	403	25		379	91	654
18	49	2.6		0	1.6	160	659	23		75	39	226
19	27	1.8		0	1.0	119	1,020	20		30	20	523
20	13	1.0		0	.70	93	976	17		551	8.6	1,310
21	7.8	.60		0	.50	84	644	15		324	9.2	1,920
22	8.6	.50		0	.30	84	450	10		140	40	850
23	26	.30		0	.10	188	395	5.0		70	1.5	465
24	18	.20		0	0	565	886	1.0		20	.10	274
25	20	.20		0	0	632	1,120	.40		11	0	150
26	208	.10		0	0	442	990	0		8.6	0	123
27	160	0		0	0	365	914	0		6.6	0	84
28	77	0		1.0	0	306	890	0		74	0	48
29	425	0		1.2	------	537	812	0		740	0	39
30	1,440	0		2.0	------	490	545	0		144	0	28
31	2,200	------		1.6	------	390	------	0	------	90	0	------
TOTAL	5,555.40	5,971.90	0	5.8	26.80	7,136.4	16,528	3,118.40	0	4,972.8	493.40	12,871
MEAN	179	199	0	.19	.96	230	551	101	0	160	15.9	429
MAX	2,200	3,530	0	2.0	2.6	632	1,120	425	0	880	146	1,920
MIN	0	0	0	0	0	0	133	0	0	0	0	0
AC-FT	11,020	11,850	0	12	53	14,160	32,780	6,190	0	9,860	979	25,530

CAL YR 1974 TOTAL 25,776.80 MEAN 70.6 MAX 3,530 MIN 0 AC-FT 51,130
WTR YR 1975 TOTAL 56,679.90 MEAN 155 MAX 3,530 MIN 0 AC-FT 112,400

PEAK DISCHARGE (BASE, 4,000 CFS).--Nov. 1 (1000) 4,100 cfs (8.65 ft).

09402500. Colorado River near Grand Canyon, Ariz.

LOCATION.--Lat 36°06'05", long 112°05'08", in sec.5, T.31 N., R.3 E. (unsurveyed), Coconino County, in Grand Canyon National Park, on left bank 0.2 mi (0.3 km) upstream from Kaibab Bridge, 0.4 mi (0.6 km) upstream from Bright Angel Creek, 4.5 mi (7.2 km) northeast of village of Grand Canyon, 26 mi (42 km) downstream from Little Colorado River, and 267 mi (430 km) upstream from Hoover Dam.

DRAINAGE AREA.--137,800 mi^2 (356,900 km^2), approximately.

PERIOD OF RECORD.--October 1922 to current year. Prior to 1944, published as Colorado River at Bright Angel Creek, near Grand Canyon. Gage-height records collected 1.5 mi (2.4 km) downstream 1908-13, published in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder with supplementary water-stage recorder on right bank 700 ft (213 m) downstream (prior to Oct. 1, 1934, supplementary gage was the only gage). Datum of both gages is 2,418.7 ft (737.22 m) above mean sea level.

AVERAGE DISCHARGE (unadjusted for storage in Lake Powell).--40 years (1922-62), 16,930 ft^3/s (479.5 m^3/s), 12,260,000 acre-ft/yr (15,100 hm^3/yr); 11 years (1964-75), 12,870 ft^3/s (364.5 m^3/s), 9,324,000 acre-ft/yr (11,500 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 28,900 ft^3/s (818 m^3/s) July 30 (gage height, 15.72 ft or 4.791 m); minimum daily, 3,140 ft^3/s (88.9 m^3/s) Feb. 3.

Period of record: Maximum discharge, 127,000 ft^3/s (3,600 m^3/s) July 2, 1927 (gage height, 29.25 ft or 8.915 m); minimum, 700 ft^3/s (19.8 m^3/s) Dec. 28, 1924 (gage height, -0.70 ft or -0.213 m).

Maximum discharge since at least 1884, 300,000 ft^3/s (8,500 m^3/s) about July 8, 1884 (computed on basis of flood studies at Lees Ferry). Crest discharge of flood of June 19, 1921, was 220,000 ft^3/s (6,230 m^3/s), gage height, 37.5 ft (11.43 m) from floodmarks, from rating curve extended above 120,000 ft^3/s (3,400 m^3/s).

REMARKS.--Records good. Flow regulated by Lake Powell, 104 mi (167 km) upstream, since Mar. 13, 1963. (See elsewhere in this report.) Many diversions above station for irrigation, municipal, and industrial uses. Records of chemical analyses and water temperatures for the current water year are published on following pages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,500	15,600	10,800	11,300	7,460	10,500	8,330	13,500	14,700	19,100	17,300	14,300
2	9,330	16,800	6,060	8,810	5,020	5,860	9,790	17,500	16,100	19,900	15,400	15,200
3	8,110	14,600	10,400	14,600	3,140	5,970	10,400	16,300	14,900	20,600	14,100	19,200
4	9,300	9,900	9,170	17,300	6,130	8,670	7,340	12,000	17,400	21,300	13,900	17,400
5	10,400	16,600	10,900	17,000	10,500	8,250	5,790	10,800	22,000	17,300	17,600	19,300
6	8,070	15,500	9,090	14,400	11,500	9,440	4,380	18,600	22,200	18,800	21,800	19,000
7	6,250	19,800	12,700	15,800	8,570	7,960	5,740	18,200	21,800	19,800	22,300	15,700
8	9,210	17,300	7,570	17,200	7,900	5,980	8,470	21,900	18,300	21,300	22,400	14,500
9	8,460	16,100	5,170	20,700	7,500	3,980	8,380	20,000	16,200	23,400	22,500	20,900
10	9,400	14,300	8,910	18,900	7,670	3,360	7,580	17,600	16,400	21,900	22,000	20,100
11	9,600	7,720	8,160	22,400	11,000	11,500	9,690	13,800	16,200	22,000	20,800	20,000
12	9,430	12,200	14,900	23,100	11,100	11,300	9,780	13,100	16,600	20,600	20,500	19,600
13	6,880	11,200	10,300	20,600	9,800	11,800	8,710	15,900	16,700	18,200	16,400	17,800
14	5,660	9,920	10,900	20,700	6,320	15,000	7,010	15,100	19,000	13,800	15,300	10,800
15	10,900	10,600	9,230	13,200	8,480	14,200	10,100	15,300	16,700	19,600	15,400	7,670
16	13,800	9,650	8,200	12,600	9,190	13,600	9,580	15,500	16,600	20,200	15,600	12,700
17	13,300	8,540	13,800	9,020	8,200	10,900	8,910	15,300	19,300	20,800	13,900	16,200
18	10,400	4,710	12,600	11,100	9,600	15,300	8,410	13,000	17,000	20,600	12,300	15,700
19	9,830	11,400	12,000	6,150	14,300	11,900	8,580	10,900	12,600	21,800	16,700	16,500
20	6,450	11,800	10,500	3,700	16,600	10,500	7,930	16,700	10,000	21,400	17,000	16,200
21	5,750	13,000	11,200	8,630	18,700	8,710	7,250	11,200	13,400	19,800	16,200	20,500
22	12,700	12,700	6,460	13,100	16,400	5,990	8,690	12,800	13,800	21,200	13,900	18,700
23	13,500	12,200	4,660	14,900	13,200	4,080	8,150	13,000	11,200	19,800	13,400	20,400
24	14,700	10,900	10,700	10,800	7,320	3,670	9,430	14,200	16,800	22,600	13,700	19,900
25	13,200	5,140	9,940	9,340	10,800	3,230	7,890	11,600	20,800	21,400	12,500	21,200
26	10,400	14,700	4,250	6,550	12,400	6,490	7,820	9,590	19,700	18,800	13,700	19,700
27	7,110	18,000	10,100	3,930	13,200	10,200	7,490	12,000	19,400	19,800	14,800	15,800
28	4,890	16,300	10,500	10,800	13,100	15,400	7,450	17,900	16,900	20,900	16,700	11,600
29	10,900	4,900	9,290	9,130	------	11,200	11,700	17,800	13,000	20,900	17,600	8,510
30	12,100	11,200	4,960	9,110	------	6,330	13,500	15,100	16,000	22,300	19,900	15,000
31	14,500	------	10,100	10,200	------	5,110	------	14,600	------	18,300	13,100	------
TOTAL	307,030	373,280	293,520	405,070	285,100	276,380	254,270	460,790	501,700	628,200	518,700	500,080
MEAN	9,904	12,440	9,468	13,070	10,180	8,915	8,476	14,860	16,720	20,260	16,730	16,670
MAX	14,700	19,800	14,900	23,100	18,700	15,400	13,500	21,900	22,200	23,400	22,500	21,200
MIN	4,890	4,710	4,250	3,700	3,140	3,230	4,380	9,590	10,000	13,800	12,300	7,670
AC-FT	609,000	740,400	582,200	803,500	565,500	548,200	504,300	914,000	995,100	1,246M	1,029M	991,900

CAL YR 1974 TOTAL 4,595,510 MEAN 12,590 MAX 24,600 MIN 2,400 AC-FT 9,115,000
WTR YR 1975 TOTAL 4,804,120 MEAN 13,160 MAX 23,400 MIN 3,140 AC-FT 9,529,000

09402500. Colorado River near Grand Canyon, Ariz.

LOCATION.--Lat 36°06'05", long 112°05'08", in sec.5, T.31 N., R.3 E. (unsurveyed), Coconino County, at gaging station in Grand Canyon National Park, on left bank, 0.2 mi (0.3 km) upstream from Kaibab Bridge, 0.4 mi (0.6 km) upstream from Bright Angel Creek, 4.5 mi (7.2 km) northeast of village of Grand Canyon, 26 mi (42 km) downstream from Little Colorado River, 104 mi (167 km) downstream from Glen Canyon Dam, and 267 mi (430 km) upstream from Hoover Dam.

DRAINAGE AREA.--137,800 mi^2 (356,900 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: August 1925 to November 1942, September 1943 to current year.
Water temperatures: October 1936 to October 1942, September 1943 to current year.
Sediment records: October 1925 to November 1942, September 1943 to September 1972.

EXTREMES.--Current year:
Water temperatures: Maximum, 14.0°C July 14; minimum, 5.0°C on several days during January, February, and March.
Period of record:
Water temperatures: Maximum, 23.0°C Sept. 4, 1967, Sept. 9, 10, 1968; minimum, 4.0°C Jan. 4, 1966, Jan. 7, 1968.

REMARKS.--Because of the regulation of flow by Glen Canyon Dam since Mar. 13, 1963, and the subsequent initial filling of Lake Powell, extreme values for the period of record include only those obtained after July 31, 1965, at which time a normal flow release pattern was begun.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT.								
15...	1400	14900	9.2	10	73	27	90	4.2
NOV.								
01...	0930	19500	9.9	40	67	17	110	3.9
DEC.								
02...	0930	19500	13	10	66	25	79	3.8
JAN.								
01...	1015	12000	7.4	10	65	23	85	4.1
FEB.								
01...	0945	8960	8.7	50	70	25	85	4.0
MAR.								
01...	0915	12600	7.4	40	69	26	91	3.4
APR.								
01...	1200	10700	7.6	10	83	27	120	4.3
MAY								
01...	1000	15800	8.1	20	77	28	99	4.1
JUNE								
02...	0700	13800	7.7	10	74	27	89	4.1
JULY								
01...	1100	27500	8.1	10	28	29	140	5.1
AUG.								
01...	0815	24100	8.1	0	74	27	90	4.4
SEP.								
04...	0815	23400	7.9	50	69	26	91	3.9

09402500 Colorado River near Grand Canyon, Ariz.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.									
15...	178	--	200	85	.3	.43	.01	590	578
NOV.									
01...	191	--	190	83	.4	.81	.01	618	579
DEC.									
02...	166	--	200	69	.4	.01	.00	568	538
JAN.									
01...	162	--	210	71	.2	.30	.01	577	547
FEB.									
01...	173	--	220	78	.2	.46	.01	605	578
MAR.									
01...	172	--	220	82	.6	.42	.00	617	586
APR.									
01...	207	--	210	120	.9	.52	.01	706	677
MAY									
01...	191	--	250	85	.3	.49	.01	647	648
JUNE									
02...	173	0	250	73	.4	.45	.00	641	613
JULY									
01...	173	0	270	86	.5	.42	.00	--	654
AUG.									
01...	158	0	230	73	.3	.54	.02	617	587
SEP.									
04...	160	6	210	77	.3	.45	.00	600	572

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.								
15...	.80	290	150	2.3	950	--	11.5	90
NOV.								
01...	.84	240	81	3.1	987	--	10.0	170
DEC.								
02...	.77	270	130	2.1	894	--	10.0	100
JAN.								
01...	.78	260	120	2.3	907	--	6.0	100
FEB.								
01...	.82	280	140	2.2	953	--	5.0	100
MAR.								
01...	.84	280	140	2.4	958	--	6.0	100
APR.								
01...	.96	320	150	2.9	1200	--	7.0	120
MAY								
01...	.88	310	150	2.5	1000	--	9.0	120
JUNE								
02...	.87	300	150	2.3	1000	--	12.0	110
JULY								
01...	.86	190	47	4.4	1100	--	11.5	130
AUG.								
01...	.84	300	170	2.3	940	--	11.5	110
SEP.								
04...	.82	280	140	2.4	1050	7.5	11.5	100

09402500. Colorado River near Grand Canyon, Ariz.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.5	10.0	10.0	9.0	9.0	6.5	6.5	5.0	5.0	7.0	6.0
2	11.0	11.0	10.0	10.0	9.0	9.0	6.5	6.5	5.5	5.0	7.0	6.5
3	11.5	11.0	10.0	9.5	9.0	9.0	6.5	6.5	5.5	5.0	8.0	7.0
4	11.5	11.5	9.5	9.5	9.0	9.0	6.5	6.5	5.5	5.0	8.0	7.5
5	11.5	11.5	9.5	9.5	9.5	9.0	6.5	6.5	5.5	5.5	8.0	7.5
6	11.5	11.5	10.0	9.5	10.0	9.5	6.5	6.5	5.5	5.5	7.5	7.0
7	12.0	11.5	9.5	9.5	10.0	9.5	6.5	6.5	5.5	5.5	7.5	6.5
8	12.0	11.5	9.5	9.5	9.5	9.5	6.5	6.5	6.0	5.5	8.0	7.5
9	11.5	11.5	10.0	9.5	9.5	9.5	6.5	6.5	6.0	5.5	8.0	8.0
10	11.5	11.5	10.0	10.0	9.5	8.5	6.5	6.0	6.0	5.5	8.0	8.0
11	11.5	11.5	10.0	10.0	8.5	8.0	6.0	6.0	6.0	5.5	8.0	8.0
12	11.5	11.5	10.0	9.5	9.0	8.5	6.0	5.5	6.0	5.5	8.0	6.5
13	11.5	11.5	10.0	9.5	9.0	9.0	5.5	5.5	5.5	5.5	6.5	6.5
14	11.5	11.5	10.0	10.0	9.0	8.5	6.0	5.5	5.5	5.5	6.5	6.5
15	11.5	11.5	10.0	10.0	8.5	8.5	6.0	5.5	5.5	5.5	6.5	6.0
16	11.5	11.0	10.0	10.0	8.5	8.0	6.0	5.5	5.5	5.5	6.5	6.0
17	11.0	10.5	10.0	10.0	9.0	8.5	5.5	5.5	5.5	5.0	7.0	6.5
18	11.0	10.5	10.0	10.0	9.0	9.0	5.5	5.5	5.5	5.0	7.0	6.5
19	11.0	11.0	10.0	10.0	9.0	9.0	5.5	5.5	5.5	5.0	7.0	7.0
20	11.0	11.0	10.0	10.0	9.0	8.5	6.0	5.5	5.0	5.0	8.0	7.5
21	11.5	11.0	10.0	10.0	8.5	8.5	6.0	5.5	5.0	5.0	8.5	8.0
22	11.5	11.0	10.0	10.0	8.5	8.5	5.5	5.5	5.0	5.0	8.5	8.0
23	11.0	11.0	10.0	9.5	8.5	8.5	6.0	5.5	5.0	5.0	8.0	8.0
24	11.0	10.5	10.0	9.5	8.5	7.0	6.0	6.0	5.5	5.0	8.5	7.5
25	11.0	10.5	9.5	9.5	7.0	6.0	6.0	6.0	6.0	5.5	8.5	8.0
26	10.5	10.5	9.5	9.5	6.5	6.0	6.0	6.0	6.0	5.5	9.0	8.5
27	11.5	10.5	9.5	9.5	6.0	6.0	6.0	6.0	6.0	5.5	8.5	7.5
28	11.5	11.0	9.5	9.5	6.5	6.0	6.0	6.0	6.0	6.0	7.5	5.0
29	11.0	10.5	9.5	9.5	6.5	6.0	6.0	5.5	---	---	5.5	5.0
30	10.5	10.5	9.5	9.0	6.5	6.5	5.5	5.5	---	---	6.0	5.5
31	10.5	10.0	---	---	6.5	6.5	5.5	5.0	---	---	6.5	6.0
MEAN	12.0	10.0	10.0	9.0	10.0	6.0	6.5	5.0	6.0	5.0	9.0	5.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.5	9.0	9.0	12.0	12.0	12.0	11.5	12.0	11.5	12.0	11.5
2	7.0	6.5	9.0	8.5	12.0	12.0	11.5	10.5	12.0	11.5	12.0	11.5
3	6.5	6.0	9.0	8.5	12.0	12.0	11.5	11.0	12.0	12.0	12.0	11.5
4	7.0	6.0	9.0	9.0	12.0	12.0	11.0	10.5	12.0	12.0	11.5	11.5
5	8.0	7.0	9.0	9.0	12.0	11.0	11.5	10.5	12.0	11.5	11.5	11.5
6	8.0	8.0	9.0	8.5	11.5	11.0	11.5	11.0	12.0	11.0	11.5	11.5
7	8.0	8.0	8.5	7.5	12.0	11.0	11.5	11.0	12.0	11.0	11.5	11.5
8	8.0	7.5	9.0	8.5	11.5	11.0	12.0	11.0	11.5	11.0	11.5	11.5
9	7.5	6.0	9.5	9.0	11.5	11.0	12.0	11.0	11.5	11.0	11.5	11.5
10	7.0	6.5	9.5	9.0	12.0	11.5	11.5	11.0	11.5	11.0	11.5	11.0
11	7.5	7.0	9.5	9.5	12.0	12.0	11.5	11.0	11.5	11.0	11.5	11.0
12	8.0	7.5	10.5	9.5	12.0	12.0	11.5	11.0	11.5	11.0	13.0	11.5
13	8.5	8.0	10.5	10.0	12.0	12.0	12.0	11.0	11.5	11.0	12.0	11.5
14	8.5	8.5	10.5	10.5	12.0	11.5	14.0	12.0	11.5	11.5	12.0	11.5
15	8.5	8.5	10.5	10.5	12.0	12.0	13.0	11.5	11.5	11.5	13.5	12.0
16	8.5	8.5	11.0	10.5	12.0	12.0	12.0	11.5	12.0	11.5	13.0	12.0
17	9.0	8.5	10.5	10.0	12.0	11.5	12.0	11.5	11.5	11.5	12.0	11.5
18	8.5	8.5	10.0	10.0	11.5	11.0	12.0	11.5	11.5	11.5	12.0	11.5
19	8.5	8.5	11.0	10.0	11.0	11.0	12.0	11.0	12.0	11.5	11.5	11.5
20	8.5	8.5	11.0	10.0	11.5	11.0	11.5	11.0	11.5	11.5	11.5	11.0
21	9.5	8.5	10.5	10.5	12.0	11.5	12.0	11.5	11.5	11.5	11.5	11.0
22	10.0	9.5	10.5	10.5	12.0	11.5	12.5	11.0	11.5	11.5	11.5	11.0
23	10.0	10.0	11.0	10.5	12.5	12.0	12.0	11.5	12.0	11.5	11.0	10.0
24	10.0	10.0	10.5	10.5	12.0	12.0	12.0	11.0	13.0	12.0	11.0	10.5
25	10.0	10.0	11.5	10.5	12.0	10.5	11.5	11.0	12.0	12.0	11.0	10.0
26	10.0	10.0	12.0	11.5	11.5	10.5	12.0	11.0	12.0	11.5	11.0	10.0
27	10.0	10.0	12.0	12.0	11.5	11.0	12.0	11.5	11.5	11.5	11.0	10.5
28	10.0	10.0	13.0	11.0	11.5	10.5	12.0	11.5	12.0	11.5	11.0	11.0
29	10.0	9.0	11.0	11.0	12.0	11.0	11.5	11.5	12.0	11.5	11.5	11.0
30	9.5	9.0	11.0	11.0	12.0	12.0	12.0	11.0	11.5	11.0	11.5	11.0
31	---	---	12.0	11.0	---	---	11.5	11.5	11.5	11.5	---	---
MEAN	10.0	6.0	13.0	7.5	12.5	10.5	14.0	10.5	13.0	11.0	13.5	10.0
YEAR	14.0	5.0										

09403780. Kanab Creek near Fredonia, Ariz.

LOCATION.--Lat 36°51'50", long 112°34'45", in SE¼ sec.14, T.40 N., R.3 W. (unsurveyed), Coconino County, in Kaibab Indian Reservation, at Nagles Crossing, on left bank 0.2 mi (0.3 km) downstream from Johnson Wash and 6.5 mi (10.5 km) southwest of Fredonia.

DRAINAGE AREA.--1,085 mi^2 (2,810 km^2).

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

GAGE.--Water-stage recorder and concrete control. Supplementary water-stage recorder 10 ft (3.0 m) downstream since Apr. 14, 1975. Altitude of gages is 4,500 ft (1,372 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 5.80 ft^3/s (0.164 m^3/s), 4,200 acre-ft/yr (5.18 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 603 ft^3/s (17.1 m^3/s) July 13 (gage height, 3.27 ft or 0.997 m); no flow for most of year. Period of record: Maximum discharge, 4,630 ft^3/s (131 m^3/s) Aug. 18, 1970 (gage height, 9.11 ft or 2.777 m, inside, 9.7 ft or 2.96 m, from profile past gage), from rating curve extended above 850 ft^3/s (24 m^3/s) on basis of slope-area measurement of peak flow; no flow for most of time.

REMARKS.--Records fair except those below 15 cfs prior to Apr. 14, which are poor. Water diverted upstream for irrigation of about 1,400 acres (5.67 km^2) in Utah and about 800 acres (3.24 km^2) in Arizona in 1967.

REVISIONS (WATER YEARS).--WRD Ariz. 1974: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.10	0	3.0	.70	18	8.8	0		0	.20	0
2	0	6.6	0	2.0	0	55	18	0		0	0	0
3	0	14	0	2.0	.20	106	17	0		0	0	0
4	1.6	1.9	0	3.0	.40	90	20	0		0	0	0
5	.60	0	0	3.0	0	22	28	0		0	0	0
6	.30	0	0	3.0	4.2	7.5	17	0		0	0	0
7	.20	0	0	4.0	7.7	.80	40	.10		0	0	0
8	0	0	0	4.0	6.8	.70	30	0		0	0	0
9	1.4	0	0	3.0	7.1	4.2	25	0		.23	0	0
10	1.7	0	0	3.0	.60	3.7	20	0		0	0	41
11	.10	0	0	3.0	.20	13	20	0		0	0	15
12	0	0	0	4.0	.20	2.2	15	0		0	0	118
13	0	0	0	5.0	.10	.40	15	0		212	0	11
14	0	0	0	5.0	.30	.10	13	0		207	0	.10
15	0	0	0	6.0	1.6	.30	19	0		3.0	0	0
16	0	0	0	6.2	.80	2.5	24	0		.20	0	0
17	0	0	0	4.3	.40	3.0	50	2.2		0	0	0
18	0	0	0	3.8	.80	2.9	13	.20		0	0	0
19	0	0	0	2.7	1.5	3.9	9.9	0		0	0	0
20	0	0	0	1.8	2.0	36	11	0		0	14	0
21	0	0	0	2.5	13	44	20	2.5		0	76	0
22	0	0	0	1.7	11	48	5.2	.10		0	1.8	0
23	0	0	0	1.5	10	21	.80	0		0	.40	0
24	0	0	0	1.2	4.5	14	.20	0		0	0	0
25	0	0	0	2.5	9.4	25	0	0		0	0	0
26	0	0	0	3.7	11	30	.20	0		0	0	0
27	.40	0	0	2.9	7.4	16	.20	0		0	0	0
28	.40	0	0	1.4	4.4	9.5	0	0		0	0	0
29	65	0	.80	17	------	12	0	0		100	0	0
30	6.6	0	5.0	13	------	14	0	0		74	0	0
31	1.5	------	4.0	1.4	------	16	------	0	------	6.3	0	------
TOTAL	79.80	22.60	9.80	120.6	106.30	621.70	440.30	5.10	0	625.50	92.40	185.10
MEAN	2.57	.75	.32	3.89	3.80	20.1	14.7	.16	0	20.2	2.98	6.17
MAX	65	14	5.0	17	13	106	50	2.5	0	212	76	118
MIN	0	0	0	1.2	0	.10	0	0	0	0	0	0
AC-FT	158	45	19	239	211	1,230	873	10	0	1,240	183	367

CAL YR 1974 TOTAL 389.30 MEAN 1.07 MAX 65 MIN 0 AC-FT 772
WTR YR 1975 TOTAL 2,309.20 MEAN 6.33 MAX 212 MIN 0 AC-FT 4,580

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 9	1500	3.24	585	7-29	1700	3.13	525
7-13	0330	3.18	550	9-12	0630	2.66	314
7-13	2200	3.27	603				

09415000. Virgin River at Littlefield, Ariz.

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

DRAINAGE AREA.--5,090 mi² (13,180 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 1,763.68 ft (537.570 m) above mean sea level, 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.

AVERAGE DISCHARGE.--46 years, 224 ft³/s (6.344 m³/s), 162,300 acre-ft/yr (200 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,910 ft³/s (167 m³/s) July 30 (gage height, 10.30 ft or 3.139 m); minimum, 38 ft³/s (1.08 m³/s) May 1, 10.
Period of record: Maximum discharge, 35,200 ft³/s (997 m³/s) Dec. 6, 1966 (gage height, 15.66 ft or 4.773 m, site then in use), from rating curve extended above 1,500 ft³/s (42 m³/s) on basis of slope-area measurement of peak flow; minimum, 38 ft³/s (1.08 m³/s) May 1, 10, 1975.

REMARKS.--Records fair. Diversion above station for irrigation of about 23,200 acres (93.9 km²). Water-quality records for the current year are published on following pages.

REVISIONS (WATER YEARS).--WSP 959: 1932. WSP 979: 1930-31, 1933-37. WSP 1313: 1940(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	280	129	156	174	159	198	64	231	52	120	50
2	64	575	138	159	159	192	177	102	245	52	82	44
3	64	347	135	144	147	207	165	85	210	52	64	44
4	63	234	135	150	141	186	162	132	195	54	62	48
5	63	192	180	150	162	171	159	245	126	52	60	48
6	63	189	220	150	159	240	180	144	100	52	66	46
7	62	186	180	144	144	382	231	92	100	52	72	50
8	62	186	165	156	138	284	180	60	85	50	66	52
9	62	192	171	162	156	210	132	46	80	52	62	108
10	62	195	144	153	159	210	132	94	75	50	62	145
11	68	192	118	123	168	262	132	276	70	50	66	194
12	68	177	126	118	150	231	112	301	64	52	72	105
13	68	168	138	112	150	183	126	298	64	174	70	72
14	85	159	135	110	171	189	126	280	66	206	70	58
15	70	159	138	105	220	248	120	323	64	206	72	54
16	60	162	141	115	204	214	102	373	64	102	70	54
17	60	162	147	138	198	214	115	410	62	82	70	52
18	58	165	144	132	180	201	120	339	68	60	64	54
19	58	162	126	138	171	210	80	386	68	52	62	54
20	56	150	123	147	156	204	72	405	64	48	60	54
21	60	147	129	141	168	220	64	610	60	48	2380	54
22	64	147	135	144	165	207	58	435	60	48	1050	54
23	78	150	138	144	135	231	56	284	58	46	308	56
24	88	177	153	141	132	198	110	220	58	50	168	58
25	90	162	126	138	153	168	102	177	56	48	108	60
26	90	144	123	135	156	159	129	234	54	52	75	62
27	184	141	135	144	150	256	120	273	52	52	64	60
28	286	129	153	147	150	183	80	280	50	54	60	60
29	1610	135	162	141	---	141	52	207	48	383	52	58
30	475	135	171	138	---	162	50	198	50	1810	50	58
31	301	---	162	156	---	159	---	165	---	224	50	---
TOTAL	4606	5699	4520	4331	4516	6481	3642	7538	2647	4365	5757	1966
MEAN	149	190	146	140	161	209	121	243	88.2	141	186	65.5
MAX	1610	575	220	162	220	382	231	610	245	1810	2380	194
MIN	56	129	118	105	132	141	50	46	48	46	50	44
AC-FT	9140	11300	8970	8590	8960	12860	7220	14950	5250	8660	11420	3900

CAL YR 1974 TOTAL 46824 MEAN 128 MAX 1610 MIN 56 AC-FT 92880
WTR YR 1975 TOTAL 56068 MEAN 154 MAX 2380 MIN 44 AC-FT 111200

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	0800	8.99	3,590	8-21	0200	10.2	†4,910
7-30	0600	10.30	5,910	8-22	0230	8.22	2,260

† About.

09415000. Virgin River at Littlefield, Ariz.

LOCATION.--Lat 36°53'30", long 113°55'25", in SW¼SW¼ sec.4, T.40 N., R.15 W., Mohave County, at gaging station 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 (13,180 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1949 to current year.
Water temperatures: October 1947 to current year.
Sediment records: October 1947 to September 1968.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 3,730 micromhos Oct. 13; minimum daily, 1,570 micromhos May 21.
Water temperatures: Maximum, 33.0°C July 9.
Period of record:
Specific conductance (1949-75): Maximum daily, 4,650 micromhos Aug. 21, 1966; minimum daily, 685 micromhos May 12, 1973.
Water temperatures: Maximum, 33.5°C July 7, 1953; minimum, 1.5°C Jan. 4, 1949; Jan. 4, 1950.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
OCT.												
18...	1730	58	21	370	100	270	29	313	0	1100	360	1.0
JAN.												
14...	1700	112	20	280	90	270	27	355	0	840	390	.8
23...	1130	138	19	290	87	260	24	365	0	830	370	.9
FEB.												
13...	1730	168	17	260	80	260	23	319	0	800	360	.7
MAR.												
19...	0900	217	16	230	73	230	23	320	0	690	300	.8
APR.												
03...	1100	165	17	260	83	240	26	352	0	750	320	.9
28...	0830	75	19	340	110	260	30	338	0	1000	370	.9
MAY												
15...	1600	198	13	210	56	170	17	288	0	510	230	.6
20...	1200	294	13	220	56	160	15	294	0	590	220	.6
JUNE												
20...	1200	66	19	360	120	260	31	290	0	1100	380	1.0
21...	1100	60	19	370	120	270	31	308	0	1200	370	.9
JULY												
10...	1730	50	20	350	130	230	29	190	0	1200	380	1.1
17...	1045	78	20	380	110	280	31	371	0	1100	410	--
AUG.												
11...	0930	66	19	360	120	280	33	303	0	1200	390	--
SEP.												
26...	0940	62	21	380	110	270	31	337	0	1200	370	--

DATE	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	DISSOLVED BORON (B) (UG/L)
OCT.												
18...	.16	.04	2410	3.28	1300	1000	3.2	3420	--	--	--	1100
JAN.												
14...	.49	.01	2100	2.86	1100	810	3.6	3030	--	--	--	870
23...	.60	.03	2060	2.80	1100	800	3.4	3100	7.3	9.0	11.8	810
FEB.												
13...	.43	.02	1960	2.67	980	720	3.6	3300	--	--	--	730
MAR.												
19...	.42	.03	1720	2.34	880	620	3.4	2500	--	--	--	580
APR.												
03...	.58	.06	1870	2.54	990	700	3.3	2800	7.2	12.0	9.4	720
28...	.34	.04	2300	3.13	1300	1000	3.1	2800	--	--	--	900
MAY												
15...	.55	.05	1350	1.84	760	520	2.7	2150	--	--	--	540
20...	.40	.02	1420	1.93	780	540	2.5	2400	7.2	17.0	9.4	460
JUNE												
20...	1.2	.00	2420	3.29	1400	1200	3.0	3230	7.4	23.0	--	1000
21...	.15	.02	2539	3.44	1400	1100	3.1	3376	--	25.0	--	1000
JULY												
10...	.09	.01	2440	3.32	1400	1200	2.7	--	--	--	--	1000
17...	.32	--	2520	3.43	1400	1100	3.3	3510	--	25.0	--	--
AUG.												
11...	--	--	2550	3.47	1400	1100	3.3	--	7.7	23.5	--	--
SEP.												
26...	--	--	2550	3.47	1300	1100	3.1	--	7.5	20.0	--	--

09415000. Virgin River at Littlefield, Ariz.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3550	2630	2960	2930	2820	2610	2110	3230	2400	3330	3250	3360
2	3550	2170	2960	2930	2880	2620	2150	2940	2300	3300	3410	3360
3	3380	2170	3100	2950	3000	2430	2710	2950	2460	3330	3300	3310
4	3570	2600	3100	2980	2980	2730	2640	2790	2580	3340	3410	3350
5	3590	2850	3000	3010	2850	2710	2760	2230	2800	3300	3450	3330
6	3600	2800	2710	2990	2890	2680	2000	2570	3000	3330	3430	3370
7	3380	2820	2850	3050	2950	1990	2350	3100	3200	3320	3410	3340
8	3470	2860	2880	2990	2980	2210	2480	3180	3190	3300	3430	3340
9	3550	2870	2900	2940	2870	2600	2490	3230	3290	3330	3430	3660
10	3610	2800	2960	2900	2800	2520	2700	2960	3400	3350	3420	3500
11	3670	2840	3090	3140	2810	2400	2780	2190	3310	3350	3430	3440
12	3490	2880	3100	3150	2850	2430	2900	1580	3400	3350	3320	3470
13	3730	2980	3000	3290	2950	2640	2450	2110	3400	3580	3430	3470
14	3720	3080	3040	3310	2950	2680	2980	2070	3320	3200	3340	3380
15	3530	3070	3090	3380	2810	2520	2970	2010	3380	3570	3380	3360
16	3650	3040	3000	3210	2810	2560	2780	1920	3450	3260	3440	3400
17	3620	3000	3000	3090	2810	2600	3100	1920	3490	3440	3440	3300
18	3630	3010	2990	3150	2830	2490	3050	2080	3410	3330	3390	3410
19	3600	3030	3010	3150	2810	2400	3180	2160	3400	3350	3400	3350
20	3570	3090	3060	3160	2940	2560	3200	1850	3430	3360	3280	3280
21	3720	3170	3040	3160	2890	2490	3120	1570	3390	3380	3000	3430
22	3640	3170	3020	3100	2950	2450	3200	1950	3420	3360	3280	3430
23	3630	3130	3010	3160	2980	2460	2780	2170	3490	3350	3390	3370
24	3660	3130	2910	3200	2870	2520	2700	2260	3580	3360	3620	3370
25	3650	2990	3040	3240	2890	2680	2700	2430	3490	3410	3680	3410
26	3630	3180	3030	3190	2830	2490	2450	2260	3220	3350	3510	3400
27	3630	3160	3010	3100	2850	2330	2450	2260	3410	3350	3500	3410
28	3100	3210	2920	2820	2850	2580	2670	2150	3500	3360	3460	3360
29	3350	3190	2880	3160	---	2820	2750	2300	3510	2020	3440	3410
30	2310	3200	2870	3090	---	2830	2700	2440	3440	2350	3390	3400
31	2360	---	2910	3000	---	2810	---	2570	---	2970	3410	---
MEAN	3490	2940	2980	3090	2880	2540	2710	2370	3240	3270	3400	3390
YEAR	MAX	3730	MIN	1570	MEAN	3030						

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.0	12.0	11.0	---	---	---	14.0	25.0	27.0	27.0	26.0	26.5
2	28.0	15.0	11.0	---	---	---	20.0	20.0	24.0	29.0	29.0	28.0
3	25.0	15.0	14.0	---	---	---	16.0	24.0	24.0	27.0	30.0	30.5
4	26.0	15.0	14.0	---	---	---	16.0	19.0	25.0	27.0	30.0	30.0
5	28.0	13.0	14.0	3.0	---	---	17.0	23.0	27.0	28.0	30.0	30.0
6	29.0	14.0	13.0	---	---	---	15.0	21.0	28.0	29.0	29.0	28.0
7	26.0	13.0	12.0	5.0	---	---	15.0	23.0	28.0	30.0	30.0	28.5
8	26.0	15.0	14.0	---	---	---	17.0	22.0	24.0	31.0	30.0	27.0
9	24.0	15.0	12.0	---	---	---	16.0	25.0	29.0	33.0	30.0	28.0
10	24.0	15.0	12.0	3.0	---	---	21.0	23.0	28.0	30.0	31.0	28.5
11	25.0	14.0	9.0	3.0	---	---	21.0	23.0	29.0	30.0	30.0	26.5
12	27.0	15.0	9.0	---	---	---	20.0	19.0	28.0	30.0	28.0	25.0
13	28.0	15.0	7.0	---	---	---	22.0	25.0	30.0	30.0	29.0	24.5
14	28.0	17.0	7.0	---	---	---	17.0	25.0	29.0	26.0	29.0	28.5
15	26.0	16.0	6.0	3.0	---	---	21.0	25.0	30.0	26.0	28.0	27.0
16	24.0	15.0	2.0	---	---	---	20.0	20.0	26.0	30.0	29.0	28.5
17	27.0	15.0	---	---	---	---	19.0	24.0	26.0	30.0	26.0	29.0
18	28.0	16.0	---	---	---	---	22.0	21.0	23.0	26.0	27.0	29.0
19	25.0	16.0	---	---	---	16.0	21.0	21.0	29.0	28.0	28.0	27.0
20	25.0	16.0	---	---	---	19.0	25.0	19.0	31.0	28.0	24.5	28.0
21	23.0	16.0	---	---	---	18.0	25.0	15.0	25.0	27.0	24.5	25.5
22	25.0	16.0	---	---	---	16.0	24.0	19.0	30.0	27.0	26.0	24.5
23	23.0	16.0	---	---	---	16.0	24.0	23.0	24.0	33.0	27.0	26.5
24	24.0	15.0	---	---	---	20.0	23.0	23.0	22.0	33.0	28.0	27.0
25	23.0	12.0	---	---	---	15.0	18.0	24.0	28.0	30.0	28.0	25.5
26	23.0	13.0	---	---	---	13.0	22.0	24.0	24.0	32.0	27.0	25.5
27	23.0	15.0	---	---	---	9.0	22.0	21.0	26.0	30.0	25.5	25.5
28	20.0	15.0	---	---	---	19.0	16.0	24.0	27.0	30.0	25.5	27.0
29	20.0	12.0	---	---	---	16.0	25.0	23.0	25.0	25.0	29.0	26.5
30	20.0	13.0	---	---	---	17.0	25.0	26.0	26.0	28.0	27.5	26.5
31	22.0	---	---	---	---	14.0	---	25.0	---	25.0	29.0	---
MEAN	25.0	14.5	---	---	---	---	20.0	22.5	26.5	29.0	28.0	27.5
YEAR	MAX	33.0										

09419700. Las Vegas Wash near Henderson, Nev.

LOCATION.--Lat 36°05'20", long 114°59'05", in SE¼SW¼ sec.30, T.21 S., R.63 E., Clark County, 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 high-water line of Lake Mead at elevation 1,221.4 ft (372.28 m) above mean sea level.

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

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

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.

AVERAGE DISCHARGE.--18 years, 32.1 ft^3/s (0.909 m^3/s), 23,260 acre-ft/yr (28.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,510 ft^3/s (184 m^3/s) July 4 (gage height, 10.67 ft or 3.252 m, from floodmarks); minimum, 25 ft^3/s (0.71 m^3/s) July 22.
Period of record: Maximum discharge, 6,510 ft^3/s (184 m^3/s) July 4, 1975 (gage height, 10.67 or 3.252 m, from floodmarks), from rating curve extended above 3,340 ft^3/s (95 m^3/s) on basis of area-velocity computation of peak flow; minimum daily, 4.8 ft^3/s (0.14 m^3/s) Aug. 17, 1960.

REMARKS.--Records fair. In closed basin above station, 2,150 acres (8.70 km^2) are irrigated, mostly by pumping from ground water. Discharge includes waste water from industrial plants and sewage effluent. Water-quality records for the current year are published on following pages.

REVISIONS.--WSP 1926: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	65	68	69	60	59	140	51	52	52	46	52
2	57	65	65	60	67	57	97	50	51	47	49	53
3	60	82	71	69	65	57	63	55	51	42	47	59
4	63	79	75	58	64	56	60	58	52	1430	47	55
5	59	70	79	54	63	56	61	58	51	121	47	57
6	59	64	70	52	63	55	66	58	46	69	43	52
7	58	63	71	53	65	55	66	54	46	57	45	55
8	55	63	64	55	64	55	60	56	49	57	50	61
9	51	62	64	55	63	62	62	56	52	60	54	71
10	51	64	66	56	62	62	62	57	52	61	54	84
11	53	63	71	54	65	67	68	59	54	60	50	64
12	53	63	65	58	64	70	89	56	53	58	48	63
13	54	62	65	54	64	58	72	56	51	55	53	64
14	52	63	65	55	64	56	66	55	49	55	54	64
15	53	63	67	58	64	58	64	55	49	54	55	63
16	57	62	66	55	66	56	61	56	51	52	56	73
17	55	61	65	53	64	57	57	53	49	54	55	92
18	59	62	63	53	68	59	59	52	44	52	53	64
19	61	62	63	53	66	60	59	52	46	53	53	63
20	62	63	62	48	66	60	62	54	48	53	56	65
21	58	63	63	51	63	59	58	55	50	50	64	63
22	63	64	64	55	63	62	53	56	51	52	61	63
23	62	63	63	55	67	65	52	55	50	50	70	62
24	59	64	61	53	67	65	50	56	50	52	61	58
25	59	63	64	52	67	65	49	56	54	52	57	58
26	65	64	62	54	65	67	49	58	53	48	57	56
27	67	60	68	49	64	63	54	60	52	47	55	54
28	65	61	68	50	60	64	54	54	52	49	48	54
29	70	63	77	53	---	65	55	53	54	49	43	53
30	66	65	71	51	---	68	55	55	52	49	45	49
31	58	---	70	52	---	66	---	53	---	45	46	---
TOTAL	1820	1931	2076	1697	1803	1884	1923	1712	1514	3085	1622	1844
MEAN	58.7	64.4	67.0	54.7	64.4	60.8	64.1	55.2	50.5	99.5	52.3	61.5
MAX	70	82	79	69	68	70	140	60	54	1430	70	92
MIN	51	60	61	48	60	55	49	50	44	42	43	49
AC-FT	3610	3830	4120	3370	3580	3740	3810	3400	3000	6120	3220	3660

CAL YR 1974 TOTAL 20142 MEAN 55.2 MAX 133 MIN 28 AC-FT 39950
WTR YR 1975 TOTAL 22911 MEAN 62.8 MAX 1430 MIN 42 AC-FT 45440

NOTE.--No gage-height record July 1-5.

09419700. Las Vegas Wash near Henderson, Nev.

LOCATION.--Lat 36°05'20", long 114°59'05", in SE¼SW¼ sec.30, T.21 S., R.63 E., Clark County, at gaging station 3.5 mi (5.6 km) north of Henderson, and 6.0 mi (9.6 km) upstream from high-water line of Lake Mead at elevation 1,221.4 ft (372.3 m) above mean sea level.

DRAINAGE AREA.--2,125 mi^2 (5,504 km^2), of which 1,518 mi^2 (3,932 km^2) contribute directly to surface runoff.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Discharge includes sewage effluent and perhaps some waste water from industrial plants. Chemical analyses for period January 1964 to September 1968 available from U.S. Environmental Protection Agency.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.										
29...	1000	80	33	170	73	310	34	267	0	660
NOV.										
11...	1245	69	--	--	--	--	--	--	--	--
DEC.										
16...	1050	72	--	--	--	--	--	--	--	--
JAN.										
28...	1030	54	35	200	94	360	51	296	0	860
FEB.										
18...	0930	72	--	--	--	--	--	--	--	--
MAR.										
13...	0915	61	--	--	--	--	--	--	--	--
APR.										
29...	0930	60	28	180	88	320	19	278	0	730
MAY										
27...	1045	64	--	--	--	--	--	--	--	--
JUNE										
17...	1015	54	--	--	--	--	--	--	--	--
JULY										
15...	0830	60	--	--	--	--	--	--	--	--
28...	1000	51	36	180	89	280	25	235	0	630
AUG.										
12...	1030	50	--	--	--	--	--	--	--	--
SEP.										
15...	0930	68	--	--	--	--	--	--	--	--

09419700. Las Vegas Wash near Henderson, Nev.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.									
29...	370	2.4	.18	--	8.2	.60	8.8	11	7.0
NOV.									
11...	--	3.6	1.6	5.2	8.0	--	--	--	6.7
DEC.									
16...	--	4.2	.30	4.5	8.0	--	--	--	6.1
JAN.									
28...	470	2.8	.23	3.0	8.0	.30	8.3	11	7.0
FEB.									
18...	--	5.5	.45	5.9	8.0	--	--	--	6.5
MAR.									
13...	--	4.3	.39	4.7	3.6	--	--	--	6.6
APR.									
29...	360	3.1	.24	3.3	5.3	.90	6.2	9.5	6.8
MAY									
27...	--	1.2	.22	1.4	11	--	--	--	7.4
JUNE									
17...	--	.52	.12	.64	11	--	--	--	6.5
JULY									
15...	--	2.7	4.2	6.9	--	--	--	--	6.4
28...	340	.21	.14	.35	13	1.0	14	14	8.5
AUG.									
12...	--	.39	.39	.78	9.4	--	--	--	6.1
SEP.									
15...	--	.48	.23	.71	12	--	--	--	6.6

DATE	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.									
29...	6.8	1780	2.42	730	510	5.0	2720	--	14.0
NOV.									
11...	--	--	--	--	--	--	2560	--	12.0
DEC.									
16...	--	--	--	--	--	--	2780	--	9.0
JAN.									
28...	7.0	2220	3.02	890	640	5.3	3140	7.3	7.0
FEB.									
18...	--	--	--	--	--	--	2757	--	6.0
MAR.									
13...	--	--	--	--	--	--	2990	--	8.0
APR.									
29...	7.0	1860	2.53	810	580	4.9	2980	7.9	13.0
MAY									
27...	--	--	--	--	--	--	2560	--	18.0
JUNE									
17...	--	--	--	--	--	--	2810	--	20.0
JULY									
15...	--	--	--	--	--	--	2630	--	23.0
28...	8.4	1700	2.31	820	620	4.3	2730	7.5	23.5
AUG.									
12...	--	--	--	--	--	--	2660	--	22.5
SEP.									
15...	--	--	--	--	--	--	2500	--	20.0

09419800. Las Vegas Wash near Boulder City, Nev.

LOCATION.--Lat 36°07'20", long 114°54'15", in NE¼SE¼ sec.14, T.21 S., R.63 E., Clark County, 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 mi^2 (5,680 km^2), of which 1,586 mi^2 (4,108 km^2) contribute directly to surface runoff.

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

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

EXTREMES.--Current year: Maximum discharge, 2,430 ft^3/s (68.8 m^3/s) July 4 (gage height, 12.32 ft or 3.755 m); minimum daily, 37 ft^3/s (1.05 m^3/s) June 28.
Period of record: Maximum discharge, 2,430 ft^3/s (68.8 m^3/s) July 4, 1975 (gage height, 12.32 ft or 3.755 m, by indirect measurement of peak flow; minimum, 14 ft^3/s (0.40 m^3/s) July 7, 8, 1971.
Flood of June 26, 1964, reached a stage of 7.5 ft (2.29 m), from floodmarks (discharge, 1,050 ft^3/s or 29.7 m^3/s, by indirect measurement of peak flow); another flood between 1964 and 1969 reached a stage of about 10 ft (3.05 m), from floodmarks (discharge, about 1,700 ft^3/s or 48.1 m^3/s, from rating curve extended above 300 ft^3/s (8.5 m^3/s) on basis of theoretical weir and culvert formulas).

REMARKS.--Records poor. In closed basin above station, 2,150 acres (8.70 km^2) are irrigated, mostly by pumping from ground water. Discharge includes sewage effluent. Water-quality records for the current year are published on following pages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	90	89	94	71	71	114	66	61	45	62	64
2	84	94	88	95	88	69	216	61	59	62	62	65
3	92	103	88	94	89	66	93	63	56	44	64	71
4	96	101	97	93	86	68	74	67	59	784	62	67
5	90	94	111	90	83	68	68	73	59	535	62	69
6	88	89	120	88	82	68	71	75	58	142	55	65
7	86	87	99	87	85	67	80	71	51	80	55	67
8	98	87	92	87	85	65	80	66	53	81	60	73
9	84	85	91	86	86	73	76	70	56	83	62	84
10	73	86	93	85	79	79	81	67	56	80	67	94
11	73	87	92	82	81	80	84	72	63	74	64	92
12	73	88	102	84	80	87	98	65	62	80	58	76
13	71	85	103	82	79	85	113	62	60	75	58	78
14	76	85	98	85	80	69	90	60	59	72	65	80
15	86	87	97	88	81	67	85	64	56	73	67	76
16	77	85	86	83	81	68	80	62	54	70	71	80
17	74	85	89	80	80	64	74	66	53	73	69	107
18	78	84	86	76	79	67	72	60	50	74	65	102
19	84	85	85	75	78	72	74	56	50	75	60	76
20	84	86	83	75	77	73	76	53	52	80	62	82
21	79	85	85	73	76	71	81	60	50	75	76	78
22	79	86	86	66	71	72	68	66	62	70	84	74
23	86	85	84	69	77	80	63	66	42	72	80	78
24	83	86	81	65	78	77	62	66	47	70	73	73
25	82	85	82	65	79	79	59	69	38	73	69	71
26	92	84	85	66	80	78	58	68	52	70	69	65
27	94	82	85	58	79	75	64	70	49	64	67	65
28	91	80	94	60	76	76	69	72	37	64	62	64
29	95	82	97	64	---	77	69	60	45	69	55	64
30	95	84	101	66	---	82	71	61	62	66	57	60
31	90	---	98	66	---	81	---	62	---	65	58	---
TOTAL	2617	2612	2867	2427	2246	2274	2463	2019	1611	3440	2000	2260
MEAN	84.4	87.1	92.5	78.3	80.2	73.4	82.1	65.1	53.7	111	64.5	75.3
MAX	98	103	120	95	89	87	216	75	63	784	84	107
MIN	71	80	81	58	71	64	58	53	37	44	55	60
AC-FT	5190	5180	5690	4810	4450	4510	4890	4000	3200	6820	3970	4480

CAL YR 1974 TOTAL 24532 MEAN 67.2 MAX 120 MIN 26 AC-FT 48660
WTR YR 1975 TOTAL 28836 MEAN 79.0 MAX 784 MIN 37 AC-FT 57200

NOTE.--No gage-height record May 3 to July 6.

09419800. Las Vegas Wash near Boulder City, Nev.

LOCATION.--Lat 36°07'20", long 114°54'15", in NE¼SE¼ sec.14, T.21 S., R.63 E., Clark County, at gaging station 11 mi (18 km) northwest of Boulder City, and 0.8 mi (1.3 km) upstream from high-water line of Lake Mead at elevation 1,221.4 ft (372.3 m) above mean sea level.

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

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Discharge includes sewage effluent and waste water from industrial plants. Chemical analyses for period January 1964 to September 1968 available from U.S. Environmental Protection Agency.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
OCT.										
15...	1255	60	--	3300	--	--	--	--	--	--
29...	1045	88	40	2700	--	300	330	110	110	400
NOV.										
11...	1145	80	--	3200	--	--	--	--	--	--
25...	1130	78	--	2800	--	--	--	--	--	--
DEC.										
16...	0930	82	--	1800	--	--	--	--	--	--
31...	1030	94	--	2700	--	--	--	--	--	--
JAN.										
13...	1045	74	--	1800	--	--	--	--	--	--
28...	1130	55	42	1900	240	340	330	170	160	430
FEB.										
18...	1030	73	--	3300	--	--	--	--	--	--
27...	1015	73	--	1700	240	--	--	--	--	--
MAR.										
17...	1000	58	--	2000	--	--	--	--	--	--
31...	1300	84	--	4600	260	--	--	--	--	--
APR.										
15...	1200	84	--	5100	--	--	--	--	--	--
29...	1015	64	37	2600	200	310	330	120	130	450
MAY										
12...	1045	65	--	2300	--	--	--	--	--	--
27...	1115	60	--	1900	190	--	--	--	--	--
JUNE										
17...	1215	47	--	2100	--	--	--	--	--	--
30...	1145	E40	--	3100	350	--	--	--	--	--
JULY										
15...	0730	69	--	14000	--	--	--	--	--	--
28...	1100	41	47	12000	--	440	400	150	130	420
AUG.										
12...	1100	58	--	6600	--	--	--	--	--	--
25...	1030	65	--	8100	1200	--	--	--	--	--
SEP.										
15...	1045	76	--	9500	--	--	--	--	--	--
29...	0945	67	--	5700	460	--	--	--	--	--

09419800. Las Vegas Wash near Boulder City, Nev.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.										
15...	--	--	4600	--	15.0	40	--	--	41	9.7
29...	1100	5.6	4320	--	14.0	30	--	9.4	21	8.8
NOV.										
11...	--	--	4020	--	17.0	30	--	--	34	--
25...	--	--	3990	--	9.0	20	--	--	35	6.8
DEC.										
16...	--	--	3870	--	7.0	30	--	--	22	8.0
31...	--	--	3890	--	6.5	--	--	--	23	8.2
JAN.										
13...	--	--	4000	--	5.5	30	--	--	29	--
28...	1300	5.5	4670	8.0	8.0	20	--	11.5	37	6.8
FEB.										
18...	--	--	4010	--	7.0	30	--	--	25	10
27...	--	--	4000	--	9.0	20	--	--	29	8.2
MAR.										
17...	--	--	4343	--	9.5	--	30	--	31	7.8
31...	--	--	3890	--	11.0	--	50	--	23	9.1
APR.										
15...	--	--	4020	--	14.5	--	27	--	30	9.0
29...	1200	5.4	4050	8.0	13.5	--	30	8.9	33	16
MAY										
12...	--	--	4050	--	16.5	--	40	--	27	9.2
27...	--	--	3980	--	18.0	--	30	--	31	8.2
JUNE										
17...	--	--	4220	--	20.0	--	30	--	35	7.5
30...	--	--	4040	--	19.0	--	40	--	42	10
JULY										
15...	--	--	4410	--	21.5	--	300	--	45	19
28...	1300	5.1	4560	8.0	23.0	--	300	7.4	41	12
AUG.										
12...	--	--	4360	--	22.5	--	100	--	43	7.5
25...	--	--	N4430	--	19.0	--	70	--	31	12
SEP.										
15...	--	--	4140	--	19.0	--	130	--	32	9.1
29...	--	--	4390	--	16.0	--	60	--	42	6.4

09419800. Las Vegas Wash near Boulder City, Nev.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT.										
15...	--	--	--	--	--	--	--	9.0	.00	9.0
29...	460	41	47	247	0	1100	700	8.6	.08	8.7
NOV.										
11...	--	--	--	--	--	--	--	--	.00	--
25...	--	--	--	--	--	--	--	--	.00	--
DEC.										
16...	--	--	--	--	--	--	--	11	.06	11
31...	--	--	--	--	--	--	--	11	.06	11
JAN.										
13...	--	--	--	--	--	--	--	9.8	.09	9.9
28...	490	54	55	237	0	1300	750	11	.06	11
FEB.										
18...	--	--	--	--	--	--	--	11	.04	11
27...	--	--	--	--	--	--	--	11	.00	11
MAR.										
17...	--	--	--	--	--	--	--	9.5	.00	9.5
31...	--	--	--	--	--	--	--	10	.00	10
APR.										
15...	--	--	--	--	--	--	--	7.5	.01	7.5
29...	460	28	29	251	0	1100	650	7.1	.00	7.1
MAY										
12...	--	--	--	--	--	--	--	7.2	.08	7.3
27...	--	--	--	--	--	--	--	7.6	.07	7.7
JUNE										
17...	--	--	--	--	--	--	--	6.8	.01	6.8
30...	--	--	--	--	--	--	--	6.8	.01	6.8
JULY										
15...	--	--	--	--	--	--	--	6.1	3.0	9.1
28...	460	46	49	295	0	1300	690	4.3	.79	5.1
AUG.										
12...	--	--	--	--	--	--	--	6.5	.07	6.6
25...	--	--	--	--	--	--	--	7.0	.20	7.2
SEP.										
15...	--	--	--	--	--	--	--	7.7	.34	8.0
29...	--	--	--	--	--	--	--	8.1	.03	8.1

09419800. Las Vegas Wash near Boulder City, Nev.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)
OCT.										
15...	.15	.71	.86	9.9	4.5	--	--	--	--	--
29...	.11	1.4	1.5	10	4.6	4.6	3040	2910	4.13	1300
NOV.										
11...	.18	.60	.78	--	4.5	--	--	--	--	--
25...	.13	.44	.57	--	2.5	--	--	--	--	--
DEC.										
16...	.35	.95	1.3	12	4.9	--	--	--	--	--
31...	1.4	.20	1.6	13	4.8	--	--	--	--	--
JAN.										
13...	.84	.96	1.8	12	4.7	--	--	--	--	--
28...	.05	.67	.72	12	3.8	3.7	3430	3240	4.66	1500
FEB.										
18...	.08	.74	.82	12	4.8	--	--	--	--	--
27...	.09	.89	.98	12	5.0	--	--	--	--	--
MAR.										
17...	.03	.69	.72	10	4.4	--	--	--	--	--
31...	.02	.66	.68	11	4.1	--	--	--	--	--
APR.										
15...	.05	.95	1.0	8.5	5.5	--	--	--	--	--
29...	.01	.67	.68	7.8	--	4.4	3100	2860	4.22	1400
MAY										
12...	.31	.69	1.0	8.3	5.7	--	--	--	--	--
27...	.03	.97	1.0	8.7	5.3	--	2920	--	3.97	--
JUNE										
17...	.00	.81	.81	7.6	4.8	--	--	--	--	--
30...	.02	.84	.86	7.7	4.7	--	2990	--	4.07	--
JULY										
15...	2.3	1.6	3.9	13	4.6	--	--	--	--	--
28...	.45	1.3	1.7	6.8	3.8	3.2	3490	3220	4.75	1500
AUG.										
12...	.02	.76	.78	7.4	4.3	--	--	--	--	--
25...	.04	1.1	1.1	8.3	5.1	--	3370	--	4.58	--
SEP.										
15...	.17	1.0	1.2	9.2	2.7	--	--	--	--	--
29...	.01	.75	.76	8.9	3.7	--	3350	--	4.56	--

PERIODIC DAILY SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.				
29...	1045	88	143	34
JAN.				
28...	1130	55	111	16
APR.				
29...	1015	64	160	28
MAY				
15...	1310	55	250	37

09419800. Las Vegas Wash near Boulder City, Nev.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)
NOV. 25...	1130	78	.00	.0	.00	.00	.00	.02
JAN. 28...	1130	55	.00	.0	.00	.00	.00	.03
APR. 29...	1015	64	.00	.0	.00	.00	.00	.04
JULY 28...	1100	41	.00	.0	.00	.00	.00	.00

DATE	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)
NOV. 25...	.00	.00	--	.00	.00	.05	.00	.00	--
JAN. 28...	.00	.00	--	.00	.00	.04	.00	.00	--
APR. 29...	.00	.00	--	.00	.00	.06	.00	.00	--
JULY 28...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRITHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)	TEMPERATURE (DEG C)
NOV. 25...	.00	.0	0	--	.00	.00	.00	9.0
JAN. 28...	.00	.0	0	--	--	--	--	8.0
APR. 29...	.00	.0	0	--	.00	.00	.00	13.5
JULY 28...	.00	.0	0	.00	.00	.00	.00	23.0

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JAN. 28...	1130	55	30	0	20	10	10	100	.0	3	40	60
FEB. 27...	1015	73	29	0	<10	30	20	100	.1	3	20	50
MAR. 31...	1300	84	29	0	10	2	10	<100	.1	3	10	10
APR. 29...	1015	64	36	0	<10	50	<10	<100	.0	3	20	10
MAY 27...	1115	60	32	0	10	20	10	100	.0	3	<10	40
JUNE 30...	1145	E40	37	0	<10	0	10	<100	.0	2	<10	40
JULY 28...	1100	41	37	400	20	40	30	100	.0	3	<10	40
AUG. 25...	1030	65	40	0	20	30	30	100	.0	5	10	70
SEP. 29...	0945	67	34	100	10	30	40	200	.0	3	20	20

09421000. Lake Mead at Hoover Dam, Ariz.-Nev.

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, in center of Hoover Dam on Colorado River.
DRAINAGE AREA.--167,800 mi² (434,600 km²), approximately.
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."
GAGE.--Water-stage indicator read once daily at midnight, with supplementary water-stage recorder. Datum of gage is 0.40 ft (0.122 m) above mean sea level, used locally as at mean sea level, powerhouse datum.
EXTREMES.--Current year: Maximum contents, 20,158,000 acre-ft (24,900 hm³) Sept. 29 (gage height, 1,180.13 ft or 359.704 m); minimum, 19,299,000 acre-ft (23,800 hm³) Oct. 17 (gage height, 1,173.53 ft or 357.692 m).
Period of record: Maximum contents, 27,790,000 acre-ft (34,300 hm³) July 29, 30, 1941 (gage height, 1,220.45 ft or 371.993 m); minimum (since 1940), 10,695,000 acre-ft (13,200 hm³) Apr. 26, 1956 (gage height, 1,083.21 ft or 330.162 m).
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. Records of chemical analyses for the current year are published on following pages.
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 elevations and contents furnished by Bureau of Reclamation. Records of diversions from Lake Mead furnished by Bureau of Reclamation and Colorado River Commission of Nevada.
REVISIONS (WATER YEARS).--WSP 899: 1935-39.

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19,359	19,350	19,575	19,716	19,983	19,938	19,753	19,377	19,325	19,425	19,750	19,908
2	19,357	19,363	19,571	19,717	19,995	19,949	19,729	19,372	19,325	19,429	19,762	19,908
3	19,367	19,352	19,566	19,721	19,991	19,944	19,717	19,370	19,334	19,439	19,772	19,907
4	19,366	19,404	19,566	19,729	19,978	19,925	19,704	19,385	19,334	19,456	19,770	19,915
5	19,368	19,406	19,566	19,750	19,966	19,912	19,699	19,377	19,333	19,482	19,764	19,917
6	19,370	19,411	19,572	19,767	19,962	19,900	19,693	19,368	19,342	19,492	19,771	19,927
7	19,368	19,415	19,582	19,770	19,958	19,887	19,675	19,366	19,365	19,498	19,780	19,948
8	19,363	19,429	19,592	19,773	19,967	19,885	19,654	19,367	19,397	19,504	19,797	19,953
9	19,353	19,448	19,602	19,787	19,967	19,894	19,636	19,374	19,401	19,513	19,818	19,955
10	19,352	19,465	19,606	19,806	19,967	19,878	19,626	19,392	19,404	19,524	19,847	19,971
11	19,344	19,479	19,599	19,824	19,952	19,869	19,610	19,406	19,404	19,529	19,860	19,982
12	19,344	19,484	19,601	19,849	19,949	19,858	19,604	19,401	19,404	19,550	19,866	19,991
13	19,342	19,487	19,614	19,874	19,953	19,858	19,610	19,393	19,402	19,573	19,869	20,004
14	19,333	19,496	19,624	19,899	19,958	19,854	19,592	19,385	19,410	19,582	19,868	20,021
15	19,316	19,502	19,638	19,923	19,961	19,866	19,577	19,383	19,429	19,575	19,864	20,013
16	19,301	19,513	19,646	19,938	19,958	19,878	19,559	19,375	19,426	19,580	19,864	19,997
17	19,299	19,522	19,654	19,944	19,959	19,882	19,551	19,377	19,425	19,585	19,873	19,983
18	19,308	19,522	19,664	19,952	19,954	19,881	19,536	19,394	19,425	19,594	19,862	19,900
19	19,318	19,523	19,681	19,965	19,948	19,873	19,526	19,380	19,426	19,606	19,854	19,997
20	19,325	19,523	19,693	19,970	19,936	19,875	19,522	19,370	19,416	19,630	19,857	20,022
21	19,326	19,528	19,707	19,955	19,933	19,860	19,509	19,362	19,416	19,643	19,865	20,030
22	19,320	19,533	19,716	19,945	19,952	19,860	19,491	19,349	19,419	19,645	19,869	20,044
23	19,317	19,540	19,720	19,948	19,971	19,860	19,477	19,336	19,451	19,656	19,879	20,054
24	19,322	19,546	19,714	19,958	19,967	19,845	19,456	19,335	19,398	19,662	19,885	20,069
25	19,331	19,548	19,708	19,973	19,958	19,821	19,440	19,340	19,397	19,673	19,883	20,087
26	19,345	19,545	19,712	19,978	19,940	19,802	19,437	19,343	19,402	19,690	19,877	20,102
27	19,354	19,542	19,711	19,976	19,932	19,779	19,431	19,334	19,402	19,694	19,873	20,129
28	19,349	19,559	19,704	19,974	19,928	19,764	19,420	19,316	19,413	19,708	19,868	20,148
29	19,347	19,571	19,717	19,970	------	19,768	19,398	19,312	19,425	19,716	19,869	20,158
30	19,335	19,575	19,723	19,973	------	19,777	19,383	19,312	19,421	19,729	19,878	20,154
31	19,338	------	19,721	19,975	------	19,764	------	19,316	------	19,743	19,899	------
(*)	1,173.83	1,175.67	1,176.80	1,178.74	1,178.38	1,177.13	1,174.18	1,173.66	1,174.48	1,176.97	1,178.16	1,180.10
(†)	-20,000	+237,000	+146,000	+254,000	-47,000	-164,000	-381,000	-67,000	+105,000	+322,000	+156,000	+255,000
(‡)	5,380	4,000	3,550	4,890	3,810	5,630	6,160	7,750	10,100	10,600	10,300	8,640
(**)	8.9	5.6	7.4	5.7	6.3	5.6	5.7	6.6	9.2	10.8	12.6	6.9
(††)	95,100	60,200	80,000	62,200	69,000	61,100	61,500	70,600	98,400	116,500	137,300	75,700

CAL YR 1974 † -16,000 ‡ 81,400 ** 79.6 †† 851,500
WTR YR 1975 † +796,000 ‡ 80,900 ** 91.3 †† 987,600

* 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. Starting October 1974, only the mass-transfer method described in Geological Survey Professional Paper 298 is used. "Gross" denotes 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.

09421000. Lake Mead at Hoover Dam, Ariz.-Nev.

LOCATION.--Lat 36°00'58", long 114°44'13", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, on State line between Mohave County, Ariz., and Clark County, Nev., at gaging station in center of Hoover Dam on Colorado River.

DRAINAGE AREA.--167,800 mi^2 (434,600 km^2), approximately.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DEPTH (FT)	ELEVATION ABOVE MEAN SEA LEVEL (FT)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.										
24...	.0	1174	6.0	81	32	100	4.0	132	0	320
24...	10	1164	--	--	--	--	--	132	0	--
24...	25	1149	6.0	82	31	100	4.0	132	0	310
24...	75	1099	6.2	85	29	97	4.0	155	0	290
24...	125	1049	--	--	--	--	--	154	0	--
24...	175	999	7.1	89	28	99	4.0	156	0	290
24...	225	949	--	--	--	--	--	159	0	--
24...	260	914	7.3	88	28	95	4.0	160	0	290
24...	275	899	--	--	--	--	--	160	0	--
24...	325	849	--	--	--	--	--	160	0	--
24...	375	799	7.3	88	28	97	4.0	160	0	290
24...	425	749	--	--	--	--	--	160	0	--
NOV.										
26...	.0	1175	8.2	84	30	100	5.0	145	0	300
26...	10	1165	--	--	--	--	--	--	--	--
26...	25	1150	--	--	--	--	--	--	--	--
26...	75	1100	8.0	84	30	100	5.0	145	0	310
26...	125	1050	--	--	--	--	--	--	--	--
26...	175	1000	9.2	89	29	99	5.0	155	0	300
26...	225	950	9.5	88	28	97	5.0	159	0	300
26...	260	915	9.7	87	28	96	4.0	159	0	290
26...	275	900	--	--	--	--	--	--	--	--
26...	325	850	--	--	--	--	--	--	--	--
26...	375	800	--	--	--	--	--	--	--	--
26...	425	750	10	89	28	96	4.0	160	0	290
26...	452	723	--	--	--	--	--	--	--	--
DEC.										
30...	.0	1177	8.9	86	30	100	5.0	148	0	300
30...	10	1167	--	--	--	--	--	146	0	--
30...	25	1152	--	--	--	--	--	146	0	--
30...	75	1102	--	--	--	--	--	146	0	--
30...	125	1052	8.7	86	30	100	5.0	146	0	300
30...	175	1002	9.0	86	30	100	5.0	153	0	300
30...	225	952	9.7	87	30	100	5.0	156	0	300
30...	263	914	9.7	88	28	96	4.0	159	0	290
30...	275	902	--	--	--	--	--	159	0	--
30...	325	852	--	--	--	--	--	159	0	--
30...	375	802	--	--	--	--	--	159	0	--
30...	425	752	10	87	28	97	4.0	159	0	290
30...	458	719	--	--	--	--	--	160	0	--
JAN.										
30...	.0	1179	8.5	84	32	100	4.0	149	0	300
30...	10	1169	--	--	--	--	--	149	0	--
30...	25	1154	--	--	--	--	--	150	0	--
30...	75	1104	--	--	--	--	--	149	0	--
30...	125	1054	--	--	--	--	--	148	0	--
30...	175	1004	--	--	--	--	--	148	0	--
30...	225	954	8.5	85	30	99	4.0	151	0	300
30...	265	914	8.9	85	30	99	4.0	155	0	290
30...	275	904	9.2	86	28	98	4.0	157	0	290
30...	325	854	--	--	--	--	--	159	0	--
30...	375	804	--	--	--	--	--	160	0	--
30...	425	754	9.7	86	29	97	4.0	160	0	290
30...	459	721	--	--	--	--	--	161	0	--

09421000. Lake Mead at Hoover Dam, Ariz.-Nev.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1940 to current year.

REMARKS.--Samples collected by Bureau of Reclamation and analyzed by the Metropolitan Water District of Southern California, LaVerne, Calif.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.										
24...	92	.20	700	.95	330	230	2.4	1100	7.7	24.0
24...	93	--	--	--	--	--	--	1120	7.6	23.5
24...	92	<.10	690	.94	330	220	2.4	1120	7.8	23.5
24...	85	.70	673	.92	330	210	2.3	1080	7.6	22.0
24...	87	--	--	--	--	--	--	1100	7.8	18.5
24...	86	1.0	681	.93	340	210	2.3	1110	7.6	15.0
24...	82	--	--	--	--	--	--	1080	7.7	14.0
24...	82	1.1	674	.92	340	200	2.3	1080	7.8	13.0
24...	82	--	--	--	--	--	--	1090	7.6	13.0
24...	82	--	--	--	--	--	--	1090	7.6	13.0
24...	82	.60	676	.92	340	200	2.3	1090	7.7	13.0
24...	83	--	--	--	--	--	--	1090	7.4	13.0
NOV.										
26...	88	<.10	687	.93	330	210	2.4	1090	7.4	19.0
26...	89	--	--	--	--	--	--	1090	7.4	19.0
26...	89	--	--	--	--	--	--	1090	7.4	19.0
26...	89	.10	698	.95	330	210	2.4	1090	7.4	19.0
26...	88	--	--	--	--	--	--	1090	7.4	19.0
26...	86	.10	694	.94	340	220	2.3	1090	7.4	15.5
26...	82	.70	689	.94	340	210	2.3	1070	7.5	14.5
26...	79	.70	673	.92	330	200	2.3	1070	7.4	13.5
26...	80	--	--	--	--	--	--	1070	7.4	13.0
26...	81	--	--	--	--	--	--	1070	7.4	13.0
26...	82	--	--	--	--	--	--	1080	7.3	13.0
26...	82	.10	678	.92	340	210	2.3	1080	7.2	13.0
26...	83	--	--	--	--	--	--	1080	7.3	13.0
DEC.										
30...	88	.20	691	.94	340	220	2.4	1100	7.5	15.0
30...	88	--	--	--	--	--	--	1110	7.5	15.0
30...	88	--	--	--	--	--	--	1110	7.5	15.5
30...	88	--	--	--	--	--	--	1100	7.5	15.5
30...	88	.20	690	.94	340	220	2.4	1100	7.5	15.5
30...	88	.20	694	.94	340	210	2.4	1100	7.5	15.0
30...	86	.40	695	.95	340	210	2.4	1100	7.4	14.5
30...	81	.40	675	.92	340	210	2.3	1060	7.7	13.0
30...	80	--	--	--	--	--	--	1060	7.5	13.0
30...	80	--	--	--	--	--	--	1060	7.5	13.0
30...	80	--	--	--	--	--	--	1070	7.4	13.0
30...	82	.40	677	.92	330	200	2.3	1070	7.8	13.0
30...	82	--	--	--	--	--	--	1060	7.8	13.0
JAN.										
30...	86	1.0	689	.94	340	220	2.4	1090	7.8	13.5
30...	88	--	--	--	--	--	--	1090	7.8	13.5
30...	87	--	--	--	--	--	--	1090	7.8	13.5
30...	87	--	--	--	--	--	--	1090	7.8	13.5
30...	87	--	--	--	--	--	--	1090	7.8	13.5
30...	87	--	--	--	--	--	--	1090	7.8	13.5
30...	87	.90	689	.94	340	210	2.4	1090	7.7	13.5
30...	84	1.0	678	.92	340	210	2.4	1060	7.8	13.0
30...	82	1.1	676	.92	330	200	2.3	1060	7.6	13.5
30...	81	--	--	--	--	--	--	1060	7.7	13.0
30...	80	--	--	--	--	--	--	1060	7.7	13.0
30...	80	.70	675	.92	330	200	2.3	1060	7.6	13.0
30...	80	--	--	--	--	--	--	1060	7.4	13.0

09421000. Lake Mead at Hoover Dam, Ariz.-Nev.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DEPTH (FT)	ELEVATION ABOVE MEAN SEA LEVEL (FT)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
FEB.										
27...	.0	1178	9.5	85	30	99	4.0	153	0	300
27...	10	1168	--	--	--	--	--	151	0	--
27...	25	1153	--	--	--	--	--	151	0	--
27...	75	1103	--	--	--	--	--	151	0	--
27...	125	1053	--	--	--	--	--	151	0	--
27...	175	1003	--	--	--	--	--	151	0	--
27...	225	953	7.8	85	30	100	4.0	150	0	300
27...	265	913	8.0	85	30	100	4.0	150	0	300
27...	275	903	--	--	--	--	--	151	0	--
27...	325	853	8.0	85	30	100	4.0	151	0	300
27...	375	803	--	--	--	--	--	151	0	--
27...	425	753	8.3	86	30	100	4.0	153	0	300
27...	460	718	--	--	--	--	--	153	0	--
MAY										
06...	.0	1174	7.2	87	30	96	4.0	154	1	290
06...	10	1164	--	--	--	--	--	155	1	--
06...	25	1149	--	--	--	--	--	155	1	--
06...	75	1099	7.2	86	30	96	4.0	157	0	290
06...	125	1049	--	--	--	--	--	158	0	--
06...	175	999	8.0	86	29	96	4.0	157	0	290
06...	225	949	--	--	--	--	--	157	0	--
06...	264	910	8.0	86	29	96	4.0	157	0	280
06...	275	899	--	--	--	--	--	159	0	--
06...	325	849	--	--	--	--	--	159	0	--
06...	375	799	8.0	85	29	96	4.0	159	0	280
06...	425	749	--	--	--	--	--	159	0	--
06...	456	718	--	--	--	--	--	159	0	--
29...	.0	1174	7.2	85	30	100	4.0	154	0	300
29...	10	1164	--	--	--	--	--	155	0	--
29...	25	1149	--	--	--	--	--	155	0	--
29...	75	1099	--	--	--	--	--	154	0	--
29...	125	1049	7.6	85	30	100	4.0	155	0	300
29...	175	999	--	--	--	--	--	155	0	--
29...	225	949	8.0	85	30	100	4.0	155	0	300
29...	264	910	8.0	84	30	100	4.0	157	0	300
29...	275	899	--	--	--	--	--	156	0	--
29...	325	849	--	--	--	--	--	159	0	--
29...	375	799	--	--	--	--	--	157	0	--
29...	425	749	8.7	84	30	100	4.0	159	0	290
29...	453	721	--	--	--	--	--	159	0	--
JUNE										
26...	.0	1174	7.6	80	30	100	4.0	148	0	300
26...	10	1164	--	--	--	--	--	146	0	--
26...	25	1149	7.6	81	29	100	4.0	157	0	290
26...	75	1099	7.8	87	28	100	4.0	156	0	290
26...	125	1049	--	--	--	--	--	157	0	--
26...	175	999	--	--	--	--	--	159	0	--
26...	225	949	--	--	--	--	--	157	0	--
26...	264	910	8.8	86	28	96	4.0	159	0	290
26...	275	899	8.3	86	28	95	4.0	159	0	280
26...	325	849	--	--	--	--	--	159	0	--
26...	375	799	--	--	--	--	--	159	0	--
26...	425	749	8.3	84	29	99	4.0	160	0	290
26...	453	7260	--	--	--	--	--	160	0	--
JULY										
30...	.0	1177	6.6	81	29	100	5.0	144	0	290
30...	10	1167	--	--	--	--	--	143	0	--
30...	25	1152	--	--	--	--	--	144	0	--
30...	75	1102	6.8	85	29	100	4.0	155	0	290
30...	125	1052	6.8	86	30	100	4.0	155	0	290
30...	225	952	--	--	--	--	--	159	0	--
30...	264	913	7.6	86	28	100	5.0	159	0	290
30...	275	902	--	--	--	--	--	159	0	--
30...	325	852	--	--	--	--	--	159	0	--
30...	375	802	--	--	--	--	--	159	0	--
30...	425	752	7.6	86	28	100	5.0	160	0	290

09421000. Lake Mead at Hoover Dam, Ariz.-Nev.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
FEB.										
27...	86	1.0	690	.94	340	210	2.4	1100	7.7	14.0
27...	86	--	--	--	--	--	--	1100	7.6	14.0
27...	86	--	--	--	--	--	--	1100	7.6	13.5
27...	86	--	--	--	--	--	--	1100	7.7	13.0
27...	86	--	--	--	--	--	--	1100	7.5	13.0
27...	86	--	--	--	--	--	--	1100	7.5	13.0
27...	86	.80	687	.93	340	210	2.4	1100	7.6	13.0
27...	87	1.0	689	.94	340	210	2.4	1090	7.7	13.0
27...	88	--	--	--	--	--	--	1090	7.5	13.0
27...	87	.70	689	.94	340	210	2.4	1100	7.6	13.0
27...	87	--	--	--	--	--	--	1100	151	13.0
27...	87	.40	691	.94	340	210	2.4	1100	7.4	13.0
27...	87	--	--	--	--	--	--	1100	7.6	13.0
MAY										
06...	87	.50	679	.92	340	210	2.3	1080	8.4	16.5
06...	87	--	--	--	--	--	--	1090	8.4	16.5
06...	87	--	--	--	--	--	--	1090	8.3	16.5
06...	86	.60	677	.92	340	210	2.3	1090	8.2	15.0
06...	85	--	--	--	--	--	--	1090	8.1	14.5
06...	85	.90	676	.92	330	210	2.3	1080	8.0	13.5
06...	85	--	--	--	--	--	--	1080	7.9	13.0
06...	84	1.0	665	.90	330	210	2.3	1070	7.9	13.0
06...	84	--	--	--	--	--	--	1070	8.0	13.0
06...	85	--	--	--	--	--	--	1070	8.0	13.0
06...	85	1.0	666	.91	330	200	2.3	1070	8.0	13.0
06...	84	--	--	--	--	--	--	1070	7.9	13.0
06...	84	--	--	--	--	--	--	1070	7.8	13.0
29...	87	.30	689	.94	340	210	2.4	1080	7.5	21.5
29...	87	--	--	--	--	--	--	1080	7.7	21.5
29...	86	--	--	--	--	--	--	1080	7.7	21.5
29...	86	--	--	--	--	--	--	1080	7.7	20.0
29...	86	.30	689	.94	340	210	2.4	1080	7.6	14.5
29...	85	--	--	--	--	--	--	1080	7.5	13.5
29...	85	.20	689	.94	340	210	2.4	1080	7.4	13.0
29...	83	.30	687	.93	330	210	2.4	1070	7.4	13.0
29...	84	--	--	--	--	--	--	1070	7.5	13.0
29...	86	--	--	--	--	--	--	1070	7.4	13.0
29...	83	--	--	--	--	--	--	1070	7.4	13.0
29...	83	.20	678	.92	330	200	2.4	1070	7.4	13.0
29...	83	--	--	--	--	--	--	1070	7.6	13.0
JUNE										
26...	84	<.10	679	.92	320	200	2.4	1050	7.5	23.0
26...	84	--	--	--	--	--	--	1050	7.4	23.0
26...	84	<.10	673	.92	320	190	2.4	1050	7.6	23.0
26...	84	.60	678	.92	330	210	2.4	1070	7.5	23.0
26...	84	--	--	--	--	--	--	1070	7.5	14.5
26...	84	--	--	--	--	--	--	1070	7.4	14.0
26...	84	--	--	--	--	--	--	1070	7.3	13.5
26...	84	.40	676	.92	330	200	2.3	1070	7.3	13.0
26...	83	.30	663	.90	330	200	2.3	1070	7.4	13.0
26...	82	--	--	--	--	--	--	1060	7.4	13.0
26...	83	--	--	--	--	--	--	1060	7.3	13.0
26...	85	.20	678	.92	330	200	2.4	1060	7.3	13.0
26...	83	--	--	--	--	--	--	1060	7.4	13.0
JULY										
30...	88	.10	671	.91	320	200	2.4	1050	7.5	24.0
30...	88	--	--	--	--	--	--	1060	7.4	24.0
30...	85	--	--	--	--	--	--	1060	7.4	23.5
30...	85	.80	677	.92	330	210	2.4	1060	7.7	19.0
30...	87	1.0	681	.93	340	210	2.4	1070	7.5	15.0
30...	85	--	--	--	--	--	--	1070	7.4	13.0
30...	85	1.1	681	.93	330	200	2.4	1060	7.4	13.0
30...	84	--	--	--	--	--	--	1060	7.4	13.0
30...	85	--	--	--	--	--	--	1060	7.4	13.0
30...	85	--	--	--	--	--	--	1060	7.4	13.0
30...	85	.70	681	.93	330	200	2.4	1060	7.6	13.0

09421000. Lake Mead at Hoover Dam, Ariz.-Nev.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DEPTH (FT)	ELEVATION ABOVE MEAN SEA LEVEL (FT)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
JULY										
30...	453	724	--	--	--	--	--	161	0	--
AUG.										
28...	.0	1178	7.0	77	31	110	5.0	129	0	320
28...	10	1168	--	--	--	--	--	128	0	--
28...	25	1153	6.6	78	30	110	5.0	129	0	300
28...	75	1103	6.8	82	30	99	4.0	157	0	290
28...	125	1053	6.8	86	30	99	4.0	157	0	290
28...	175	1003	--	--	--	--	--	159	0	--
28...	225	953	--	--	--	--	--	159	0	--
28...	268	910	--	--	--	--	--	160	0	--
28...	275	903	7.4	86	29	99	4.0	160	0	290
28...	325	853	--	--	--	--	--	160	0	--
28...	375	803	--	--	--	--	--	160	0	--
28...	425	753	7.8	86	29	100	4.0	161	0	290
28...	458	720	--	--	--	--	--	161	0	--
SEP.										
30...	.0	1180	7.2	75	31	110	5.0	124	0	310
30...	10	1170	--	--	--	--	--	--	--	--
30...	25	1155	--	--	--	--	--	--	--	--
30...	75	1105	7.2	82	30	100	5.0	156	0	290
30...	125	1055	7.3	82	30	100	5.0	156	0	300
30...	175	1005	--	--	--	--	--	--	--	--
30...	225	955	7.4	85	28	96	5.0	159	0	290
30...	271	909	7.6	85	28	96	5.0	160	0	290
30...	275	905	--	--	--	--	--	--	--	--
30...	325	854	--	--	--	--	--	--	--	--
30...	375	805	--	--	--	--	--	--	--	--
30...	425	755	8.2	85	29	98	5.0	160	0	290
30...	461	719	--	--	--	--	--	--	--	--

09421000. Lake Mead at Hoover Dam, Ariz.-Nev.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS_ SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
JULY										
30...	86	--	--	--	--	--	--	1060	7.3	13.0
AUG.										
28...	91	.10	705	.96	320	210	2.7	1050	7.7	26.5
28...	90	--	--	--	--	--	--	1050	7.6	26.5
28...	90	.10	683	.93	320	210	2.7	1060	7.5	26.5
28...	86	.50	676	.92	330	200	2.4	1060	7.6	20.0
28...	87	.90	681	.93	340	210	2.3	1060	7.7	15.0
28...	86	--	--	--	--	--	--	1050	7.5	14.0
28...	85	--	--	--	--	--	--	1050	7.4	13.5
28...	85	--	--	--	--	--	--	1050	7.4	13.0
28...	85	.40	680	.92	330	200	2.4	1050	7.4	13.0
28...	85	--	--	--	--	--	--	1050	7.4	13.0
28...	85	--	--	--	--	--	--	1050	7.3	13.0
28...	85	.20	681	.93	330	200	2.4	1050	7.3	13.0
28...	85	--	--	--	--	--	--	1050	7.4	13.0
SEP.										
30...	90	.20	689	.94	320	210	2.7	1070	7.6	27.0
30...	89	--	--	--	--	--	--	1070	7.6	27.0
30...	89	--	--	--	--	--	--	1070	7.6	27.0
30...	84	.90	676	.92	330	200	2.4	1070	7.5	20.5
30...	84	1.4	687	.93	330	200	2.4	1080	7.6	17.0
30...	84	--	--	--	--	--	--	1080	7.6	14.5
30...	82	1.1	673	.92	330	200	2.3	1070	7.5	13.5
30...	82	.80	673	.92	330	200	2.3	1070	7.4	13.5
30...	81	--	--	--	--	--	--	1070	7.4	13.0
30...	81	--	--	--	--	--	--	1060	7.5	13.0
30...	81	--	--	--	--	--	--	1070	7.5	13.0
30...	82	.80	677	.92	330	200	2.3	1070	7.4	13.0
30...	81	--	--	--	--	--	--	1070	7.2	13.0

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	TEMPER-ATURE (DEG C)
NOV.											
26...	0927	10	.28	.00	.28	.02	.20	.22	.05	.03	19.0
FEB.											
27...	0926	10	.28	.01	.29	.08	.26	.34	.06	.04	14.0
MAY											
20...	0835	10	.12	.00	.12	.07	.52	.59	.00	.03	21.5
AUG.											
28...	1045	10	.01	.01	.02	.00	.41	.41	.04	.04	26.5

09421500. Colorado River below Hoover Dam, Ariz.-Nev.

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, in powerhouse at downstream side of Hoover Dam.

DRAINAGE AREA.--167,800 mi^2 (434,600 km^2), approximately.

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) above mean sea level. 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) above mean sea level.

AVERAGE DISCHARGE.--41 years (1934-75), 13,380 ft^3/s (378.9 m^3/s), 9,694,000 acre-ft/yr (12,000 hm^3/yr) unadjusted for storage in Lake Mead.

EXTREMES.--Current year: Maximum daily discharge, 20,900 ft^3/s (592 m^3/s) May 22; minimum daily, 3,570 ft^3/s (101 m^3/s) Dec. 21. Period of record: Maximum daily discharge, 36,000 ft^3/s (1,020 m^3/s) Jan. 28, 1942; no flow at Hoover Dam part of Feb. 10, 1935; minimum daily discharge, 152 ft^3/s (4.30 m^3/s) Feb. 10, 1935.

REMARKS.--Flow regulated by Lake Mead since Feb. 1, 1935. Many diversions above station for irrigation, industrial, and municipal use. Records of chemical analyses for the current year are published on following pages.

COOPERATION.--Records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,800	8,930	6,780	5,330	4,750	6,670	15,100	16,400	8,740	13,500	14,900	8,120
2	11,500	6,260	12,100	9,960	4,390	7,290	16,800	17,200	13,200	15,000	10,500	13,600
3	11,400	5,610	12,200	8,920	9,810	12,500	14,600	13,600	12,900	15,600	8,940	13,400
4	9,110	9,060	10,600	7,650	10,500	15,800	16,600	7,780	15,400	8,780	16,200	14,100
5	5,290	10,700	9,820	5,280	11,200	15,000	12,100	17,000	16,300	9,010	15,300	15,900
6	6,330	11,200	8,060	10,300	10,500	14,900	9,300	18,000	14,900	11,500	11,500	11,000
7	12,200	13,300	4,720	11,500	11,800	15,100	15,200	16,300	8,780	14,600	13,700	7,590
8	11,200	10,700	3,680	11,100	6,510	7,440	14,600	17,500	7,670	15,400	11,500	12,600
9	10,800	7,490	4,960	12,600	6,330	6,200	15,600	18,500	13,500	16,000	8,530	12,300
10	10,100	5,910	6,430	9,390	10,900	15,000	15,800	9,960	13,700	16,900	6,990	12,500
11	10,400	8,580	8,720	8,530	15,000	11,300	17,800	9,120	15,200	15,100	15,400	13,400
12	9,390	9,520	6,760	5,660	9,400	11,800	10,300	18,000	14,800	11,600	16,000	14,100
13	9,440	6,780	5,380	10,600	11,100	11,700	7,790	17,100	16,600	7,340	16,500	11,800
14	13,900	6,910	5,000	7,700	10,500	14,200	17,200	19,700	12,500	13,700	15,500	7,450
15	14,700	7,560	4,360	8,310	5,790	7,500	16,200	16,700	7,710	15,500	16,800	16,800
16	15,100	5,200	5,800	7,420	6,580	7,770	16,300	19,500	15,900	14,800	12,600	16,400
17	13,400	5,200	5,790	8,940	9,870	12,500	16,700	12,700	16,100	14,600	9,340	16,400
18	7,900	9,830	4,650	5,560	12,200	12,900	17,100	10,400	15,200	15,000	15,800	12,500
19	6,260	7,160	5,430	4,580	14,000	17,800	14,700	17,800	14,600	11,100	17,300	10,800
20	5,230	7,430	5,340	8,640	15,900	14,200	9,150	18,700	18,000	8,140	15,600	5,770
21	8,940	9,440	3,570	10,900	15,900	14,400	15,600	18,400	10,700	14,500	14,800	3,960
22	8,430	8,460	4,400	9,100	9,280	10,700	16,000	20,900	7,600	17,000	14,300	11,700
23	10,800	8,520	8,200	9,860	5,900	6,680	15,500	18,200	15,500	14,300	7,290	10,800
24	10,200	7,970	8,610	9,140	16,900	14,300	15,400	12,400	16,100	14,600	9,480	11,800
25	9,470	10,600	6,710	5,910	15,400	13,900	17,000	12,300	15,600	15,300	14,600	10,100
26	7,440	10,900	8,600	4,710	19,800	15,800	12,000	10,100	16,900	10,100	15,000	11,600
27	5,850	10,400	8,210	8,360	15,300	14,100	9,590	17,800	16,800	13,400	14,800	5,150
28	11,500	8,360	6,400	9,670	15,700	14,500	15,900	19,100	13,100	14,800	14,800	5,350
29	10,500	8,100	5,960	7,000	------	11,500	17,200	16,100	8,790	13,800	14,100	7,850
30	11,900	7,950	8,310	8,260	------	8,550	16,200	17,900	14,100	12,600	10,700	11,800
31	9,910	------	8,830	8,930	------	15,700	------	13,100	------	15,000	7,000	------
TOTAL	309,390	254,030	214,380	259,810	311,210	377,700	439,330	488,260	406,890	418,570	405,770	336,640
MEAN	9,980	8,468	6,915	8,381	11,110	12,180	14,640	15,750	13,560	13,500	13,090	11,220
MAX	15,100	13,300	12,200	12,600	19,800	17,800	17,800	20,900	18,000	17,000	17,300	16,800
MIN	5,230	5,200	3,570	4,580	4,390	6,200	7,790	7,780	7,600	7,340	6,990	3,960
AC-FT	613,700	503,900	425,200	515,300	617,300	749,200	871,400	968,500	807,100	830,200	804,800	667,700

CAL YR 1974 TOTAL 4,402,240 MEAN 12,060 MAX 23,300 MIN 2,030 AC-FT 8,732,000
WTR YR 1975 TOTAL 4,221,980 MEAN 11,570 MAX 20,900 MIN 3,570 AC-FT 8,374,000

09421500. Colorado River below Hoover Dam, Ariz.-Nev.
(National stream-quality accounting network station)

LOCATION.--Lat 36°00'38", long 114°44'31", in SW¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, Mohave County, Ariz., or in SW¼SE¼ sec.29, T.22 S., R.65 E., Mount Diablo meridian, Clark County, Nev., 0.3 mi (0.5 km) downstream from gaging station in powerhouse at downstream side of Hoover Dam.

DRAINAGE AREA.--167,800 mi^2 (434,600 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1939 to current year.
Water temperatures: October 1941 to September 1957.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
NOV.										
05...	0800	5620	9.8	--	--	--	--	87	27	100
DEC.										
03...	0800	10120	8.8	60	40	20	0	85	29	95
JAN.										
07...	0950	15220	8.9	--	10	--	--	88	29	100
FEB.										
11...	0900	18200	9.4	150	10	10	0	85	29	100
MAR.										
11...	0815	12920	8.3	--	30	--	--	85	31	100
APR.										
08...	0900	18100	8.1	--	10	--	--	86	29	99
MAY										
06...	0745	22820	7.9	130	30	10	0	83	31	99
JUNE										
10...	0800	12220	9.0	--	10	--	--	81	28	100
JULY										
08...	0730	14700	9.3	--	10	--	--	89	29	100
AUG.										
05...	0800	15120	9.2	50	30	0	0	85	29	100
SEP.										
09...	0800	10420	9.1	--	0	--	--	84	29	100

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
NOV.									
05...	4.7	162	0	280	81	.4	.43	.02	715
DEC.									
03...	4.2	163	0	270	80	.3	.43	.01	689
JAN.									
07...	5.5	160	0	290	84	.3	.43	.02	715
FEB.									
11...	5.2	165	0	270	85	.3	.46	.01	713
MAR.									
11...	5.1	160	0	290	88	.3	.35	.01	720
APR.									
08...	6.4	160	0	310	86	.4	.35	.02	715
MAY									
06...	4.6	164	0	280	85	.3	.38	.02	710
JUNE									
10...	5.4	163	0	280	83	.4	.37	.01	722
JULY									
08...	4.9	160	0	300	84	.4	.34	.03	708
AUG.									
05...	5.3	160	0	300	86	.4	.36	.01	714
SEP.									
09...	5.1	161	0	290	86	.5	.35	.00	722

09421500. Colorado River below Hoover Dam, Ariz.-Nev.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
NOV.									
05...	672	.97	330	200	2.4	1080	--	12.5	1
DEC.									
03...	655	.94	330	200	2.3	1070	--	12.0	1
JAN.									
07...	687	.97	340	210	2.4	1090	--	12.0	1
FEB.									
11...	667	.97	330	200	2.4	1080	--	10.5	1
MAR.									
11...	688	.98	340	210	2.4	1110	--	11.5	1
APR.									
08...	705	.97	330	200	2.4	1060	--	12.0	1
MAY									
06...	674	.97	340	200	2.4	1100	8.1	11.5	1
JUNE									
10...	669	.98	320	180	2.4	1080	7.9	11.5	5
JULY									
08...	697	.96	340	210	2.4	1080	8.1	12.0	1
AUG.									
05...	696	.97	330	200	2.4	1100	8.0	12.0	1
SEP.									
09...	685	.98	330	200	2.4	1100	8.0	13.5	3

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
NOV.								
05...	0800	.43	.00	.42	.20	.62	2.7	.04
DEC.								
03...	0800	.43	.00	.42	.16	.58	2.6	.05
JAN.								
07...	0950	.43	.00	.40	.19	.59	2.6	.01
FEB.								
11...	0900	.46	.00	.46	.22	.68	3.0	.00
MAR.								
11...	0815	.34	.01	.35	.40	.75	3.3	.02
APR.								
08...	0900	.35	.00	.37	.22	.59	2.6	.02
MAY								
06...	0745	.38	.00	.39	.15	.54	2.4	.03
JUNE								
10...	0800	.36	.01	.33	.38	.71	3.1	.02
JULY								
08...	0730	.34	.00	.36	.14	.50	2.2	.02
AUG.								
05...	0800	.35	.01	.38	.21	.59	2.6	.01
SEP.								
09...	0800	.34	.01	.35	.25	.60	2.7	.03

09421500. Colorado River below Hoover Dam, Ariz.-Nev.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	TOTAL SESTON (MG/L)	SESTON ASH WEIGHT (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV.											
05...	0800	3600	--	--	--	--	--	--	--	--	8.6
06...	0650	--	--	--	--	--	--	--	81	812	--
DEC.											
03...	0800	1300	--	--	13	--	82	8.3	--	--	4.2
04...	0730	--	--	--	--	--	--	--	81	88	--
JAN.											
07...	0950	1500	--	--	--	--	--	--	--	--	--
08...	0820	--	--	--	--	--	--	--	81	84	--
FEB.											
11...	0900	1100	--	--	6.3	8.0	.6	.2	--	--	4.1
12...	0830	--	--	--	--	--	--	--	81	81	--
MAR.											
11...	0815	71	--	--	--	--	--	--	--	--	--
12...	0820	--	--	--	--	--	--	--	81	81	--
APR.											
09...	0830	--	--	--	--	--	--	--	81	81	--
MAY											
06...	0745	64	--	--	.5	.6	.4	.1	--	--	3.4
JUNE											
10...	0800	150	--	--	--	--	--	--	--	--	--
11...	0845	--	--	--	--	--	--	--	81	88	--
JULY											
08...	0730	--	.0	.0	--	--	--	--	--	--	--
09...	0800	--	--	--	--	--	--	--	81	86	--
AUG.											
05...	0800	--	.0	.0	.9	1.0	.2	.1	--	--	3.0
06...	0800	--	--	--	--	--	--	--	81	87	--
SEP.											
09...	0800	--	.0	.0	--	--	--	--	--	--	--
10...	0800	--	--	--	--	--	--	--	82	81	--

09421500. Colorado River below Hoover Dam, Ariz.-Nev.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)
NOV.										
05...	0800	--	--	100	--	--	--	--	--	--
DEC.										
03...	0800	4	4	120	10	1	0	<10	<50	0
JAN.										
07...	0950	--	--	140	--	--	--	--	--	--
FEB.										
11...	0900	2	2	110	<10	1	0	0	50	2
MAR.										
11...	0815	--	--	130	--	--	--	--	--	--
APR.										
08...	0900	--	--	140	--	--	--	--	--	--
MAY										
06...	0745	4	5	130	<10	0	0	10	<50	3
JUNE										
10...	0800	--	--	140	--	--	--	--	--	--
JULY										
08...	0730	--	--	120	--	--	--	--	--	--
AUG.										
05...	0800	1	0	110	<10	0	10	10	0	0
SEP.										
09...	0800	--	--	140	--	--	--	--	--	--

DATE	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV.									
05...	--	--	--	--	--	--	--	--	--
DEC.									
03...	30	3	<100	7	<.1	<.1	4	4	<10
JAN.									
07...	--	--	--	--	--	--	--	--	--
FEB.									
11...	440	2	<100	2	.0	.0	4	3	20
MAR.									
11...	--	--	--	--	--	--	--	--	--
APR.									
08...	--	--	--	--	--	--	--	--	--
MAY									
06...	10	0	<100	0	.0	.0	4	4	0
JUNE									
10...	--	--	--	--	--	--	--	--	--
JULY									
08...	--	--	--	--	--	--	--	--	--
AUG.									
05...	20	1	<100	0	.0	.0	5	4	10
SEP.									
09...	--	--	--	--	--	--	--	--	--

09422500. Lake Mohave at Davis Dam, Ariz.-Nev.

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, 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.--169,300 mi^2 (438,500 km^2), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 1,668,000 acre-ft (2,060 hm^3) Mar. 14, 15 (elevation, 641.88 ft or 195.645 m, Mar. 15); minimum, 1,354,000 acre-ft (1,670 hm^3) Oct. 7 (elevation, 629.80 ft or 191.963 m).
Period of record: Maximum contents, 1,811,000 acre-ft (2,230 hm^3) 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 hm^3) Sept. 8, 1953 (elevation, 622.15 ft or 189.631 m).

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 hm^3) 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 hm^3) 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.

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

630	1,359,000	640	1,618,000
635	1,486,000	645	1,754,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,376	1,453	1,581	1,553	1,582	1,645	1,600	1,545	1,618	1,631	1,539	1,431
2	1,377	1,455	1,590	1,553	1,576	1,642	1,602	1,548	1,616	1,632	1,533	1,428
3	1,377	1,456	1,600	1,549	1,577	1,643	1,597	1,544	1,614	1,636	1,531	1,427
4	1,374	1,463	1,612	1,544	1,578	1,646	1,591	1,540	1,617	1,624	1,529	1,430
5	1,363	1,466	1,625	1,544	1,584	1,649	1,580	1,540	1,620	1,611	1,527	1,432
6	1,357	1,479	1,632	1,550	1,585	1,658	1,580	1,540	1,625	1,613	1,519	1,424
7	1,362	1,491	1,633	1,558	1,589	1,665	1,572	1,532	1,618	1,605	1,517	1,420
8	1,366	1,498	1,630	1,569	1,584	1,653	1,563	1,547	1,619	1,608	1,505	1,424
9	1,368	1,499	1,624	1,583	1,585	1,653	1,559	1,563	1,619	1,609	1,489	1,428
10	1,368	1,499	1,622	1,594	1,597	1,657	1,581	1,545	1,620	1,614	1,483	1,430
11	1,369	1,501	1,624	1,602	1,616	1,660	1,606	1,543	1,625	1,613	1,478	1,441
12	1,369	1,504	1,620	1,607	1,616	1,658	1,606	1,548	1,628	1,604	1,476	1,445
13	1,372	1,502	1,618	1,620	1,617	1,661	1,601	1,552	1,634	1,597	1,478	1,445
14	1,380	1,502	1,612	1,626	1,617	1,668	1,615	1,558	1,632	1,591	1,475	1,441
15	1,390	1,504	1,610	1,630	1,608	1,662	1,626	1,559	1,628	1,592	1,475	1,448
16	1,401	1,499	1,607	1,625	1,608	1,665	1,622	1,566	1,630	1,588	1,471	1,458
17	1,407	1,496	1,605	1,624	1,604	1,661	1,612	1,561	1,631	1,583	1,469	1,463
18	1,405	1,501	1,594	1,618	1,604	1,660	1,607	1,561	1,636	1,583	1,467	1,469
19	1,401	1,501	1,588	1,615	1,609	1,665	1,602	1,560	1,639	1,573	1,470	1,463
20	1,395	1,503	1,581	1,614	1,621	1,665	1,601	1,570	1,644	1,570	1,475	1,454
21	1,394	1,509	1,570	1,620	1,629	1,664	1,591	1,577	1,638	1,564	1,477	1,435
22	1,398	1,517	1,572	1,620	1,622	1,662	1,583	1,588	1,633	1,565	1,479	1,418
23	1,408	1,523	1,569	1,622	1,620	1,659	1,574	1,596	1,636	1,563	1,467	1,401
24	1,416	1,526	1,572	1,623	1,627	1,650	1,565	1,596	1,640	1,559	1,466	1,418
25	1,419	1,537	1,569	1,615	1,630	1,646	1,564	1,600	1,642	1,556	1,465	1,429
26	1,421	1,549	1,570	1,613	1,641	1,641	1,548	1,597	1,643	1,543	1,464	1,426
27	1,416	1,561	1,565	1,611	1,647	1,629	1,546	1,609	1,644	1,544	1,466	1,403
28	1,424	1,570	1,559	1,611	1,657	1,621	1,546	1,617	1,634	1,543	1,467	1,395
29	1,430	1,574	1,559	1,602	------	1,605	1,546	1,620	1,637	1,540	1,464	1,387
30	1,439	1,577	1,559	1,597	------	1,603	1,547	1,626	1,632	1,537	1,453	1,385
31	1,449	------	1,560	1,593	------	1,604	------	1,620	------	1,538	1,442	------
MAX	1,449	1,577	1,633	1,630	1,657	1,668	1,626	1,626	1,644	1,636	1,539	1,469
MIN	1,357	1,453	1,559	1,544	1,576	1,603	1,546	1,532	1,614	1,537	1,442	1,385
(†)	633.58	638.47	637.85	639.10	641.45	639.49	637.36	640.10	640.55	637.00	633.30	631.07
(‡)	+69,000	+128,000	-17,000	+33,000	+64,000	-53,000	-57,000	+73,000	+12,000	-94,000	-96,000	-57,000

CAL YR 1974 MAX 1,711 MIN 1,357 ‡ -10,000
WTR YR 1975 MAX 1,668 MIN 1,357 ‡ +5,000

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

09423000. Colorado River below Davis Dam, Ariz.-Nev.

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, 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.--169,300 mi^2 (438,500 km^2), approximately.

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 (152.400 m) above mean sea level; gage readings have been reduced to elevations above mean sea level. 1905-7, nonrecording gage at site 4.8 mi (7.7 km) downstream at datum about 13.4 ft (4.08 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.

AVERAGE DISCHARGE.--26 years (1949-75), 12,620 ft^3/s (357.4 m^3/s), 9,143,000 acre-ft/yr (11,300 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 27,700 ft^3/s (784 m^3/s) May 19, Aug. 11 (elevation, 506.16 ft or 154.278 m); minimum daily, 1,760 ft^3/s (49.8 m^3/s) Dec. 5.
1905-7: Maximum daily discharge, 116,000 ft^3/s (3,290 m^3/s) June 20, 1906; minimum daily, 2,850 ft^3/s (80.7 m^3/s) Jan. 5, 1906.
1949-75: Maximum discharge, 31,200 ft^3/s (884 m^3/s) Apr. 22, 1952 (elevation, 513.91 ft or 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 ft^3/s (8.07 m^3/s) Aug. 3, 1950.

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. Records of chemical analyses for the current year are published on following pages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,600	4,530	3,350	6,130	10,600	11,600	16,100	15,700	10,100	15,000	13,400	14,700
2	10,800	4,600	7,130	10,500	6,820	8,420	15,500	15,400	14,200	14,000	14,000	14,800
3	11,300	4,630	6,630	10,400	9,040	11,900	16,900	15,900	13,700	14,400	9,810	13,900
4	11,100	5,570	4,370	9,730	8,960	13,300	19,100	10,100	13,400	14,600	16,600	12,200
5	11,100	6,580	1,760	4,640	9,140	12,500	18,000	17,000	14,200	15,500	16,800	14,900
6	8,630	5,680	4,640	6,540	9,060	10,500	9,860	17,400	12,200	10,100	15,600	15,700
7	9,220	5,690	5,300	6,870	9,090	10,700	18,500	20,600	12,400	18,000	14,800	9,880
8	9,490	7,000	3,570	4,780	8,910	13,900	19,800	10,000	7,840	14,600	17,300	10,800
9	10,200	6,750	6,690	3,860	4,590	6,650	18,500	9,900	12,900	15,000	16,800	10,200
10	10,200	5,620	6,690	3,350	4,660	12,800	3,810	20,400	12,300	14,300	9,940	10,900
11	10,200	6,880	7,130	3,380	4,620	9,550	4,860	10,200	11,600	15,600	18,300	8,080
12	8,240	7,310	7,160	3,210	9,240	11,800	10,000	15,100	13,000	15,600	16,800	11,300
13	8,380	6,850	7,220	3,340	10,600	9,630	10,200	14,500	12,800	10,800	14,700	11,800
14	8,870	6,340	7,180	3,720	10,600	11,500	10,300	16,400	13,800	16,400	15,800	10,100
15	9,810	6,600	4,730	5,790	10,300	10,000	9,890	16,900	9,810	15,200	15,900	12,300
16	10,000	7,160	7,220	9,650	7,040	6,410	20,000	15,500	14,200	16,600	15,500	11,600
17	10,100	6,630	7,180	9,290	10,400	14,400	20,500	15,900	14,300	17,100	9,960	13,400
18	9,000	6,780	8,860	9,340	11,500	13,500	20,600	9,780	13,000	15,100	15,600	10,300
19	8,590	7,310	8,660	4,740	10,500	15,600	17,500	16,000	13,000	15,900	14,900	13,500
20	7,960	6,070	8,590	8,220	10,500	14,700	9,920	15,800	14,500	9,880	14,400	12,400
21	8,810	5,180	8,810	8,340	11,900	13,900	20,200	14,900	14,400	17,400	13,200	11,900
22	6,140	4,620	4,660	8,200	11,100	13,000	20,100	14,900	9,860	16,400	12,700	20,400
23	4,830	4,590	7,640	8,030	6,020	8,710	20,400	14,400	14,000	15,600	13,000	20,700
24	4,900	5,670	6,910	7,730	11,500	19,200	20,200	12,200	13,700	16,300	9,880	2,790
25	7,230	4,060	6,800	9,160	12,800	17,400	18,300	9,880	14,200	16,100	14,700	4,100
26	7,060	4,060	7,250	4,760	13,100	19,100	19,900	11,000	15,700	17,400	15,100	13,000
27	7,050	3,750	10,800	9,420	12,200	19,300	10,200	12,200	15,600	11,900	13,600	17,200
28	7,080	4,030	9,470	9,270	10,300	19,200	17,600	13,400	18,600	15,900	14,100	9,860
29	7,030	4,100	5,850	11,100	------	19,300	15,600	13,600	7,470	15,300	15,500	13,200
30	7,050	6,370	7,450	10,800	------	8,010	15,000	14,400	16,300	13,500	16,700	10,800
31	4,690	------	9,580	10,500	------	16,600	------	15,600	------	14,900	11,900	------
TOTAL	266,660	171,010	209,280	224,790	265,090	403,080	467,340	444,960	393,080	464,380	447,290	366,710
MEAN	8,602	5,700	6,751	7,251	9,468	13,000	15,580	14,350	13,100	14,980	14,430	12,220
MAX	11,600	7,310	10,800	11,100	13,100	19,300	20,600	20,600	18,600	18,000	18,300	20,700
MIN	4,690	3,750	1,760	3,210	4,590	6,410	3,810	9,780	7,470	9,880	9,810	2,790
AC-FT	528,900	339,200	415,100	445,900	525,800	799,500	927,000	882,600	779,700	921,100	887,200	727,400

CAL YR 1974 TOTAL 4,366,130 MEAN 11,960 MAX 19,100 MIN 1,760 AC-FT 8,660,000
WTR YR 1975 TOTAL 4,123,670 MEAN 11,300 MAX 20,700 MIN 1,760 AC-FT 8,179,000

09423000. Colorado River below Davis Dam, Ariz.-Nev.

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, at gaging station 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.--169,300 mi² (438,500 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
01...	0920	13930	9.5	10	83	31	90	5.3	153	290	85
NOV.											
01...	0930	4930	9.3	40	84	25	100	5.5	160	270	82
DEC.											
02...	1135	9520	8.4	20	84	30	100	4.5	152	290	87
JAN.											
02...	1105	18000	4.6	10	83	27	110	5.8	153	290	87
FEB.											
03...	1145	11420	9.0	0	87	29	110	5.5	160	300	90
MAR.											
03...	1120	14100	8.3	30	84	31	99	6.1	163	270	88
APR.											
01...	1315	24960	8.2	10	90	29	100	6.3	162	300	88
MAY											
01...	0900	14160	6.9	10	87	30	100	4.8	159	270	89
JUNE											
02...	1200	22680	6.2	10	83	29	98	5.3	160	300	91
JULY											
01...	0730	25950	8.4	0	86	30	110	4.9	157	290	89
AUG.											
01...	0830	7790	8.6	10	85	29	100	5.3	160	290	94
SEP.											
02...	1150	22980	7.9	10	84	29	100	5.9	156	290	88

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.											
01...	.3	.40	725	671	.99	340	210	2.1	1110	18.0	50
NOV.											
01...	.3	.36	724	657	.98	310	180	2.5	1080	14.0	150
DEC.											
02...	.3	.27	731	680	.99	330	210	2.4	1100	13.5	150
JAN.											
02...	.2	.09	731	684	.99	320	190	2.7	1130	10.5	150
FEB.											
03...	.3	.27	729	711	.99	340	210	2.6	1110	10.0	140
MAR.											
03...	.3	.20	732	668	1.00	340	210	2.3	1110	10.5	140
APR.											
01...	.3	.28	736	703	1.00	340	210	2.3	1130	12.0	140
MAY											
01...	.4	.22	733	--	1.00	340	210	2.4	1100	15.0	170
JUNE											
02...	.4	.28	728	--	.99	330	200	2.4	1080	19.0	120
JULY											
01...	.5	.23	711	--	.97	340	210	2.6	1080	17.0	120
AUG.											
01...	.3	.26	712	--	.97	330	200	2.4	1080	19.0	170
SEP.											
02...	.3	.17	724	6	.98	330	200	2.4	1100	18.0	140

09423500. Colorado River at Needles, Calif.

LOCATION.--Lat 34°51'06", long 114°36'33", in SE¼SE¼ sec.19, T.9 N., R.23 E., San Bernardino meridian, San Bernardino County, on right bank at Needles, 15 mi (24 km) upstream from gaging station near Topock, Ariz., 30 mi (48 km) downstream from Davis Dam, and 97 mi (156 km) downstream from Hoover Dam.

DRAINAGE AREA.--170,600 mi^2 (441,900 km^2), approximately.

PERIOD OF RECORD.--April 1931 to current year (elevations only).

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft (121.920 m) above mean sea level. Prior to May 15, 1942, at site 550 ft (170 m) downstream and May 15, 1942, to Feb. 16, 1969, at site 200 ft (60 m) upstream; at datum 66.23 ft (20.187 m) higher prior to Jan. 12, 1952, and at present datum thereafter.

EXTREMES.--Current year: Maximum elevation, 470.84 ft (143.512 m) July 26, 27; minimum, 458.93 ft (139.882 m) Dec. 6.
Period of record: Maximum elevation, 475.77 ft (145.015 m) Nov. 30, 1944; minimum, 457.84 ft (139.550 m) Feb. 26, 1973.

REMARKS.--Flow regulated by Lake Mead since Feb. 1, 1935, and by Lake Mohave since Jan. 17, 1950.

REVISIONS (WATER YEARS).--WSP 1119: 1931-47.

MEAN ELEVATION, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64.33	60.38	61.17	63.35	64.07	64.35	66.51	66.25	65.49	66.17	65.74	65.26
2	64.56	60.81	60.69	62.69	63.15	64.07	66.75	66.44	64.94	65.73	65.66	65.62
3	64.40	60.83	62.16	63.72	62.73	63.79	66.92	65.76	65.67	65.75	65.00	66.03
4	64.51	60.83	61.83	63.90	63.28	65.17	67.79	65.77	65.43	66.02	65.08	65.38
5	64.26	61.47	59.62	62.20	63.18	65.14	67.72	65.11	65.00	66.24	67.02	65.34
6	64.04	61.86	59.48	61.55	63.19	64.35	65.04	67.38	65.48	64.87	66.57	66.34
7	62.78	61.51	60.63	61.66	63.37	64.40	66.32	68.35	65.03	66.06	66.00	64.78
8	63.15	61.65	61.21	61.62	63.03	64.80	67.85	66.42	64.12	66.48	67.06	64.27
9	63.67	62.10	60.40	60.80	61.95	63.84	68.97	63.76	63.70	66.11	66.93	63.83
10	63.84	61.95	61.90	60.24	60.85	63.69	64.06	65.80	64.91	65.94	65.16	64.36
11	63.88	61.60	62.45	59.83	60.79	64.29	59.79	66.01	64.91	66.37	66.16	63.48
12	63.24	62.24	62.20	59.94	61.54	63.99	62.55	64.83	64.75	66.11	67.04	63.28
13	62.96	62.18	62.18	59.81	63.15	64.33	63.64	66.00	65.10	-	66.24	64.45
14	63.30	61.94	62.23	59.82	63.89	64.05	63.68	66.46	65.41	-	66.44	64.16
15	63.09	61.86	61.68	60.42	63.99	63.87	63.65	66.87	64.73	-	66.48	64.24
16	63.69	62.05	61.39	62.04	63.59	63.20	65.93	66.54	64.71	-	66.54	64.51
17	63.79	62.09	62.22	63.44	62.23	63.72	68.26	66.51	65.76	-	64.95	64.68
18	63.53	61.94	62.56	63.11	64.17	65.27	68.83	65.14	65.24	-	65.34	64.66
19	63.13	62.19	62.91	62.35	64.33	66.44	67.84	65.06	65.21	-	66.03	64.40
20	62.86	62.04	62.96	61.62	63.98	65.87	65.48	66.29	65.65	-	65.78	64.74
21	62.88	61.59	63.06	62.72	64.46	65.81	65.89	66.04	65.84	-	65.42	65.25
22	63.03	61.16	62.19	62.60	64.48	65.84	69.04	66.02	64.67	67.79	65.31	66.03
23	61.48	60.82	61.49	62.55	63.45	63.76	68.35	66.04	64.63	67.75	65.42	68.44
24	61.09	60.81	62.20	62.63	62.68	66.36	68.72	65.22	65.47	67.69	64.32	64.31
25	61.66	61.27	61.94	62.62	65.16	67.38	67.90	64.65	65.55	67.66	64.78	59.70
26	62.23	60.47	62.07	62.35	65.29	67.80	67.77	63.38	66.22	67.90	66.02	62.61
27	62.23	60.43	63.17	61.66	64.99	68.12	66.50	64.95	66.32	66.91	65.56	66.16
28	62.24	60.26	63.83	63.19	64.38	68.23	65.47	64.93	67.60	66.82	65.57	65.38
29	62.27	60.44	62.76	63.85	---	68.13	66.88	65.43	64.50	67.26	66.13	64.55
30	62.23	60.91	61.53	64.03	---	65.65	66.17	65.73	65.20	66.69	66.74	64.79
31	62.09	---	62.75	64.12	---	64.69	---	65.92	---	66.91	65.47	---
MEAN	63.11	61.39	61.90	62.14	63.41	65.17	66.34	65.78	65.24	-	65.87	64.70
MAX	64.56	62.24	63.83	64.12	65.29	68.23	69.04	68.35	67.60	-	67.06	68.44
MIN	61.09	60.26	59.48	59.81	60.79	63.20	59.79	63.38	63.70	-	64.32	59.70

NOTE.--Add 400.00 ft to obtain elevation above mean sea level.

09423550. Topock Marsh inlet near Needles, Calif.

LOCATION.--Lat 34°50'10", long 114°35'03", in NE¼NW¼ sec.33, T.9 N., R.23 E., San Bernardino meridian, in Arizona, Mohave County, on left bank of Colorado River on north side of intake structure, 1.3 mi (2.1 km) east of Needles.

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Water-stage recorders above and below intake gates to record head; recorder to show gate opening. Datum of gages is 400.00 ft (121.920 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 66.3 ft^3/s (1.878 m^3/s), 48,030 acre-ft/yr (59.2 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 225 ft^3/s (6.37 m^3/s) July 17, 1968; no flow at times.

REMARKS.--Records good above 100 ft^3/s (2.83 m^3/s), fair between 40 and 100 ft^3/s (1.13 and 2.83 m^3/s), and poor below 40 ft^3/s (1.13 m^3/s). Topock Marsh inlet diverts water from the Colorado River into Topock Marsh, an area of about 4,000 acres (16.2 km^2). This water flows through the marsh and returns to the Colorado River through the Topock Marsh outlet. (See following page.) The Bureau of Sport Fisheries and Wildlife maintains two gates to the same opening as the recording gate.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	19	35			0	38	64	50	136	91	94
2	119	20	15			0	39	66	48	132	93	123
3	131	20	77			0	39	63	52	132	87	101
4	148	19	61			0	41	63	50	139	87	95
5	141	29	11			46	41	60	49	146	105	93
6	140	51	6.1			68	33	70	52	125	87	103
7	91	31	6.1			70	36	73	50	141	68	87
8	107	31	36			73	39	64	46	116	75	86
9	121	55	15			63	42	53	44	97	74	79
10	126	57	60			67	31	63	49	95	63	87
11	167	33	93			69	17	58	47	99	71	73
12	89	65	86			67	28	51	60	97	75	80
13	84	60	84			68	31	55	83	92	71	108
14	97	53	87			68	32	57	85	90	72	97
15	85	49	50			64	32	57	78	103	72	114
16	96	59	36			55	37	56	80	105	73	132
17	97	57	87			62	41	56	87	106	63	127
18	98	52	104			76	41	50	99	102	66	129
19	87	64	111			83	39	51	129	106	70	126
20	80	58	112			79	34	54	135	92	68	133
21	77	43	113			61	35	54	138	101	66	148
22	87	5.6	68			39	42	54	115	101	65	160
23	57	4.6	41			33	40	54	114	104	67	205
24	26	4.7	78			40	132	50	125	105	59	101
25	32	23	70			42	188	48	126	105	63	0
26	39	4.6	71			26	186	41	137	107	70	0
27	36	4.5	114			7.9	165	49	138	97	67	0
28	26	4.6	129			0	98	49	158	98	67	0
29	77	4.7	91		---	30	72	52	97	100	83	0
30	89	14	17		---	35	68	52	125	94	107	0
31	77	---	0		---	34	---	53	---	97	95	---
TOTAL	2834	995.3	1964.2	0	0	1425.9	1737	1740	2646	3360	2340	2681
MEAN	91.4	33.2	63.4	0	0	46.0	57.9	56.1	88.2	108	75.5	89.4
MAX	167	65	129	0	0	83	188	73	158	146	107	205
MIN	26	4.5	0	0	0	0	17	41	44	90	59	0
AC-FT	5620	1970	3900	0	0	2830	3450	3450	5250	6660	4640	5320

CAL YR 1974 TOTAL 17785.5 MEAN 48.7 MAX 167 MIN 0 AC-FT 35280
WTR YR 1975 TOTAL 21723.4 MEAN 59.5 MAX 205 MIN 0 AC-FT 43090

09423650. Topock Marsh outlet near Topock, Ariz.

LOCATION.--Lat 34°44'13", long 114°29'22", in SW¼SE¼ sec.27, T.16 N., R.21 W., Gila and Salt River meridian, Mohave County, at outlet structure in left bank levee of Colorado River, 1.3 mi (2.1 km) north of Topock.

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Water-stage recorders on marsh and on river to record head over weir; log of elevations of stoplogs on crest of weir; log of operation of flapgates just downstream from weir. Datum of gages is 400.00 ft (121.920 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 13.5 ft^3/s (0.382 m^3/s), 9,780 acre-ft/yr (12.1 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 828 ft^3/s (23.4 m^3/s) July 8, 1968; no flow for most of time; maximum daily reverse flow, 238 ft^3/s (6.74 m^3/s) Aug. 15, 1967.

REMARKS.--Records fair. Station measures return flow from Topock Marsh to Colorado River. Reverse flow (from Colorado River into Topock Marsh) can occur at times when flapgates are tied open. No reverse flow this year.

COOPERATION.--Log of stoplog elevations and flapgate operation furnished by Bureau of Sport Fisheries and Wildlife.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												0
2												0
3												0
4												0
5												0
6												0
7												0
8												0
9												0
10												0
11												0
12												0
13												0
14												0
15												0
16												0
17												0
18												0
19												0
20												0
21												0
22												0
23												0
24												254
25												803
26												777
27												354
28												262
29					---							497
30					---							31
31		---			---		---		---			---
TOTAL	0	0	0	0	0	0	0	0	0	0	0	2978
MEAN	0	0	0	0	0	0	0	0	0	0	0	99.3
MAX	0	0	0	0	0	0	0	0	0	0	0	803
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	0	0	5910

CAL YR 1974 TOTAL 966.77 MEAN 2.65 MAX 40 MIN 0 AC-FT 1920
WTR YR 1975 TOTAL 2978 MEAN 8.16 MAX 803 MIN 0 AC-FT 5910

09424000. Colorado River near Topock, Ariz.

LOCATION.--Lat 34°41'15", long 114°27'43", in SW¼NW¼ sec.13, T.15 N., R.21 W., Gila and Salt River meridian, Mohave County, on left bank in Mohave Canyon, 2.4 mi (3.9 km) southeast of Topock, 39 mi (63 km) upstream from Parker Dam, and 45 mi (72 km) downstream from Davis Dam.

DRAINAGE AREA.--172,300 mi^2 (446,300 km^2), approximately.

PERIOD OF RECORD.--January 1917 to current year. Daily mean elevations published since October 1938.

GAGE.--Water-stage recorder. Datum of gage is 423.02 ft (128.936 m) above mean sea level; gage readings have been reduced to elevations above mean sea level. Prior to Dec. 3, 1922, at site about 1 mi (2 km) upstream at different datum.

AVERAGE DISCHARGE.--17 years (1917-34), 20,260 ft^3/s (573.8 m^3/s), 14,670,000 acre-ft/yr (18,100 hm^3/yr); 41 years (1934-75), 12,920 ft^3/s (365.9 m^3/s), 9,361,000 acre-ft/yr (11,500 hm^3/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 20,900 ft^3/s (592 m^3/s) Apr. 24, 25 (elevation, 456.19 ft or 139.047 m); minimum daily, 2,230 ft^3/s (63.2 m^3/s) Dec. 6; minimum elevation, 448.43 ft (136.681 m) Dec. 6.
1917-34: Maximum discharge probably exceeded 200,000 ft^3/s (5,660 m^3/s) June 22, 1921; minimum, 1,480 ft^3/s (41.9 m^3/s) Aug. 17, 1934.
1934-75: Maximum discharge, 35,700 ft^3/s (1,010 m^3/s) Jan. 29, 1942; maximum elevation, 457.37 ft (139.406 m) July 9, 1959; minimum discharge, 375 ft^3/s (10.6 m^3/s) Feb. 14, 1935; minimum daily, 422 ft^3/s (12.0 m^3/s) Feb. 14, 1935.
Discharge of about 300,000 ft^3/s (8,500 m^3/s), based on determination at Lees Ferry gaging station, occurred about July 10, 1884. Discharge estimated to be in excess of 400,000 ft^3/s (11,300 m^3/s) probably occurred within the period 1857-68 and most likely in 1862.

REMARKS.--Records good. Many diversions above station for irrigation, municipal, and industrial uses. Flow regulated by Lake Mead since Feb. 1, 1935, and by Lake Mohave since Jan. 17, 1950. Records of chemical analyses for the current water year are published on following pages.

REVISIONS (WATER YEARS).--WSP 918: 1921. WSP 1313: 1918-19(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,400	4,590	5,320	8,820	10,100	10,400	14,600	14,800	14,400	14,500	13,700	11,500
2	11,000	4,460	3,560	6,380	9,780	11,000	15,100	15,300	10,500	14,100	13,100	13,100
3	10,500	4,510	5,990	9,240	7,470	8,870	15,300	14,800	13,500	13,300	13,100	13,600
4	11,200	4,440	6,010	9,730	8,890	11,200	16,700	15,200	13,300	13,800	10,600	12,800
5	10,600	5,060	4,150	8,870	8,890	12,200	17,400	11,200	12,900	14,400	15,300	11,600
6	10,500	5,820	2,230	5,570	8,970	11,700	15,100	16,200	13,700	14,100	15,500	13,800
7	8,080	5,320	3,820	6,340	9,170	10,200	12,100	17,800	12,700	11,700	14,600	13,600
8	8,620	5,250	4,720	6,800	8,920	10,600	16,700	18,200	12,400	15,300	15,000	9,600
9	8,970	6,200	3,480	5,190	8,470	11,700	18,900	10,500	8,550	14,400	16,100	9,630
10	9,470	6,050	5,720	4,240	5,340	7,920	15,800	10,900	11,800	14,400	14,800	9,740
11	9,550	5,290	6,430	3,520	4,830	11,000	4,960	16,400	12,000	14,400	11,700	9,760
12	9,240	6,120	6,510	3,380	4,870	9,520	6,160	10,600	11,400	14,900	16,200	7,640
13	8,030	6,430	6,490	3,150	8,260	10,900	9,870	13,700	12,500	14,400	15,500	10,200
14	8,310	6,160	6,530	3,090	9,620	9,800	10,200	14,200	12,700	11,400	14,300	10,600
15	8,080	5,840	6,360	3,490	9,930	10,300	10,000	15,600	12,900	15,200	14,800	9,320
16	8,970	5,950	4,890	5,380	9,750	9,600	11,400	15,700	10,400	15,200	14,900	10,700
17	9,220	6,410	6,380	8,520	7,200	7,690	17,200	15,100	13,600	15,800	13,900	10,500
18	9,170	6,060	6,840	8,420	9,420	11,900	19,100	14,500	13,300	15,700	10,600	11,500
19	8,260	6,180	7,560	8,220	10,700	13,100	18,700	11,100	12,500	15,000	14,000	9,520
20	7,940	6,510	7,830	5,360	10,100	13,400	16,000	14,800	12,700	14,300	13,700	11,600
21	7,510	5,650	7,800	7,430	9,930	13,100	12,000	14,700	13,800	11,100	13,200	11,700
22	8,080	4,980	7,800	7,690	10,800	13,400	18,600	14,500	13,100	15,600	12,500	11,900
23	6,140	4,400	5,000	7,740	10,300	10,900	19,100	14,400	9,950	15,600	12,400	18,300
24	4,980	4,330	6,720	7,650	6,900	10,600	19,500	13,900	13,200	15,200	11,700	16,700
25	5,290	5,020	6,410	7,470	11,000	15,400	18,900	12,200	12,700	15,600	9,980	5,290
26	6,550	3,990	6,450	8,240	12,000	16,400	17,700	9,870	14,000	15,600	13,400	5,820
27	6,530	3,860	7,260	5,420	12,100	17,600	17,700	11,200	14,800	15,600	13,400	11,900
28	6,670	3,510	9,440	8,280	11,400	18,000	12,300	11,800	16,400	12,400	12,700	14,600
29	6,720	3,650	8,590	8,870	------	18,100	16,000	12,500	15,600	14,700	13,400	11,000
30	6,610	3,940	5,780	10,000	------	16,400	15,700	13,400	9,250	14,200	14,700	12,200
31	6,650	------	6,940	10,100	------	10,500	------	14,200	------	13,100	14,500	------
TOTAL	257,840	156,060	189,010	212,600	255,110	373,400	448,790	429,270	380,550	445,000	423,280	339,720
MEAN	8,317	5,202	6,097	6,858	9,111	12,050	14,960	13,850	12,690	14,350	13,650	11,320
MAX	11,200	6,510	9,440	10,100	12,100	18,100	19,500	18,200	16,400	15,800	16,200	18,300
MIN	4,980	3,510	2,230	3,090	4,830	7,690	4,960	9,870	8,550	11,100	9,980	5,290
AC-FT	511,400	309,500	374,900	421,700	506,000	740,600	890,200	851,500	754,800	882,700	839,600	673,800

CAL YR 1974 TOTAL 4,079,560 MEAN 11,180 MAX 17,700 MIN 1,920 AC-FT 8,092,000
WTR YR 1975 TOTAL 3,910,630 MEAN 10,710 MAX 19,500 MIN 2,230 AC-FT 7,757,000

09424000. Colorado River near Topock, Ariz.--Continued

MEAN ELEVATION, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.60	50.21	50.52	52.03	52.50	52.63	54.10	54.25	54.32	54.22	53.91	53.18
2	52.83	50.15	49.54	50.92	52.36	52.81	54.25	54.41	53.32	54.11	53.74	53.66
3	52.68	50.18	50.86	52.19	51.42	52.02	54.32	54.27	54.07	54.00	53.73	53.86
4	52.95	50.14	50.88	52.37	52.03	52.93	54.81	54.39	54.04	54.14	52.97	53.58
5	52.75	50.47	49.83	51.99	52.04	53.28	55.04	53.25	53.93	54.23	54.37	53.21
6	52.70	50.86	48.61	50.49	52.07	53.08	54.24	54.67	54.15	54.14	54.43	53.91
7	51.73	50.61	49.67	50.88	52.15	52.55	53.24	55.19	53.91	53.44	54.13	53.82
8	51.98	50.57	50.17	51.10	52.04	52.71	54.83	55.30	53.83	54.56	54.27	52.62
9	52.14	51.06	49.45	50.29	51.84	53.09	55.53	53.25	52.79	54.18	54.61	52.62
10	52.34	50.98	50.68	49.78	50.37	51.62	54.48	53.27	53.69	54.19	54.19	52.66
11	52.39	50.59	51.05	49.36	50.10	52.82	50.83	54.77	53.73	54.20	53.23	52.65
12	52.27	51.02	51.09	49.27	50.11	52.29	51.12	53.19	53.60	54.33	54.65	51.97
13	51.78	51.18	51.08	49.12	51.76	52.80	52.44	54.01	53.85	54.19	54.41	52.80
14	51.92	51.04	51.09	49.08	52.32	52.40	52.55	54.16	53.90	53.37	54.06	52.92
15	51.83	50.87	51.00	49.34	52.44	52.58	52.47	54.53	53.95	54.37	54.22	52.53
16	52.20	50.95	50.23	50.38	52.37	52.30	53.00	54.57	53.22	54.34	54.25	52.99
17	52.32	51.15	51.01	51.88	51.27	51.50	54.97	54.43	54.10	54.54	53.91	52.94
18	52.30	50.97	51.22	51.84	52.24	53.17	55.60	54.23	54.00	54.50	52.90	53.28
19	51.94	51.03	51.56	51.74	52.72	53.61	55.46	53.30	53.83	54.33	53.96	52.65
20	51.81	51.18	51.66	50.38	52.50	53.72	54.55	54.32	53.89	54.11	53.87	53.28
21	51.64	50.75	51.66	51.41	52.44	53.61	53.24	54.30	54.16	53.15	53.71	53.34
22	51.89	50.39	51.62	51.52	52.74	53.69	55.44	54.26	53.98	54.44	53.49	53.41
23	51.00	50.07	50.26	51.54	52.56	52.80	55.59	54.28	53.16	54.44	53.46	55.35
24	50.41	50.03	51.12	51.50	51.16	52.68	55.74	54.13	53.96	54.35	53.23	54.76
25	50.58	50.40	50.97	51.42	52.83	54.42	55.54	53.68	53.91	54.44	52.70	50.59
26	51.24	49.83	50.99	51.74	53.21	54.74	55.14	53.03	54.16	54.47	53.76	50.79
27	51.23	49.75	51.37	50.40	53.23	55.14	55.15	53.40	54.41	54.44	53.78	53.38
28	51.30	49.54	52.30	51.78	52.99	55.30	53.49	53.56	54.79	53.56	53.56	54.07
29	51.32	49.64	51.93	52.02	------	55.30	54.57	53.60	54.51	54.19	53.78	52.76
30	51.27	49.79	50.64	52.47	------	54.76	54.36	54.01	52.81	54.06	54.17	53.20
31	51.29	------	51.20	52.50	------	52.66	------	54.22	------	53.76	54.10	------
MEAN	51.89	50.51	50.81	51.06	52.06	53.19	54.20	54.08	53.87	54.15	53.86	53.09
MAX	52.95	51.18	52.30	52.50	53.23	55.30	55.74	55.30	54.79	54.56	54.65	55.35
MIN	50.41	49.54	48.61	49.08	50.10	51.50	50.83	53.03	52.79	53.15	52.70	50.59

CAL YR 1974 ..... MAX 55.33 MIN 48.56
WTR YR 1975 ..... MAX 55.74 MIN 48.61

NOTE.--Add 400.00 ft to obtain elevation above mean sea level.

09424000. Colorado River near Topock, Ariz.

LOCATION.--Lat 34°41'15", long 114°27'43", in SW¼NW¼ sec.13, T.15 N., R.21 W., Mohave County, at gaging station on left bank in Mohave Canyon, 2.7 mi (4.3 km) downstream from Topock, 39.5 mi (63.6 km) upstream from Parker Dam, and 49 mi (79 km) downstream from Davis Dam.

DRAINAGE AREA.--172,300 mi² (446,300 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: August 1969 to current year.
Water temperatures: July 1952 to July 1962.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	1330	10410	9.3	10	82	29	93	5.3	152	--	290	85
NOV.												
01...	1540	3350	9.5	10	89	31	100	5.2	163	--	270	88
DEC.												
02...	1430	3090	8.1	10	83	31	100	4.5	155	--	290	96
JAN.												
02...	1315	5760	8.2	10	80	29	110	6.0	153	--	300	89
FEB.												
03...	1315	7410	8.8	10	86	30	100	5.1	159	--	290	89
MAR.												
03...	1425	8850	8.1	10	85	30	100	5.5	162	--	280	88
APR.												
01...	0945	17020	8.2	10	87	30	100	6.3	162	--	310	86
MAY												
01...	1535	11040	6.8	10	86	31	110	5.0	163	--	310	90
JUNE												
02...	0920	12860	5.8	--	83	30	100	5.2	154	--	300	88
JULY												
01...	0940	14780	--	0	83	30	100	5.0	154	--	300	86
AUG.												
01...	0945	15420	8.3	10	84	29	100	5.2	160	--	280	92
SEP.												
02...	1445	12170	9.1	10	86	29	100	5.2	157	0	300	89

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.												
01...	.3	.21	680	670	.92	320	200	2.2	1100	--	19.5	50
NOV.												
01...	.3	1.0	736	678	1.00	350	220	2.3	1120	--	15.0	160
DEC.												
02...	.3	.21	704	690	.96	340	210	2.4	1120	--	13.0	140
JAN.												
02...	.3	.24	704	699	.96	320	190	2.7	1110	--	8.5	170
FEB.												
03...	.3	.54	700	690	.95	340	210	2.4	1100	--	10.0	130
MAR.												
03...	.3	.18	702	678	.95	340	210	2.4	1100	--	10.5	140
APR.												
01...	.5	.19	712	709	.97	340	210	2.4	1120	--	12.0	190
MAY												
01...	.3	.22	710	--	.97	340	210	2.6	1090	--	16.0	140
JUNE												
02...	.4	.16	688	--	.94	330	200	2.4	1090	--	19.0	140
JULY												
01...	--	--	684	--	.93	330	200	2.4	1090	--	19.0	140
AUG.												
01...	.3	.18	676	--	.92	330	200	2.4	1070	--	19.0	140
SEP.												
02...	.3	.50	--	698	.95	330	210	2.4	1080	7.8	19.0	140

09424150. Colorado River aqueduct near Parker Dam, Ariz.-Calif.

LOCATION.--Lat 34°18'58", long 114°09'23", in NW¼SW¼ sec.28, T.3 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, at intake pumping plant of Metropolitan Water District of Southern California on Lake Havasu, 1.8 mi (2.9 km) upstream from Parker Dam and 149 mi (240 km), downstream from Hoover Dam.

PERIOD OF RECORD.--January 1939 to current year (monthly diversions only since October 1942). Published as a supplement to records for Colorado River below Parker Dam, 1942-50. Percolation return flow (monthly flow only) October 1964 to September 1973 (discontinued); prior to October 1964 miscellaneous measurements only.

GAGE.--Venturi meters in pressure lines at intake pumping plant.

AVERAGE DISCHARGE.--36 years, 858 ft^3/s (24.30 m^3/s), 621,600 acre-ft/yr (766 hm^3/yr).

EXTREMES.--Period of record: Maximum daily diversion, 3,986 acre-ft (4.91 hm^3), 2,010 ft^3/s (56.9 m^3/s) Oct. 25, 1970; no diversion at times.

REMARKS.--Pumping began Jan. 7, 1939. Figures of monthly diversion shown represent water pumped from Lake Havasu less return surface flow from Gene and Copper Basin Reservoirs. No water returned as surface flow from these reservoirs this year. Percolation return flow from Gene and Copper Basin Reservoirs is estimated as 14 acre-ft/day (17,300 m^3/day) or 5,110 acre-ft (6.30 hm^3) for the year for accounting purposes.

COOPERATION.--Diversion records furnished by Metropolitan Water District of Southern California.

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	Diversions			
	Maximum	Minimum	Mean	Total
October	3,633	3,411	3,494	108,309
November	2,400	1,381	1,826	54,776
December	2,793	2,471	2,664	82,596
CAL YR 1974	3,872	1,113	3,097	1,130,458
January	2,889	0	1,800	55,795
February	3,262	1,107	1,920	53,754
March	2,664	1,820	2,231	69,170
April	2,637	1,777	2,253	67,583
May	3,314	2,159	2,602	80,662
June	2,770	1,402	2,542	76,268
July	3,348	1,856	2,680	83,067
August	2,770	2,070	2,612	80,958
September	2,937	2,086	2,235	67,045
WTR YR 1975	3,633	0	2,411	879,983

09424200. Cottonwood Wash No. 1 near Kingman, Ariz.

LOCATION.--Lat 35°10'52", long 113°28'08", in NW¼ sec.29, T.21 N., R.11 W., Mohave County, on right bank, 13 mi (21 km) upstream from mouth, and 34 mi (55 km) east of Kingman.

DRAINAGE AREA.--143 mi^2 (370 km^2).

PERIOD OF RECORD.--January 1959 to August 1963 (fragmentary low flow only published in WSP 1858), February 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,545 ft (1,385.3 m), from special USGS project map. Prior to June 20, 1969, at site 10 ft (3 m) downstream at datum 2.72 ft (0.829 m) lower.

AVERAGE DISCHARGE.--11 years, 3.79 ft^3/s (0.107 m^3/s), 2,750 acre-ft/yr (3.39 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 870 ft^3/s (24.6 m^3/s) July 27 (gage height, 3.20 ft or 0.975 m, from high-water mark in gage well), from rating curve extended above 2 ft^3/s (0.06 m^3/s) on basis of slope-area measurements at gage heights 2.79, 4.38, and 5.64 ft (0.850, 1.335, and 1.719 m); minimum daily, 0.10 ft^3/s (0.003 m^3/s) on many days.
Period of record: Maximum discharge, 7,000 ft^3/s (198 m^3/s) July 31, 1964 (gage height, 7.36 ft or 2.243 m, at former site and datum of supplementary gage), from rating curve extended above 400 ft^3/s (11.3 m^3/s) on basis of slope-area measurements at gage heights 3.82 and 7.36 ft (1.164 and 2.243 m); minimum daily, 0.10 ft^3/s (0.003 m^3/s) many days in 1972, 1974, and 1975.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	1.3	.70	1.2	1.0	.60	1.0	.60	.10	.10	.70	.30
2	.50	2.5	.70	1.2	1.0	.60	.90	.60	.10	.10	.70	.40
3	.50	1.0	.70	1.2	1.0	.50	.90	.60	.10	.30	.70	.90
4	.50	.70	.90	1.2	1.0	.50	.80	.60	.10	.10	.70	.40
5	.50	.70	.60	1.2	1.0	.50	.80	.60	.10	.10	.70	.40
6	.50	.70	.50	1.2	1.0	.50	.80	.20	.10	.10	.70	.40
7	.50	.70	.60	1.0	1.0	.60	.80	.10	.10	.10	.70	.40
8	.50	.70	.50	1.0	1.0	.90	.40	.10	.10	.10	.50	.40
9	.50	.70	.50	1.2	1.0	.90	.90	.10	.10	.10	.60	.40
10	.50	.70	.50	1.2	.90	.90	.50	.10	.10	.10	.90	.40
11	.50	.70	.50	1.2	.90	.90	.60	.10	.10	.10	.80	.40
12	.50	.70	.50	1.2	.90	.90	.90	.10	.10	.10	.90	.40
13	.60	.70	.50	1.2	.90	.80	.90	.10	.10	.10	.90	.40
14	.50	.70	.60	1.2	.90	.90	.40	.10	.10	.10	.80	.40
15	.60	.70	.60	1.2	1.0	.60	.50	.10	.10	.10	.60	.40
16	.60	.70	.60	1.2	1.0	.80	.60	.10	.10	.10	.80	11
17	.60	.70	.60	1.2	.90	.80	.50	.10	.10	.10	.80	22
18	.60	.70	.60	1.2	.90	.80	.40	.10	.10	.10	.80	1.0
19	.60	.70	.60	1.2	.90	.80	.60	.10	.10	.10	.60	.50
20	.60	.70	.70	1.2	.90	.80	.30	.10	.10	.10	.80	.30
21	.60	.70	.90	1.2	.90	.80	.20	.10	.10	.10	.80	.30
22	.60	.70	1.0	1.2	.80	.60	.20	.10	.10	.10	.60	.30
23	.60	.70	1.2	1.0	.80	.60	.20	.10	.10	.10	.80	.30
24	.60	.70	1.2	1.0	.80	.60	.20	.10	.10	.10	.80	.30
25	.60	.70	1.2	1.0	.80	.80	.20	.10	.10	.10	.50	.30
26	2.0	.70	1.2	1.0	.80	.80	.20	.10	.10	.10	.50	.30
27	1.3	.70	1.2	1.2	.80	.90	.20	.10	.10	70	.50	.30
28	1.0	.70	1.2	1.2	.60	.90	.20	.10	.10	1.0	.30	.30
29	1.7	.70	1.3	1.2	---	.90	.60	.10	.10	.70	.40	.30
30	1.0	.70	1.2	1.2	---	1.0	.60	.10	.10	.70	.30	.30
31	.90	---	1.2	1.0	---	1.0	---	.10	---	.70	.30	---
TOTAL	22.50	23.90	25.40	35.4	25.40	23.70	16.30	5.70	3.00	75.90	20.50	44.20
MEAN	.73	.80	.82	1.15	.91	.76	.54	.18	.10	2.45	.66	1.47
MAX	2.0	2.5	1.3	1.2	1.0	1.0	1.0	.60	.10	70	.90	22
MIN	.50	.70	.50	1.0	.60	.50	.20	.10	.10	.10	.30	.30
AC-FT	45	47	50	71	50	47	32	11	6.0	151	41	88

CAL YR 1974 TOTAL 1282.80 MEAN 3.51 MAX 400 MIN .10 AC-FT 2540
WTR YR 1975 TOTAL 322.30 MEAN .88 MAX 70 MIN .10 AC-FT 639

PEAK DISCHARGE (BASE, 700 CFS).--July 27 (time unknown) 870 cfs (3.20 ft).

NOTE.--No gage-height record July 7 to Aug. 7.

09424450. Big Sandy River near Wikieup, Ariz.

LOCATION.--Lat 34°27'45", long 113°37'25", in SE¼ sec.16, T.13 N., R.13 W., Mohave County, on left bank 7 mi (11 km) downstream from Burro Creek, 15 mi (24 km) upstream from confluence with Santa Maria River, and 17 mi (27 km) south of Wikieup.

DRAINAGE AREA.--2,800 mi^2 (7,250 km^2), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (427 m), from topographic map. Prior to Oct. 1, 1970, at datum 3.06 ft (0.933 m), corrected, higher. Oct. 1, 1970, to Oct. 10, 1973, at datum 2.06 ft (0.628 m) higher. Supplementary water-stage recorder for low flows at site 75 ft (23 m) upstream at same datum since Apr. 10, 1975; Mar. 28 to Dec. 7, 1966, Apr. 2, 1969 to Apr. 9, 1975, at site 0.8 mi (1.3 km) downstream at different datum.

AVERAGE DISCHARGE.--9 years, 42.1 ft^3/s (1.19 m^3/s), 30,500 acre-ft/yr (37.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,720 ft^3/s (48.7 m^3/s) July 29 (gage height, 5.10 ft or 1.554 m); minimum daily, 2.4 ft^3/s (0.068 m^3/s) Aug. 16-19.
Period of record: Maximum discharge, 28,000 ft^3/s (793 m^3/s) Dec. 7, 1966 (gage height, 10.82 ft or 3.298 m), from rating curve extended above 12,000 ft^3/s (340 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 1.3 ft^3/s (0.037 m^3/s) July 13, 1974.

REMARKS.--Records fair except those for Oct. 1 to Nov. 1, Nov. 3 to Dec. 3, which are poor. Diversions above station for irrigation of about 3,800 acres (15 km^2), mostly by pumping from ground water.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	3.1	.47	0	2.5	2.5	6.0	4.0	.47	0	4.5	0
2	7.7	0	.47	0	2.5	2.5	6.0	4.0	.54	0	5.0	0
3	7.7	0	.47	0	2.5	2.5	14	4.0	.54	0	5.7	0
4	7.7	0	.64	0	2.5	2.5	27	4.0	.54	0	5.7	0
5	7.7	1.6	5.3	0	2.5	2.6	27	3.8	.54	0	2.5	0
6	7.7	5.0	9.2	0	2.5	2.9	27	2.2	.54	0	0	0
7	8.0	5.7	9.2	.33	2.5	2.9	27	.82	.54	0	0	0
8	3.5	5.7	9.2	2.1	2.5	2.9	13	.61	.54	0	0	0
9	0	5.7	4.2	2.5	2.5	2.9	4.5	.54	.54	0	0	0
10	0	5.7	0	2.7	2.5	2.7	3.6	.47	.54	0	0	0
11	0	5.7	0	3.2	2.5	2.7	3.6	.34	.54	0	0	0
12	0	6.0	0	3.2	2.5	2.9	3.4	.28	.54	0	0	1.6
13	0	12	0	2.4	2.7	2.9	3.4	.09	.54	0	0	0
14	0	2.9	0	0	2.7	2.9	3.2	.01	.54	0	0	0
15	.92	0	0	0	2.9	3.2	2.9	0	.54	0	0	0
16	.65	0	0	0	2.9	3.4	2.7	0	.54	0	0	0
17	0	0	0	.03	2.9	3.4	2.7	0	.54	0	0	0
18	0	2.0	0	1.5	2.9	3.4	2.7	0	.54	0	0	0
19	0	2.1	0	1.9	2.9	3.4	2.7	0	4.8	0	0	0
20	0	0	0	1.9	2.9	6.1	2.7	0	0	0	0	0
21	0	0	0	2.2	2.9	8.8	2.7	0	0	0	0	0
22	0	0	0	2.2	3.2	9.2	2.7	0	0	0	0	0
23	0	.33	0	2.2	3.2	8.4	2.5	0	0	0	0	0
24	0	.40	0	2.2	2.7	8.4	2.9	0	0	0	0	0
25	0	.40	0	2.2	2.7	8.0	2.9	0	2.2	0	.11	0
26	0	.47	0	2.2	2.5	7.7	2.9	0	0	0	1.4	0
27	0	.47	0	2.4	2.5	9.6	3.2	0	0	0	2.4	0
28	0	.47	0	2.4	2.5	12	3.2	0	0	0	1.2	0
29	2.0	.47	0	2.4	---	9.6	3.6	0	0	0	0	0
30	6.7	.47	0	2.4	---	6.0	3.8	.34	0	.19	0	0
31	7.3	---	0	2.5	---	6.0	---	.40	---	3.2	0	---
TOTAL	75.27	66.68	39.15	47.06	75.0	154.9	215.5	25.90	16.65	3.39	28.51	1.6
MEAN	2.43	2.22	1.26	1.52	2.68	5.00	7.18	.84	.56	.11	.92	.05
MAX	8.0	12	9.2	3.2	3.2	12	27	4.0	4.8	3.2	5.7	1.6
MIN	0	0	0	0	2.5	2.5	2.5	0	0	0	0	0
AC-FT	149	132	78	93	149	307	427	51	33	6.7	57	3.2
(†)	9,440	9,590	9,860	10,110	10,270	10,430	10,080	9,950	9,650	10,030	9,750	9,650

CAL YR 1974 TOTAL 1169.21 MEAN 3.20 MAX 13 MIN 0 AC-FT 2320 ‡ -170
WTR YR 1975 TOTAL 749.61 MEAN 2.05 MAX 27 MIN 0 AC-FT 1490 ‡ + 90

† Monthend contents, in acre-feet, in Alamo Lake, furnished by Corps of Engineers.
‡ Change in contents, in acre-feet.

09424470. Kirkland Creek near Kirkland, Ariz.

LOCATION.--Lat 34°23'38", long 112°43'19", in SW¼ sec.7, T.12 N., R.4 W., Yavapai County, on right bank 1.3 mi (2.1 km) upstream from Skull Valley Wash and 1.7 mi (2.7 km) southwest of Kirkland.

DRAINAGE AREA.--109 mi^2 (282 km^2).

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,900 ft (1,190 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 776 ft^3/s (22.0 m^3/s) July 28 (gage height, 4.36 ft or 1.329 m, from crest-stage gage), from rating curve extended above 45 ft^3/s (1.3 m^3/s) on basis of slope-area measurement at gage height 4.37 ft (1.332 m); minimum daily, 1.1 ft^3/s (0.031 m^3/s) Oct. 2 to Nov. 1.
Period of record: Maximum discharge, 785 ft^3/s (22.2 m^3/s) Aug. 13, 1973 (gage height, 4.37 ft or 1.332 m, from profile past gage), from rating curve extended above 45 ft^3/s (1.3 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 1.1 ft^3/s (0.031 m^3/s) Oct. 2 to Nov. 1, 1974.

REMARKS.--Records poor. No known diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.1	2.5	2.6	2.6	2.6	2.3	2.6	1.9	1.2	1.7	1.4
2	1.1	3.0	2.5	2.6	2.6	2.5	2.3	2.6	1.8	1.2	1.7	1.4
3	1.1	2.4	2.5	2.6	2.6	2.5	2.4	2.6	1.7	1.4	1.7	1.6
4	1.1	2.4	2.5	2.6	2.6	2.5	2.3	2.6	1.7	1.6	1.7	1.4
5	1.1	2.4	2.5	2.6	2.5	2.5	2.3	2.6	1.6	1.5	1.7	1.4
6	1.1	2.4	2.5	2.6	2.5	2.5	2.3	2.7	1.6	1.6	1.7	1.8
7	1.1	2.4	2.5	2.6	2.5	2.5	2.3	3.0	1.6	1.6	1.7	1.8
8	1.1	2.4	2.5	2.6	2.5	2.6	2.3	3.0	1.6	1.6	1.7	1.8
9	1.1	2.4	2.5	2.6	2.5	2.6	2.3	3.1	1.7	1.6	1.7	1.8
10	1.1	2.4	2.5	2.6	2.5	2.3	2.3	2.7	1.4	1.6	1.7	1.8
11	1.1	2.4	2.5	2.6	2.5	2.4	2.3	2.7	1.4	1.6	1.6	1.8
12	1.1	2.4	2.5	2.6	2.5	2.5	2.3	2.7	1.6	1.6	1.6	1.8
13	1.1	2.4	2.5	2.6	2.5	2.5	2.3	2.7	1.6	1.6	1.6	1.8
14	1.1	2.4	2.5	2.6	2.5	2.5	2.3	2.7	1.6	1.6	1.6	1.8
15	1.1	2.4	2.5	2.6	2.5	2.5	2.3	2.8	1.6	1.7	1.6	1.8
16	1.1	2.4	2.5	2.6	2.5	2.5	2.3	2.8	1.6	1.7	1.6	1.8
17	1.1	2.5	2.6	2.6	2.7	2.5	2.3	2.7	1.5	1.7	1.6	1.8
18	1.1	2.5	2.6	2.6	2.7	2.4	2.3	2.7	1.4	1.7	1.6	1.8
19	1.1	2.5	2.6	2.6	2.7	2.1	2.1	3.0	1.4	1.7	1.6	1.8
20	1.1	2.5	2.6	2.6	2.7	2.1	2.1	2.8	1.4	1.7	1.6	1.8
21	1.1	2.5	2.6	2.6	2.7	2.1	2.1	2.9	1.4	1.7	1.6	1.8
22	1.1	2.5	2.6	2.6	2.7	2.1	2.2	2.9	1.4	1.7	1.6	1.8
23	1.1	2.5	2.6	2.6	2.7	2.1	2.3	2.3	1.2	1.7	1.4	1.8
24	1.1	2.5	2.6	2.6	2.7	2.1	2.3	2.0	1.2	1.7	1.4	1.8
25	1.1	2.5	2.6	2.6	2.7	2.1	2.3	2.2	1.2	1.7	1.6	1.8
26	1.1	2.5	2.6	2.6	2.7	2.4	2.5	2.3	1.2	1.7	1.4	1.8
27	1.1	2.5	2.6	2.6	2.7	2.5	2.5	2.3	1.2	1.7	1.4	1.8
28	1.1	2.5	2.6	2.6	2.7	2.5	2.5	2.2	1.2	40	1.4	1.8
29	1.1	2.5	2.6	2.6	---	2.3	2.5	2.2	1.2	1.7	1.4	1.8
30	1.1	2.5	2.6	2.6	---	2.3	2.5	2.2	1.2	1.7	1.4	1.8
31	1.1	---	2.6	2.6	---	2.3	---	2.0	---	1.7	1.4	---
TOTAL	34.2	72.7	79.0	80.6	72.8	73.9	69.4	80.6	44.1	88.5	49.0	52.2
MEAN	1.10	2.42	2.55	2.60	2.60	2.38	2.31	2.60	1.47	2.85	1.58	1.74
MAX	1.2	3.0	2.6	2.6	2.7	2.6	2.5	3.1	1.9	40	1.7	1.8
MIN	1.1	1.1	2.5	2.6	2.5	2.1	2.1	2.0	1.2	1.2	1.4	1.4
AC-FT	68	144	157	160	144	147	138	160	87	176	97	104

CAL YR 1974 TOTAL 954.4 MEAN 2.61 MAX 26 MIN 1.1 AC-FT 1890
WTR YR 1975 TOTAL 797.0 MEAN 2.18 MAX 40 MIN 1.1 AC-FT 1580

PEAK DISCHARGE (BASE, 200 CFS).--July 28 (time unknown) 776 cfs (4.36 ft, from crest-stage gage).

NOTE.--Doubtful or no gage-height record Oct. 1 to Feb. 4, July 6 to Aug. 20.

09424900. Santa Maria River near Bagdad, Ariz.

LOCATION.--Lat 34°18'21", long 113°20'47", in SE¼ sec.12, T.11 N., R.11 W., Mohave County, on right bank 4.0 mi (6.4 km) east of Palmerita Ranch, 12 mi (19 km) upstream from confluence with Big Sandy River, and 21 mi (34 km) southwest of Bagdad.

DRAINAGE AREA.--1,210 mi^2 (3,130 km^2), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,360 ft (415 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 37.4 ft^3/s (1.059 m^3/s), 27,100 acre-ft/yr (33.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,890 ft^3/s (53.5 m^3/s) July 29 (gage height, 3.93 ft or 1.198 m); no flow for many days. Period of record: Maximum discharge, 13,500 ft^3/s (382 m^3/s) Dec. 7, 1966 (gage height, 5.50 ft or 1.676 m), from rating curve extended above 5,000 ft^3/s (140 m^3/s) on basis of step-backwater computations and slope-area measurement at gage height 5.50 ft (1.676 m); no flow for most of time.

REMARKS.--Records poor. Diversions above station for irrigation of about 5,300 acres (21.4 km^2), most of which is by pumping from ground water.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		.70				0				0		0
2		0				0				0		0
3		60				0				0		0
4		18				0				0		4.5
5		0				0				0		0
6		0				0				0		0
7		0				0				0		0
8		0				0				0		0
9		0				0				0		0
10		0				0				0		0
11		0				0				0		0
12		0				0				0		0
13		0				0				0		0
14		0				0				7.0		0
15		0				0				0		0
16		0				30				0		0
17		0				15				0		0
18		0				1.5				0		0
19		0				0				0		0
20		0				0				0		0
21		0				0				0		0
22		0				0				0		0
23		0				0				0		0
24		0				0				0		0
25		0				0				0		0
26		0				0				0		0
27		0				0				0		0
28		0				0				0		0
29		0			------	0				192		0
30		0			------	0				9.0		0
31		------			------	0	------		------	0		------
TOTAL	0	78.70	0	0	0	46.5	0	0	0	208.0	0	4.5
MEAN	0	2.62	0	0	0	1.50	0	0	0	6.71	0	.15
MAX	0	60	0	0	0	30	0	0	0	192	0	4.5
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	156	0	0	0	92	0	0	0	413	0	8.9

CAL YR 1974 TOTAL 282.70 MEAN .77 MAX 100 MIN 0 AC-FT 561
WTR YR 1975 TOTAL 337.70 MEAN .93 MAX 192 MIN 0 AC-FT 670

PEAK DISCHARGE (BASE, 200 CFS).--July 29 (1045) 1,890 cfs (3.93 ft); Sept. 4 (1500) 299 cfs (3.16 ft).

09426000. Bill Williams River below Alamo Dam, Ariz.

LOCATION.--Lat 34°13'51", long 113°36'29", in SE¼SE¼ sec.4, T.10 N., R.13 W., Yuma County, on left bank 0.6 mi (1.0 km) downstream from Alamo Dam, 3.7 mi (6.0 km) downstream from Bullard Wash, and 8 mi (13 km) downstream from confluence of Santa Maria and Big Sandy Rivers.

DRAINAGE AREA.--4,730 mi^2 (12,250 km^2), approximately, of which 400 mi^2 (1,040 km^2) is below confluence of Santa Maria and Big Sandy Rivers.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1943, published as Williams River near Alamo. October 1943 to September 1967, published as Bill Williams River near Alamo.

GAGE.--Water-stage recorder. Altitude of gage is 967 ft (294.7 m), from construction data. Prior to Apr. 9, 1968, at site 1.7 mi (2.7 km) upstream at datum 1,002.95 ft (305.699 m) above mean sea level.

AVERAGE DISCHARGE (adjusted for storage in Alamo Lake).--36 years, 84.1 ft^3/s (2.382 m^3/s), 60,930 acre-ft/yr (75.1 hm^3/yr); median of yearly mean discharges, 41 ft^3/s (1.16 m^3/s), 29,700 acre-ft/yr (37 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 27 ft^3/s (0.76 m^3/s) Apr. 4-7; no flow for many days.
Period of record: Maximum discharge, 65,100 ft^3/s (1,840 m^3/s) Aug. 29, 1951 (gage height, 30.8 ft or 9.39 m, site and datum then in use); no flow at times in each year since 1969.
Flood of Sept. 6, 1939, reached a stage of 39.6 ft (12.07 m), from floodmarks, discharge, 86,000 ft^3/s (2,440 m^3/s), from rating curve extended above 50,000 ft^3/s (1,420 m^3/s) on basis of slope-area measurement of peak flow made just below confluence of Santa Maria and Big Sandy Rivers. Floodmarks indicate a previous stage of about 46 ft (14.0 m). Stage is referred to site and datum in use prior to Apr. 9, 1968.

REMARKS.--Records fair. Diversions above station for irrigation of about 9,100 acres (36.8 km^2), mostly by pumping from ground water. Flow regulated by Alamo Lake, beginning Mar. 28, 1969. Temporary storage and slight regulation of releases through uncontrolled rectangular conduit through Alamo Dam June 23, 1968, to Mar. 27, 1969. Alamo Lake is formed by an earthfill and rockfill dam, completed in 1968. Total capacity of lake is 1,043,000 acre-ft (1,290 hm^3). See table below for monthend contents. Maximum contents during year was 10,560 acre-ft (13.0 hm^3) Mar. 19, 20.

REVISIONS (WATER YEARS).--WSP 1213: 1939(M). 1941(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	3.1	.47	0	2.5	2.5	6.0	4.0	.47	0	4.5	0
2	7.7	0	.47	0	2.5	2.5	6.0	4.0	.54	0	5.0	0
3	7.7	0	.47	0	2.5	2.5	14	4.0	.54	0	5.7	0
4	7.7	0	.64	0	2.5	2.5	27	4.0	.54	0	5.7	0
5	7.7	1.6	5.3	0	2.5	2.6	27	3.8	.54	0	2.5	0
6	7.7	5.0	9.2	0	2.5	2.9	27	2.2	.54	0	0	0
7	8.0	5.7	9.2	.33	2.5	2.9	27	.82	.54	0	0	0
8	3.5	5.7	9.2	2.1	2.5	2.9	13	.61	.54	0	0	0
9	0	5.7	4.2	2.5	2.5	2.9	4.5	.54	.54	0	0	0
10	0	5.7	0	2.7	2.5	2.7	3.6	.47	.54	0	0	0
11	0	5.7	0	3.2	2.5	2.7	3.6	.34	.54	0	0	0
12	0	6.0	0	3.2	2.5	2.9	3.4	.28	.54	0	0	1.6
13	0	12	0	2.4	2.7	2.9	3.4	.09	.54	0	0	0
14	0	2.9	0	0	2.7	2.9	3.2	.01	.54	0	0	0
15	.92	0	0	0	2.9	3.2	2.9	0	.54	0	0	0
16	.65	0	0	0	2.9	3.4	2.7	0	.54	0	0	0
17	0	0	0	.03	2.9	3.4	2.7	0	.54	0	0	0
18	0	2.0	0	1.5	2.9	3.4	2.7	0	.54	0	0	0
19	0	2.1	0	1.9	2.9	3.4	2.7	0	4.8	0	0	0
20	0	0	0	1.9	2.9	6.1	2.7	0	0	0	0	0
21	0	0	0	2.2	2.9	8.8	2.7	0	0	0	0	0
22	0	0	0	2.2	3.2	9.2	2.7	0	0	0	0	0
23	0	.33	0	2.2	3.2	8.4	2.5	0	0	0	0	0
24	0	.40	0	2.2	2.7	6.4	2.9	0	0	0	0	0
25	0	.40	0	2.2	2.7	6.0	2.9	0	2.2	0	.11	0
26	0	.47	0	2.2	2.5	7.7	2.9	0	0	0	1.4	0
27	0	.47	0	2.4	2.5	9.6	3.2	0	0	0	2.4	0
28	0	.47	0	2.4	2.5	12	3.2	0	0	0	1.2	0
29	2.0	.47	0	2.4	---	9.6	3.6	0	0	0	0	0
30	6.7	.47	0	2.4	---	6.0	3.8	.34	0	.19	0	0
31	7.3	---	0	2.5	---	6.0	---	.40	---	3.2	0	---
TOTAL	75.27	66.68	39.15	47.06	75.0	154.9	215.5	25.99	16.65	3.39	28.51	1.6
MEAN	2.43	2.22	1.26	1.52	2.68	5.00	7.18	.84	.56	.11	.92	.05
MAX	8.0	12	9.2	3.2	3.2	12	27	4.0	4.8	3.2	5.7	1.6
MIN	0	0	0	0	2.5	2.5	2.5	0	0	0	0	0
AC-FT	149	132	78	93	149	307	427	51	33	6.7	57	3.2
(†)	9,440	9,590	9,860	10,110	10,270	10,430	10,080	9,950	9,650	10,030	9,750	9,650

CAL YR 1974 TOTAL 1169.21 MEAN 3.20 MAX 13 MIN 0 AC-FT 2320 ‡ -170
WTR YR 1975 TOTAL 749.61 MEAN 2.05 MAX 27 MIN 0 AC-FT 1490 ‡ + 90

† Monthend contents, in acre-feet, in Alamo Lake, furnished by Corps of Engineers.
‡ Change in contents, in acre-feet.

09426600. Bill Williams River below Mineral Wash near Planet, Ariz.
(National stream-quality accounting network station)

LOCATION.--Lat 34°15'43", long 114°01'40", in SE¼SW¼ sec.27, T.11 N., R.17 W., on boundary between Mohave and Yuma Counties, at ford 0.8 mi (1.3 km) downstream from Mineral Wash, 3.6 mi (5.8 km) upstream from Havasu Lake National Wildlife Refuge, 4.1 mi (6.6 km) west of Planet Ranch, 5.2 mi (8.4 km) upstream from waterline of Havasu Lake at elevation 450 ft (137.2 m) above mean sea level, and approximately 30 mi (50 km) downstream from Alamo Dam.

DRAINAGE AREA.--5,140 mi² (13,310 km²) approximately, of which approximately 410 mi² (1,060 km²) is below Alamo Dam.

PERIOD OF RECORD.--Chemical analyses: January 1970 to January 1972 (partial-record station), October 1974 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 979 micromhos Dec. 6; minimum daily, 862 micromhos Nov. 13.
Water temperatures: Maximum, 27.0°C May 1; minimum 11.5°C Feb. 3.

REMARKS.--Streamflow ungaged. No flow for extended periods of each year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.										
08...	1100	.39	33	--	--	--	--	46	20	120
NOV.										
04...	1100	.41	33	650	80	50	0	52	18	120
DEC.										
02...	1100	2.4	33	--	--	--	--	59	17	120
JAN.										
06...	1120	4.4	17	--	10	--	--	58	20	110
FEB.										
10...	1130	4.2	31	260	10	10	0	57	18	110
MAR.										
10...	1200	4.4	28	--	20	--	--	58	20	110
APR.										
07...	1115	3.0	30	--	10	--	--	58	18	110
MAY										
05...	1100	.51	32	0	20	10	5	61	19	120

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.									
08...	7.9	223	--	85	110	1.7	.42	.03	540
NOV.									
04...	7.6	237	--	86	120	1.6	--	--	546
DEC.									
02...	7.5	272	--	85	110	1.6	.55	.04	556
JAN.									
06...	7.0	274	--	86	120	.9	.48	.03	558
FEB.									
10...	6.2	247	--	89	120	1.5	.71	.00	537
MAR.									
10...	6.9	281	0	89	100	1.6	.59	.04	569
APR.									
07...	8.0	274	0	78	110	1.6	.18	.03	561
MAY									
05...	6.5	282	0	86	120	1.5	.20	.04	582

DATE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)
OCT.									
08...	536	.73	200	14	3.7	910	8.2	28.5	6
NOV.									
04...	555	.74	200	10	3.7	920	8.3	20.0	10
DEC.									
02...	570	.76	220	0	3.5	940	8.1	19.0	2
JAN.									
06...	556	.76	230	2	3.2	950	8.3	16.0	3
FEB.									
10...	558	.73	220	14	3.3	928	--	21.5	1
MAR.									
10...	555	.77	230	0	3.2	960	8.4	18.0	3
APR.									
07...	550	.76	220	0	3.2	943	7.9	19.0	1
MAY									
05...	586	.79	230	0	3.4	960	8.0	23.0	2

09426600. Bill Williams River below Mineral Wash near Planet, Ariz.--Continued

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.							
08...	1100	.01	.46	.37	.83	3.7	.03
NOV.							
04...	1100	--	.76	.24	1.0	4.4	.08
DEC.							
02...	1100	.00	.57	.01	.58	2.6	.06
JAN.							
06...	1120	.03	.87	.04	.91	4.0	.03
FEB.							
10...	1130	.00	.75	.16	.91	4.0	.02
MAR.							
10...	1200	.01	.57	.18	.75	3.3	.03
APR.							
07...	1115	.00	.21	.14	.35	1.6	.03
MAY							
05...	1100	.00	.22	.32	.54	2.4	.01

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
08...	1100	940	--	--	--	--	330	700	--
NOV.									
04...	1100	1300	14	--	8.5	2.1	190	390	5.4
DEC.									
02...	1100	860	--	--	--	--	87	180	--
JAN.									
06...	1120	510	--	--	--	--	31	22	--
FEB.									
10...	1130	1600	--	--	10	1.3	811	56	2.4
MAR.									
10...	1200	2400	--	--	--	--	67	310	--
APR.									
07...	1115	920	--	--	--	--	814	100	--
MAY									
05...	1100	1600	2.5	3.4	1.7	.3	--	--	1.7

09426600. Bill Williams River below Mineral Wash near Planet, Ariz.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)
OCT.										
08...	1100	--	--	320	--	--	--	--	--	--
NOV.										
04...	1100	11	8	250	10	3	0	0	<50	0
DEC.										
02...	1100	--	--	290	--	--	--	--	--	--
JAN.										
06...	1120	--	--	270	--	--	--	--	--	--
FEB.										
10...	1130	4	5	260	<10	0	0	0	50	0
MAR.										
10...	1200	--	--	270	--	--	--	--	--	--
APR.										
07...	1115	--	--	270	--	--	--	--	--	--
MAY										
05...	1100	7	6	260	<10	0	0	20	<50	0

DATE	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.									
08...	--	--	--	--	--	--	--	--	--
NOV.									
04...	<10	3	<100	12	.0	.0	0	0	50
DEC.									
02...	--	--	--	--	--	--	--	--	--
JAN.									
06...	--	--	--	--	--	--	--	--	--
FEB.									
10...	190	1	<100	3	.1	.0	1	0	20
MAR.									
10...	--	--	--	--	--	--	--	--	--
APR.									
07...	--	--	--	--	--	--	--	--	--
MAY									
05...	<10	2	<100	1	.0	.0	0	0	6

09427500. Lake Havasu near Parker Dam, Ariz.-Calif.

LOCATION.--Lat 34°18'58", long 114°09'23", in NW¼SW¼ sec.28, T.3 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, at intake pumping plant for Colorado River aqueduct of Metropolitan Water District of Southern California, 1.8 mi (2.9 km) upstream from Parker Dam on Colorado River, and 149 mi (240 km), downstream from Hoover Dam.

DRAINAGE AREA.--178,800 mi^2 (463,100 km^2), approximately.

PERIOD OF RECORD.--July 1938 to current year. Published as Parker Reservoir near Parker Dam 1938.

GAGE.--Water-stage recorder. Datum of gage is 400.54 ft (122.085 m) above mean sea level. Gage readings have been reduced to elevations above mean sea level.

EXTREMES.--Current year: Maximum contents, 623,400 acre-ft (769 hm^3) June 8 (elevation, 450.74 ft or 137.386 m); minimum, 527,200 acre-ft (650 hm^3) Mar. 25 (elevation, 445.68 ft or 135.843 m).
Period of record: Maximum contents, 693,000 acre-ft (854 hm^3), by temporary use of flashboards, Apr. 18, 1943, June 4, 1953; maximum elevation, 450.77 ft (137.395 m) June 26, 1958; minimum contents, 71,400 acre-ft (88.0 hm^3) June 25, 1942 (elevation, 412.09 ft or 125.605 m).

REMARKS.--Lake is formed by concrete-arch dam; dam was completed and storage began July 1, 1938. Usable capacity—based on April 1957 re-survey by Bureau of Reclamation between elevations 430.54 ft (131.229 m) and 450.54 ft (137.325 m)—619,400 acre-ft (764 hm^3) between elevations 400.54 ft (122.085 m), sill of regulating gates, and 450.54 ft (137.325 m), top of regulating gates. Prior to Oct. 1, 1956, different capacity table used. Dead storage, 28,600 acre-ft (35.3 hm^3) below elevation 400.54 ft (122.085 m), based on original survey. About 0.07 ft (0.021 m) fall indicated between gage and Parker Dam under normal operating conditions. Drawdown below elevation 440.54 ft (134.277 m) not legally permissible except by consent of the Metropolitan Water District of Southern California or in an emergency affecting the safety of the dam. Lake is used for flood control, power development, re-regulation of river for irrigation demand, and as a basin from which water is pumped by Metropolitan Water District of Southern California to Colorado River aqueduct. Figures given herein represent usable contents. For record of diversion to Colorado River aqueduct, see record for Colorado River aqueduct near Parker Dam elsewhere in this report.

CORRECTION.--Elevation for Mar. 1, 1974, published in WRD Ariz. 1974, was in error. Correct elevation was 446.95 ft. Maximum elevation (at 2400) for March was then 448.15 ft and for water year 1974 was 450.42 ft.

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	562,500	567,100	548,800	532,600	550,400	549,400	554,400	604,000	614,600	603,800	597,400	571,300
2	563,800	563,700	546,300	532,600	555,800	547,900	556,400	605,000	610,400	607,000	595,400	570,500
3	566,300	560,000	546,300	541,300	557,900	543,100	559,600	603,600	610,800	610,000	593,800	571,300
4	567,100	556,500	550,800	555,000	561,100	542,300	562,700	604,000	611,800	609,000	584,800	573,200
5	565,400	554,400	553,300	562,200	566,300	545,200	566,900	595,000	613,800	607,600	584,000	571,300
6	563,100	555,400	550,400	560,500	568,800	549,400	569,000	598,000	617,600	606,200	586,600	572,800
7	557,700	555,000	550,100	561,600	569,600	547,700	561,300	605,800	619,000	599,200	587,400	578,900
8	555,200	553,100	547,900	565,800	569,700	545,800	564,600	616,200	619,200	603,600	583,600	580,000
9	556,200	552,800	542,500	565,200	568,000	546,800	583,600	610,800	612,000	605,400	585,300	579,800
10	559,800	551,700	539,100	561,600	561,300	542,500	598,400	602,600	610,200	607,400	584,200	579,800
11	562,700	548,500	538,700	556,500	553,700	547,700	591,000	607,000	611,200	605,800	575,200	582,100
12	563,500	547,700	538,600	550,400	545,900	550,800	582,300	600,400	610,400	605,400	577,300	575,800
13	562,200	548,100	538,700	545,000	545,200	555,600	580,400	598,000	610,000	604,000	580,400	572,200
14	559,400	550,400	538,000	540,200	546,300	555,000	574,100	598,000	609,200	596,600	580,800	568,600
15	556,900	550,400	536,900	535,700	547,600	556,400	567,300	602,200	609,000	596,800	582,100	564,200
16	557,300	550,300	537,900	535,900	549,400	555,600	557,900	604,600	602,600	596,800	582,500	563,300
17	560,200	551,300	537,000	540,400	544,700	548,100	563,300	606,800	601,400	599,000	581,900	564,200
18	561,600	550,400	537,000	544,300	543,800	548,800	570,700	606,800	602,400	600,000	575,600	569,200
19	561,100	550,600	537,200	547,700	546,100	548,500	579,000	599,200	603,800	599,400	576,400	565,200
20	559,200	554,100	536,400	544,700	547,700	550,400	580,400	602,600	605,000	597,400	578,300	566,100
21	557,700	555,400	540,500	546,300	548,600	547,200	572,400	605,400	607,800	588,900	582,100	566,100
22	561,500	555,400	551,300	548,600	547,700	543,000	576,200	610,400	609,600	589,900	582,500	564,800
23	563,300	552,800	544,500	550,600	545,600	536,700	584,800	613,800	603,800	593,400	581,000	576,200
24	562,700	550,300	541,600	549,500	541,300	528,100	592,200	614,600	602,800	597,000	577,900	587,600
25	560,700	551,900	538,600	545,200	536,800	530,500	598,400	612,800	603,800	595,000	570,300	575,100
26	561,600	553,500	535,300	543,400	536,000	536,400	599,000	608,400	605,400	594,400	570,900	562,500
27	560,700	552,800	533,000	536,800	545,800	545,200	602,200	606,600	606,400	595,000	572,800	563,300
28	562,000	552,400	536,000	535,900	551,000	554,100	597,400	606,600	609,400	591,400	573,000	570,700
29	564,200	550,400	541,600	532,800	------	561,500	599,800	609,600	611,600	591,000	572,800	571,100
30	567,800	548,100	535,900	537,500	------	564,400	602,200	609,400	601,200	595,000	573,500	573,400
31	570,500	------	533,300	543,400	------	554,100	------	610,800	------	597,400	574,900	------
MAX	570,500	567,100	553,300	565,800	569,700	564,400	602,200	616,200	619,200	610,000	597,400	587,600
MIN	555,200	547,700	531,000	532,600	536,000	528,100	554,400	595,000	601,200	588,900	570,300	562,500
(‡)	+8,000	-22,400	-14,800	+10,100	+7,600	+3,100	+48,100	+8,600	-9,600	-3,800	-22,500	-1,500

CAL YR 1974 MAX 617,000 MIN 521,500 ‡ -11,200
WTR YR 1975 MAX 619,200 MIN 528,100 ‡ +10,900

‡ Change in contents, in acre-feet.

09427500. Lake Havasu near Parker Dam, Ariz.-Calif.--Continued

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	447.62	447.66	446.88	445.98	446.97	447.91	447.19	449.77	450.30	449.76	449.44	448.08
2	447.69	447.68	446.74	445.98	447.16	446.83	447.29	449.82	450.09	449.92	449.34	448.04
3	447.82	447.48	446.74	446.46	447.37	446.56	447.46	449.75	450.11	450.07	449.26	448.08
4	447.86	447.30	446.99	447.22	447.54	446.52	447.63	449.77	450.16	450.02	448.79	448.18
5	447.77	447.18	447.13	447.60	447.82	446.68	447.85	449.32	450.26	449.95	448.75	448.08
6	447.65	447.24	446.97	447.51	447.95	446.91	447.96	449.47	450.45	449.88	448.89	448.16
7	447.36	447.22	446.95	447.57	447.99	446.82	447.55	449.86	450.52	449.53	448.93	448.48
8	447.23	447.12	446.83	447.79	448.00	446.71	447.73	450.38	450.53	449.75	448.73	448.54
9	447.28	447.10	446.53	447.76	447.91	446.77	448.73	450.11	450.17	449.84	448.82	448.53
10	447.47	447.04	446.34	447.57	447.55	446.53	449.49	449.70	450.08	449.94	448.76	448.53
11	447.63	447.86	446.32	447.30	447.15	446.82	449.12	449.92	450.13	449.86	448.29	448.65
12	447.67	447.82	446.31	446.97	446.72	446.99	448.66	449.59	450.09	449.84	448.40	448.32
13	447.60	446.84	446.32	446.67	446.68	447.25	448.56	449.47	450.07	449.77	448.56	448.13
14	447.45	446.97	446.28	446.40	446.74	447.22	448.23	449.47	450.03	449.40	448.58	447.94
15	447.32	446.97	446.22	446.15	446.81	447.29	447.87	449.68	450.02	449.41	448.65	447.71
16	447.34	446.96	445.94	446.16	446.91	447.25	447.37	449.80	449.70	449.41	448.67	447.66
17	447.49	447.02	445.89	446.41	446.65	446.84	447.66	449.91	449.64	449.52	448.64	447.71
18	447.57	446.97	445.89	446.63	446.60	446.88	448.05	449.91	449.69	449.57	448.31	447.97
19	447.54	446.98	446.01	446.82	446.73	446.86	448.49	449.53	449.76	449.54	448.35	447.76
20	447.44	447.17	446.19	446.65	446.82	446.97	448.56	449.70	449.82	449.44	448.45	447.81
21	447.36	447.24	446.42	446.74	446.87	446.79	448.14	449.84	449.96	449.01	448.65	447.81
22	447.56	447.24	447.02	446.87	446.82	446.63	448.38	450.09	450.05	449.06	448.67	447.74
23	447.66	447.10	446.64	446.98	446.70	446.32	448.79	450.26	449.76	449.24	448.59	448.34
24	447.63	446.96	446.48	446.92	446.46	445.73	449.18	450.30	449.71	449.42	448.43	448.94
25	447.42	447.15	446.31	446.68	446.21	445.86	449.49	450.21	449.76	449.32	448.03	448.28
26	447.57	447.14	446.13	446.58	446.17	446.30	449.52	449.99	449.84	449.29	448.06	447.62
27	447.52	447.10	446.00	446.21	446.71	446.68	449.68	449.90	449.89	449.32	448.16	447.66
28	447.59	447.08	446.17	446.16	447.00	447.17	449.44	449.90	450.04	449.14	448.17	448.06
29	447.71	446.97	446.48	445.99	------	447.56	449.56	450.05	450.15	449.12	448.16	448.07
30	447.90	446.84	446.16	446.25	------	447.72	449.68	450.04	449.63	449.32	448.20	448.19
31	448.04	------	446.02	446.58	------	447.17	------	450.11	------	449.44	448.27	------
MEAN	447.57	447.19	446.43	446.76	447.04	446.86	448.44	449.86	450.01	449.55	448.58	448.10
MAX	448.04	447.86	447.13	447.79	448.00	447.91	449.68	450.38	450.53	450.07	449.44	448.94
MIN	447.23	446.84	445.89	445.98	446.17	445.73	447.19	449.32	449.63	449.01	448.03	447.62

CAL YR 1974..... MAX 450.42 MIN 445.36
WTR YR 1975..... MAX 450.53 MIN 445.73

09427520. Colorado River below Parker Dam, Ariz.-Calif.

LOCATION.--Lat 34°17'44", long 114°08'22", in NW¼NW¼ sec.3, T.2 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, on north end of powerplant at Parker Dam, 13 mi (21 km) northeast of Parker, Ariz., and 14 mi (23 km) upstream from Headgate Rock Dam.

DRAINAGE AREA.--178,800 mi^2 (463,100 km^2), approximately.

PERIOD OF RECORD.--February to September 1934 (gage heights and fragmentary discharge records), October 1934 to current year. Prior to October 1937, published as "near Parker, Ariz."

GAGE.--Water-stage recorder. Datum of gage is 300.54 ft (91.605 m) above mean sea level. Prior to Oct. 1, 1967, at site 3.8 mi (6.1 km) downstream at datum 346.23 ft (105.531 m) above mean sea level.

AVERAGE DISCHARGE.--41 years, 12,130 ft^3/s (343.5 m^3/s), 8,788,000 acre-ft/yr (10,800 hm^3/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 21,800 ft^3/s (617 m^3/s) Mar. 21 (gage height, 72.58 ft or 22.122 m); minimum daily, 2,040 ft^3/s (57.8 m^3/s) Dec. 5.
Period of record: Maximum discharge, 42,400 ft^3/s (1,200 m^3/s) Feb. 8, 1937; no flow at Parker Dam for parts of several days in 1942 when gates in dam were closed; minimum daily discharge, 1,220 ft^3/s (34.6 m^3/s) Jan. 16, 1974.
An unregulated discharge of probably less than 1,350 ft^3/s (38.2 m^3/s) occurred Aug. 18, 1934 (lowest unregulated discharge since 1917 and probably since a much earlier date).

REMARKS.--Records excellent except those for January, which are good. Flow regulated by Lake Mead since Feb. 1, 1935, Lake Mohave since Jan. 17, 1950, and by Lake Havasu since July 1, 1938. Many diversions above station. For record of diversion to Colorado River aqueduct and return flows, see record for Colorado River aqueduct near Parker Dam, elsewhere in this report. Records of chemical analyses and water temperatures for the current water year are published on following pages.

REVISIONS (WATER YEARS).--WSP 1313: 1941(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,480	5,290	3,930	6,860	5,480	10,400	13,800	13,100	11,600	12,400	12,800	13,000
2	7,830	5,310	3,970	6,110	6,070	10,900	13,400	13,300	12,400	11,300	12,900	13,100
3	7,370	5,600	4,270	3,650	5,670	10,800	12,900	14,000	12,000	11,300	13,000	12,600
4	8,540	5,370	3,770	2,440	5,650	10,300	14,000	14,100	11,500	12,900	13,900	11,300
5	9,690	5,180	2,040	4,630	5,420	9,930	14,500	13,900	10,800	14,000	14,100	12,200
6	9,550	4,430	2,670	5,020	6,220	9,070	14,700	13,200	10,300	14,100	13,300	12,400
7	9,010	4,530	2,800	4,750	7,280	10,100	14,500	12,600	10,500	13,700	13,400	10,700
8	8,040	5,430	4,610	5,000	7,410	11,100	14,700	12,100	11,100	12,700	14,700	9,360
9	7,070	5,430	5,100	4,980	7,680	10,200	8,170	12,800	11,100	12,600	15,000	9,670
10	6,330	5,860	5,820	5,900	7,730	9,360	7,870	13,500	11,600	12,700	14,400	9,330
11	7,100	5,990	5,390	6,130	7,450	7,640	8,420	13,400	10,200	13,800	14,400	8,100
12	6,850	5,860	5,290	6,130	7,390	7,280	9,020	13,400	10,600	14,000	14,300	10,300
13	7,160	5,400	5,270	5,940	7,390	7,230	9,550	13,900	11,500	14,200	13,000	11,000
14	7,870	4,410	5,670	5,670	7,980	9,000	11,800	13,300	11,500	14,200	13,200	11,900
15	7,710	5,160	5,860	5,900	8,240	8,830	12,700	11,700	12,000	13,700	13,200	10,900
16	7,430	4,890	5,900	5,290	8,240	9,500	14,900	13,400	12,000	13,900	13,500	11,100
17	6,400	5,270	6,140	5,710	8,370	9,650	13,900	13,100	12,400	13,700	13,700	9,980
18	7,190	5,350	5,400	5,420	8,730	11,100	14,500	13,400	11,800	14,100	12,200	9,040
19	6,990	5,580	5,380	5,580	8,880	12,400	14,400	12,900	10,600	14,400	12,500	11,200
20	7,340	4,130	5,290	5,860	8,880	12,100	15,300	12,400	11,200	14,700	11,700	11,400
21	6,570	4,170	4,530	5,330	10,200	13,700	15,000	11,800	11,100	14,400	11,200	11,400
22	4,830	4,290	2,690	5,500	10,000	14,500	15,100	11,100	11,300	13,500	11,600	11,400
23	3,930	4,690	6,400	5,350	10,800	13,900	14,700	11,600	11,900	13,500	12,300	11,500
24	3,490	4,790	7,010	7,410	8,280	14,100	14,800	12,100	12,500	12,700	12,800	10,800
25	4,370	3,190	6,530	8,450	12,100	14,400	16,000	12,200	11,500	14,800	12,700	10,900
26	4,650	2,600	6,990	7,800	12,500	13,000	16,300	11,300	12,100	15,100	12,200	10,900
27	4,910	3,050	7,170	7,640	6,920	13,100	15,200	10,800	12,800	14,200	11,400	11,200
28	4,450	3,130	7,140	6,680	8,570	13,100	14,300	10,400	13,400	13,400	11,800	10,800
29	3,650	3,510	5,230	9,020	------	12,900	13,600	10,200	13,300	13,100	12,500	10,200
30	3,110	4,270	7,780	6,530	------	14,000	13,000	11,500	13,200	11,800	13,300	10,300
31	3,170	------	7,660	6,110	------	14,300	------	11,600	------	11,200	13,600	------
TOTAL	201,080	142,160	163,700	182,790	225,530	347,890	401,030	388,100	349,800	416,100	404,600	327,980
MEAN	6,486	4,739	5,281	5,896	8,055	11,220	13,370	12,520	11,660	13,420	13,050	10,930
MAX	9,690	5,990	7,780	9,020	12,500	14,500	16,300	14,100	13,400	15,100	15,000	13,100
MIN	3,110	2,600	2,040	2,440	5,420	7,230	7,870	10,200	10,200	11,200	11,200	8,100
AC-FT	398,800	282,000	324,700	362,600	447,300	690,000	795,400	769,800	693,800	825,300	802,500	650,500

CAL YR 1974 TOTAL 3,615,170 MEAN 9,905 MAX 16,100 MIN 1,220 AC-FT 7,171,000
WTR YR 1975 TOTAL 3,550,760 MEAN 9,728 MAX 16,300 MIN 2,040 AC-FT 7,043,000

09427520. Colorado River below Parker Dam, Ariz.-Calif.

LOCATION.--Lat 34°17'44", long 114°08'22", in NW¼NW¼ sec.3, T.2 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, at gaging station at Parker Dam, 13 mi (21 km) northeast of Parker, Ariz., and 14 mi (23 km) upstream from Headgate Rock Dam.

DRAINAGE AREA.--178,800 mi² (463,100 km²), approximately.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
07...	0830	--	--	--	--	--	--	--	--	--	--	--
15...	0830	--	--	--	--	--	--	--	--	--	--	--
21...	0830	--	--	--	--	--	--	--	--	--	--	--
29...	0900	--	--	--	--	--	--	--	--	--	--	--
NOV.												
04...	0830	4550	9.1	10	82	29	100	5.7	149	--	280	86
11...	0830	--	--	--	--	--	--	--	--	--	--	--
18...	0830	--	--	--	--	--	--	--	--	--	--	--
25...	0830	--	--	--	--	--	--	--	--	--	--	--
DEC.												
02...	0830	3300	8.9	10	84	29	100	5.1	153	--	290	89
09...	0830	--	--	--	--	--	--	--	--	--	--	--
16...	0830	--	--	--	--	--	--	--	--	--	--	--
23...	0800	--	--	--	--	--	--	--	--	--	--	--
30...	0830	--	--	--	--	--	--	--	--	--	--	--
JAN.												
06...	0830	3910	8.5	10	87	29	100	5.0	156	--	310	91
13...	0830	--	--	--	--	--	--	--	--	--	--	--
20...	0830	--	--	--	--	--	--	--	--	--	--	--
27...	0830	--	--	--	--	--	--	--	--	--	--	--
FEB.												
03...	0830	4370	7.9	10	86	30	110	4.9	157	--	310	92
10...	0830	--	--	--	--	--	--	--	--	--	--	--
18...	0830	--	--	--	--	--	--	--	--	--	--	--
24...	0830	--	--	--	--	--	--	--	--	--	--	--
MAR.												
10...	0830	--	--	--	--	--	--	--	--	--	--	--
17...	0830	--	--	--	--	--	--	--	--	--	--	--
21...	1020	18100	7.8	10	84	32	110	4.8	164	--	310	90
24...	0830	--	--	--	--	--	--	--	--	--	--	--
31...	0800	18500	7.8	10	82	31	100	5.1	163	--	300	90
APR.												
07...	0800	--	--	--	--	--	--	--	--	--	--	--
14...	0830	--	--	--	--	--	--	--	--	--	--	--
21...	0830	--	--	--	--	--	--	--	--	--	--	--
28...	0830	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	0830	18560	7.4	20	87	32	100	5.3	166	0	300	90
12...	0830	--	--	--	--	--	--	--	--	--	--	--
19...	0830	--	--	--	--	--	--	--	--	--	--	--
26...	0830	--	--	--	--	--	--	--	--	--	--	--
JUNE												
02...	0830	9140	6.2	20	85	32	100	5.1	159	0	300	89
09...	0830	--	--	--	--	--	--	--	--	--	--	--
16...	0830	--	--	--	--	--	--	--	--	--	--	--
23...	0830	--	--	--	--	--	--	--	--	--	--	--
30...	0830	--	--	--	--	--	--	--	--	--	--	--
JULY												
07...	0830	8200	7.9	10	85	29	100	5.3	156	0	320	89
14...	0830	--	--	--	--	--	--	--	--	--	--	--
21...	0830	--	--	--	--	--	--	--	--	--	--	--
28...	0830	--	--	--	--	--	--	--	--	--	--	--
AUG.												
04...	0830	8570	8.6	0	84	29	100	5.8	151	0	290	88
11...	0830	--	--	--	--	--	--	--	--	--	--	--
18...	0830	--	--	--	--	--	--	--	--	--	--	--
25...	0830	--	--	--	--	--	--	--	--	--	--	--
SEP.												
02...	0830	17600	8.3	20	83	30	100	5.0	152	0	280	85
08...	0830	--	--	--	--	--	--	--	--	--	--	--
15...	0830	--	--	--	--	--	--	--	--	--	--	--
22...	0830	--	--	--	--	--	--	--	--	--	--	--
29...	0830	--	--	--	--	--	--	--	--	--	--	--

09427520. Colorado River below Parker Dam, Ariz.-Calif.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1963 to current year.
Water temperatures: February 1954 to August 1970.
Prior to October 1968, published as 09428000.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
07...	--	--	706	--	.96	--	--	--	1100	--	--	--
15...	--	--	698	--	.95	--	--	--	1100	--	--	--
21...	--	--	708	--	.96	--	--	--	1110	--	--	--
29...	--	--	704	--	.96	--	--	--	1110	--	--	--
NOV.												
04...	.3	.16	698	666	.95	320	200	2.4	1100	--	--	160
11...	--	--	698	--	.95	--	--	--	1100	--	--	--
18...	--	--	712	--	.97	--	--	--	1110	--	--	--
25...	--	--	702	--	.95	--	--	--	1110	--	--	--
DEC.												
02...	.3	.15	702	682	.95	330	200	2.4	1100	--	--	130
09...	--	--	702	--	.95	--	--	--	1110	--	--	--
16...	--	--	704	--	.96	--	--	--	1110	--	--	--
23...	--	--	710	--	.97	--	--	--	1110	--	--	--
30...	--	--	704	--	.96	--	--	--	1110	--	--	--
JAN.												
06...	.3	.31	704	709	.96	340	210	2.4	1110	--	--	130
13...	--	--	702	--	.95	--	--	--	1110	--	--	--
20...	--	--	702	--	.95	--	--	--	1110	--	--	--
27...	--	--	710	--	.97	--	--	--	1120	--	--	--
FEB.												
03...	.3	.15	706	719	.96	340	210	2.6	1120	--	--	140
10...	--	--	712	--	.97	--	--	--	1120	--	--	--
18...	--	--	714	--	.97	--	--	--	1120	--	--	--
24...	--	--	710	--	.97	--	--	--	1120	--	--	--
MAR.												
10...	--	--	710	--	.97	--	--	--	1120	--	--	--
17...	--	--	698	--	.95	--	--	--	1100	--	--	--
21...	.3	.14	700	720	.95	340	210	2.6	1100	--	10.5	140
24...	--	--	710	--	.97	--	--	--	1110	--	--	--
31...	.3	.17	708	697	.96	330	200	2.4	1110	--	--	130
APR.												
07...	--	--	708	--	.96	--	--	--	1110	--	--	--
14...	--	--	698	--	.95	--	--	--	1100	--	--	--
21...	--	--	712	--	.97	--	--	--	1110	--	--	--
28...	--	--	714	--	.97	--	--	--	1120	--	--	--
MAY												
05...	.4	.24	710	705	.97	350	210	2.3	1120	7.9	--	130
12...	--	--	706	--	.96	--	--	--	1110	--	--	--
19...	--	--	728	--	.99	--	--	--	1140	--	--	--
26...	--	--	708	--	.96	--	--	--	1110	--	--	--
JUNE												
02...	.4	.14	716	697	.97	340	210	2.3	1110	8.0	--	170
09...	--	--	714	--	.97	--	--	--	1120	--	--	--
16...	--	--	706	--	.96	--	--	--	1110	--	--	--
23...	--	--	702	--	.95	--	--	--	1110	--	--	--
30...	--	--	700	--	.95	--	--	--	1100	--	--	--
JULY												
07...	.4	.23	704	715	.96	330	200	2.4	1100	7.9	--	140
14...	--	--	698	--	.95	--	--	--	1090	--	--	--
21...	--	--	690	--	.94	--	--	--	1090	--	--	--
28...	--	--	694	--	.94	--	--	--	1090	--	--	--
AUG.												
04...	.3	.16	690	681	.94	330	210	2.4	1090	7.9	--	130
11...	--	--	694	--	.94	--	--	--	1090	--	--	--
18...	--	--	692	--	.94	--	--	--	1090	--	--	--
25...	--	--	692	--	.94	--	--	--	1090	--	--	--
SEP.												
02...	.4	.13	694	667	.94	330	210	2.4	1090	7.7	--	140
08...	--	--	696	--	.95	--	--	--	1100	--	--	--
15...	--	--	690	--	.94	--	--	--	1080	--	--	--
22...	--	--	698	--	.95	--	--	--	1090	--	--	--
29...	--	--	698	--	.95	--	--	--	1090	--	--	--

09428500. Colorado River Indian Reservation Main Canal near Parker, Ariz.

LOCATION.--Two gages, lat 34°10'04", long 114°16'33", in SE¼NW¼ sec.31, T.10 N., R.19 W., Gila and Salt River meridian, Yuma County. Forebay gage, on left wall of canal intake, 90 ft (30 m) upstream from diversion gates at Arizona end of Headgate Rock Dam. Tailrace gage, on right bank of canal 250 ft (80 m) downstream from gates. Both gages are on Colorado River Indian Reservation 1.7 mi (2.7 km) northeast of Parker and 14 mi (23 km) downstream from Parker Dam.

PERIOD OF RECORD.--January 1915 to current year (prior to January 1937, fiscal year diversions only; January 1937 to September 1954, monthly diversions only).

GAGE.--Water-stage recorders above and below intake gates to record head and recorder to show gate openings (since Oct. 1, 1972), with supplementary tape gages read daily and at time of each gate change (prior to Oct. 1, 1972, tape gages only). Datum of gages is 350.00 ft (106.680 m) above mean sea level, datum in use locally, or 350.51 ft (106.835 m) above mean sea level, datum of 1929. Normal operating level of forebay is 364.3 ft (111.04 m); prior to July 9, 1962, normal operating level of forebay was 362.9 ft (110.61 m), datum in use locally. Prior to October 1954, discharge computed by various methods as described in WSP 1313.

EXTREMES.--Period of record: Maximum daily diversion, 1,510 ft^3/s (42.8 m^3/s) June 18, 1975; no diversion at times in most years.

REMARKS.--Records excellent above 700 ft^3/s (19.8 m^3/s) and good below. Daily diversions computed on basis of head on intake gates and gate openings. Records show water diverted to project and surface return flows to Colorado River through two wasteways and two drains; three of these are equipped with water-stage recorders. Water used for irrigation of 66,003 acres (267 km^2) during 1974 calendar year on east side of Colorado River between Parker and Ehrenberg.

COOPERATION.--Log of canal intake gate opening (supplementary record) furnished by Bureau of Indian Affairs.

REVISIONS (WATER YEARS).--WSP 1513: 1915-36.

DISCHARGE, IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	771	473	429	749	955	1020	947	1140	1100	1360	1210	989
2	781	502	488	689	946	963	1050	1200	1090	1330	1140	1040
3	775	487	480	441	1040	979	1120	1190	1120	1260	1090	1150
4	732	409	502	0	1090	1010	1120	1190	1250	1200	1130	1220
5	682	376	463	0	1050	1070	1120	1170	1310	1140	1220	1240
6	675	455	379	0	937	980	1110	1090	1250	1030	1270	1160
7	687	559	327	0	897	967	1170	1010	1190	1020	1360	1180
8	701	558	328	0	783	998	1200	1170	1150	1080	1400	1090
9	643	531	325	0	735	1000	1200	1190	1130	1110	1380	944
10	606	362	331	0	682	940	1150	1170	1180	1100	1300	905
11	668	457	329	0	609	964	1120	1150	1210	1140	1230	903
12	640	510	392	0	614	981	1030	1140	1320	1180	1190	839
13	606	480	425	0	613	1010	974	1190	1340	1210	1180	747
14	655	465	430	0	565	876	1020	1290	1220	1230	1170	734
15	681	470	426	0	537	807	1040	1350	1090	1210	1140	782
16	748	432	471	0	586	797	1060	1350	1180	1250	1130	795
17	826	465	545	0	564	795	1150	1320	1220	1230	1140	858
18	726	509	488	0	611	790	1180	1250	1510	1270	1170	951
19	694	495	471	0	716	837	1160	1260	1190	1300	1220	956
20	725	482	499	0	830	912	1110	1260	1090	1310	1180	905
21	727	451	571	0	754	974	1110	1320	1120	1290	1130	901
22	698	431	593	0	676	986	1180	1360	1180	1320	1140	899
23	572	491	553	0	667	986	1230	1310	1210	1260	1180	876
24	523	518	469	169	715	988	1250	1230	1270	1260	1160	860
25	521	503	428	545	834	984	1290	1200	1280	1280	1110	856
26	519	482	496	665	874	1100	1240	1190	1280	1290	1170	856
27	488	475	584	655	966	1170	1160	1190	1220	1260	1180	794
28	469	482	677	655	1010	1090	1160	1190	1260	1230	1140	760
29	473	487	707	601	---	933	1160	1190	1390	1240	1160	755
30	470	455	714	717	---	865	1130	1190	1420	1230	999	763
31	476	---	786	867	---	926	---	1140	---	1220	991	---
TOTAL	19958	14252	15106	6753	21856	29698	33941	37590	36770	37840	36610	27708
MEAN	644	475	487	218	781	958	1131	1213	1226	1221	1181	924
MAX	826	559	786	867	1090	1170	1290	1360	1510	1360	1400	1240
MIN	469	362	325	0	537	790	947	1010	1090	1020	991	734
AC-FT	39590	28270	29960	13390	43350	58910	67320	74560	72930	75060	72620	54960
(†)	29840	25970	23000	15890	20180	29370	28860	32560	30860	29630	30970	28250

CAL YR 1974 TOTAL 320505 MEAN 878 MAX 1410 MIN 0 AC-FT 635700 † 350,400
WTR YR 1975 TOTAL 318082 MEAN 871 MAX 1510 MIN 0 AC-FT 630900 † 325,400

† Return surface flow, in acre-feet, to Colorado River.

09428500. Colorado River Indian Reservation Main Canal near Parker, Ariz.

LOCATION.--Lat 34°10'04", long 114°16'33", in SE¼NW¼ sec.31, T.10 N., R.19 W., Yuma County, at gaging station at Arizona end of Headgate Rock Dam, on Colorado River Indian Reservation, 1.7 mi (2.7 km) northeast of Parker, and 14 mi (23 km) downstream from Parker Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
07...	0930	--	--	--	--	--	--	--	--	--	--	--
15...	0920	--	--	--	--	--	--	--	--	--	--	--
21...	0915	--	--	--	--	--	--	--	--	--	--	--
29...	0925	--	--	--	--	--	--	--	--	--	--	--
NOV.												
04...	1010	370	12	20	83	32	100	5.3	150	--	290	90
11...	0910	--	--	--	--	--	--	--	--	--	--	--
18...	0920	--	--	--	--	--	--	--	--	--	--	--
25...	0930	--	--	--	--	--	--	--	--	--	--	--
DEC.												
02...	0930	488	8.9	0	85	29	100	5.2	153	--	290	90
09...	0930	--	--	--	--	--	--	--	--	--	--	--
16...	0920	--	--	--	--	--	--	--	--	--	--	--
23...	0845	--	--	--	--	--	--	--	--	--	--	--
30...	0910	733	9.2	10	85	30	100	4.9	154	--	300	92
JAN.												
06...	0920	--	--	--	--	--	--	--	--	--	--	--
27...	0920	--	--	--	--	--	--	--	--	--	--	--
FEB.												
03...	0920	920	8.0	10	83	31	110	5.0	156	--	310	95
10...	1130	--	--	--	--	--	--	--	--	--	--	--
18...	0910	--	--	--	--	--	--	--	--	--	--	--
24...	0920	--	--	--	--	--	--	--	--	--	--	--
MAR.												
03...	0925	979	7.9	20	93	30	110	6.4	161	--	300	110
10...	0920	--	--	--	--	--	--	--	--	--	--	--
17...	0920	--	--	--	--	--	--	--	--	--	--	--
24...	0920	--	--	--	--	--	--	--	--	--	--	--
31...	0930	926	8.3	10	86	30	110	4.8	166	--	310	88
APR.												
07...	0835	--	--	--	--	--	--	--	--	--	--	--
14...	0920	--	--	--	--	--	--	--	--	--	--	--
21...	0925	--	--	--	--	--	--	--	--	--	--	--
28...	0930	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	0920	1230	6.3	10	86	32	100	5.3	164	0	290	89
12...	0920	--	--	--	--	--	--	--	--	--	--	--
19...	0920	--	--	--	--	--	--	--	--	--	--	--
27...	0830	--	--	--	--	--	--	--	--	--	--	--
JUNE												
02...	1030	1080	6.3	70	83	31	100	5.2	160	0	310	91
09...	0945	--	--	--	--	--	--	--	--	--	--	--
16...	1000	--	--	--	--	--	--	--	--	--	--	--
23...	0955	--	--	--	--	--	--	--	--	--	--	--
30...	0930	1300	7.3	0	86	29	100	5.6	157	0	300	88
JULY												
07...	0930	--	--	--	--	--	--	--	--	--	--	--
14...	1000	--	--	--	--	--	--	--	--	--	--	--
21...	1000	--	--	--	--	--	--	--	--	--	--	--
28...	1000	--	--	--	--	--	--	--	--	--	--	--
AUG.												
04...	0945	1120	8.3	0	83	28	110	5.5	148	0	300	90
11...	0950	--	--	--	--	--	--	--	--	--	--	--
18...	1000	--	--	--	--	--	--	--	--	--	--	--
25...	1000	--	--	--	--	--	--	--	--	--	--	--
SEP.												
02...	1135	1040	7.9	0	80	30	110	4.9	149	0	320	95
08...	1000	--	--	--	--	--	--	--	--	--	--	--
22...	1000	--	--	--	--	--	--	--	--	--	--	--
29...	1000	--	--	--	--	--	--	--	--	--	--	--

09428500. Colorado River Indian Reservation Main Canal near Parker, Ariz.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year.

REMARKS.--No flow Jan. 4-23. Unpublished miscellaneous chemical analyses for water years 1962-63 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
07...	--	--	718	--	.98	--	--	--	1130	--	24.5	--
15...	--	--	722	--	.98	--	--	--	1140	--	24.0	--
21...	--	--	728	--	.99	--	--	--	1140	--	21.5	--
29...	--	--	714	--	.97	--	--	--	1130	--	18.5	--
NOV.												
04...	.2	.84	704	--	.96	340	--	2.4	1110	--	19.0	150
11...	--	--	704	--	.96	--	--	--	1110	--	17.0	--
18...	--	--	738	--	1.00	--	--	--	1150	--	16.5	--
25...	--	--	710	--	.97	--	--	--	1120	--	15.5	--
DEC.												
02...	.3	.17	712	--	.97	330	--	2.4	1120	--	14.0	140
09...	--	--	708	--	.96	--	--	--	1120	--	14.0	--
16...	--	--	710	--	.97	--	--	--	1120	--	14.0	--
23...	--	--	716	--	.97	--	--	--	1130	--	15.5	--
30...	.3	.22	706	--	.96	340	--	2.4	1120	--	12.0	130
JAN.												
06...	--	--	710	--	.97	--	--	--	1120	--	10.5	--
27...	--	--	716	--	.97	--	--	--	1130	--	12.0	--
FEB.												
03...	.4	.21	714	--	.97	340	--	2.6	1130	--	11.0	140
10...	--	--	718	--	.98	--	--	--	1130	--	10.5	--
18...	--	--	748	--	1.02	--	--	--	1170	--	10.5	--
24...	--	--	798	--	1.09	--	--	--	1260	--	11.0	--
MAR.												
03...	.7	.82	768	--	1.04	360	--	2.5	1170	--	9.5	130
10...	--	--	740	--	1.01	--	--	--	1170	--	11.0	--
17...	--	--	768	--	1.04	--	--	--	1190	--	10.0	--
24...	--	--	726	--	.99	--	--	--	1140	--	15.0	--
31...	.3	.19	708	--	.96	340	--	2.6	1110	--	13.0	140
APR.												
07...	--	--	712	--	.97	--	--	--	1120	--	13.0	--
14...	--	--	744	--	1.01	--	--	--	1160	--	17.0	--
21...	--	--	722	--	.98	--	--	--	1120	--	16.5	--
28...	--	--	720	--	.98	--	--	--	1130	--	19.0	--
MAY												
05...	.4	.11	706	690	.96	350	220	2.3	1120	8.1	18.5	130
12...	--	--	728	--	.99	--	--	--	1150	--	20.5	--
19...	--	--	720	--	.98	--	--	--	1130	--	20.0	--
27...	--	--	714	--	.97	--	--	--	1120	--	20.0	--
JUNE												
02...	.4	.15	712	707	.97	340	200	2.4	1110	8.1	22.0	140
09...	--	--	702	--	.95	--	--	--	1110	--	23.5	--
16...	--	--	702	--	.95	--	--	--	1110	--	23.0	--
23...	--	--	718	--	.98	--	--	--	1120	--	25.0	--
30...	.4	.18	712	695	.95	330	210	2.4	1110	7.7	23.5	140
JULY												
07...	--	--	706	--	.96	--	--	--	1110	--	24.5	--
14...	--	--	710	--	.97	--	--	--	1120	--	25.5	--
21...	--	--	702	--	.95	--	--	--	1100	--	26.5	--
28...	--	--	700	--	.95	--	--	--	1100	--	26.0	--
AUG.												
04...	.4	.05	702	699	.95	320	200	2.7	1100	8.2	26.0	130
11...	--	--	702	--	.95	--	--	--	1100	--	26.0	--
18...	--	--	696	--	.95	--	--	--	1090	--	25.5	--
25...	--	--	708	--	.96	--	--	--	1120	--	26.0	--
SEP.												
02...	.4	.22	710	723	.97	320	200	2.7	1120	7.7	26.0	140
08...	--	--	688	--	.94	--	--	--	1080	--	25.5	--
22...	--	--	844	--	1.15	--	--	--	1330	--	23.5	--
29...	--	--	736	--	1.00	--	--	--	1150	--	23.5	--

09428510. Colorado River Indian Reservation Poston wasteway near Poston, Ariz.

LOCATION.--Lat 33°59'58", long 114°26'41", in SW¼SE¼ sec.28, T.8 N., R.21 W., Yuma County, at gaging station 0.8 mi (1.3 km) upstream from mouth, 2.5 mi (4.0 km) west of Poston, and 14 mi (23 km) southwest of Parker.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
07...	0830	--	--	--	--	--	--	--	--	--	--	--
15...	0820	--	--	--	--	--	--	--	--	--	--	--
21...	0820	--	--	--	--	--	--	--	--	--	--	--
29...	0810	--	--	--	--	--	--	--	--	--	--	--
NOV.												
04...	0900	15	20	120	44	160	5.9	227	--	400	150	.4
11...	0755	--	--	--	--	--	--	--	--	--	--	--
18...	0740	--	--	--	--	--	--	--	--	--	--	--
25...	0800	--	--	--	--	--	--	--	--	--	--	--
DEC.												
02...	0820	12	10	95	35	140	5.5	202	--	370	120	.3
09...	0800	--	--	--	--	--	--	--	--	--	--	--
16...	0940	--	--	--	--	--	--	--	--	--	--	--
23...	0900	--	--	--	--	--	--	--	--	--	--	--
30...	0755	16	10	120	44	170	5.4	239	--	430	150	.4
JAN.												
06...	0800	--	--	--	--	--	--	--	--	--	--	--
20...	0755	--	--	--	--	--	--	--	--	--	--	--
27...	0800	--	--	--	--	--	--	--	--	--	--	--
FEB.												
03...	0800	14	10	120	39	170	6.2	233	--	440	150	.5
10...	1150	--	--	--	--	--	--	--	--	--	--	--
18...	0800	--	--	--	--	--	--	--	--	--	--	--
24...	0800	--	--	--	--	--	--	--	--	--	--	--
MAR.												
03...	0800	11	10	110	34	140	5.9	195	--	380	120	.4
10...	0755	--	--	--	--	--	--	--	--	--	--	--
17...	0800	--	--	--	--	--	--	--	--	--	--	--
24...	0800	--	--	--	--	--	--	--	--	--	--	--
31...	0800	13	10	120	41	160	5.5	234	--	430	140	.4
APR.												
07...	0805	--	--	--	--	--	--	--	--	--	--	--
14...	0800	--	--	--	--	--	--	--	--	--	--	--
21...	0805	--	--	--	--	--	--	--	--	--	--	--
28...	0800	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	0800	9.0	30	100	36	140	5.5	182	0	360	110	.4
12...	0800	--	--	--	--	--	--	--	--	--	--	--
19...	0800	--	--	--	--	--	--	--	--	--	--	--
27...	0800	--	--	--	--	--	--	--	--	--	--	--
JUNE												
02...	0845	14	10	130	45	170	5.7	244	0	480	150	.5
09...	0830	--	--	--	--	--	--	--	--	--	--	--
16...	0830	--	--	--	--	--	--	--	--	--	--	--
23...	0835	--	--	--	--	--	--	--	--	--	--	--
30...	1010	12	0	110	38	150	6.0	202	0	390	120	.4
JULY												
07...	0815	--	--	--	--	--	--	--	--	--	--	--
14...	0830	--	--	--	--	--	--	--	--	--	--	--
21...	0835	--	--	--	--	--	--	--	--	--	--	--
28...	0840	--	--	--	--	--	--	--	--	--	--	--
AUG.												
04...	0830	17	0	130	46	200	6.3	220	0	500	180	.4
11...	0840	--	--	--	--	--	--	--	--	--	--	--
18...	0830	--	--	--	--	--	--	--	--	--	--	--
SEP.												
02...	1240	18	0	140	47	200	5.5	228	0	530	170	.5
08...	0800	--	--	--	--	--	--	--	--	--	--	--
22...	0845	--	--	--	--	--	--	--	--	--	--	--
29...	0900	--	--	--	--	--	--	--	--	--	--	--

09428510. Colorado River Indian Reservation Poston wasteway near Poston, Ariz.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1965-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.											
07...	--	1070	--	1.46	--	--	--	1660	--	24.5	--
15...	--	1010	--	1.37	--	--	--	1560	--	23.0	--
21...	--	946	--	1.29	--	--	--	1470	--	20.5	--
29...	--	1190	--	1.62	--	--	--	1830	--	18.0	--
NOV.											
04...	.18	1040	--	1.41	480	--	3.2	1570	--	18.5	230
11...	--	1060	--	1.44	--	--	--	1640	--	15.5	--
18...	--	1190	--	1.62	--	--	--	1740	--	16.5	--
25...	--	980	--	1.33	--	--	--	1500	--	14.5	--
DEC.											
02...	.18	912	--	1.24	380	--	3.1	1410	--	14.5	160
09...	--	970	--	1.32	--	--	--	1530	--	15.0	--
16...	--	1120	--	1.52	--	--	--	1690	--	13.5	--
23...	--	946	--	1.29	--	--	--	1450	--	14.0	--
30...	.32	1050	--	1.43	480	--	3.4	1610	--	13.0	210
JAN.											
06...	--	1010	--	1.37	--	--	--	1600	--	11.0	--
20...	--	1320	--	1.80	--	--	--	1960	--	13.5	--
27...	--	1290	--	1.75	--	--	--	1890	--	11.5	--
FEB.											
03...	.30	1060	--	1.44	460	--	3.4	1610	--	11.0	210
10...	--	1050	--	1.43	--	--	--	1640	--	12.0	--
18...	--	1080	--	1.47	--	--	--	1610	--	11.0	--
24...	--	852	--	1.16	--	--	--	1330	--	11.0	--
MAR.											
03...	.52	880	--	1.20	410	--	3.0	1380	--	9.0	180
10...	--	768	--	1.04	--	--	--	1210	--	9.5	--
17...	--	816	--	1.11	--	--	--	1280	--	9.5	--
24...	--	844	--	1.15	--	--	--	1330	--	14.0	--
31...	.27	1010	--	1.37	470	--	3.2	1560	--	12.0	220
APR.											
07...	--	1080	--	1.47	--	--	--	1650	--	14.5	--
14...	--	1020	--	1.39	--	--	--	1560	--	15.5	--
21...	--	940	--	1.28	--	--	--	1460	--	16.0	--
28...	--	970	--	1.32	--	--	--	1480	--	17.0	--
MAY											
05...	.04	860	851	1.17	400	250	3.1	1340	7.9	17.0	160
12...	--	950	--	1.29	--	--	--	1450	--	18.5	--
19...	--	1070	--	1.46	--	--	--	1610	--	20.5	--
27...	--	1110	--	1.51	--	--	--	1650	--	21.0	--
JUNE											
02...	.05	1130	1120	1.54	510	310	3.3	1680	7.9	22.0	230
09...	--	872	--	1.19	--	--	--	1380	--	23.0	--
16...	--	1090	--	1.48	--	--	--	1700	--	23.5	--
23...	--	1040	--	1.41	--	--	--	1590	--	24.0	--
30...	.25	934	927	1.27	430	260	3.1	1420	7.7	24.5	190
JULY											
07...	--	968	--	1.32	--	--	--	1510	--	24.0	--
14...	--	1010	--	1.37	--	--	--	1510	--	24.5	--
21...	--	1130	--	1.54	--	--	--	1710	--	25.5	--
28...	--	1130	--	1.54	--	--	--	1670	--	26.0	--
AUG.											
04...	.00	1160	1190	1.58	510	330	3.8	1770	7.9	26.5	230
11...	--	1040	--	1.41	--	--	--	1580	--	26.5	--
18...	--	816	--	1.11	--	--	--	1270	--	25.0	--
SEP.											
02...	.20	1250	1220	1.70	540	360	3.7	1850	7.8	25.5	240
08...	--	950	--	1.29	--	--	--	1450	--	24.5	--
22...	--	1110	--	1.51	--	--	--	1660	--	22.0	--
29...	--	1020	--	1.39	--	--	--	1580	--	23.0	--

09429000. Palo Verde Canal near Blythe, Calif.

LOCATION.--Lat 33°43'55", long 114°30'40", in NW¼NE¼ sec.19, T.5 S., R.24 E., San Bernardino meridian, Riverside County, at canal intake structure on west side of Palo Verde Diversion Dam, 10 mi (16 km) northeast of Blythe and 44 mi (71 km) downstream from Headgate Rock Dam.

PERIOD OF RECORD.--January 1922 to December 1923, January 1925 to current year (prior to October 1950, monthly discharge only).

GAGE.--Recording gages above and below intakes to record head. Since May 18, 1964, recorder to show gate openings. Datum of gage is: Forebay gage, at mean sea level; tailrace gage, 274.13 ft (83.555 m) above mean sea level. Aug. 7, 1950, to Nov. 30, 1952, water-stage recorder on tailrace and auxiliary recorder 0.5 mi (0.8 km) downstream and Dec. 1, 1952, to Oct. 28, 1957, recording gage above and below former intake structure 0.2 mi (0.3 km) upstream, at different datums.

AVERAGE DISCHARGE.--25 years (1950-75), 1,203 ft^3/s (34.07 m^3/s), 871,600 acre-ft/yr (1,070 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 2,180 ft^3/s (61.7 m^3/s) Aug. 7, 1962; no flow at times.

REMARKS.--Records good. Daily diversions computed on basis of head on intake gates and gate openings. Records published herein represent flow diverted from Colorado River for irrigation of 91,778 acres (371 km^2) during the 1974 calendar year. Return flows to Colorado River are measured by 11 wasteways and drains extending throughout the project; 5 of these are equipped with water-stage recorder and Parshall flume, 3 are equipped with Sparling flowmeters. Return flows have not been subtracted; combined monthly return flows are given in table below. Records of chemical analyses for the current year are published on following pages.

REVISIONS (WATER YEARS).--WSP 1213: 1946-48.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	789	759	737	778	1150	1590	1860	1250	1560	1700	1570
2	1130	764	688	903	701	1020	1660	1840	1330	1630	1730	1540
3	1160	748	662	975	779	1090	1630	1790	1350	1620	1670	1690
4	1070	748	591	847	729	1230	1560	1630	1290	1460	1640	1650
5	1130	821	524	808	872	1370	1470	1750	1290	1630	1760	1660
6	982	864	526	915	872	1380	1380	1810	1250	1610	1850	1550
7	957	933	506	898	839	1450	1560	1760	1350	1650	1780	1490
8	942	986	503	898	776	1280	1540	1790	1430	1610	1730	1490
9	991	1020	628	823	771	1050	1450	1900	1320	1690	1680	1590
10	945	972	654	762	944	1120	1290	1830	1240	1770	1560	1470
11	1060	976	764	787	1000	1170	1060	1650	1270	1720	1680	1490
12	955	952	756	723	1120	1120	958	1880	1370	1820	1770	1510
13	870	887	801	825	1130	907	919	1880	1370	1700	1760	1550
14	970	971	818	829	1050	964	1120	1890	1380	1770	1840	1500
15	870	1010	658	884	997	1060	1200	1940	1240	1750	1720	1640
16	960	1010	673	873	983	908	1400	1890	1340	1720	1840	1530
17	1010	865	693	948	1180	982	1590	1850	1480	1780	1860	1320
18	898	817	827	948	1310	1210	1670	1670	1420	1840	1690	1420
19	746	813	944	851	1320	1380	1720	1730	1440	1790	1660	1420
20	717	793	1070	937	1390	1490	1670	1800	1440	1590	1680	1370
21	1040	860	954	905	1490	1490	1690	1710	1500	1700	1620	1300
22	973	804	886	878	1390	1360	1640	1730	1350	1730	1540	1460
23	630	762	906	853	1190	1180	1730	1640	1510	1750	1560	1510
24	663	744	538	852	1220	1390	1730	1620	1630	1850	1420	1410
25	570	717	363	822	1280	1540	1700	1650	1580	1820	1560	1450
26	542	724	651	820	1350	1610	1750	1600	1650	1820	1430	1460
27	555	701	662	923	1540	1630	1830	1600	1670	1630	1510	1460
28	617	645	749	957	1330	1580	1770	1660	1630	1480	1530	1220
29	671	765	704	1030	---	1520	1770	1730	1570	1630	1460	1260
30	731	785	864	1030	---	1410	1910	1590	1540	1590	1520	1380
31	817	---	830	892	---	1530	---	1430	---	1690	1580	---
TOTAL	27342	25246	22152	27133	30331	39571	45957	54100	42480	52400	51330	44360
MEAN	882	842	715	875	1083	1276	1532	1745	1416	1690	1656	1479
MAX	1170	1020	1070	1030	1540	1630	1910	1940	1670	1850	1860	1690
MIN	542	645	363	723	701	907	919	1430	1240	1460	1420	1220
AC-FT	54230	50080	43940	53820	60160	78490	91160	107300	84260	103900	101800	87990
(†)	41640	38460	35380	35240	32200	37110	37730	44370	40210	43570	45630	47240

CAL YR 1974 TOTAL 469911 MEAN 1287 MAX 1980 MIN 0 AC-FT 932100 † 473,700
WTR YR 1975 TOTAL 462402 MEAN 1267 MAX 1940 MIN 363 AC-FT 917200 † 478,800

† Return flows, in acre-feet, to Colorado River.

09429000. Palo Verde Canal near Blythe, Calif.

LOCATION.--Lat 33°43'55", long 114°30'40", in NW¼NE¼ sec.19, T.5 S., R.24 E., San Bernardino meridian, Riverside County, at gaging station at canal intake structure on west side of Palo Verde Dam, 10 mi (16 km) northeast of Blythe, and 44 mi (71 km) downstream from Headgate Rock Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
07...	0730	--	--	--	--	--	--	--	--	--	--	--
15...	0735	--	--	--	--	--	--	--	--	--	--	--
21...	0725	--	--	--	--	--	--	--	--	--	--	--
29...	0720	--	--	--	--	--	--	--	--	--	--	--
NOV.												
04...	0810	8130	9.6	20	88	29	110	5.8	158	--	290	94
11...	0700	--	--	--	--	--	--	--	--	--	--	--
18...	0655	--	--	--	--	--	--	--	--	--	--	--
25...	0710	--	--	--	--	--	--	--	--	--	--	--
DEC.												
02...	0730	695	9.3	20	88	29	110	5.3	161	--	310	96
09...	0710	--	--	--	--	--	--	--	--	--	--	--
16...	0730	--	--	--	--	--	--	--	--	--	--	--
23...	0700	--	--	--	--	--	--	--	--	--	--	--
30...	0710	984	9.7	10	90	32	110	5.1	165	--	320	110
JAN.												
06...	0710	--	--	--	--	--	--	--	--	--	--	--
20...	0710	--	--	--	--	--	--	--	--	--	--	--
27...	0710	--	--	--	--	--	--	--	--	--	--	--
FEB.												
03...	0720	752	8.8	20	85	32	110	4.9	158	--	320	96
10...	1410	--	--	--	--	--	--	--	--	--	--	--
18...	0705	--	--	--	--	--	--	--	--	--	--	--
24...	0710	--	--	--	--	--	--	--	--	--	--	--
MAR.												
03...	0710	1090	7.7	10	94	30	130	6.5	161	--	310	130
10...	0700	--	--	--	--	--	--	--	--	--	--	--
17...	0705	--	--	--	--	--	--	--	--	--	--	--
24...	0710	--	--	--	--	--	--	--	--	--	--	--
31...	1000	1530	7.8	10	86	31	100	5.1	165	--	300	91
APR.												
07...	--	--	--	--	--	--	--	--	--	--	--	--
14...	0710	--	--	--	--	--	--	--	--	--	--	--
21...	0710	--	--	--	--	--	--	--	--	--	--	--
28...	0710	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	0715	1770	6.8	20	87	28	110	5.2	163	0	300	90
12...	0710	--	--	--	--	--	--	--	--	--	--	--
19...	0710	--	--	--	--	--	--	--	--	--	--	--
27...	1345	--	--	--	--	--	--	--	--	--	--	--
JUNE												
02...	0745	1390	5.5	10	82	33	110	5.3	155	0	310	92
09...	0735	--	--	--	--	--	--	--	--	--	--	--
16...	0740	--	--	--	--	--	--	--	--	--	--	--
23...	0755	--	--	--	--	--	--	--	--	--	--	--
30...	0730	1500	7.3	10	69	31	110	5.3	155	0	300	90
JULY												
07...	0725	--	--	--	--	--	--	--	--	--	--	--
14...	0715	--	--	--	--	--	--	--	--	--	--	--
21...	0745	--	--	--	--	--	--	--	--	--	--	--
28...	0740	--	--	--	--	--	--	--	--	--	--	--
AUG.												
04...	0730	1720	8.2	0	83	30	110	5.8	149	0	300	92
18...	0735	--	--	--	--	--	--	--	--	--	--	--
25...	0745	--	--	--	--	--	--	--	--	--	--	--
SEP.												
02...	1345	1540	8.4	10	86	33	120	5.2	146	0	350	100
08...	0710	--	--	--	--	--	--	--	--	--	--	--
22...	0735	--	--	--	--	--	--	--	--	--	--	--
29...	0755	--	--	--	--	--	--	--	--	--	--	--

09429000. Palo Verde Canal near Blythe, Calif.--Continued

PERIOD OF RECORD.--Chemical analyses: March 1970 to current year.

REMARKS.--No flow Jan. 6-11.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
07...	--	--	808	--	1.10	--	--	--	1230	--	24.0	--
15...	--	--	842	--	1.15	--	--	--	1310	--	22.0	--
21...	--	--	774	--	1.05	--	--	--	1200	--	22.0	--
29...	--	--	738	--	1.00	--	--	--	1160	--	16.5	--
NOV.												
04...	.4	.25	744	--	1.01	340	--	2.6	1170	--	16.5	190
11...	--	--	762	--	1.04	--	--	--	1200	--	16.0	--
18...	--	--	744	--	1.01	--	--	--	1160	--	15.5	--
25...	--	--	764	--	1.04	--	--	--	1200	--	16.5	--
DEC.												
02...	.3	.18	738	--	1.00	340	--	2.6	1170	--	14.0	130
09...	--	--	748	--	1.02	--	--	--	1180	--	14.0	--
16...	--	--	786	--	1.07	--	--	--	1220	--	12.0	--
23...	--	--	744	--	1.01	--	--	--	1170	--	12.0	--
30...	.3	.37	750	--	1.02	360	--	2.5	1190	--	11.5	150
JAN.												
06...	--	--	784	--	1.07	--	--	--	1240	--	12.0	--
20...	--	--	754	--	1.03	--	--	--	1190	--	11.5	--
27...	--	--	734	--	1.00	--	--	--	1160	--	11.0	--
FEB.												
03...	.4	.49	732	--	1.00	340	--	2.6	1160	--	10.5	110
10...	--	--	728	--	.99	--	--	--	1150	--	14.0	--
18...	--	--	724	--	.98	--	--	--	1130	--	10.5	--
24...	--	--	954	--	1.30	--	--	--	1490	--	10.5	--
MAR.												
03...	.5	.63	802	--	1.09	360	--	3.0	1250	--	10.0	130
10...	--	--	762	--	1.04	--	--	--	1190	--	9.0	--
17...	--	--	820	--	1.12	--	--	--	1290	--	10.0	--
24...	--	--	790	--	1.07	--	--	--	1230	--	13.0	--
31...	.3	.20	710	704	.97	340	--	2.4	1120	--	12.0	140
APR.												
07...	--	--	712	--	.97	--	--	--	1120	--	12.0	--
14...	--	--	744	--	1.01	--	--	--	1160	--	15.5	--
21...	--	--	726	--	.99	--	--	--	1120	--	16.0	--
28...	--	--	732	--	1.00	--	--	--	1140	--	17.0	--
MAY												
05...	.4	.12	714	708	.97	330	200	2.6	1130	8.0	16.5	130
12...	--	--	720	--	.98	--	--	--	1130	--	18.5	--
19...	--	--	738	--	1.00	--	--	--	1160	--	20.0	--
27...	--	--	718	--	.98	--	--	--	1130	--	21.0	--
JUNE												
02...	.4	.08	714	715	.97	340	210	2.6	1120	8.2	22.0	140
09...	--	--	758	--	1.03	--	--	--	1180	--	22.0	--
16...	--	--	720	--	.98	--	--	--	1140	--	24.0	--
23...	--	--	748	--	1.02	--	--	--	1180	--	24.5	--
30...	.4	.13	710	690	.97	300	170	2.8	1120	8.0	24.0	150
JULY												
07...	--	--	700	--	.95	--	--	--	1100	--	24.5	--
14...	--	--	692	--	.94	--	--	--	1090	--	25.0	--
21...	--	--	724	--	.98	--	--	--	1130	--	25.5	--
28...	--	--	704	--	.96	--	--	--	1110	--	--	--
AUG.												
04...	.3	.36	708	704	.96	330	210	2.6	1110	8.0	26.0	130
18...	--	--	744	--	1.01	--	--	--	1160	--	26.0	--
25...	--	--	706	--	.96	--	--	--	1110	--	25.5	--
SEP.												
02...	.4	.11	742	776	1.01	350	230	2.8	1170	7.9	26.0	150
08...	--	--	706	--	.96	--	--	--	1110	--	24.5	--
22...	--	--	800	--	1.09	--	--	--	1270	--	23.5	--
29...	--	--	778	--	1.06	--	--	--	1210	--	23.5	--

09429010. Colorado River at Palo Verde Dam, Ariz.-Calif.

LOCATION.--Lat 33°43'55", long 114°30'40", in NW¼NE¼ sec.19, T.5 S., R.24 E., San Bernardino meridian, in California, Riverside County, on west side of Palo Verde Diversion Dam, 10 mi (16 km) northeast of Blythe, Calif., and 44 mi (71 km) downstream from Headgate Rock Dam.

DRAINAGE AREA.--182,200 mi^2 (471,900 km^2), approximately.

PERIOD OF RECORD.--April 1969 to current year. If records (available in files of Tucson District office) for the two Colorado River Indian Reservation drains entering below Palo Verde Dam are added to records for this station, records equivalent to those published 1956-69 as Colorado River below Palo Verde Dam can be obtained.

GAGE.--Two water-stage recorders, one above and one below dam, to record head on gates, and water-stage recorder to record gate opening. Supplementary water-stage recorder above dam operated by Geological Survey and supplementary water-stage recorder below dam operated by Palo Verde Irrigation District. Datum of gages is at mean sea level.

AVERAGE DISCHARGE.--6 years, 7,340 ft^3/s (207.9 m^3/s), 5,318,000 acre-ft/yr (6,560 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 12,200 ft^3/s (346 m^3/s) Apr. 26; minimum daily, 1,910 ft^3/s (54.1 m^3/s) Dec. 6. Period of record: Maximum daily discharge, 13,200 ft^3/s (374 m^3/s) Apr. 8, 1970, minimum daily, 1,060 ft^3/s (30.0 m^3/s) Nov. 24, 1972.

REMARKS.--Records excellent. Record does not include diversion to Palo Verde Canal. (See elsewhere in this report.) Daily discharge computed from relation between discharge, head, and gate openings. Many diversions above station for irrigation, municipal, and industrial uses. Flow regulated by Lake Mead, Lake Mohave, and Lake Havasu.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7720	2780	3240	5810	4630	7030	10900	9680	9010	9510	7540	10600
2	6820	4300	3120	5580	4200	8350	10500	9760	9410	8510	9360	10300
3	6210	4450	3090	4770	4700	8780	9980	10200	9560	7930	9950	9700
4	5790	4800	3720	4790	4410	8260	10300	10500	9360	8800	9750	9100
5	6990	4690	2710	3180	4430	7930	10800	11200	8580	10100	10600	8370
6	7950	4420	1910	4030	4180	7510	11600	10600	8240	11000	10400	9110
7	7790	3360	2220	4480	5070	6810	11000	9740	7730	11000	9240	9860
8	7410	3510	2760	4320	6030	7670	11000	9570	8150	10200	10800	7900
9	6350	4290	3300	4400	6130	9140	11400	9080	8420	9790	11500	7210
10	5690	4380	4500	4480	6180	8010	5210	9680	8590	9520	11300	7340
11	4890	4950	4640	5330	5950	7090	5970	10200	8670	9780	11200	7010
12	5520	4940	4240	5630	5820	5820	6650	10100	7600	10300	11500	6200
13	5560	4820	4540	5460	5780	5910	7180	10200	8020	10400	9990	8150
14	5630	4430	4340	5850	5970	6120	7500	10200	8590	10900	9980	8920
15	6490	3530	4750	5490	6630	6880	9360	9240	8930	10600	10100	9140
16	6010	4090	4820	4930	6810	7520	9830	9630	9110	10400	10300	8620
17	5620	4180	4770	4620	6490	7910	11300	9760	9090	10200	10400	8780
18	5100	4370	4770	4630	6620	8370	10300	9730	9190	10200	10400	7880
19	5830	4530	4120	4880	6800	8330	10800	9690	8600	10500	9070	7210
20	5780	4690	3820	4900	6830	9240	11000	9370	8020	10900	9240	8610
21	5620	3280	3710	5150	6620	9470	12000	9280	8310	10800	8810	8900
22	5190	3340	3300	4620	8030	12100	11500	8070	8350	10600	8580	9040
23	4220	3550	2020	4670	8430	11400	11600	8380	8480	10100	8810	9450
24	3100	3780	4970	5290	8990	11100	10500	8460	8740	9490	9480	8910
25	3280	3670	5660	4970	7200	11900	12000	9380	8680	9570	9760	8600
26	3850	2500	5700	6810	11300	10500	12200	8820	8400	11700	9650	8430
27	4040	2190	5700	6570	7050	9680	12100	8320	9310	10900	9000	8420
28	4140	2660	5590	6420	5300	10400	11500	7490	9870	10600	8800	9160
29	3600	2580	5190	6680	---	10200	10300	7730	10000	9980	9200	8940
30	2650	2970	3950	5150	---	10400	9770	7610	10000	9950	9900	7910
31	2710	---	6120	5270	---	11400	---	8740	---	8480	10200	---
TOTAL	167550	116030	127290	159160	176580	271230	306050	290380	263010	312720	304810	257770
MEAN	5405	3868	4106	5134	6306	8749	10200	9367	8767	10090	9833	8592
MAX	7950	4950	6120	6810	11300	12100	12200	11200	10000	11700	11500	10600
MIN	2650	2190	1910	3180	4180	5820	5210	7490	7600	7930	7540	6200
AC-FT	332300	230100	252500	315700	350200	538000	607100	576000	521700	620300	604600	511300

CAL YR 1974 TOTAL 2808330 MEAN 7694 MAX 12800 MIN 1240 AC-FT 5570000
WTR YR 1975 TOTAL 2752580 MEAN 7541 MAX 12200 MIN 1910 AC-FT 5460000

09429030. Colorado River Indian Reservation Levee drain near Parker, Ariz.

LOCATION.--Lat 33°45'25", long 114°29'48", in NE¼SW¼ sec.24, T.5 N., R.22 W., Yuma County, at bridge, 0.5 mi (0.8 km) above mouth, 0.5 mi (0.8 km) northeast of Palo Verde Dam, 9 mi (14 km) north of Ehrenberg, and 31 mi (50 km) southwest of Parker.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
07...	0750	--	--	--	--	--	--	--	--	--	--	--
15...	0755	--	--	--	--	--	--	--	--	--	--	--
21...	0745	--	--	--	--	--	--	--	--	--	--	--
29...	0735	--	--	--	--	--	--	--	--	--	--	--
NOV.												
04...	0820	30	23	20	150	51	200	5.7	255	--	470	210
11...	0710	--	--	--	--	--	--	--	--	--	--	--
18...	0705	--	--	--	--	--	--	--	--	--	--	--
25...	0720	--	--	--	--	--	--	--	--	--	--	--
DEC.												
02...	0745	29	22	50	150	45	200	5.2	256	--	480	210
09...	0735	--	--	--	--	--	--	--	--	--	--	--
16...	0755	--	--	--	--	--	--	--	--	--	--	--
23...	0725	--	--	--	--	--	--	--	--	--	--	--
30...	0735	33	22	20	150	45	200	5.3	247	--	480	200
JAN.												
06...	1045	--	--	--	--	--	--	--	--	--	--	--
20...	0725	--	--	--	--	--	--	--	--	--	--	--
27...	0730	--	--	--	--	--	--	--	--	--	--	--
FEB.												
03...	0735	30	20	30	140	45	190	4.8	240	--	500	190
10...	1345	--	--	--	--	--	--	--	--	--	--	--
18...	0730	--	--	--	--	--	--	--	--	--	--	--
24...	0730	--	--	--	--	--	--	--	--	--	--	--
MAR.												
03...	0720	36	21	20	150	46	190	6.3	245	--	470	190
10...	0720	--	--	--	--	--	--	--	--	--	--	--
17...	0730	--	--	--	--	--	--	--	--	--	--	--
24...	0730	--	--	--	--	--	--	--	--	--	--	--
31...	0725	46	19	10	140	49	190	5.1	247	--	480	190
APR.												
07...	0740	--	--	--	--	--	--	--	--	--	--	--
14...	0730	--	--	--	--	--	--	--	--	--	--	--
21...	0730	--	--	--	--	--	--	--	--	--	--	--
28...	0730	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	0730	52	18	60	150	50	190	5.1	241	0	510	200
12...	0730	--	--	--	--	--	--	--	--	--	--	--
19...	0730	--	--	--	--	--	--	--	--	--	--	--
27...	0730	--	--	--	--	--	--	--	--	--	--	--
JUNE												
02...	0810	50	20	10	150	51	200	5.0	236	0	510	190
09...	0755	--	--	--	--	--	--	--	--	--	--	--
16...	0800	--	--	--	--	--	--	--	--	--	--	--
23...	0810	--	--	--	--	--	--	--	--	--	--	--
30...	0755	42	21	20	150	48	200	5.0	248	0	510	190
JULY												
07...	0740	--	--	--	--	--	--	--	--	--	--	--
14...	0735	--	--	--	--	--	--	--	--	--	--	--
21...	0805	--	--	--	--	--	--	--	--	--	--	--
28...	0810	--	--	--	--	--	--	--	--	--	--	--
AUG.												
04...	0805	40	20	10	160	50	210	6.3	253	0	530	210
11...	0805	--	--	--	--	--	--	--	--	--	--	--
18...	0800	--	--	--	--	--	--	--	--	--	--	--
25...	0755	--	--	--	--	--	--	--	--	--	--	--
SEP.												
02...	1330	40	21	10	150	51	210	5.1	246	0	500	200
08...	0730	--	--	--	--	--	--	--	--	--	--	--
22...	0805	--	--	--	--	--	--	--	--	--	--	--
29...	0815	--	--	--	--	--	--	--	--	--	--	--

09429030. Colorado River Indian Reservation Levee drain near Parker, Ariz.--Continued

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

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
07...	--	--	1290	--	1.75	--	--	--	1940	--	24.0	--
15...	--	--	1330	--	1.81	--	--	--	1970	--	20.0	--
21...	--	--	1280	--	1.74	--	--	--	1940	--	20.5	--
29...	--	--	1280	--	1.74	--	--	--	1930	--	18.5	--
NOV.												
04...	.4	.08	1300	1240	1.77	580	370	3.6	1910	--	18.5	230
11...	--	--	1230	--	1.67	--	--	--	1890	--	15.5	--
18...	--	--	1260	--	1.71	--	--	--	1850	--	15.5	--
25...	--	--	1250	--	1.70	--	--	--	1870	--	15.5	--
DEC.												
02...	.3	.13	1290	1240	1.75	560	350	3.7	1900	--	15.0	200
09...	--	--	1330	--	1.81	--	--	--	2000	--	13.5	--
16...	--	--	1360	--	1.85	--	--	--	1990	--	14.5	--
23...	--	--	1270	--	1.73	--	--	--	1880	--	13.5	--
30...	.2	.15	1230	1230	1.67	560	360	3.7	1850	--	13.5	190
JAN.												
06...	--	--	1190	--	1.62	--	--	--	1830	--	13.0	--
20...	--	--	1220	--	1.66	--	--	--	1830	--	11.5	--
27...	--	--	1210	--	1.65	--	--	--	1810	--	14.5	--
FEB.												
03...	.4	.31	1170	1210	1.59	540	340	3.6	1800	--	11.5	190
10...	--	--	1150	--	1.56	--	--	--	1800	--	11.0	--
18...	--	--	1200	--	1.63	--	--	--	1810	--	11.0	--
24...	--	--	1240	--	1.69	--	--	--	1900	--	11.5	--
MAR.												
03...	.4	.58	1210	1200	1.65	560	360	3.5	1830	--	11.5	190
10...	--	--	1260	--	1.71	--	--	--	1910	--	10.5	--
17...	--	--	1220	--	1.66	--	--	--	1860	--	11.0	--
24...	--	--	1220	--	1.66	--	--	--	1860	--	14.5	--
31...	.3	.16	1210	1200	1.65	550	350	3.5	1840	--	13.0	190
APR.												
07...	--	--	1200	--	1.63	--	--	--	1850	--	16.0	--
14...	--	--	1220	--	1.66	--	--	--	1860	--	18.0	--
21...	--	--	1220	--	1.66	--	--	--	1850	--	18.0	--
28...	--	--	1260	--	1.71	--	--	--	1870	--	19.0	--
MAY												
05...	.4	.00	1250	1240	1.70	580	380	3.4	1890	7.8	17.0	200
12...	--	--	1310	--	1.78	--	--	--	1970	--	19.0	--
19...	--	--	1270	--	1.73	--	--	--	1860	--	20.0	--
27...	--	--	1230	--	1.67	--	--	--	1850	--	22.0	--
JUNE												
02...	.4	.01	1240	1240	1.69	580	390	3.6	1860	7.9	22.0	190
09...	--	--	1190	--	1.62	--	--	--	1820	--	22.0	--
16...	--	--	1210	--	1.65	--	--	--	1810	--	22.0	--
23...	--	--	1230	--	1.67	--	--	--	1820	--	23.5	--
30...	.4	.05	1270	1250	1.73	570	370	3.6	1870	7.8	24.0	200
JULY												
07...	--	--	1180	--	1.60	--	--	--	1800	--	24.0	--
14...	--	--	1210	--	1.65	--	--	--	1850	--	24.5	--
21...	--	--	1280	--	1.74	--	--	--	1880	--	25.0	--
28...	--	--	1240	--	1.69	--	--	--	1870	--	25.5	--
AUG.												
04...	.3	.01	1310	1310	1.78	610	400	3.7	1940	8.0	25.0	210
11...	--	--	1290	--	1.75	--	--	--	1920	--	25.0	--
18...	--	--	1310	--	1.78	--	--	--	1910	--	24.5	--
25...	--	--	1220	--	1.66	--	--	--	1810	--	25.5	--
SEP.												
02...	.4	.03	1300	1260	1.77	580	380	3.8	1930	8.0	26.5	200
08...	--	--	1280	--	1.74	--	--	--	1900	--	28.5	--
22...	--	--	1430	--	1.94	--	--	--	2130	--	21.5	--
29...	--	--	1300	--	1.77	--	--	--	1970	--	21.5	--

09429060. Colorado River Indian Reservation Lower Main drain near Parker, Ariz.

LOCATION.--Lat 33°45'40", long 114°29'05", in SW¼NW¼ sec.19, T.5 N., R.21 W., Yuma County, at gaging station, 2.8 mi (4.5 km) above outlet to Colorado River, and 31 mi (50 km) south of Parker.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
07...	0755	--	--	--	--	--	--	--	--	--	--	--
15...	0800	--	--	--	--	--	--	--	--	--	--	--
21...	0750	--	--	--	--	--	--	--	--	--	--	--
29...	0740	--	--	--	--	--	--	--	--	--	--	--
NOV.												
04...	0830	235	17	20	150	55	280	6.7	253	--	510	310
11...	0725	--	--	--	--	--	--	--	--	--	--	--
18...	0710	--	--	--	--	--	--	--	--	--	--	--
25...	0735	--	--	--	--	--	--	--	--	--	--	--
DEC.												
02...	0755	209	16	0	150	52	270	6.1	255	--	530	290
09...	0725	--	--	--	--	--	--	--	--	--	--	--
16...	0735	--	--	--	--	--	--	--	--	--	--	--
23...	0720	--	--	--	--	--	--	--	--	--	--	--
30...	0725	158	19	10	170	59	320	6.8	281	--	610	370
JAN.												
06...	0725	--	--	--	--	--	--	--	--	--	--	--
20...	0720	--	--	--	--	--	--	--	--	--	--	--
27...	0725	--	--	--	--	--	--	--	--	--	--	--
FEB.												
03...	0730	142	14	10	140	50	250	5.9	242	--	520	270
10...	1400	--	--	--	--	--	--	--	--	--	--	--
18...	0725	--	--	--	--	--	--	--	--	--	--	--
24...	0720	--	--	--	--	--	--	--	--	--	--	--
MAR.												
03...	0730	190	14	10	140	50	250	6.8	240	--	490	260
10...	0715	--	--	--	--	--	--	--	--	--	--	--
17...	0720	--	--	--	--	--	--	--	--	--	--	--
24...	0720	--	--	--	--	--	--	--	--	--	--	--
31...	0720	270	13	10	130	49	220	6.3	246	--	490	240
APR.												
07...	0730	--	--	--	--	--	--	--	--	--	--	--
14...	0720	--	--	--	--	--	--	--	--	--	--	--
21...	0720	--	--	--	--	--	--	--	--	--	--	--
28...	0720	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	0720	324	9.9	20	120	45	210	6.3	196	0	470	230
12...	0720	--	--	--	--	--	--	--	--	--	--	--
19...	0720	--	--	--	--	--	--	--	--	--	--	--
27...	0725	--	--	--	--	--	--	--	--	--	--	--
JUNE												
02...	0800	234	13	10	140	54	270	7.1	214	0	560	310
09...	0745	--	--	--	--	--	--	--	--	--	--	--
16...	0755	--	--	--	--	--	--	--	--	--	--	--
23...	0805	--	--	--	--	--	--	--	--	--	--	--
30...	0740	256	15	0	140	49	230	6.7	240	0	470	240
JULY												
07...	0745	--	--	--	--	--	--	--	--	--	--	--
14...	0725	--	--	--	--	--	--	--	--	--	--	--
21...	0800	--	--	--	--	--	--	--	--	--	--	--
28...	0805	--	--	--	--	--	--	--	--	--	--	--
AUG.												
04...	0755	267	15	0	140	50	240	7.3	238	0	530	250
11...	0800	--	--	--	--	--	--	--	--	--	--	--
18...	0750	--	--	--	--	--	--	--	--	--	--	--
25...	0800	--	--	--	--	--	--	--	--	--	--	--
SEP.												
02...	1320	245	16	20	140	51	270	6.1	252	0	560	280
08...	0735	--	--	--	--	--	--	--	--	--	--	--
22...	0800	--	--	--	--	--	--	--	--	--	--	--
29...	0825	--	--	--	--	--	--	--	--	--	--	--

09429060. Colorado River Indian Reservation Lower Main drain near Parker, Ariz.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
07...	--	--	1330	--	1.81	--	--	--	2060	--	--	--
15...	--	--	1830	--	2.49	--	--	--	2690	--	23.5	--
21...	--	--	1210	--	1.65	--	--	--	1870	--	21.0	--
29...	--	--	1470	--	2.00	--	--	--	2270	--	16.0	--
NOV.												
04...	.6	.32	1520	--	2.07	600	--	5.0	2270	--	18.0	360
11...	--	--	1450	--	1.97	--	--	--	2230	--	16.5	--
18...	--	--	1430	--	1.94	--	--	--	2140	--	15.0	--
25...	--	--	1460	--	1.99	--	--	--	2230	--	15.0	--
DEC.												
02...	.4	.38	1510	--	2.05	590	--	4.8	2260	--	14.5	310
09...	--	--	1400	--	1.90	--	--	--	2160	--	15.0	--
16...	--	--	1730	--	2.35	--	--	--	2570	--	14.0	--
23...	--	--	1550	--	2.11	--	--	--	2350	--	14.0	--
30...	.6	.52	1700	--	2.31	670	--	5.4	2580	--	13.5	400
JAN.												
06...	--	--	1930	--	2.62	--	--	--	2920	--	13.0	--
20...	--	--	2080	--	2.83	--	--	--	3080	--	13.0	--
27...	--	--	1900	--	2.58	--	--	--	2880	--	14.0	--
FEB.												
03...	.6	.88	1380	--	1.88	560	--	4.6	2100	--	12.0	310
10...	--	--	1470	--	2.00	--	--	--	2330	--	18.0	--
18...	--	--	1420	--	1.93	--	--	--	2130	--	12.0	--
24...	--	--	1620	--	2.20	--	--	--	2550	--	12.0	--
MAR.												
03...	.6	.93	1380	--	1.88	560	--	4.6	2110	--	12.0	310
10...	--	--	1590	--	2.16	--	--	--	2450	--	10.0	--
17...	--	--	1270	--	1.73	--	--	--	1950	--	9.5	--
24...	--	--	1340	--	1.82	--	--	--	2110	--	15.0	--
31...	.5	.45	1310	--	1.78	530	--	4.2	1980	--	13.5	240
APR.												
07...	--	--	1450	--	1.97	--	--	--	2170	--	14.0	--
14...	--	--	1300	--	1.77	--	--	--	1970	--	16.5	--
21...	--	--	1340	--	1.82	--	--	--	2060	--	17.0	--
28...	--	--	1170	--	1.59	--	--	--	1790	--	18.0	--
MAY												
05...	.5	.00	1230	1190	1.67	490	330	4.2	1870	7.6	18.5	240
12...	--	--	1640	--	2.23	--	--	--	2480	--	20.0	--
19...	--	--	1430	--	1.94	--	--	--	2220	--	21.0	--
27...	--	--	1370	--	1.86	--	--	--	2080	--	21.0	--
JUNE												
02...	.6	.01	1500	1460	2.04	570	390	4.9	2260	7.9	23.5	350
09...	--	--	1340	--	1.82	--	--	--	2060	--	23.0	--
16...	--	--	1250	--	1.70	--	--	--	1930	--	23.5	--
23...	--	--	1440	--	1.96	--	--	--	2210	--	24.0	--
30...	.5	.31	1310	1270	1.78	550	350	4.3	2010	7.8	24.5	280
JULY												
07...	--	--	1430	--	1.94	--	--	--	2130	--	25.0	--
14...	--	--	1230	--	1.67	--	--	--	1860	--	25.0	--
21...	--	--	1520	--	2.07	--	--	--	2290	--	26.0	--
28...	--	--	1530	--	2.08	--	--	--	2280	--	26.5	--
AUG.												
04...	.6	.19	1310	1350	1.78	560	360	4.4	1950	8.0	25.5	290
11...	--	--	1290	--	1.75	--	--	--	1970	--	26.0	--
18...	--	--	1360	--	1.85	--	--	--	2060	--	25.5	--
25...	--	--	1360	--	1.85	--	--	--	2080	--	26.0	--
SEP.												
02...	.7	.36	1490	1450	2.03	560	350	5.0	2200	8.0	27.0	340
08...	--	--	1340	--	1.82	--	--	--	2020	--	25.0	--
22...	--	--	1650	--	2.24	--	--	--	2440	--	23.0	--
29...	--	--	1910	--	2.46	--	--	--	2670	--	23.0	--

09429130. Palo Verde Irrigation District Olive Lake drain near Blythe, Calif.

LOCATION.--Lat 33°40'36", long 114°32'09", in SW¼SW¼ sec.1, T.6 S., R.23 E., San Bernardino meridian, Riverside County, 0.3 mi (0.5 km) upstream from mouth, and 5 mi (8 km) northeast of Blythe.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1970 (partial-record station), October 1970 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	0830	18	19	10	150	44	140	6.5	301	--	410	140
NOV.												
01...	0905	14	18	20	130	48	150	6.3	292	--	420	130
DEC.												
02...	0825	10	16	10	130	38	140	5.8	257	--	380	120
JAN.												
01...	1100	7.0	19	10	150	45	160	6.1	318	--	440	160
FEB.												
03...	1010	7.0	17	10	140	47	160	6.4	304	--	430	140
MAR.												
03...	0830	6.0	15	20	140	46	150	6.4	294	--	430	140
APR.												
02...	0900	8.0	15	10	140	42	140	7.2	290	--	410	130
MAY												
01...	0940	11	16	10	140	41	150	5.7	297	0	370	140
JUNE												
02...	0730	12	12	40	130	37	140	5.8	256	0	380	120
JULY												
01...	0945	12	14	0	110	38	140	5.7	244	0	380	120
SEP.												
02...	0840	12	14	20	120	38	140	6.2	236	0	390	110

09429130. Palo Verde Irrigation District Olive Lake drain near Blythe, Calif.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
01...	.3	1.9	1080	--	1.47	560	--	2.6	1650	--	20.0	100
NOV.												
01...	.4	.29	1110	--	1.51	520	--	2.9	1630	--	19.0	220
DEC.												
02...	.3	.28	1020	--	1.39	480	--	2.8	1500	--	14.0	190
JAN.												
01...	.3	.37	1090	--	1.48	560	--	2.9	1710	--	13.5	200
FEB.												
03...	.3	.28	1090	--	1.48	540	--	3.0	1640	--	13.0	170
MAR.												
03...	.4	.19	1080	--	1.47	540	--	2.8	1600	--	14.5	190
APR.												
02...	.3	.20	1110	--	1.51	520	--	2.7	1590	--	14.5	230
MAY												
01...	.4	.25	1090	1010	1.48	520	280	2.9	1610	7.7	19.5	200
JUNE												
02...	.3	.16	1000	952	1.36	480	270	2.8	1460	7.5	22.0	140
JULY												
01...	.4	.14	946	929	1.29	430	230	2.9	1450	7.8	22.5	160
SEP.												
02...	.4	.18	988	936	1.34	460	260	2.9	1340	7.6	25.0	180

09429188. Colorado River at Taylor Ferry, near Blythe, Calif.

LOCATION.--Lat 33°26'03", long 114°37'35", in SE¼ sec.36, T.8 S., R.22 E., San Bernardino meridian, Riverside County, at gaging station, at site of old Taylor Ferry, 2.5 mi (4.0 km) upstream from Cibola Bridge, 12 mi (19 km) south of Blythe, Calif., 28 mi (45 km) downstream from Palo Verde Dam, and 62 mi (100 km) upstream from Imperial Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
07...	1135	--	--	--	--	--	--	--	--	--	--	--
15...	1120	--	--	--	--	--	--	--	--	--	--	--
21...	1120	--	--	--	--	--	--	--	--	--	--	--
29...	1200	--	--	--	--	--	--	--	--	--	--	--
NOV.												
04...	1125	4960	10	20	91	33	120	5.4	169	--	310	110
11...	1050	--	--	--	--	--	--	--	--	--	--	--
18...	1055	--	--	--	--	--	--	--	--	--	--	--
25...	1100	--	--	--	--	--	--	--	--	--	--	--
DEC.												
02...	1030	3870	10	10	95	31	130	5.3	175	--	330	110
09...	1025	--	--	--	--	--	--	--	--	--	--	--
16...	1035	--	--	--	--	--	--	--	--	--	--	--
23...	1100	--	--	--	--	--	--	--	--	--	--	--
30...	1100	4480	9.9	10	91	32	120	5.2	167	--	310	110
JAN.												
06...	1140	--	--	--	--	--	--	--	--	--	--	--
20...	1025	--	--	--	--	--	--	--	--	--	--	--
27...	1120	--	--	--	--	--	--	--	--	--	--	--
FEB.												
03...	1150	5950	8.6	10	93	34	120	5.0	173	--	340	110
10...	0730	--	--	--	--	--	--	--	--	--	--	--
18...	1030	--	--	--	--	--	--	--	--	--	--	--
24...	1055	--	--	--	--	--	--	--	--	--	--	--
MAR.												
03...	1100	8800	8.4	30	97	31	120	6.5	166	--	320	120
10...	1110	--	--	--	--	--	--	--	--	--	--	--
17...	1120	--	--	--	--	--	--	--	--	--	--	--
24...	1115	--	--	--	--	--	--	--	--	--	--	--
31...	1100	10800	8.2	10	89	32	110	5.2	170	--	310	97
APR.												
07...	1025	--	--	--	--	--	--	--	--	--	--	--
14...	1110	--	--	--	--	--	--	--	--	--	--	--
21...	1110	--	--	--	--	--	--	--	--	--	--	--
28...	1100	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	1115	10660	7.4	20	91	33	120	5.4	170	0	320	100
12...	1120	--	--	--	--	--	--	--	--	--	--	--
19...	1110	--	--	--	--	--	--	--	--	--	--	--
27...	1210	--	--	--	--	--	--	--	--	--	--	--
JUNE												
02...	1210	8250	6.8	10	91	34	120	5.4	169	0	330	110
09...	1145	--	--	--	--	--	--	--	--	--	--	--
16...	1200	--	--	--	--	--	--	--	--	--	--	--
23...	1200	--	--	--	--	--	--	--	--	--	--	--
30...	1100	9730	9.7	10	91	33	120	5.2	164	0	320	100
JULY												
07...	1100	--	--	--	--	--	--	--	--	--	--	--
14...	1210	--	--	--	--	--	--	--	--	--	--	--
21...	1200	--	--	--	--	--	--	--	--	--	--	--
28...	1120	--	--	--	--	--	--	--	--	--	--	--
AUG.												
04...	1300	10510	8.0	0	89	30	110	6.1	156	0	310	98
11...	1220	--	--	--	--	--	--	--	--	--	--	--
18...	1145	--	--	--	--	--	--	--	--	--	--	--
25...	1145	--	--	--	--	--	--	--	--	--	--	--
SEP.												
02...	0745	12290	8.8	10	84	34	120	5.5	155	0	320	100
08...	1120	--	--	--	--	--	--	--	--	--	--	--
22...	1150	--	--	--	--	--	--	--	--	--	--	--
29...	1210	--	--	--	--	--	--	--	--	--	--	--

09429188. Colorado River at Taylor Ferry, near Blythe, Calif.--Continued

DRAINAGE AREA.--183,700 mi^2 (475,800 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: April 1970 to current year.

REMARKS.--Gaging station operated by Bureau of Reclamation.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
07...	--	--	744	--	1.01	--	--	--	1180	--	23.5	--
15...	--	--	764	--	1.04	--	--	--	1210	--	22.0	--
21...	--	--	782	--	1.06	--	--	--	1230	--	23.0	--
29...	--	--	820	--	1.12	--	--	--	1290	--	18.5	--
NOV.												
04...	.4	.18	780	--	1.06	360	--	2.7	1230	--	18.0	170
11...	--	--	780	--	1.06	--	--	--	1230	--	16.5	--
18...	--	--	798	--	1.09	--	--	--	1240	--	18.0	--
25...	--	--	796	--	1.08	--	--	--	1250	--	15.0	--
DEC.												
02...	.3	.19	824	--	1.12	360	--	3.0	1280	--	13.5	150
09...	--	--	828	--	1.13	--	--	--	1300	--	13.5	--
16...	--	--	794	--	1.08	--	--	--	1240	--	13.5	--
23...	--	--	828	--	1.13	--	--	--	1300	--	13.5	--
30...	.3	.49	764	--	1.04	360	--	2.8	1220	--	12.0	150
JAN.												
06...	--	--	822	--	1.12	--	--	--	1300	--	11.5	--
20...	--	--	792	--	1.08	--	--	--	1250	--	10.5	--
27...	--	--	764	--	1.04	--	--	--	1210	--	12.0	--
FEB.												
03...	.4	.16	784	--	1.07	370	--	2.7	1240	--	10.5	130
10...	--	--	758	--	1.03	--	--	--	1190	--	11.5	--
18...	--	--	792	--	1.08	--	--	--	1230	--	10.5	--
24...	--	--	846	--	1.15	--	--	--	1320	--	10.5	--
MAR.												
03...	.2	.93	796	--	1.08	370	--	2.7	1230	--	9.0	140
10...	--	--	784	--	1.07	--	--	--	1230	--	9.5	--
17...	--	--	832	--	1.13	--	--	--	1320	--	8.5	--
24...	--	--	766	--	1.04	--	--	--	1190	--	13.0	--
31...	.3	.26	738	--	1.00	350	--	2.5	1160	--	11.5	170
APR.												
07...	--	--	750	--	1.02	--	--	--	1180	--	13.5	--
14...	--	--	824	--	1.12	--	--	--	1270	--	15.5	--
21...	--	--	752	--	1.02	--	--	--	1180	--	15.5	--
28...	--	--	778	--	1.06	--	--	--	1190	--	16.0	--
MAY												
05...	.4	.13	758	762	1.03	360	220	2.7	1190	8.0	16.5	130
12...	--	--	764	--	1.04	--	--	--	1200	--	20.5	--
19...	--	--	800	--	1.09	--	--	--	1220	--	21.0	--
27...	--	--	764	--	1.04	--	--	--	1200	--	21.5	--
JUNE												
02...	.4	.15	780	782	1.06	370	230	2.7	1220	8.2	23.5	160
09...	--	--	788	--	1.07	--	--	--	1200	--	24.0	--
16...	--	--	774	--	1.05	--	--	--	1200	--	23.5	--
23...	--	--	788	--	1.07	--	--	--	1230	--	25.5	--
30...	.4	.25	754	761	1.03	360	230	2.7	1180	8.0	24.0	150
JULY												
07...	--	--	754	--	1.03	--	--	--	1170	--	24.0	--
14...	--	--	742	--	1.01	--	--	--	1160	--	25.5	--
21...	--	--	742	--	1.01	--	--	--	1170	--	26.0	--
28...	--	--	732	--	1.00	--	--	--	1160	--	27.0	--
AUG.												
04...	.3	.37	732	731	1.00	350	220	2.6	1160	8.2	26.5	140
11...	--	--	728	--	.99	--	--	--	1150	--	26.5	--
18...	--	--	750	--	1.02	--	--	--	1170	--	26.0	--
25...	--	--	730	--	.99	--	--	--	1160	--	25.5	--
SEP.												
02...	.4	.11	766	750	1.04	350	220	2.8	1210	7.8	26.5	170
08...	--	--	748	--	1.02	--	--	--	1170	--	24.5	--
22...	--	--	808	--	1.10	--	--	--	1280	--	24.0	--
29...	--	--	800	--	1.09	--	--	--	1270	--	22.0	--

09429220. Palo Verde Irrigation District Outfall drain near Palo Verde, Calif.

LOCATION.--Lat 33°21'41", long 114°43'20", in SE¼SE¼ sec.26, T.9 S., R.21 E., San Bernardino meridian, Imperial County, at gaging station, at State Highway 78 bridge, 3.3 mi (5.3 km) upstream from mouth, and 5 mi (8 km) south of Palo Verde.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
07...	1310	--	--	--	--	--	--	--	--	--	--	--
15...	1250	--	--	--	--	--	--	--	--	--	--	--
21...	1245	--	--	--	--	--	--	--	--	--	--	--
29...	1300	--	--	--	--	--	--	--	--	--	--	--
NOV.												
04...	1300	507	22	20	150	50	400	7.2	328	--	570	410
11...	1215	--	--	--	--	--	--	--	--	--	--	--
18...	1245	--	--	--	--	--	--	--	--	--	--	--
25...	1245	--	--	--	--	--	--	--	--	--	--	--
DEC.												
02...	1245	542	20	10	130	41	340	6.2	306	--	510	340
09...	1230	--	--	--	--	--	--	--	--	--	--	--
16...	1315	--	--	--	--	--	--	--	--	--	--	--
23...	1300	--	--	--	--	--	--	--	--	--	--	--
30...	1300	524	21	10	140	46	410	6.6	315	--	570	420
JAN.												
06...	1320	--	--	--	--	--	--	--	--	--	--	--
20...	1300	--	--	--	--	--	--	--	--	--	--	--
27...	1310	--	--	--	--	--	--	--	--	--	--	--
FEB.												
03...	1320	472	18	10	130	44	430	6.2	306	--	590	430
10...	0800	--	--	--	--	--	--	--	--	--	--	--
18...	1310	--	--	--	--	--	--	--	--	--	--	--
24...	1300	--	--	--	--	--	--	--	--	--	--	--
MAR.												
03...	1310	551	18	10	140	42	370	7.1	300	--	550	360
10...	1330	--	--	--	--	--	--	--	--	--	--	--
17...	1315	--	--	--	--	--	--	--	--	--	--	--
24...	1320	--	--	--	--	--	--	--	--	--	--	--
31...	1330	584	18	10	130	44	370	6.7	300	--	560	380
APR.												
07...	1135	--	--	--	--	--	--	--	--	--	--	--
14...	1315	--	--	--	--	--	--	--	--	--	--	--
21...	1315	--	--	--	--	--	--	--	--	--	--	--
28...	1310	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	1320	640	17	30	120	43	400	6.8	267	0	580	390
12...	1330	--	--	--	--	--	--	--	--	--	--	--
19...	1300	--	--	--	--	--	--	--	--	--	--	--
27...	1100	--	--	--	--	--	--	--	--	--	--	--
JUNE												
02...	1400	675	18	10	120	42	380	6.8	268	0	570	370
09...	1330	--	--	--	--	--	--	--	--	--	--	--
16...	1345	--	--	--	--	--	--	--	--	--	--	--
23...	1400	--	--	--	--	--	--	--	--	--	--	--
30...	1300	626	21	0	120	46	410	7.2	302	0	590	370
JULY												
07...	1315	--	--	--	--	--	--	--	--	--	--	--
14...	1340	--	--	--	--	--	--	--	--	--	--	--
21...	1345	--	--	--	--	--	--	--	--	--	--	--
28...	1240	--	--	--	--	--	--	--	--	--	--	--
AUG.												
04...	1410	680	20	0	130	46	390	7.6	284	0	570	380
11...	1400	--	--	--	--	--	--	--	--	--	--	--
18...	1400	--	--	--	--	--	--	--	--	--	--	--
25...	1345	--	--	--	--	--	--	--	--	--	--	--
SEP.												
02...	0910	668	21	0	140	46	410	6.5	315	0	620	390
08...	1320	--	--	--	--	--	--	--	--	--	--	--
15...	1330	--	--	--	--	--	--	--	--	--	--	--
29...	1350	--	--	--	--	--	--	--	--	--	--	--

09429220. Palo Verde Irrigation District Outfall drain near Palo Verde, Calif.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
07...	--	--	1550	--	2.11	--	--	--	2440	--	25.5	--
15...	--	--	1630	--	2.22	--	--	--	2590	--	24.0	--
21...	--	--	1690	--	2.30	--	--	--	2680	--	23.5	--
29...	--	--	1690	--	2.30	--	--	--	2680	--	19.0	--
NOV.												
04...	1.2	.54	1820	1780	2.48	580	310	7.2	2750	--	19.5	570
11...	--	--	1700	--	2.31	--	--	--	2690	--	18.0	--
18...	--	--	1660	--	2.26	--	--	--	2610	--	18.5	--
25...	--	--	1550	--	2.11	--	--	--	2420	--	16.0	--
DEC.												
02...	.9	.43	1610	--	2.19	490	--	6.7	2480	--	15.0	440
09...	--	--	1840	--	2.50	--	--	--	2880	--	15.5	--
16...	--	--	1620	--	2.20	--	--	--	2540	--	14.5	--
23...	--	--	1850	--	2.52	--	--	--	2870	--	15.0	--
30...	1.0	.59	1780	--	2.42	540	--	7.7	2770	--	14.5	540
JAN.												
06...	--	--	1670	--	2.27	--	--	--	2630	--	13.5	--
20...	--	--	1730	--	2.35	--	--	--	2660	--	14.0	--
27...	--	--	1960	--	2.67	--	--	--	2960	--	14.5	--
FEB.												
03...	1.1	.53	1790	--	2.43	510	250	8.3	2840	--	13.0	610
10...	--	--	1730	--	2.35	--	--	--	2740	--	15.0	--
18...	--	--	1820	--	2.48	--	--	--	2900	--	14.0	--
24...	--	--	1750	--	2.38	--	--	--	2750	--	14.0	--
MAR.												
03...	1.1	1.2	1680	--	2.28	520	280	7.0	2580	--	14.5	400
10...	--	--	1710	--	2.33	--	--	--	2660	--	13.0	--
17...	--	--	1820	--	2.48	--	--	--	2850	--	12.0	--
24...	--	--	1600	--	2.18	--	--	--	2520	--	15.5	--
31...	1.0	.65	1690	--	2.30	510	--	7.2	2640	--	13.5	570
APR.												
07...	--	--	1700	--	2.31	--	--	--	2680	--	17.0	--
14...	--	--	1820	--	2.48	--	--	--	2870	--	19.0	--
21...	--	--	1780	--	2.42	--	--	--	2820	--	19.0	--
28...	--	--	1790	--	2.43	--	--	--	2750	--	20.5	--
MAY												
05...	1.2	.04	1750	1690	2.38	480	260	8.0	2720	7.8	20.5	540
12...	--	--	1770	--	2.41	--	--	--	2760	--	23.5	--
19...	--	--	1720	--	2.34	--	--	--	2710	--	23.5	--
27...	--	--	1660	--	2.26	--	--	--	2580	--	23.5	--
JUNE												
02...	1.2	.01	1690	1640	2.30	470	250	7.6	2580	7.8	26.5	560
09...	--	--	1560	--	2.12	--	--	--	2480	--	26.5	--
16...	--	--	1690	--	2.30	--	--	--	2670	--	26.0	--
23...	--	--	1550	--	2.11	--	--	--	2430	--	26.0	--
30...	1.2	.29	1680	1720	2.28	490	240	8.1	2650	7.8	26.5	570
JULY												
07...	--	--	1680	--	2.28	--	--	--	2620	--	27.0	--
14...	--	--	1700	--	2.31	--	--	--	2640	--	27.0	--
21...	--	--	1700	--	2.31	--	--	--	2620	--	28.0	--
28...	--	--	1690	--	2.30	--	--	--	2610	--	28.5	--
AUG.												
04...	1.0	.35	1680	1690	2.28	510	280	7.5	2650	8.0	28.5	550
11...	--	--	1580	--	2.15	--	--	--	2460	--	28.5	--
18...	--	--	1690	--	2.30	--	--	--	2620	--	28.5	--
25...	--	--	1660	--	2.26	--	--	--	2620	--	28.0	--
SEP.												
02...	1.3	.65	1750	1790	2.38	540	280	7.7	2740	8.0	28.0	550
08...	--	--	1700	--	2.31	--	--	--	2620	--	26.5	--
15...	--	--	1640	--	2.23	--	--	--	2550	--	26.0	--
29...	--	--	1550	--	2.11	--	--	--	2390	--	25.0	--

09429225. Palo Verde Irrigation District Anderson drain near Palo Verde, Calif.

LOCATION.--Lat 33°21'19", long 114°43'00", in SW¼ sec.36, T.9 S., R.21 E., San Bernardino meridian, Imperial County, 0.1 mi (0.2 km) upstream from pump into Outfall drain, and 5.5 mi (8.8 km) south of Palo Verde.

PERIOD OF RECORD.--Chemical analyses: Water year 1969 (partial-record station), October 1969 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1966-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
02...	0815	2.2	30	20	120	58	670	9.4	563	--	790	480
NOV.												
01...	1725	1.6	25	50	61	28	570	5.7	532	--	590	320
DEC.												
02...	1315	1.2	23	140	42	21	630	3.6	554	--	600	350
JAN.												
01...	1115	.00	24	130	47	20	620	4.7	537	--	620	370
FEB.												
03...	1235	1.2	23	150	41	22	680	4.7	554	--	670	370
MAR.												
03...	1210	1.2	22	240	63	29	510	8.7	558	--	580	260
APR.												
01...	1000	8.0	22	210	54	23	550	5.7	519	--	620	290
MAY												
01...	1100	1.6	19	10	110	43	380	5.7	452	0	520	250
JUNE												
02...	1500	1.6	23	400	42	20	630	3.6	541	0	660	310
JULY												
01...	1115	1.2	25	260	42	21	650	3.7	549	0	670	350
AUG.												
01...	1400	1.6	23	160	62	27	570	6.2	529	0	620	300
SEP.												
02...	1500	1.1	23	10	43	21	570	3.9	502	0	610	290

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.												
02...	1.1	.23	2450	--	3.33	540	--	13	3710	--	25.0	840
NOV.												
01...	2.1	.06	1950	--	2.65	270	--	15	3020	--	18.0	970
DEC.												
02...	2.6	2.2	2000	1960	2.72	190	0	20	3070	--	18.5	1100
JAN.												
01...	2.7	.43	2000	1980	2.72	200	--	19	3060	--	15.0	1000
FEB.												
03...	2.9	.08	2060	--	2.80	190	--	21	3180	--	14.0	1300
MAR.												
03...	1.6	.05	1750	--	2.38	280	--	13	2720	--	18.5	860
APR.												
01...	1.0	.04	1840	--	2.50	230	--	16	2870	--	16.0	990
MAY												
01...	1.2	.05	1670	1550	2.27	450	79	7.8	2490	7.7	19.0	580
JUNE												
02...	2.4	.07	1970	1960	2.68	190	0	20	3060	8.0	25.0	1100
JULY												
01...	2.7	.04	1990	2040	2.71	190	0	20	3100	8.0	24.0	1100
AUG.												
01...	2.1	.11	1880	1870	2.56	270	0	15	2910	7.9	27.0	920
SEP.												
02...	2.3	.06	1860	1810	2.53	190	0	18	2800	8.1	27.0	930

09429300. Colorado River below Cibola Valley, Ariz.

LOCATION.--Lat 33°13'16", long 114°40'18", in NE¼SW¼ sec.30, T.2 S., R.23 W., Gila and Salt River meridian, Yuma County, on left bank 6.7 mi (10.8 km) south of Cibola, 38 mi (61 km) upstream from Imperial Dam, 39.7 mi (63.9 km) downstream from Ehrenberg, Ariz., 52.1 mi (83.2 km) downstream from Palo Verde diversion dam near Blythe, Calif., and at mile 620 (998 km) on Colorado River Profile Survey map.

DRAINAGE AREA.--183,800 mi^2 (476,000 km^2), approximately.

PERIOD OF RECORD.--April 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 200.00 ft (60.960 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 8,889 ft^3/s (251.7 m^3/s), 6,440,000 acre-ft/yr (7,940 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 13,200 ft^3/s (374 m^3/s) Apr. 28; maximum gage height, 9.96 ft (3.036 m) Apr. 28, Aug. 11; minimum daily discharge, 3,140 ft^3/s (88.9 m^3/s) Dec. 7; minimum gage height, 4.74 ft (1.445 m) Dec. 24.
Period of record: Maximum discharge, 21,800 ft^3/s (617 m^3/s) Apr. 8, 1958; maximum gage height, 13.60 ft (4.145 m) May 6, 1958; minimum daily discharge, 1,900 ft^3/s (53.8 m^3/s) Jan. 18, 1974; minimum gage height, about 4.1 ft (1.25 m), Jan. 18, 1974, based on minimum observed gage height of 4.25 ft (1.295 m) Jan. 14, 1974.

REMARKS.--Records excellent. Flow regulated by Lake Mead, Lake Mohave, and by Lake Havasu. Many diversions above station for irrigation, municipal, and industrial uses. See sta 09429000 for return flows from Palo Verde Irrigation District, which enter between sta 09429010 and this station. A portion of the return flows from Colorado River Indian Reservation also enters between these two stations.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,140	3,590	3,690	6,660	6,080	6,800	12,000	10,700	9,580	10,700	9,780	11,000
2	8,410	3,690	4,010	6,650	5,400	7,950	11,700	10,500	9,950	10,300	9,220	11,400
3	7,710	4,890	3,880	6,310	5,020	8,940	11,400	10,600	10,200	9,490	10,400	11,100
4	7,390	5,100	3,910	5,550	5,230	9,350	11,000	10,900	10,400	9,070	10,900	10,600
5	6,890	5,350	4,410	5,520	5,060	8,920	11,100	11,200	10,100	9,870	10,900	10,000
6	7,930	5,310	3,840	4,220	4,960	8,660	11,600	11,800	9,370	10,700	11,500	9,560
7	8,760	5,040	3,140	4,800	4,870	8,110	12,200	11,300	9,170	11,500	11,400	10,100
8	8,710	4,250	3,170	5,180	5,610	7,750	11,800	10,700	8,680	11,600	10,400	10,600
9	8,250	4,270	3,460	4,990	6,540	8,620	11,900	10,400	9,030	10,900	11,600	8,870
10	7,350	4,870	4,150	5,010	6,710	9,630	11,800	9,920	9,260	10,500	12,300	8,430
11	6,750	5,040	4,950	5,120	6,840	8,870	7,480	10,600	9,440	10,100	12,200	8,000
12	6,260	5,460	5,460	5,790	6,520	7,860	7,570	11,100	9,280	10,500	11,900	7,730
13	6,580	5,590	5,050	6,150	6,370	6,990	8,000	10,700	8,510	10,900	12,300	7,350
14	6,600	5,610	5,290	5,960	6,390	6,800	8,320	11,100	8,770	11,100	11,100	8,760
15	6,620	5,210	5,160	6,280	6,560	7,220	8,710	10,900	9,350	11,500	10,900	9,470
16	7,280	4,520	5,570	5,950	7,170	7,820	9,980	10,100	9,640	11,300	10,900	9,770
17	6,910	4,960	5,670	5,580	7,260	8,160	10,400	10,400	9,770	11,000	11,100	9,350
18	6,540	5,100	5,570	5,120	6,970	8,430	11,500	10,600	9,760	10,900	11,400	9,260
19	6,220	5,230	5,500	5,370	7,080	8,900	11,000	10,800	9,740	11,100	11,200	8,410
20	6,780	5,370	4,900	5,540	7,280	9,240	11,100	10,500	9,130	11,300	10,300	8,020
21	6,750	5,460	4,620	5,480	7,280	9,740	11,500	10,200	8,810	11,800	10,200	9,260
22	6,930	4,320	4,470	5,630	7,330	10,100	12,200	10,000	9,070	11,800	9,840	9,420
23	6,580	4,220	4,050	5,210	8,300	12,100	12,000	9,150	9,110	11,500	9,540	9,470
24	5,380	4,330	3,240	5,210	8,870	12,000	12,100	9,360	9,170	10,900	9,860	9,810
25	4,500	4,550	5,390	5,670	9,120	11,800	11,300	9,480	9,360	10,500	10,400	9,470
26	4,500	4,490	6,300	5,740	8,020	12,300	12,300	10,200	9,320	10,800	10,700	9,080
27	4,760	3,600	6,360	7,170	11,000	11,300	12,700	9,630	9,110	12,500	10,500	9,010
28	4,920	3,350	6,470	7,030	7,980	10,600	12,600	9,260	9,940	12,000	9,910	9,100
29	5,000	3,530	6,430	6,910	------	11,000	12,100	8,660	10,500	11,700	9,700	9,630
30	4,580	3,470	6,000	7,120	------	11,000	11,200	8,710	10,700	11,300	10,100	9,190
31	4,100	------	4,880	5,960	------	11,300	------	8,780	------	10,700	10,700	------
TOTAL	204,080	139,810	148,990	178,880	191,820	288,260	330,560	318,250	284,220	339,830	333,150	281,220
MEAN	6,583	4,660	4,806	5,770	6,851	9,299	11,020	10,270	9,474	10,960	10,750	9,374
MAX	8,760	5,610	6,470	7,170	11,000	12,300	12,700	11,800	10,700	12,500	12,300	11,400
MIN	4,100	3,350	3,140	4,220	4,870	6,800	7,480	8,660	8,510	9,070	9,220	7,350
AC-FT	404,800	277,300	295,500	354,800	380,500	571,800	655,700	631,200	563,800	674,100	660,800	557,800

CAL YR 1974 TOTAL 3,118,420 MEAN 8,544 MAX 13,400 MIN 1,900 AC-FT 6,185,000
WTR YR 1975 TOTAL 3,039,070 MEAN 8,326 MAX 12,700 MIN 3,140 AC-FT 6,028,000

09429300. Colorado River below Cibola Valley, Ariz.

LOCATION.--Lat 33°13'16", long 114°40'18", in NE¼SW¼ sec.30, T.2 S., R.23 W., Yuma County, at gaging station on left bank 6.7 mi (10.8 km) south of Cibola, 38 mi (61 km) upstream from Imperial Dam, and 52.1 mi (83.2 km) downstream from Palo Verde Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
07...	1230	--	--	--	--	--	--	--	--	--	--	--
15...	1200	--	--	--	--	--	--	--	--	--	--	--
21...	1200	--	--	--	--	--	--	--	--	--	--	--
29...	1230	--	--	--	--	--	--	--	--	--	--	--
NOV.												
04...	1210	5380	12	10	100	21	180	6.2	191	--	360	160
11...	1135	--	--	--	--	--	--	--	--	--	--	--
18...	1150	--	--	--	--	--	--	--	--	--	--	--
25...	1200	--	--	--	--	--	--	--	--	--	--	--
DEC.												
02...	1200	3880	13	10	110	35	200	5.5	211	--	400	180
09...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
30...	1200	6220	11	10	93	31	140	5.3	177	--	340	140
JAN.												
06...	--	--	--	--	--	--	--	--	--	--	--	--
20...	1200	--	--	--	--	--	--	--	--	--	--	--
27...	1210	--	--	--	--	--	--	--	--	--	--	--
FEB.												
03...	1235	4740	9.8	60	99	35	160	5.2	189	--	370	150
10...	1250	--	--	--	--	--	--	--	--	--	--	--
18...	1210	--	--	--	--	--	--	--	--	--	--	--
24...	1230	--	--	--	--	--	--	--	--	--	--	--
MAR.												
03...	1220	8860	8.1	10	90	35	130	5.8	166	--	340	120
10...	1230	--	--	--	--	--	--	--	--	--	--	--
17...	1230	--	--	--	--	--	--	--	--	--	--	--
24...	1245	--	--	--	--	--	--	--	--	--	--	--
31...	1245	10600	8.7	10	90	33	120	5.3	177	--	300	120
APR.												
07...	1230	--	--	--	--	--	--	--	--	--	--	--
14...	1230	--	--	--	--	--	--	--	--	--	--	--
21...	1245	--	--	--	--	--	--	--	--	--	--	--
28...	1215	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	1230	10760	8.4	20	92	35	150	5.6	169	0	360	140
12...	--	--	--	--	--	--	--	--	--	--	--	--
19...	1230	--	--	--	--	--	--	--	--	--	--	--
JUNE												
02...	1330	9290	8.5	10	95	31	150	5.6	169	0	350	140
09...	1315	--	--	--	--	--	--	--	--	--	--	--
16...	1315	--	--	--	--	--	--	--	--	--	--	--
23...	1330	--	--	--	--	--	--	--	--	--	--	--
30...	1230	10200	8.8	40	85	33	140	5.6	153	0	340	120
JULY												
07...	1230	--	--	--	--	--	--	--	--	--	--	--
14...	1310	--	--	--	--	--	--	--	--	--	--	--
21...	1310	--	--	--	--	--	--	--	--	--	--	--
28...	1200	--	--	--	--	--	--	--	--	--	--	--
AUG.												
04...	1230	10500	9.8	10	88	34	150	6.3	164	0	340	130
11...	1320	--	--	--	--	--	--	--	--	--	--	--
18...	1330	--	--	--	--	--	--	--	--	--	--	--
25...	1300	--	--	--	--	--	--	--	--	--	--	--
SEP.												
02...	0835	12000	9.0	0	87	32	130	5.0	163	0	350	110
08...	1230	--	--	--	--	--	--	--	--	--	--	--
22...	1300	--	--	--	--	--	--	--	--	--	--	--
29...	1320	--	--	--	--	--	--	--	--	--	--	--

09429300. Colorado River below Cibola Valley, Ariz.--Continued

DRAINAGE AREA.--183,800 mi^2 (476,000 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: January 1969 to current year.
Water temperatures: March 1956 to December 1966.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
07...	--	--	946	--	1.29	--	--	--	1470	--	23.5	--
15...	--	--	984	--	1.34	--	--	--	1550	--	21.5	--
21...	--	--	960	--	1.31	--	--	--	1510	--	21.0	--
29...	--	--	1020	--	1.39	--	--	--	1610	--	16.0	--
NOV.												
04...	.5	.27	960	--	1.31	340	--	4.3	1520	--	17.0	240
11...	--	--	816	--	1.11	--	--	--	1290	--	16.0	--
18...	--	--	1010	--	1.37	--	--	--	1560	--	17.0	--
25...	--	--	948	--	1.29	--	--	--	1500	--	15.5	--
DEC.												
02...	.4	.23	1040	--	1.41	420	--	4.3	1630	--	14.0	240
09...	--	--	998	--	1.36	--	--	--	1560	--	--	--
16...	--	--	846	--	1.15	--	--	--	1320	--	--	--
23...	--	--	916	--	1.25	--	--	--	1440	--	--	--
30...	.4	.27	856	--	1.16	360	210	3.2	1340	--	--	180
JAN.												
06...	--	--	950	--	1.29	--	--	--	1500	--	--	--
20...	--	--	854	--	1.16	--	--	--	1350	--	--	--
27...	--	--	808	--	1.10	--	--	--	1260	--	--	--
FEB.												
03...	.5	.22	920	--	1.25	390	--	3.5	1450	--	--	210
10...	--	--	840	--	1.14	--	--	--	1310	--	--	--
18...	--	--	908	--	1.23	--	--	--	1420	--	--	--
24...	--	--	822	--	1.12	--	--	--	1290	--	--	--
MAR.												
03...	.4	.07	800	--	1.09	370	--	2.9	1250	--	--	180
10...	--	--	796	--	1.08	--	--	--	1250	--	--	--
17...	--	--	860	--	1.17	--	--	--	1350	--	--	--
24...	--	--	786	--	1.07	--	--	--	1230	--	--	--
31...	.4	.22	806	766	1.10	360	220	2.8	1270	--	12.0	170
APR.												
07...	--	--	782	--	1.06	--	--	--	1230	--	--	--
14...	--	--	912	--	1.24	--	--	--	1420	--	--	--
21...	--	--	836	--	1.14	--	--	--	1300	--	--	--
28...	--	--	852	--	1.16	--	--	--	1330	--	--	--
MAY												
05...	.5	.08	870	875	1.19	370	240	3.4	1360	8.0	--	220
12...	--	--	814	--	1.11	--	--	--	1270	--	--	--
19...	--	--	854	--	1.16	--	--	--	1320	--	--	--
JUNE												
02...	.4	.32	864	865	1.18	360	230	3.4	1340	8.0	--	180
09...	--	--	854	--	1.16	--	--	--	1340	--	--	--
16...	--	--	850	--	1.16	--	--	--	1320	--	--	--
23...	--	--	862	--	1.17	--	--	--	1350	--	--	--
30...	.4	.04	826	809	1.12	350	220	3.3	1290	7.8	--	200
JULY												
07...	--	--	816	--	1.11	--	--	--	1270	--	--	--
14...	--	--	818	--	1.11	--	--	--	1280	--	--	--
21...	--	--	798	--	1.09	--	--	--	1260	--	--	--
28...	--	--	828	--	1.13	--	--	--	1290	--	--	--
AUG.												
04...	.4	.06	852	840	1.16	360	230	3.4	1340	8.1	--	180
11...	--	--	804	--	1.09	--	--	--	1270	--	--	--
18...	--	--	828	--	1.13	--	--	--	1290	--	--	--
25...	--	--	826	--	1.12	--	--	--	1300	--	--	--
SEP.												
02...	.4	.11	792	804	1.08	350	220	3.0	1240	8.0	26.0	180
08...	--	--	836	--	1.14	--	--	--	1320	--	--	--
22...	--	--	848	--	1.15	--	--	--	1330	--	--	--
29...	--	--	856	--	1.16	--	--	--	1320	--	--	--

09429490. Colorado River above Imperial Dam, Ariz.-Calif.

LOCATION.--Lat 32°52'59", long 114°27'55", at Imperial Dam. The Arizona end of the dam is in SW¼NW¼ sec.30, T.6 S., R.21 W., Gila and Salt River meridian; the California end is in NW¼SW¼ sec.9, T.15 S., R.24 E., San Bernardino meridian. Imperial Dam is 5 mi (8 km) upstream from Laguna Dam, 15 mi (24 km) northeast of Yuma, Ariz., 90 mi (145 km) downstream from Palo Verde Dam, and 147 mi (237 km) downstream from Parker Dam.

DRAINAGE AREA.--184,600 mi^2 (478,100 km^2), approximately.

PERIOD OF RECORD.--1903-34 (yearly discharge only, published in WSP 1313), July 1934 to current year (monthly discharge only since October 1942). Prior to October 1942 published as "near Picacho, Calif." October 1942 to September 1971 published as "at Imperial Dam" (monthly discharge shown as "flow reaching Imperial Dam," listed as supplement to "flow passing Imperial Dam").

GAGE.--None. This record is synthesized from records of several other stations (see REMARKS). July 13, 1934, to Sept. 30, 1942, water-stage recorder at site 14.5 mi (23.3 km) upstream at datum 167.38 ft (51.017 m) above mean sea level.

AVERAGE DISCHARGE.--41 years (1934-75), 11,180 ft^3/s (316.6 m^3/s), 8,100,000 acre-ft/yr (9,990 hm^3/yr).

EXTREMES.--1934-75: Maximum discharge, 40,800 ft^3/s (1,160 m^3/s) Sept. 5, 1939; minimum, 538 ft^3/s (15.2 m^3/s) Aug. 3, 1934; minimum daily since regulation of Hoover Dam began, 1,450 ft^3/s (41.1 m^3/s) Feb. 17, 1935.

REMARKS.--Records show flow of Colorado River reaching Imperial Dam, and are based on combined monthly total flow of Colorado River below Imperial Dam (sta 09429500), All-American Canal near Imperial Dam (sta 09523000), Gila Gravity Main Canal at Imperial Dam (sta 09522500), and diversions to Mittry Lake. Records for 1903-34 and for October 1942 to September 1960 were computed as combined flow of Colorado River at Yuma (sta 09521000) and the canals diverting at Imperial and Laguna Dams, less the flow of Gila River near Dome (sta 09520500); for some of these periods drainage and waste return flows and channel losses between the gaging stations and Imperial Dam were considered, and for other periods they were neglected. Records for July 1934 to September 1942 show daily discharge of Colorado River at gaging station near Picacho, Calif.

Natural flow of Colorado River at this point affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, and diversions for irrigation, municipal, and industrial uses, and return flows from irrigated areas. Diversions to Mittry Lake, which began June 23, 1970, are included in river records in table below. Additional regulation, beginning Jan. 31, 1966, to equalize supplies for downstream water users, is provided by pumped storage in reservoir on Senator Wash, about 2 mi (3 km) upstream from Imperial Dam. Monthend contents of Senator Wash Reservoir--capacity, 13,840 acre-ft (17.1 hm^3)--is given in table below. Records of chemical analyses for the current water year are given on following pages.

COOPERATION.--Records of Sparling meter readings of diversion to Mittry Lake and contents of Senator Wash Reservoir furnished by Bureau of Reclamation.

COLORADO RIVER ABOVE IMPERIAL DAM, DIVERSIONS TO MITTRY LAKE, AND MONTHEND CONTENTS OF SENATOR WASH RESERVOIR, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	Discharge of Colorado River		Diversions to Mittry Lake (acre-feet)*	Monthend contents, Senator Wash Reservoir (acre-feet)
	Mean (cubic feet per second)	Runoff in acre-feet		
October	6,642	408,400	658	8,640
November	4,888	290,900	539	4,910
December	4,903	301,500	432	2,390
CAL YR 1974	8,583	6,214,000	7,230	-
January	5,715	351,400	584	7,350
February	6,882	382,200	540	5,780
March	9,085	558,600	576	9,820
April	11,130	662,100	768	8,220
May	10,450	642,500	778	7,110
June	9,334	555,400	756	5,640
July	10,640	654,300	750	10,370
August	10,760	661,600	454	6,320
September	9,423	560,700	456	7,990
WTR YR 1975	8,329	6,030,000	7,290	-

* Included in first two columns of table.

NOTE.--Discharge of Colorado River, in first two columns of table above, is combined discharge of Colorado River below Imperial Dam (sta 09429500) and diversions to All-American Canal, Gila Gravity Main Canal, and Mittry Lake.

09429490. Colorado River above Imperial Dam, Ariz.-Calif.
(National stream-quality accounting network, pesticide, radiochemical, and tritium network station)

LOCATION.--Lat 32°52'59", long 114°27'55", in NW¼SW¼ sec.9, T.15 S., R.24 E., San Bernardino meridian, Imperial County, Calif., above trash racks at All-American Canal headworks at west end of Imperial Dam, 5 mi (8 km) upstream from Laguna Dam, 15 mi (24 km) northeast of Yuma, 90 mi (145 km) downstream from Palo Verde Dam, and 147 mi (237 km) downstream from Parker Dam.

DRAINAGE AREA.--184,600 mi^2 (478,100 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: August 1969 to current year.
Prior to October 1971, published as sta 09429500, Colorado River at Imperial Dam, Ariz.-Calif.
Water temperatures: October 1974 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.											
02...	8160	7.0	92	32	140	6.3	166	0	350	120	.5
07...	7680	6.0	94	33	140	6.3	176	0	355	122	.5
14...	6590	7.0	95	34	145	6.5	180	0	360	125	.5
21...	6350	8.0	95	32	145	6.5	176	0	360	122	.5
28...	4590	8.0	106	32	160	6.5	196	0	380	140	.6
NOV.											
04...	4830	10	103	34	165	6.5	194	0	385	142	.5
11...	5230	11	98	33	160	6.8	184	0	375	135	.5
18...	4770	10	100	34	155	6.7	186	0	375	135	.5
25...	4840	10	100	34	160	6.7	192	0	380	140	.6
DEC.											
02...	3870	9.0	105	35	175	6.6	204	0	390	152	.7
09...	3870	10	104	35	175	6.7	206	0	390	155	.5
16...	5190	10	98	32	145	6.4	182	0	360	125	.5
23...	5340	8.0	98	33	160	6.2	184	0	375	138	.5
30...	6410	10	98	31	145	6.2	178	0	355	128	.5
JAN.											
06...	4250	8.0	96	34	150	5.7	182	0	360	132	.5
13...	5480	8.0	97	34	145	5.6	182	0	360	125	.5
20...	5420	9.0	97	34	155	5.6	184	0	365	135	.5
27...	6340	9.0	93	34	145	5.4	176	0	355	128	.5
FEB.											
03...	5510	9.0	95	32	145	6.2	178	0	355	128	.4
10...	6440	10	96	32	140	5.8	176	0	350	122	.5
17...	6640	8.0	96	31	140	5.6	176	0	345	120	.4
24...	8400	8.0	93	32	135	5.2	176	0	340	115	.5
MAR.											
03...	8510	9.0	95	31	135	5.7	176	0	345	115	.4
10...	8340	8.0	95	31	135	5.8	178	0	340	115	.4
17...	8000	9.0	97	31	140	5.4	182	0	345	120	.5
24...	11100	8.0	94	29	125	5.0	172	0	330	104	.4
31...	10920	8.0	95	31	125	5.6	178	0	335	108	.4
APR.											
07...	11500	9.0	96	31	130	5.7	178	0	335	110	.5
14...	7940	9.0	98	31	145	5.8	184	0	355	120	.5
21...	11840	7.0	94	31	130	5.3	176	0	335	108	.5
28...	12600	7.0	94	31	130	5.6	176	0	335	108	.5
MAY											
05...	11000	8.0	95	32	130	5.7	180	0	345	110	.6
12...	9580	8.0	97	31	130	5.7	180	0	340	115	.5
19...	10340	8.0	95	32	135	5.6	180	0	340	117	.5
26...	9310	7.0	98	31	140	5.8	184	0	345	118	.5
JUNE											
02...	9560	7.0	95	32	135	5.9	182	0	345	118	.5
09...	8770	6.0	95	32	140	5.5	186	0	345	118	.5
16...	9100	7.0	98	31	130	6.0	182	0	340	112	.5
23...	8930	8.0	97	31	130	5.7	182	0	340	112	.5
30...	10070	7.0	91	34	130	6.0	174	0	340	110	.6
JULY											
07...	10160	8.0	89	34	125	5.9	172	0	335	108	.5
14...	10540	8.0	94	31	130	6.0	174	0	335	110	.5
21...	11000	9.0	92	32	125	6.3	174	0	335	105	.5
28...	11160	9.0	90	32	125	6.0	168	0	330	105	.5
AUG.											
04...	10020	7.0	92	33	130	5.7	172	0	340	110	.5
11...	11680	8.0	89	32	125	5.7	172	0	335	105	.5
18...	10920	7.0	90	33	130	5.4	170	0	335	111	.6
25...	9784	9.0	92	33	130	5.7	174	0	340	112	.6
SEP.											
01...	10160	8.0	89	34	125	5.8	172	0	335	108	.5
08...	9227	8.0	90	33	130	5.8	172	0	335	112	.5
15...	8845	9.0	94	33	135	5.8	176	0	345	119	.5
22...	9140	9.0	92	33	135	5.9	172	0	340	118	.5
29...	8990	8.0	90	33	135	5.9	166	0	340	118	.5

09429490. Colorado River above Imperial Dam, Ariz.-Calif.--Continued

EXTREMES.--Current year:
Specific conductance: Maximum daily, 1,560 micromhos Nov. 30; minimum daily, 1,200 micromhos Feb. 28.
Water temperatures: Maximum daily, 31.0°C Aug. 5; minimum daily, 9.0°C Dec. 26.
Period of record:
Specific conductance: Maximum daily, 1,880 micromhos Nov. 21, 1969; minimum daily, 1,160 micromhos Mar. 26, 27, 1973.

REMARKS.--Stream discharges reported with analyses represent total flow reaching Imperial Dam. Daily temperature and specific-conductance record furnished by Bureau of Reclamation. Since January 1971, daily specific-conductance measurements have been made using a composite of four water samples taken at 6-hour intervals. Composites of four water samples per day are analyzed for major chemical constituents. Tritium analyses available from U.S. Geological Survey, Water Resources Division, Reston, Virginia.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)
OCT.										
02...	872	831	1.19	360	224	3.2	1300	8.0	1	--
07...	852	845	1.16	370	226	3.2	1320	7.9	1	--
14...	864	863	1.18	375	228	3.2	1350	8.0	1	--
21...	858	857	1.17	370	226	3.3	1340	8.0	1	--
28...	948	931	1.29	395	234	3.5	1460	8.0	2	--
NOV.										
04...	942	943	1.28	395	236	3.6	1480	7.9	1	--
11...	922	911	1.25	380	229	3.6	1430	8.0	1	--
18...	920	909	1.25	390	238	3.4	1420	8.0	1	--
25...	932	927	1.27	390	232	3.5	1450	8.0	1	--
DEC.										
02...	974	973	1.32	405	238	3.8	1520	8.0	1	--
09...	982	977	1.34	405	236	3.8	1530	8.0	1	--
16...	866	867	1.18	375	226	3.3	1360	8.0	1	--
23...	912	910	1.24	380	229	3.6	1430	8.0	1	--
30...	866	862	1.18	370	224	3.3	1350	7.7	2	--
JAN.										
06...	880	876	1.20	380	231	3.4	1370	7.9	1	--
13...	870	865	1.18	380	231	3.2	1360	8.0	1	--
20...	894	892	1.22	380	229	3.5	1400	7.9	2	--
27...	860	857	1.17	370	226	3.3	1350	7.8	2	--
FEB.										
03...	860	859	1.17	370	224	3.3	1350	7.9	--	1
10...	844	843	1.15	370	226	3.2	1320	7.9	--	1
17...	838	833	1.14	365	220	3.2	1310	8.0	--	1
24...	818	816	1.11	365	220	3.1	1280	7.9	--	3
MAR.										
03...	834	823	1.13	365	220	3.1	1290	8.0	--	3
10...	826	818	1.12	365	219	3.1	1280	7.9	--	2
17...	844	838	1.15	370	221	3.2	1310	8.0	--	3
24...	782	780	1.06	355	214	2.9	1220	7.9	--	4
31...	796	796	1.08	365	219	2.8	1250	8.0	--	2
APR.										
07...	808	805	1.10	365	219	3.0	1260	8.0	--	1
14...	862	855	1.17	370	219	3.3	1340	7.9	--	2
21...	806	798	1.10	360	216	3.0	1250	8.0	--	2
28...	808	798	1.10	360	216	3.0	1250	7.9	--	2
MAY										
05...	816	815	1.11	370	222	2.9	1280	8.1	--	1
12...	824	816	1.12	370	222	2.9	1280	8.0	--	1
19...	828	822	1.13	370	222	3.1	1290	8.1	--	1
26...	840	836	1.14	370	219	3.2	1310	8.1	--	1
JUNE										
02...	828	828	1.13	370	221	3.1	1300	8.1	--	1
09...	840	834	1.14	370	219	3.2	1310	8.2	1	1
16...	832	814	1.13	370	221	2.9	1280	8.0	--	1
23...	832	814	1.13	370	221	2.9	1280	8.0	--	1
30...	806	805	1.10	365	222	3.0	1260	8.1	--	1
JULY										
07...	792	790	1.08	360	219	2.9	1240	8.0	--	1
14...	810	800	1.10	360	218	3.0	1250	8.1	--	1
21...	798	791	1.09	360	218	2.9	1240	8.1	--	4
28...	784	780	1.07	355	217	2.9	1220	8.2	--	3
AUG.										
04...	808	803	1.10	365	224	3.0	1260	8.0	--	7
11...	790	785	1.07	355	214	2.9	1230	8.0	--	3
18...	800	796	1.09	360	220	3.0	1250	8.1	--	1
25...	810	808	1.10	365	222	3.0	1270	8.0	--	2
SEP.										
01...	792	790	1.08	360	219	2.9	1240	8.0	--	2
08...	798	799	1.09	360	219	3.0	1250	8.0	--	5
15...	830	828	1.13	370	226	3.1	1300	8.0	--	4
22...	822	818	1.12	365	224	3.1	1290	8.0	--	5
29...	814	812	1.11	360	224	3.1	1280	8.0	--	5

09429490. Colorado River above Imperial Dam, Ariz.-Calif.--Continued

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)
OCT.							
09...	1200	.16	--	.00	.01	.16	.08
22...	1040	.13	.14	.00	.00	.13	.04
NOV.							
05...	1330	.17	--	.01	.01	.18	.04
DEC.							
03...	1300	.20	--	.01	.00	.21	.02
17...	1110	.20	.21	.00	.00	.20	.04
JAN.							
07...	1330	.15	--	.01	.00	.16	.04
21...	1100	.21	.23	.01	.01	.22	.02
FEB.							
11...	1345	.21	--	.00	.00	.21	.03
25...	1025	.15	.14	.00	.00	.15	.01
MAR.							
11...	1235	.17	--	.01	.01	.18	.02
25...	1100	.16	.15	.00	.00	.16	.04
APR.							
08...	1400	.21	--	.00	.00	.21	.01
22...	1040	.17	.17	.00	.01	.17	.00
MAY							
06...	1345	.17	--	.00	.00	.17	.01
20...	1035	.14	.15	.00	.00	.14	.00
JUNE							
10...	1335	.10	--	.00	.00	.10	.00
24...	1105	.10	.09	.00	.00	.10	.01
JULY							
08...	1330	.15	--	.01	.00	.16	.00
22...	1030	.07	--	.01	--	.08	.03
AUG.							
05...	1445	.06	--	.01	.01	.07	.00
19...	1100	.07	--	.01	--	.08	.00
SEP.							
09...	1200	.09	--	.01	.01	.10	.00
23...	1035	.09	--	.01	--	.10	.00

DATE	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)
OCT.						
09...	.59	.67	.83	3.7	.04	--
22...	.43	.47	.60	2.7	.01	--
NOV.						
05...	.27	.31	.49	2.2	.01	.00
DEC.						
03...	.23	.25	.46	2.0	.02	--
17...	.17	.21	.41	1.8	.03	--
JAN.						
07...	.32	.36	.52	2.3	.01	--
21...	.41	.43	.65	2.9	.03	--
FEB.						
11...	.23	.26	.47	2.1	.01	.03
25...	.47	.48	.63	2.8	.04	--
MAR.						
11...	.23	.25	.43	1.9	.02	--
25...	.32	.36	.52	2.3	.03	--
APR.						
08...	.25	.26	.47	2.1	.03	--
22...	.26	.26	.43	1.9	.01	--
MAY						
06...	.16	.17	.34	1.5	.05	.00
20...	.08	.08	.22	.97	.02	--
JUNE						
10...	.09	.09	.19	.84	.00	--
24...	.59	.60	.70	3.1	.01	--
JULY						
08...	.19	.19	.35	1.6	.02	--
22...	.44	.47	.55	2.4	.03	--
AUG.						
05...	.34	.34	.41	1.8	.02	.01
19...	.57	.57	.65	2.9	.04	--
SEP.						
09...	.43	.43	.53	2.3	.03	--
23...	.37	.37	.47	2.1	.03	--

09429490. Colorado River above Imperial Dam, Ariz.-Calif.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTOPLANKTON (CELLS PER ML)	TOTAL SESTON (MG/L)	SESTON ASH WEIGHT (MG/L)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL A MG/SQ M
OCT.							
09...	1200	8800	--	--	--	--	--
22...	1040	--	--	--	--	--	--
NOV.							
05...	1330	1900	--	--	.8	--	.4
DEC.							
03...	1300	970	--	--	--	--	--
17...	1110	--	--	--	--	--	--
JAN.							
07...	1330	180	--	--	--	--	--
21...	1100	--	--	--	--	--	--
FEB.							
11...	1345	4400	--	--	.2	.3	22
25...	1025	--	--	--	--	--	--
MAR.							
11...	1235	9500	--	--	--	--	--
25...	1100	--	--	--	--	--	--
APR.							
08...	1400	2700	--	--	--	--	--
22...	1040	--	--	--	--	--	--
MAY							
06...	1345	2300	--	--	23	26	14
20...	1035	--	--	--	--	--	--
JUNE							
10...	1335	410	--	--	--	--	--
24...	1105	--	--	--	--	--	--
JULY							
08...	1330	--	.0	.0	--	--	--
22...	1030	--	--	--	--	--	--
AUG.							
05...	1445	--	.0	.0	1.2	2.5	1.4
19...	1100	--	--	--	--	--	--
SEP.							
09...	1200	--	.0	.0	--	--	--
23...	1035	--	--	--	--	--	--

DATE	UNCORRECTED PERIPHYTON CHLOROPHYLL B MG/SQ M	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.						
09...	--	1.7	1.7	36	811	8.8
22...	--	--	--	--	--	4.4
NOV.						
05...	.8	1.5	1.0	100	815	3.8
DEC.						
03...	--	2.8	5.1	810	69	3.5
17...	--	--	--	--	--	3.0
JAN.						
07...	--	4.5	4.2	88	34	3.8
21...	--	--	--	--	--	3.8
FEB.						
11...	1.9	3.8	5.3	810	85	3.5
25...	--	--	--	--	--	6.8
MAR.						
11...	--	6.8	7.2	37	75	6.2
25...	--	--	--	--	--	5.8
APR.						
08...	--	7.4	13	85	47	5.0
22...	--	--	--	--	--	3.1
MAY						
06...	3.7	2.9	6.4	--	--	3.3
20...	--	--	--	--	--	3.5
JUNE						
10...	--	8.1	11	85	38	3.7
24...	--	--	--	--	--	3.2
JULY						
08...	--	3.5	2.6	24	180	6.0
22...	--	--	--	--	--	4.8
AUG.						
05...	.3	3.9	4.3	810	48	5.2
19...	--	--	--	--	--	3.0
SEP.						
09...	--	5.2	5.1	130	96	11
23...	--	--	--	--	--	4.4

09429490. Colorado River above Imperial Dam, Ariz.-Calif.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)
OCT. 22...	1040	6650	.00	.0	.00	.00	.00	.00
NOV. 05...	1330	4680	.00	.0	.00	.00	.00	.00
JAN. 07...	1330	4680	.00	.0	.00	.00	.00	.00
FEB. 11...	1345	6450	.00	.0	.00	.00	.00	.00
MAR. 11...	1235	8390	.00	.0	.00	.00	.00	.00
APR. 08...	1400	11960	.00	.0	.00	.00	.00	.00
MAY 06...	1345	11380	.00	.0	.00	.00	.00	.00
JUNE 24...	1105	9920	.00	.0	.00	.00	.00	.00
JULY 08...	1330	11090	.00	.0	.00	.00	.00	.00
AUG. 05...	1445	10940	.00	.0	.00	.00	.00	.00
SEP. 09...	1200	8740	.00	.0	.00	.00	.00	.00

DATE	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)
OCT. 22...	.00	.00	.00	.00	.00	.00	.00	.00	.00
NOV. 05...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JAN. 07...	.00	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 11...	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR. 11...	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR. 08...	.00	.00	--	.00	.00	.00	.00	.00	--
MAY 06...	.00	.00	--	.00	.00	.00	.00	.00	--
JUNE 24...	.00	.00	--	.00	.00	.00	.00	.00	--
JULY 08...	.00	.00	--	.00	.00	.00	.00	.00	--
AUG. 05...	.00	.00	--	.00	.00	.00	.00	.00	--
SEP. 09...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRITHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)	TEMPERATURE (DEG C)
OCT. 22...	.00	.0	0	.00	.00	.00	.00	23.0
NOV. 05...	.00	.0	0	.00	.00	.00	.00	18.0
JAN. 07...	.00	.0	0	.00	.00	.00	.00	10.0
FEB. 11...	.00	.0	0	.00	.00	.00	.00	14.0
MAR. 11...	.00	.0	0	.00	.02	.00	.00	14.0
APR. 08...	.00	.0	0	--	.00	.00	.00	15.5
MAY 06...	.00	.0	0	--	.00	.00	.00	19.5
JUNE 24...	.00	.0	0	--	.00	.00	.00	25.0
JULY 08...	.00	.0	0	--	.00	.00	.00	28.5
AUG. 05...	.00	.0	0	--	.00	.00	.00	30.0
SEP. 09...	.00	.0	0	.00	.00	.00	.00	28.0

09429490. Colorado River above Imperial Dam, Ariz.-Calif.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)
OCT.												
09...	1200	8150	160	--	--	--	--	--	--	--	--	--
22...	1040	6650	200	--	--	--	--	--	--	--	--	--
NOV.												
05...	1330	4680	100	100	50	10	85	27	140	5.1	4	4
DEC.												
03...	1300	4350	140	--	--	--	--	--	--	--	--	--
17...	1110	5390	220	--	--	--	--	--	--	--	--	--
JAN.												
07...	1330	4680	250	--	--	--	--	--	--	--	--	--
21...	1100	5760	600	--	--	--	--	--	--	--	--	--
FEB.												
11...	1345	6450	440	10	40	0	94	31	140	4.5	1	1
25...	1025	8940	900	--	--	--	--	--	--	--	--	--
MAR.												
11...	1235	8390	530	--	--	--	--	--	--	--	--	--
25...	1100	11490	720	--	--	--	--	--	--	--	--	--
APR.												
08...	1400	11960	460	--	--	--	--	--	--	--	--	--
22...	1040	12330	290	--	--	--	--	--	--	--	--	--
MAY												
06...	1345	11380	0	10	70	0	87	31	120	4.1	4	4
20...	1035	10230	400	--	--	--	--	--	--	--	--	--
JUNE												
10...	1335	9140	170	--	--	--	--	--	--	--	--	--
24...	1105	9920	440	--	--	--	--	--	--	--	--	--
JULY												
08...	1330	11090	670	--	--	--	--	--	--	--	--	--
22...	1030	11300	520	--	--	--	--	--	--	--	--	--
AUG.												
05...	1445	10940	350	30	40	0	69	30	130	5.3	2	2
19...	1100	11180	440	--	--	--	--	--	--	--	--	--
SEP.												
09...	1200	8740	300	--	--	--	--	--	--	--	--	--
23...	1035	9347	950	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.												
09...	170	--	--	--	--	--	--	--	--	--	--	--
22...	220	--	--	--	--	--	--	--	--	--	--	--
NOV.												
05...	210	10	<1	0	0	<50	1	<10	0	<100	11	.0
DEC.												
03...	220	--	--	--	--	--	--	--	--	--	--	--
17...	200	--	--	--	--	--	--	--	--	--	--	--
JAN.												
07...	210	--	--	--	--	--	--	--	--	--	--	--
21...	190	--	--	--	--	--	--	--	--	--	--	--
FEB.												
11...	180	<10	0	0	0	<50	1	480	0	<100	3	.0
25...	180	--	--	--	--	--	--	--	--	--	--	--
MAR.												
11...	170	--	--	--	--	--	--	--	--	--	--	--
25...	180	--	--	--	--	--	--	--	--	--	--	--
APR.												
08...	180	--	--	--	--	--	--	--	--	--	--	--
22...	180	--	--	--	--	--	--	--	--	--	--	--
MAY												
06...	190	<10	0	0	0	<50	3	<10	1	<100	0	.0
20...	190	--	--	--	--	--	--	--	--	--	--	--
JUNE												
10...	190	--	--	--	--	--	--	--	--	--	--	--
24...	170	--	--	--	--	--	--	--	--	--	--	--
JULY												
08...	140	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--
AUG.												
05...	180	<10	0	6	5	0	0	10	1	<100	0	.1
19...	--	--	--	--	--	--	--	--	--	--	--	--
SEP.												
09...	190	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--

09429490. Colorado River above Imperial Dam, Ariz.-Calif.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

DATE	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)
OCT.											
09...	--	--	--	--	--	18	1280	8.2	25.5	8.0	15
22...	--	--	--	--	--	11	--	--	23.0	--	9
NOV.											
05...	.0	3	2	90	30	56	1400	8.1	18.0	9.4	20
DEC.											
03...	--	--	--	--	--	12	1470	8.1	9.0	10.3	11
17...	--	--	--	--	--	13	--	--	13.0	--	14
JAN.											
07...	--	--	--	--	--	7	1370	8.2	10.0	10.3	14
21...	--	--	--	--	--	8	--	--	10.5	--	2
FEB.											
11...	.0	3	2	20	10	20	1380	8.0	14.0	8.8	9
25...	--	--	--	--	--	30	--	--	12.0	--	11
MAR.											
11...	--	--	--	--	--	28	1320	8.3	14.0	10.0	11
25...	--	--	--	--	--	20	--	--	16.0	--	11
APR.											
08...	--	--	--	--	--	24	1320	8.2	15.5	9.2	12
22...	--	--	--	--	--	24	--	--	18.5	--	11
MAY											
06...	.0	4	4	8	0	32	1300	8.2	19.5	8.8	13
20...	--	--	--	--	--	20	--	--	21.0	--	11
JUNE											
10...	--	--	--	--	--	20	1330	7.8	26.5	8.1	9
24...	--	--	--	--	--	188	--	--	25.0	--	8
JULY											
08...	--	--	--	--	--	39	1260	8.2	28.5	7.9	10
22...	--	--	--	--	--	40	--	--	28.5	--	11
AUG.											
05...	.0	4	4	20	10	20	1310	8.3	30.0	7.5	9
19...	--	--	--	--	--	8	--	--	28.0	--	18
SEP.											
09...	--	--	--	--	--	12	1310	7.9	28.0	7.4	12
23...	--	--	--	--	--	28	--	--	25.0	--	7

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)
JAN.							
07...	1330	4600	13	<.4	9.7	1.1	7.8
JULY							
08...	1330	11000	12	1.4	11	1.9	8.5

DATE	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED NATURAL URANIUM (U) (UG/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TEMPER-ATURE (DEG C)
JAN.						
07...	1.0	.12	4.1	940	7	10.0
JULY						
08...	1.5	.12	4.7	890	39	28.5

09429490. Colorado River above Imperial Dam, Ariz.-Calif.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1320	1450	1530	1400	1330	1330	1260	1280	1310	1260	1290	1240
2	1300	1530	1520	1330	1360	1350	1250	1290	1300	1250	1310	1250
3	1290	1550	1490	1310	1350	1290	1260	1300	1300	1280	1300	1240
4	1320	1480	1480	1330	1390	1270	1280	1290	1290	1290	1260	1240
5	1340	1400	1460	1340	1360	1250	1280	1280	1290	1290	1260	1270
6	1340	1400	1460	1370	1370	1270	1260	1290	1300	1250	1260	1290
7	1320	1400	1410	1370	1370	1290	1260	1270	1310	1240	1260	1280
8	1280	1390	1480	1430	1380	1290	1250	1280	1320	1240	1250	1250
9	1280	1420	1530	1400	1360	1320	1250	1290	1310	1240	1290	1240
10	1280	1460	1530	1390	1320	1280	1240	1300	1300	1260	1240	1300
11	1320	1430	1470	1390	1310	1260	1270	1310	1290	1270	1230	1300
12	1350	1400	1420	1390	1300	1280	1380	1280	1280	1270	1230	1310
13	1370	1380	1370	1360	1330	1310	1360	1280	1290	1260	1230	1330
14	1350	1380	1370	1320	1320	1340	1340	1300	1310	1250	1220	1340
15	1350	1360	1390	1330	1340	1350	1330	1290	1300	1250	1260	1300
16	1360	1370	1360	1320	1330	1340	1320	1290	1280	1250	1260	1280
17	1320	1410	1360	1330	1310	1310	1300	1310	1280	1250	1260	1270
18	1330	1420	1340	1350	1310	1310	1290	1290	1280	1260	1250	1280
19	1350	1400	1350	1370	1330	1290	1250	1290	1280	1250	1250	1300
20	1370	1390	1370	1400	1330	1300	1270	1280	1290	1250	1240	1310
21	1340	1380	1380	1350	1320	1290	1250	1290	1290	1240	1280	1320
22	1340	1370	1410	1360	1330	1290	1260	1300	1300	1240	1270	1290
23	1320	1410	1430	1360	1330	1270	1230	1310	1280	1250	1280	1290
24	1300	1460	1440	1370	1280	1220	1250	1330	1300	1250	1270	1290
25	1360	1450	1530	1380	1300	1250	1260	1310	1320	1260	1270	1280
26	1420	1430	1450	1360	1260	1250	1280	1310	1330	1270	1260	1290
27	1490	1420	1330	1350	1310	1230	1240	1290	1300	1260	1250	1290
28	1460	1440	1340	1290	1200	1280	1250	1310	1290	1220	1270	1300
29	1430	1520	1330	1310	---	1280	1270	1320	1270	1250	1290	1280
30	1430	1560	1350	1310	---	1240	1270	1330	1260	1260	1290	1270
31	1430	---	1340	1310	---	1250	---	1330	---	1270	1270	---
MEAN	1350	1430	1420	1350	1330	1290	1280	1300	1300	1260	1260	1280
YEAR	MAX	1560	MIN	1200	MEAN	1320						

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.0	19.5	14.0	10.0	11.5	15.5	15.0	21.0	23.5	28.0	30.0	28.5
2	27.0	19.0	14.0	10.0	11.5	16.5	15.5	21.0	25.5	28.0	30.0	29.0
3	26.5	19.0	14.5	9.5	12.0	16.5	15.5	22.0	26.5	28.0	30.0	29.0
4	26.5	19.0	14.5	9.5	12.0	16.5	16.0	22.0	26.5	28.5	30.0	29.5
5	26.5	19.0	14.5	9.5	12.0	16.0	16.5	20.5	26.5	29.0	31.0	29.5
6	26.0	19.0	15.0	10.0	13.0	15.5	16.5	20.0	26.5	29.5	31.0	29.0
7	24.5	19.0	14.5	10.5	13.5	15.5	16.5	20.0	26.5	29.5	31.0	29.0
8	25.5	18.5	14.5	11.0	13.5	16.0	16.0	21.0	26.5	29.0	31.0	28.5
9	25.5	19.0	14.0	11.0	14.0	16.0	16.0	22.0	26.5	30.0	31.0	29.0
10	25.5	18.5	13.5	11.0	14.5	15.5	15.0	23.0	27.0	30.0	31.0	29.0
11	25.5	18.5	13.5	11.0	14.5	15.0	15.0	23.5	27.0	31.0	30.5	29.0
12	25.0	18.5	13.5	11.0	14.5	14.5	15.5	24.0	28.0	31.0	30.0	29.0
13	24.5	18.5	13.5	10.5	14.5	15.0	17.0	24.5	28.5	31.0	30.5	29.0
14	24.0	18.5	13.0	10.0	15.0	15.5	18.5	24.5	28.5	24.5	29.5	29.0
15	24.5	18.5	13.0	10.5	14.5	15.5	19.5	24.5	29.0	24.5	29.0	29.0
16	24.5	18.5	13.5	10.5	14.0	15.5	18.5	24.5	29.0	24.5	29.0	29.5
17	24.0	18.5	13.5	11.0	13.5	15.5	18.0	24.5	28.0	24.0	29.0	29.5
18	24.5	19.0	13.5	11.5	13.0	15.5	18.0	24.0	26.0	24.0	28.5	29.5
19	24.5	18.5	13.5	12.0	13.0	16.0	18.0	23.5	24.5	24.0	28.5	29.5
20	24.0	19.0	13.5	13.0	13.5	16.5	18.5	23.0	24.0	24.0	28.0	29.5
21	24.0	19.0	13.5	13.0	13.5	16.5	19.0	21.0	24.5	24.0	28.5	29.5
22	24.0	18.5	13.5	12.0	11.0	16.5	20.0	21.0	25.5	24.0	29.0	28.0
23	23.5	18.5	13.5	12.0	11.5	16.0	20.0	21.5	26.5	24.5	29.0	27.0
24	23.5	17.0	11.0	11.5	11.0	16.5	20.0	23.5	26.5	24.5	29.5	26.5
25	23.5	16.5	9.5	12.0	12.0	16.5	20.0	24.5	26.5	25.0	29.5	26.5
26	23.5	16.0	9.0	12.0	14.0	16.5	20.0	25.0	26.5	25.5	29.0	26.5
27	22.0	15.5	9.5	13.5	15.0	16.0	20.0	25.5	26.5	24.5	29.0	26.5
28	21.5	15.5	10.0	12.0	14.5	15.5	18.0	25.5	27.0	24.5	28.5	26.5
29	20.0	15.0	10.0	11.0	---	14.5	18.0	25.0	28.0	24.5	28.0	26.5
30	19.0	14.5	10.5	11.5	---	14.0	20.5	25.0	28.0	24.5	28.0	26.5
31	19.5	---	10.0	11.0	---	14.0	---	24.5	---	24.5	28.0	---
MEAN	24.0	18.0	13.0	11.0	13.0	15.5	17.5	23.0	26.5	26.5	29.5	28.5
YEAR	MAX	31.0	MIN	9.0	MEAN	20.5						

09429500. Colorado River below Imperial Dam, Ariz.-Calif.

LOCATION.--Forebay gage: Lat 32°52'59", long 114°27'57", in NW¼SW¼ sec.9, T.15 S., R.24 E., San Bernardino meridian, in California, Imperial County, near All-American Canal headworks at west end of Imperial Dam, 5 mi (8 km) upstream from Laguna Dam, 15 mi (24 km) northeast of Yuma, 90 mi (145 km) downstream from Palo Verde Dam, and 147 mi (237 km) downstream from Parker Dam.

DRAINAGE AREA.--184,600 mi^2 (478,100 km^2), approximately.

PERIOD OF RECORD.--October 1960 to current year. Prior to October 1971 published as "at Imperial Dam." Records of flow reaching Imperial Dam, formerly published with this station, are now published separately as sta 09429490, Colorado River above Imperial Dam (see preceding page).

GAGE.--Water-stage recorder in forebay, 12 calibrated gates on California sluiceway, 8 calibrated gates on Gila sluiceway, and calibrated manometer on each discharge pipe from desilting basin. Datum of forebay gage is 162.00 ft (49.378 m) above mean sea level (Bureau of Reclamation bench mark).

EXTREMES.--Current year: Maximum daily discharge, 2,240 ft^3/s (63.4 m^3/s) Apr. 11; minimum daily, 225 ft^3/s (6.37 m^3/s) Nov. 22-27, Feb. 17 to Mar. 6.
Period of record: Maximum daily discharge, 5,040 ft^3/s (143 m^3/s) Mar. 3, 1970; minimum daily, 27 ft^3/s (0.76 m^3/s) Dec. 15-18, 1969.

REMARKS.--Records good. Records of daily discharge show flow of Colorado River passing Imperial Dam, and include water released to river through California and Gila sluiceways, sludge from desilting basins returned to river, and leakage through dam. Records of flow reaching Imperial Dam, formerly published as supplement to this station, are now published separately (see sta 09429490 on preceding page).
Flow of Colorado River regulated by many reservoirs, principally Lake Mead, since 1935. Many diversions from Colorado River and tributaries above station. Diversion to Mittry Lake and monthend contents of Senator Wash Reservoir also are now published with sta 09429490.

COOPERATION.--Records of gate openings furnished by Bureau of Reclamation. Records of sludge return flow from desilting basins furnished by Imperial Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	246	245	227	1,020	953	225	325	326	723	430	346	345
2	246	245	387	1,020	971	225	325	326	815	336	346	345
3	246	245	523	1,040	913	225	325	326	666	461	346	345
4	246	245	519	1,040	855	225	325	326	326	586	346	345
5	246	403	517	1,100	853	225	325	326	420	336	346	345
6	246	235	519	1,120	853	225	325	388	326	336	346	345
7	246	235	519	1,000	851	325	325	430	326	336	346	345
8	246	307	521	1,000	851	325	325	436	437	336	346	345
9	527	235	603	896	999	325	908	436	684	430	346	687
10	620	332	735	755	1,040	325	1,900	579	724	430	346	616
11	246	332	917	717	937	325	2,240	669	722	336	537	345
12	246	332	962	716	881	325	2,200	671	812	336	533	345
13	246	296	965	717	715	325	1,720	649	893	336	440	295
14	246	269	965	717	599	325	416	647	457	336	440	245
15	246	333	719	717	601	325	325	648	326	336	440	245
16	246	333	227	793	602	325	325	739	420	336	346	245
17	246	333	227	812	225	325	325	828	607	336	346	456
18	565	353	227	792	225	325	325	653	512	336	346	667
19	411	399	227	773	225	325	325	830	326	336	346	667
20	246	422	227	603	225	325	325	833	326	336	346	633
21	246	353	227	572	225	325	325	653	326	523	346	618
22	246	225	227	570	225	325	325	652	326	523	346	617
23	246	225	227	568	225	325	325	809	326	336	346	617
24	346	225	227	566	225	325	325	872	326	336	346	616
25	246	225	227	566	225	325	407	924	326	430	531	619
26	246	225	227	569	225	325	489	1,010	326	336	440	621
27	246	225	227	570	225	325	325	1,030	326	336	439	623
28	246	356	227	570	225	605	701	1,020	326	336	346	621
29	437	234	227	573	------	466	512	824	326	523	346	623
30	246	234	391	573	------	850	325	719	608	336	346	540
31	246	------	628	774	------	391	------	719	------	336	346	------
TOTAL	9,056	8,656	13,795	23,819	16,174	10,487	17,993	20,298	14,390	11,728	11,758	14,321
MEAN	292	289	445	768	578	338	600	655	480	378	379	477
MAX	620	422	965	1,120	1,040	850	2,240	1,030	893	586	537	687
MIN	246	225	227	566	225	225	325	326	326	336	346	245
AC-FT	17,960	17,170	27,360	47,240	32,080	20,800	35,690	40,260	28,540	23,260	23,320	28,410

CAL YR 1974 TOTAL 160,668 MEAN 440 MAX 1,590 MIN 148 AC-FT 318,700
WTR YR 1975 TOTAL 172,475 MEAN 473 MAX 2,240 MIN 225 AC-FT 342,100

09429600. Colorado River below Laguna Dam, Ariz.-Calif.

LOCATION.--Lat 32°48'44", long 114°30'51", in SE¼NE¼ sec.35, T.15 S., R.23 E., San Bernardino meridian, in California, Imperial County, on right bank 1.4 mi (2.3 km) downstream from Laguna Dam, 2.8 mi (4.5 km) northeast of Bard, Calif., and 10 mi (16 km) northeast of Yuma, Ariz.

DRAINAGE AREA.--184,700 mi^2 (478,400 km^2), approximately.

PERIOD OF RECORD.--December 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 120.84 ft (36.832 m) above mean sea level (Bureau of Reclamation bench mark).

EXTREMES.--Current year: Maximum discharge, 2,180 ft^3/s (61.7 m^3/s) Apr. 13 (gage height, 8.43 ft or 2.569 m); minimum daily, 222 ft^3/s (6.29 m^3/s) Nov. 30.
Period of record: Maximum discharge, 3,650 ft^3/s (103 m^3/s) Oct. 7, 1972 (gage height, 10.09 ft or 3.075 m); minimum daily, 71 ft^3/s (2.01 m^3/s) May 29, 1973.

REMARKS.--Records good. Natural flow of Colorado River at this point is affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation, municipal and industrial uses, and return flows from irrigated areas. Flow past station consists mainly of water released through Imperial Dam, sludge from the desilting basins at Imperial Dam, seepage through Imperial Dam, and seepage from the All-American Canal and the Gila Gravity Main Canal. Records of chemical analyses for the current year are published on following pages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	345	254	946	906	305	386	344	885	350	316	355
2	299	332	388	988	940	300	354	340	781	350	312	353
3	299	326	544	963	908	292	305	339	551	451	544	351
4	299	318	554	983	846	280	405	344	372	598	758	350
5	308	334	546	994	843	280	625	344	380	295	460	435
6	312	342	536	1040	842	281	591	352	386	300	383	538
7	305	321	535	1040	843	288	460	439	371	323	377	519
8	300	321	534	1040	844	278	386	464	564	560	381	482
9	292	324	594	978	974	299	353	468	802	682	386	443
10	300	320	723	795	1070	361	1250	742	793	650	379	413
11	302	334	855	738	908	365	2070	905	771	442	354	364
12	268	338	946	732	853	366	1990	857	759	375	332	359
13	262	353	957	759	741	367	1870	834	788	370	344	323
14	258	316	965	807	608	368	689	734	537	363	358	293
15	285	334	924	744	579	367	414	705	373	356	352	292
16	366	318	335	689	565	370	640	698	372	355	340	469
17	350	366	289	711	288	368	742	675	373	354	344	628
18	337	376	283	712	268	368	485	640	373	354	343	624
19	334	406	281	720	285	368	428	666	356	355	348	656
20	319	431	283	693	308	370	417	694	308	356	347	671
21	330	435	308	643	342	413	410	660	291	339	448	630
22	360	388	306	624	348	512	396	628	291	345	571	611
23	363	288	303	602	338	474	387	674	292	320	558	601
24	373	247	295	595	328	388	381	816	296	321	527	619
25	374	242	288	591	332	376	376	896	318	327	412	636
26	360	240	289	591	298	369	378	1110	425	336	344	642
27	347	261	290	591	290	367	380	1120	675	334	351	652
28	338	255	290	589	288	356	376	1110	553	328	360	656
29	340	253	293	592	---	352	391	1180	341	350	357	656
30	336	222	269	594	---	367	367	1080	343	360	356	587
31	337	---	512	683	---	492	---	1010	---	313	357	---
TOTAL	9943	9686	14769	23767	16983	11107	18702	21868	14720	11912	12399	15208
MEAN	321	323	476	767	607	358	623	705	491	384	400	507
MAX	374	435	965	1040	1070	512	2070	1180	885	682	758	671
MIN	258	222	254	589	268	278	305	339	291	295	312	292
AC-FT	19720	19210	29290	47140	33690	22030	37100	43380	29200	23630	24590	30170

CAL YR 1974 TOTAL 168013 MEAN 460 MAX 1570 MIN 139 AC-FT 333300
WTR YR 1975 TOTAL 181064 MEAN 496 MAX 2070 MIN 222 AC-FT 359100

09429600. Colorado River below Laguna Dam, Ariz.-Calif.

LOCATION.--Lat 32°48'44", long 114°30'51", in SE¼NE¼ sec.35, T.15 S., R.23 E., San Bernardino meridian, in California, Imperial County, at gaging station on right bank, 1.4 mi (2.3 km) downstream from Laguna Dam, 2.8 mi (4.5 km) northeast of Bard, Calif., and 19 mi (16 km) northeast of Yuma, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
07...	0110	295	11	98	34	170	6.7	188	0	375	155
14...	0200	252	10	100	32	165	6.9	192	0	370	145
21...	0100	312	11	98	32	155	6.7	182	0	365	135
28...	0110	332	10	103	32	180	6.6	200	0	380	160
NOV.											
04...	0140	315	13	108	34	200	7.0	212	0	395	188
11...	0110	332	11	98	34	175	7.3	194	0	380	155
18...	0100	360	10	98	33	165	6.8	190	0	370	145
25...	0140	245	12	104	33	185	6.7	200	0	385	170
DEC.											
02...	0100	258	13	108	33	190	6.8	196	0	400	172
09...	0105	537	12	105	31	170	7.0	198	0	380	150
16...	0135	456	11	102	37	190	6.7	200	0	390	180
23...	0150	298	12	100	34	175	6.2	192	0	375	160
30...	0100	285	10	100	34	175	6.4	200	0	375	160
JAN.											
06...	0200	982	9.0	95	32	145	5.7	178	0	355	128
13...	0200	711	8.0	101	31	155	5.8	190	0	365	135
20...	0100	699	9.0	97	34	155	5.6	188	0	365	132
27...	0135	564	9.0	100	32	155	5.7	186	0	365	138
FEB.											
03...	0105	912	9.0	98	32	145	6.2	180	0	355	128
10...	0110	1110	8.0	98	33	155	6.0	186	0	365	138
17...	0140	330	9.0	100	34	170	6.3	198	0	370	158
24...	0155	328	10	105	32	190	5.6	202	0	375	182
MAR.											
03...	0110	275	11	104	32	175	5.9	196	0	370	160
10...	0140	340	10	98	32	145	6.3	188	0	350	128
17...	0120	348	10	101	31	160	5.5	190	0	365	140
24...	0115	378	10	101	31	160	5.4	194	0	355	145
31...	0140	630	9.0	98	31	145	5.9	186	0	350	122
APR.											
07...	0100	540	10	106	33	185	6.5	196	0	375	185
14...	0100	1226	9.0	100	33	145	6.1	192	0	355	125
21...	0140	348	9.0	100	33	165	5.6	198	0	355	152
28...	0115	312	9.0	98	32	145	5.8	188	0	350	125
MAY											
05...	0155	280	9.0	101	31	145	5.9	190	0	350	130
12...	0145	711	8.0	99	31	145	6.1	188	0	350	128
19...	0140	558	9.0	98	31	140	5.9	180	0	345	121
26...	0215	1030	8.0	98	32	140	6.0	186	0	345	120
JUNE											
02...	0115	744	7.0	102	31	145	6.2	192	0	350	130
09...	0200	723	9.0	97	32	140	6.0	184	0	345	122
16...	0045	588	9.0	100	33	155	6.3	192	0	360	140
23...	0120	290	10	100	32	145	5.8	188	0	350	130
30...	0140	342	9.0	94	35	145	6.0	188	0	350	130
JULY											
07...	0130	332	9.0	99	32	145	6.0	190	0	350	130
14...	0100	363	9.0	96	32	145	6.1	186	0	345	128
21...	0140	345	10	94	32	145	6.5	184	0	345	125
28...	0400	328	11	94	34	145	6.2	188	0	350	128
AUG.											
04...	0250	817	9.0	94	32	140	5.9	178	0	345	122
11...	0055	372	10	96	34	150	6.1	184	0	355	135
18...	0125	342	9.0	96	33	150	5.7	184	0	355	130
25...	0115	549	11	98	32	150	5.8	184	0	355	135
SEP.											
01...	0135	352	11	96	31	145	6.1	178	0	350	128
09...	0220	450	12	93	35	155	6.2	186	0	355	142
15...	0110	292	11	96	35	160	6.0	192	0	365	145
22...	0135	621	9.0	94	34	150	6.4	180	0	355	135
29...	0230	660	10	94	32	145	6.1	174	0	350	128

09429600. Colorado River below Laguna Dam, Ariz.-Calif.--Continued

DRAINAGE AREA.--184,700 mi^2 (478,400 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1972 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.										
07...	.7	948	944	1.29	385	231	3.8	1480	7.9	24.0
14...	.7	930	926	1.26	380	222	3.7	1440	8.1	23.5
21...	.6	890	894	1.21	375	226	3.5	1400	7.9	24.0
28...	.7	974	972	1.32	390	7	4.0	1530	7.9	20.5
NOV.										
04...	.6	1060	1050	1.44	410	236	4.3	1660	7.9	18.5
11...	.6	960	957	1.31	385	226	3.9	1500	7.9	18.5
18...	.6	928	922	1.26	380	224	3.7	1450	8.0	20.5
25...	.6	998	995	1.36	395	231	4.0	1570	8.0	16.5
DEC.										
02...	.7	1020	1020	1.39	405	244	4.1	1600	8.0	15.5
09...	.6	954	954	1.30	390	228	3.7	1490	8.0	13.5
16...	.6	1020	1020	1.39	405	241	4.1	1600	8.0	12.0
23...	.5	956	958	1.30	390	232	3.9	1520	7.9	15.0
30...	.5	960	960	1.31	390	226	3.9	1520	7.9	11.0
JAN.										
06...	.5	856	858	1.16	370	224	3.3	1350	7.9	8.5
13...	.5	892	895	1.21	380	224	3.5	1410	7.9	17.0
20...	.5	890	891	1.21	380	226	3.5	1400	7.8	11.5
27...	.5	900	897	1.22	380	228	3.5	1410	7.9	12.0
FEB.										
03...	.5	858	863	1.17	375	228	3.3	1360	7.9	15.5
10...	.5	894	895	1.22	380	230	3.5	1410	8.0	14.0
17...	.5	950	945	1.29	390	230	3.7	1490	7.9	13.5
24...	.4	1010	1000	1.37	395	230	4.2	1580	7.9	16.5
MAR.										
03...	.4	964	955	1.31	390	230	3.8	1510	7.9	15.5
10...	.5	892	863	1.21	375	221	3.3	1360	8.0	16.0
17...	.5	908	907	1.23	380	224	3.6	1430	8.0	18.5
24...	.5	902	904	1.23	380	221	3.6	1430	8.0	15.5
31...	.5	864	853	1.18	370	218	3.3	1340	8.0	14.0
APR.										
07...	.7	1000	998	1.36	400	240	4.0	1580	8.0	16.5
14...	.5	874	869	1.19	385	228	3.2	1370	8.0	19.0
21...	.6	922	918	1.25	385	222	3.7	1450	7.9	19.5
28...	.6	862	858	1.17	375	221	3.3	1350	7.9	20.0
MAY										
05...	.7	870	867	1.18	380	224	3.2	1370	8.1	23.0
12...	.6	864	861	1.18	375	221	3.3	1350	8.0	23.5
19...	.5	842	839	1.15	370	222	3.2	1320	8.1	23.0
26...	.5	846	842	1.15	375	222	3.1	1320	8.0	--
JUNE										
02...	.5	876	867	1.19	380	222	3.2	1370	8.0	26.5
09...	.6	848	843	1.15	375	224	3.2	1330	8.1	23.5
16...	.6	922	899	1.25	385	228	3.4	1420	7.9	--
23...	.6	884	866	1.20	380	226	3.2	1370	8.0	26.0
30...	.7	866	863	1.18	380	226	3.2	1360	7.9	26.0
JULY										
07...	.7	870	866	1.18	380	224	3.2	1370	8.0	--
14...	.5	874	854	1.19	370	218	3.3	1350	8.0	30.0
21...	.5	858	849	1.17	365	214	3.3	1340	8.1	28.5
28...	.5	868	862	1.18	375	221	3.3	1360	8.0	--
AUG.										
04...	.6	846	836	1.15	365	219	3.2	1320	8.2	29.5
11...	.5	876	878	1.19	380	229	3.4	1380	8.1	30.0
18...	.7	868	870	1.18	375	224	3.4	1370	8.0	28.0
25...	.6	878	878	1.19	375	224	3.4	1380	7.9	29.0
SEP.										
01...	.6	858	856	1.17	365	219	3.3	1350	8.0	28.0
09...	.5	892	891	1.21	375	222	3.5	1410	7.9	29.0
15...	.6	916	914	1.25	385	228	3.6	1440	8.0	28.5
22...	.6	884	873	1.20	375	228	3.4	1380	7.9	26.5
29...	.6	854	852	1.16	365	222	3.3	1350	8.0	25.5

09429690. Colorado River above Gila River, near Yuma, Ariz.

LOCATION.--Lat 32°43'22", long 114°32'46", in SE¼NE¼ sec.19, T.8 S., R.22 W., Yuma County, on left bank, 0.6 mi (1.0 km) upstream from Gila River, 5 mi (8 km) east of Yuma, 9 mi (14 km) downstream from Laguna Dam, 12 mi (19 km) upstream from northerly international boundary, and 14 mi (22 km) downstream from Imperial Dam.

DRAINAGE AREA.--185,000 mi^2 (479,000 km^2), approximately.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
07...	0820	16	10	120	38	170	6.6	228	--	400	180	.5
15...	1425	16	20	110	35	200	8.2	230	--	400	180	.5
21...	1115	15	20	110	33	180	5.7	215	--	380	170	.6
29...	1400	16	10	120	36	200	6.2	236	--	410	200	.6
NOV.												
04...	1140	16	10	120	34	220	6.3	237	--	420	200	.6
11...	1430	15	20	110	38	190	4.0	225	--	390	180	.5
18...	1100	14	20	110	38	180	3.2	218	--	380	160	.6
26...	1325	16	10	120	38	210	6.2	239	--	400	200	.6
DEC.												
02...	1420	16	10	100	40	210	5.5	241	--	400	190	.7
09...	1330	13	10	110	35	180	5.5	213	--	370	170	.5
16...	1340	15	40	120	41	220	5.7	239	--	400	220	.7
23...	1350	15	40	110	35	210	5.3	227	--	410	190	.6
30...	1300	15	10	110	35	200	5.4	223	--	390	180	.6
JAN.												
06...	1135	11	10	99	34	160	5.5	187	--	370	140	.5
13...	1300	15	10	110	35	160	5.5	201	--	370	160	.5
20...	1105	12	10	97	35	160	5.3	199	--	380	150	.5
27...	1325	13	10	110	35	170	5.3	204	--	410	160	.5
FEB.												
03...	1310	11	30	98	32	150	5.2	191	--	360	140	.4
10...	1350	11	10	96	31	160	5.7	190	--	360	150	.5
18...	1320	14	20	120	39	210	5.3	238	--	430	200	.6
24...	1125	13	10	110	36	210	5.6	231	--	410	210	.7
MAR.												
03...	1405	13	10	110	38	200	5.7	223	--	460	170	.6
10...	1420	12	30	110	35	170	5.0	212	--	390	160	.6
17...	1505	12	10	110	36	180	6.1	219	--	390	170	.6
24...	1335	12	30	110	40	170	5.4	212	--	370	170	.6
31...	1535	11	10	100	36	170	7.2	205	--	370	140	.4
APR.												
07...	1510	11	10	100	37	180	6.0	213	--	400	160	.6
15...	1445	10	40	110	37	160	5.7	213	--	380	150	.4
21...	1610	12	10	100	38	190	5.9	216	0	390	180	.6
28...	1340	11	10	110	38	160	5.6	217	0	360	150	.5
MAY												
05...	1340	12	10	110	39	180	5.8	220	0	410	160	.5
12...	1225	9.6	10	100	34	160	5.6	195	0	360	140	.5
19...	1400	9.7	20	100	36	150	5.6	202	0	340	140	.5
27...	1150	8.4	20	97	36	160	6.8	194	0	370	130	.5
JUNE												
02...	1500	9.5	40	99	35	160	5.9	206	0	360	150	.5
09...	1425	9.3	10	95	35	150	6.2	196	0	350	130	.5
16...	1425	12	20	100	40	180	5.9	218	0	380	170	.5
23...	1500	12	30	110	35	180	6.0	219	0	400	160	.5
30...	1330	12	30	110	37	170	5.9	210	0	390	150	.5
JULY												
08...	1120	12	0	110	37	160	5.9	208	0	370	150	.5
14...	1350	13	0	100	37	170	5.8	197	0	370	160	.5
21...	1440	13	0	110	34	170	5.8	203	0	350	160	.6
28...	1350	13	0	110	38	170	6.0	206	0	380	160	.5
AUG.												
04...	1350	11	10	96	34	150	5.8	186	0	340	140	.6
11...	1355	14	0	100	34	170	5.9	202	0	390	150	.6
18...	1455	13	10	100	36	170	5.9	205	0	380	150	.5
25...	1530	14	0	100	43	170	5.7	205	0	410	160	.6
SEP.												
02...	1410	12	0	96	34	170	6.0	202	0	360	150	.5
08...	1450	14	20	100	36	180	5.9	189	0	400	170	.7
15...	1100	14	0	110	39	190	5.6	215	0	440	170	.6
22...	1430	14	160	97	38	170	5.6	191	0	400	160	.5
29...	1045	11	0	96	35	170	5.3	194	0	370	150	.5

COLORADO RIVER MAIN STEM

09429690. Colorado River above Gila River, near Yuma, Ariz.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished chemical analyses (continuing record) for water years 1961-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.											
07...	.14	1120	1040	1.52	460	270	3.5	1690	--	23.0	260
15...	.12	1110	1060	1.51	420	230	4.3	1670	--	24.0	280
21...	.09	1020	1000	1.39	410	230	3.9	1600	--	23.5	270
29...	.13	1070	1110	1.46	450	250	4.1	1730	--	21.0	240
NOV.											
04...	.14	1180	1130	1.60	440	250	4.6	1790	--	18.5	260
11...	.16	1110	1040	1.51	430	250	4.0	1660	--	20.0	270
18...	.21	1040	994	1.41	430	250	3.8	1600	--	18.0	250
26...	.18	1150	1110	1.56	460	260	4.3	1770	--	16.5	270
DEC.											
02...	.16	1140	1080	1.55	410	220	4.5	1760	--	14.0	280
09...	.23	1040	990	1.41	420	240	3.8	1600	--	13.5	220
16...	1.1	1190	1150	1.62	470	270	4.4	1830	--	16.5	290
23...	.23	1080	1090	1.47	420	230	4.5	1680	--	13.5	290
30...	.56	1050	1050	1.43	420	240	4.3	1650	--	12.5	250
JAN.											
06...	.28	900	914	1.22	390	230	3.5	1410	--	9.0	180
13...	1.4	944	962	1.28	420	250	3.4	1480	--	19.0	210
20...	.38	944	940	1.28	390	220	3.5	1460	--	15.5	210
27...	.46	958	1010	1.30	420	250	3.6	1520	--	14.0	240
FEB.											
03...	.23	906	892	1.23	380	220	3.4	1410	--	13.5	190
10...	.25	910	909	1.24	370	210	3.6	1420	--	14.0	230
18...	.15	1120	1140	1.52	460	270	4.3	1740	--	16.0	290
24...	.13	1140	1110	1.55	420	230	4.4	1740	--	16.0	280
MAR.											
03...	.12	1100	1110	1.50	430	250	4.2	1650	--	18.5	260
10...	.16	988	988	1.34	420	250	3.6	1520	--	21.0	230
17...	.16	1010	1010	1.37	420	240	3.8	1570	--	17.0	230
24...	.16	996	984	1.35	440	270	3.5	1560	--	18.5	250
31...	.19	960	937	1.31	400	230	3.7	1490	--	17.0	310
APR.											
07...	.20	1060	1000	1.44	400	230	3.9	1590	--	15.5	250
15...	.17	964	959	1.31	430	250	3.4	1500	--	20.5	220
21...	.15	1040	1020	1.39	410	230	4.1	1600	7.9	22.0	250
28...	.19	1000	943	1.36	430	250	3.4	1520	8.0	21.0	220
MAY											
05...	.15	1010	1030	1.37	440	250	3.8	1550	8.0	20.5	250
12...	.09	950	906	1.29	390	230	3.5	1430	8.0	24.0	230
19...	.09	922	882	1.25	400	230	3.3	1430	8.1	24.0	210
27...	.08	892	905	1.21	390	230	3.5	1380	8.0	24.5	210
JUNE											
02...	.05	942	922	1.28	390	220	3.5	1450	8.0	26.5	190
09...	.04	892	873	1.21	380	220	3.3	1400	8.1	27.0	210
16...	.08	1050	996	1.43	410	240	3.8	1580	8.1	28.5	220
23...	.09	998	1010	1.36	420	240	3.8	1570	8.1	26.5	210
30...	.11	986	980	1.34	430	260	3.6	1520	8.2	27.0	230
JULY											
08...	.05	996	948	1.35	430	260	3.4	1500	7.9	26.0	220
14...	.05	954	954	1.30	400	240	3.7	1500	8.0	29.5	210
21...	.08	942	944	1.28	410	240	3.6	1490	8.0	30.0	220
28...	.06	980	979	1.33	430	260	3.6	1490	8.0	30.5	170
AUG.											
04...	.06	880	869	1.20	380	230	3.4	1370	8.1	30.5	210
11...	.13	976	965	1.33	390	220	3.7	1500	8.0	30.0	200
18...	.07	956	957	1.30	400	230	3.7	1500	8.0	28.5	190
25...	.11	984	1010	1.34	430	260	3.6	1530	8.0	29.5	240
SEP.											
02...	.06	950	929	1.29	380	210	3.8	1480	8.0	29.5	220
08...	.10	984	1000	1.34	400	240	3.9	1530	7.9	29.0	230
15...	.07	1040	1080	1.41	440	260	4.0	1620	7.9	28.0	260
22...	.13	944	980	1.28	400	240	3.7	1480	8.1	27.0	200
29...	.11	942	934	1.28	380	220	3.8	1450	7.9	25.5	220

09430500 GILA RIVER NEAR GILA, N. MEX.

LOCATION.--Lat 33°03'40", long 108°32'12", in NE¼NW¼ sec.30, T.14 S., R.16 W., Grant County, on left bank at Hooker damsite, 1.6 mi (2.6 km) upstream from Mogollon Creek, 7 mi (11 km) northeast of Gila, and at mile 572.5 (921.2 km).

DRAINAGE AREA.--1,864 mi² (4,828 km²).

PERIOD OF RECORD.--April to December 1914, December 1927 to current year. Monthly discharge only December 1927 to September 1930, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,655.8 ft (1,419.09 m) above mean sea level from river-profile survey. Prior to Dec. 31, 1928, at site 5 mi (8 km) upstream at different datum. Dec. 31, 1928, to Jan. 7, 1942, at site 200 ft (61 m) upstream at same datum.

AVERAGE DISCHARGE.--48 years (1927-75), 135 ft³/s (3.823 m³/s) 97,810 acre-ft/yr (121 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,620 ft³/s (103 m³/s) Sept. 8 (gage height, 5.80 ft or 1.768 m); minimum, 37 ft³/s (1.05 m³/s) at times.
Period of record: Maximum discharge, 25,400 ft³/s (719 m³/s) Sept. 29, 1941 (gage height, 17.2 ft or 5.24 m, from floodmark), from rating curve extended above 3,900 ft³/s (110 m³/s) on basis of velocity-area studies; minimum, 14 ft³/s (0.40 m³/s) July 15, 1971.
Other major floods occurred in November 1905, December 1906, and January 1916.

REMARKS.--Records good. Diversions for irrigation of about 500 acres (202 hm²) above station.

REVISIONS (WATER YEARS).--WSP 1283: Drainage area. WSP 1313: 1944 (M), 1949 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	190	86	83	848	144	310	255	136	40	76	55
2	59	170	83	86	640	180	374	235	124	43	64	52
3	55	161	83	83	888	250	386	225	116	43	61	55
4	55	152	90	78	410	350	446	225	112	46	55	91
5	50	140	97	72	332	362	591	235	112	46	52	378
6	50	127	93	75	280	350	680	230	112	49	46	2320
7	57	123	93	75	250	386	680	220	112	49	43	2640
8	64	116	90	75	220	422	640	208	112	52	40	2850
9	75	123	90	78	204	676	556	200	104	52	43	2290
10	64	123	86	78	196	832	476	184	100	52	43	1770
11	57	144	83	72	188	720	452	180	94	49	40	1690
12	90	144	78	67	180	598	500	184	88	55	43	1880
13	97	131	78	62	172	507	488	192	85	58	52	1970
14	86	119	75	62	168	434	446	200	79	58	55	1860
15	81	112	70	62	180	422	410	216	76	58	58	1330
16	78	104	70	64	176	428	386	220	70	58	55	1000
17	75	101	67	67	168	410	386	235	67	64	52	612
18	72	97	70	67	164	380	434	230	64	67	55	521
19	70	93	72	67	148	350	440	212	61	64	46	452
20	67	90	70	67	148	338	392	204	58	67	46	434
21	70	86	72	70	152	344	362	192	55	67	58	410
22	75	86	75	72	156	386	350	184	52	70	94	320
23	90	86	75	75	140	422	368	180	52	112	128	265
24	93	83	75	75	136	392	380	160	49	116	85	225
25	90	83	81	78	136	362	374	148	49	120	82	196
26	86	81	72	78	136	344	356	140	46	94	76	176
27	90	81	72	81	136	350	356	132	46	82	79	164
28	97	83	72	83	136	338	338	136	43	97	112	156
29	104	83	78	93	---	338	305	148	40	144	85	148
30	140	83	81	477	---	320	270	156	40	116	67	140
31	235	---	81	1190	---	310	---	152	---	88	61	---
TOTAL	2534	3395	2458	3812	7088	12445	12932	6018	2354	2176	1952	26450
MEAN	81.7	113	79.3	123	253	401	431	194	78.5	70.2	63.0	882
MAX	235	190	97	1190	888	832	680	255	136	144	128	2850
MIN	50	81	67	62	136	144	270	132	40	40	40	52
AC-FT	5030	6730	4880	7560	14060	24680	25650	11940	4670	4320	3870	52460

CAL YR 1974 TOTAL 26896 MEAN 73.7 MAX 431 MIN 20 AC-FT 53350
WTR YR 1975 TOTAL 83614 MEAN 229 MAX 2850 MIN 40 AC-FT 165800

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-31	0700	3.90	1,330	4-6	1800	3.20	720
3- 9	2100	3.45	920	9-8	0230	5.80	3,620

09431500 GILA RIVER NEAR REDROCK, N. MEX.

LOCATION.--Lat 32°43'37", long 108°40'30", in W½ sec.23, T.18 S., R.18 W., Grant County, on left bank 0.2 mi (0.3 km) downstream from Copper Canyon, 0.2 mi (0.3 km) upstream from lower end of box canyon, 4.7 mi (7.6 km) northeast of Redrock, 14 mi (23 km) downstream from Mangas Creek, and at mile 539.2 (867.6 km).

DRAINAGE AREA.--2,829 mi² (7,327 km²).

PERIOD OF RECORD.--September 1904 to February 1905 (gage heights only). May 1905 to December 1906, January to December 1907 and July to October 1908 (gage heights only). November 1908 to December 1910, January 1911 to January 1912 and May to June 1912 (gage heights only). August 1912 to September 1955, October 1962 to current year. Monthly or annual discharge only for some periods, published in WSP 1313. Published as "near Cliff" 1904-07, and as "near Redrock" 1908-55.

GAGE.--Water-stage recorder. Altitude of gage is 4,090 ft (1,247 m) from plane table survey. Prior to Dec. 31, 1907, nonrecording gage at site 13.5 mi (21.7 km) upstream at different datum. May 14, 1908, to July 16, 1909, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--59 years (1905-06, 1908-10, 1912-55, 1962-75), 198 ft³/s (5.607 m³/s), 143,500 acre-ft/yr (177 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,740 ft³/s (191 m³/s) Sept. 11 (gage height, 14.40 ft or 4.389 m); minimum, 22 ft³/s (0.62 m³/s) Aug. 17.
Period of record: Maximum discharge, 40,000 ft³/s (1,130 m³/s) Sept. 29, 1941 (gage height, 31 ft or 9.4 m, from floodmarks), computed on basis of known peak flow for station below Blue Creek; minimum, 2.2 ft³/s (0.062 m³/s) Aug. 5, 1947.

REMARKS.--Records fair. Diversions for irrigation of about 5,000 acres (20.2 km²) above station.

REVISIONS (WATER YEARS).--WSP 1213: 1906, 1911-15, 1931, 1936-37, 1939, 1941, 1944, 1945(P), 1946(M), 1947. WSP 1283: Drainage area. WSP 1926: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	210	79	74	633	203	411	335	129	41	83	56
2	82	195	80	75	486	222	449	306	123	42	66	78
3	77	185	79	69	436	282	474	301	118	43	61	110
4	75	182	79	66	398	353	477	292	111	48	55	490
5	79	173	81	62	365	420	553	289	109	48	49	542
6	74	153	78	63	342	409	638	276	103	54	44	2880
7	75	142	73	62	311	413	652	272	101	60	39	4380
8	68	137	76	67	293	442	629	258	99	56	36	4670
9	78	172	84	71	280	542	571	235	108	51	33	3400
10	75	190	82	71	266	810	534	219	103	49	29	2600
11	78	164	76	74	251	741	514	212	102	156	25	3190
12	79	155	80	76	257	683	543	211	97	113	25	2980
13	113	149	82	82	232	600	557	218	92	75	28	2920
14	109	135	84	81	235	544	520	236	86	70	29	2570
15	103	126	84	80	218	535	478	251	82	69	27	1730
16	97	121	88	82	215	540	449	244	76	66	24	1240
17	89	113	89	82	215	520	445	249	72	66	23	904
18	89	102	88	89	221	500	476	245	69	66	23	710
19	80	99	88	88	207	449	509	227	64	68	23	584
20	66	96	84	86	203	442	487	210	54	63	23	536
21	66	91	83	81	200	444	445	195	49	68	24	488
22	68	85	81	71	203	460	425	185	46	82	110	420
23	79	84	80	69	202	502	439	173	43	142	200	350
24	86	81	79	72	195	496	451	163	43	150	110	306
25	82	84	76	78	208	468	425	156	49	105	96	276
26	78	85	78	76	207	443	420	149	49	95	80	245
27	78	85	80	78	200	468	416	148	48	95	160	218
28	82	80	73	82	196	457	406	140	43	94	120	198
29	88	78	72	86	---	472	386	136	42	99	96	188
30	140	84	74	120	---	450	357	135	41	112	70	179
31	170	---	73	847	---	421	---	135	---	101	60	---
TOTAL	2686	3836	2483	3160	7675	14731	14536	6801	2351	2447	1871	39438
MEAN	86.6	128	80.1	102	274	475	485	219	78.4	78.9	60.4	1315
MAX	170	210	89	847	633	810	652	335	129	156	200	4670
MIN	66	78	72	62	195	203	357	135	41	41	23	56
AC-FT	5330	7610	4930	6270	15220	29220	28830	13490	4660	4850	3710	78230

CAL YR 1974 TOTAL 27233.4 MEAN 74.6 MAX 338 MIN 4.7 AC-FT 54020
WTR YR 1975 TOTAL 102015.0 MEAN 279 MAX 4670 MIN 23 AC-FT 202300

PEAK DISCHARGE (BASE, 3,000 CFS).--July 11 (2030) 6,300 cfs (15.36 ft); Sept. 11 (2245) 6,740 cfs (14.40 ft).

09432000. Gila River below Blue Creek, near Virden, N. Mex.

LOCATION.--Lat 32°38'53", long 108°50'43", in SE¼SW¼ sec.18, T.19 S., R.19 W., Grant County, on left bank at head of canyon, 1.4 mi (2.3 km) downstream from Blue Creek, 10 mi (16 km) east of Virden, and 16 mi (26 km) upstream from New Mexico-Arizona State line.

DRAINAGE AREA.--3,203 mi^2 (8,296 km^2), excluding Animas River basin.

PERIOD OF RECORD.--May to November 1914, March to September 1915, July 1927 to current year. July 1927 to May 1931 monthly discharge only, published in WSP 1313, computed as sum of flow at Virden Bridge, 9 mi (14 km) downstream, and in Sunset Canal. Published as Gila River near Duncan, Ariz., 1914-15 and as Gila River at Fuller's Ranch, near Duncan, Ariz., 1931-38.

GAGE.--Water-stage recorder. Altitude of gage is 3,875 ft (1,181.1 m) (from river-profile map). May 11, 1914, to Sept. 30, 1915, at site 6 mi (10 km) downstream, 1,000 ft (300 m) upstream from intake of Sunset Canal. June 1 to July 7, 1931, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--48 years (1927-75), 178 ft^3/s (5.041 m^3/s), 129,000 acre-ft/yr (159 hm^3/yr); median of yearly mean discharges, 130 ft^3/s (3.68 m^3/s), 94,200 acre-ft/yr (120 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 7,720 ft^3/s (219 m^3/s) Sept. 8 (gage height, 12.30 ft or 3.749 m); minimum, 7.5 ft^3/s (0.21 m^3/s) Aug. 18.
Period of record: Maximum discharge, 41,700 ft^3/s (1,180 m^3/s) Sept. 29, 1941 (gage height, 25.78 ft or 7.858 m); minimum, 1 ft^3/s (0.028 m^3/s) July 14, 1934.

REMARKS.--Records good. Station is above all Duncan Valley diversions. Diversions for irrigation of about 6,200 acres (25.1 km^2) above station.

REVISIONS (WATER YEARS).--WSP 1283: Drainage area. WSP 1313: 1929, 1931-32(M)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	231	101	106	1,260	158	366	334	116	31	90	48
2	70	209	104	115	842	167	394	310	110	30	70	41
3	67	190	99	105	666	205	421	300	108	29	56	40
4	62	175	104	105	586	254	421	296	105	29	49	229
5	68	177	104	100	526	292	478	285	98	38	43	487
6	64	151	105	102	478	308	574	276	93	247	39	2,110
7	66	138	99	102	442	314	634	267	91	126	34	4,480
8	55	132	99	104	406	340	634	258	86	98	30	6,180
9	65	154	108	107	379	403	578	234	89	79	28	3,870
10	94	220	111	102	358	719	532	216	93	68	26	2,800
11	81	195	102	101	340	722	502	202	87	143	23	3,730
12	79	177	102	99	332	650	520	192	82	617	21	3,990
13	157	169	105	104	308	574	582	198	75	133	20	3,210
14	141	146	104	98	306	517	517	205	68	116	18	3,500
15	115	134	99	96	283	517	475	222	64	108	15	2,300
16	100	133	102	99	274	520	448	214	59	102	13	1,520
17	90	130	104	97	263	520	427	223	55	105	10	1,100
18	92	121	102	106	268	505	448	229	51	126	8.2	894
19	89	117	105	110	249	475	481	216	49	67	9.2	785
20	72	116	100	108	234	448	469	205	44	60	9.0	670
21	67	116	102	107	214	442	430	193	41	55	11	583
22	68	108	100	95	211	445	403	180	39	57	106	494
23	80	105	101	90	204	472	403	164	37	103	221	382
24	90	101	101	91	188	478	412	151	36	254	113	328
25	85	105	100	96	190	445	391	146	35	145	88	304
26	79	102	101	98	181	418	388	135	35	125	80	271
27	76	107	105	99	170	430	391	129	35	125	163	245
28	86	102	101	106	156	418	382	125	34	105	132	227
29	90	97	99	113	------	427	366	121	32	118	100	210
30	158	104	104	200	------	418	350	122	32	124	73	196
31	195	------	105	1,440	------	382	------	121	------	105	56	------
TOTAL	2,772	4,262	3,178	4,601	10,314	13,383	13,817	6,469	1,979	3,668	1,754.4	45,224
MEAN	89.4	142	103	148	368	432	461	209	66.0	118	56.6	1,507
MAX	195	231	111	1,440	1,260	722	634	334	116	617	221	6,180
MIN	55	97	99	90	156	158	350	121	32	29	8.2	40
AC-FT	5,500	8,450	6,300	9,130	20,460	26,550	27,410	12,830	3,930	7,280	3,480	89,700

CAL YR 1974 TOTAL 29,523.9 MEAN 80.9 MAX 752 MIN 2.7 AC-FT 58,560
WTR YR 1975 TOTAL 111,421.4 MEAN 305 MAX 6,180 MIN 8.2 AC-FT 221,000

PEAK DISCHARGE (BASE, 1,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-11	2330	9.79	2,670	9-12	0100	11.64	6,200
9- 8	0230	12.30	7,720				

09432500. Diversions from Gila River in Duncan Valley, N. Mex.-Ariz.

LOCATION.--Duncan Valley lies along Gila River in Hidalgo County, N. Mex., and Greenlee County, Ariz. The part in New Mexico is also known as Virden Valley. The valley extends from a point about 8 mi (13 km) east of State line to vicinity of Guthrie, Ariz. Ten canals, listed in the following table in downstream order, and several pumps have rights to divert water from Gila River for irrigation in the valley. The first three canals listed divert in New Mexico and the others divert in Arizona. Intake of Sunset Canal, at eastern end of valley, is 6 mi (10 km) downstream from station on Gila River below Blue Creek, near Virden, N. Mex. (09432000). Intake of York Canal, at western end, is about 14 mi (23 km) upstream from station on Gila River near Clifton, Ariz. (09442000).

PERIOD OF RECORD.--January 1936 to current year (combined monthly diversions and annual diversions by each canal). See WSP 1313 for summary of records of each canal (some since 1914) prior to 1951. Records of daily discharge for Sunset and New Model Canals have been published in reports of Geological Survey. Records of daily discharge since 1936 published in reports of Gila Water Commissioner.

GAGE.--Water-stage recorders and Parshall flumes.

REMARKS.--Record shows total diversions, unadjusted for return flows. Water obtained by pumping from ground water for irrigation in the valley is not included in these records. Decreed area for irrigation for the valley is 8,061 acres (32.6 km^2). Water was issued for 6,300 acres (25.5 km^2) during calendar year 1974.

COOPERATION.--Records furnished by Gila Water Commissioner.

ANNUAL DIVERSIONS, IN ACRE-FEET, TO EACH CANAL DURING CALENDAR YEAR 1974 AND WATER YEAR 1975

	Canal	Calendar year 1974	Water year 1975
09433000.	Sunset	10,910	12,280
09436000.	New Model	2,110	4,880
09437500.	Valley	377	3,670
09439000.	Duncan	0	0
09439500.	Black-McCleskey	0	0
09440000.	Colmenero	0	0
09440100.	Albert	0	0
09440200.	Sexton	0	0
09440300.	R. Sexton	0	0
09440500.	York	0	0
	Direct pumping	0	0
	Total	13,400	20,830

COMBINED MONTHLY DISCHARGE OF CANALS DIVERTING FROM GILA RIVER IN DUNCAN VALLEY, N. MEX.-ARIZ., DURING WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	Discharge, in cubic feet per second			Diversions in acre-feet
	Maximum	Minimum	Mean	
October	34	7.9	19.8	1,220
November	42	7.7	21.9	1,300
December	51	19	30.8	1,890
CAL YR 1974	54	0	18.5	13,400
January	5.7	1.5	2.4	150
February	58	1.6	33.1	1,840
March	72	32	57.6	3,540
April	73	42	65.9	3,920
May	75	25	55.5	3,410
June	36	13	20.3	1,210
July	63	12	25.4	1,560
August	15	4.6	11.9	732
September	13	0	.98	59
WTR YR 1975	75	0	28.8	20,830

09442000. Gila River near Clifton, Ariz.

LOCATION.--Lat 32°57'55", long 109°18'25", in NE¼SE¼ sec.25, T.5 S., R.29 E., Greenlee County, on right bank 60 ft (18 m) upstream from bridge on county road, 6 mi (10 km) upstream from San Francisco River, and 6 mi (10 km) south of Clifton.

DRAINAGE AREA.--4,010 mi^2 (10,386 km^2).

PERIOD OF RECORD.--November 1910 to July 1918 (published as "at Guthrie"), October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 3,336.38 ft (1,016.929 m) above mean sea level (adjusted). Nov. 6, 1910, to July 11, 1918, non-recording gage or water-stage recorder at two sites about 6 mi (10 km) upstream at Guthrie at different datums. March 1928 to June 1948 water-stage recorder at present site at datum 0.91 ft (0.277 m) lower. June 1948 to Oct. 17, 1967, water-stage recorder at site 0.2 mi (0.3 km) upstream at datum 3.12 ft (0.951 m) higher. Oct. 18, 1967, to June 23, 1974, at site 500 ft (150 m) downstream at datum 0.44 ft (0.134 m) higher.

AVERAGE DISCHARGE.--54 years (1911-17, 1927-75), 187 ft^3/s (5.296 m^3/s), 135,500 acre-ft/yr (167 hm^3/yr); median of yearly mean discharges, 140 ft^3/s (3.96 m^3/s), 101,000 acre-ft/yr (120 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,660 ft^3/s (132 m^3/s) Sept. 8 (gage height, 9.25 ft or 2.819 m); minimum daily, 14 ft^3/s (0.40 m^3/s) July 4, Aug. 16-19.
Period of record: Maximum discharge, 33,000 ft^3/s (935 m^3/s) Oct. 21, 1972 (gage height, 18.7 ft or 5.70 m, from high-water mark in gage well, at site and datum then in use, 20.0 ft or 6.10 m, from profile past gage at present site and datum); minimum daily, 5 ft^3/s (0.14 m^3/s) Aug. 24, 1962.

REMARKS.--Records good. Diversions for irrigation of about 14,300 acres (57.9 km^2) above station. Station is below all Duncan Valley diversions.

REVISIONS (WATER YEARS).--WSP 1059: 1911-12, 1915, 1917. WSP 1179: 1929(M), 1934(M). WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	174	63	90	1,290	104	281	269	67	15	50	30
2	47	180	62	94	835	98	274	247	62	15	50	33
3	39	168	59	104	622	106	294	221	59	15	40	26
4	291	162	55	98	469	146	311	209	55	14	30	110
5	70	152	52	96	377	204	317	200	51	15	30	624
6	50	148	51	93	335	228	425	196	47	62	30	850
7	47	127	57	93	286	221	556	188	45	180	20	2,560
8	45	117	62	93	242	233	618	202	39	55	20	3,480
9	42	111	67	94	221	269	574	198	32	40	20	4,170
10	39	148	79	96	209	476	514	180	29	30	20	3,130
11	179	176	87	93	192	775	432	170	28	30	20	3,270
12	83	148	84	88	186	706	413	150	27	120	20	3,300
13	151	132	82	87	174	602	435	140	25	60	20	2,800
14	213	122	81	92	168	483	445	130	24	50	17	2,850
15	106	108	76	88	170	425	404	130	23	40	15	2,010
16	94	99	74	85	156	416	380	136	23	40	14	1,360
17	79	105	73	87	156	413	344	141	22	30	14	890
18	80	105	71	87	162	392	344	146	20	30	14	670
19	77	87	70	92	164	365	392	150	19	30	14	586
20	75	82	77	98	158	329	442	136	18	30	17	514
21	59	82	80	98	144	314	404	117	18	30	16	472
22	53	86	81	99	137	299	359	108	18	30	17	422
23	52	77	80	85	127	314	332	104	17	29	24	371
24	74	73	79	80	124	353	335	93	17	172	118	326
25	76	71	80	79	114	368	332	82	17	178	74	279
26	77	71	84	81	113	338	323	77	17	104	51	262
27	74	62	84	84	108	314	323	75	17	80	43	238
28	68	69	86	85	106	326	320	73	16	70	90	216
29	79	68	82	92	------	323	305	79	16	60	81	196
30	114	63	81	94	------	323	292	74	15	60	59	180
31	150	------	84	563	------	320	------	70	------	60	44	------
TOTAL	2,739	3,373	2,283	3,288	7,545	10,583	11,522	4,491	883	1,774	1,092	36,225
MEAN	88.4	112	73.6	106	269	341	384	145	29.4	57.2	35.2	1,208
MAX	291	180	87	563	1,290	775	618	269	67	180	118	4,170
MIN	39	62	51	79	106	98	274	70	15	14	14	26
AC-FT	5,430	6,690	4,530	6,520	14,970	20,990	22,850	8,910	1,750	3,520	2,170	71,850

CAL YR 1974 TOTAL 28,339.8 MEAN 77.6 MAX 1,320 MIN 8.9 AC-FT 56,210
WTR YR 1975 TOTAL 85,798.0 MEAN 235 MAX 4,170 MIN 14 AC-FT 170,200

PEAK DISCHARGE (BASE, 2,500 CFS).--Sept. 8 (2330) 4,660 cfs (9.25 ft); Sept. 11 (0330) 4,200 cfs (9.05 ft).

09442680 SAN FRANCISCO RIVER NEAR RESERVE, N. MEX.

LOCATION.--Lat 33°44'12", long 108°46'14", in NE¼NW¼SE¼ sec.35, T.6 S., R.19 W., Catron County, on left bank 1,300 ft (400 m) downstream from Rainbow Bridge Canyon, 1.7 mi (2.7 km) northwest of Reserve, and at mile 563.1 (906.0 km).

DRAINAGE AREA.--350 mi² (907 km²), approximately.

PERIOD OF RECORD.--March 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,820 ft (1,774 m) from topographic map. Prior to Dec. 15, 1972 at site 1,800 ft (549 m) upstream at datum 21.3 ft (6.49 m) higher.

AVERAGE DISCHARGE.--16 years, 25.3 ft³/s (0.716 m³/s), 18,330 acre-ft/yr (22.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 929 ft³/s (26.3 m³/s) July 11 (gage height, 6.80 ft or 2.073 m); minimum, 1.4 ft³/s (0.040 m³/s) May 26.
Period of record: Maximum discharge, 11,900 ft³/s (337 m³/s) Oct. 20, 1972 (gage height, 7.47 ft or 2.277 m in gage well, 8.05 ft or 2.454 m, from outside floodmarks, site and datum then in use), from rating curve extended above 9,000 ft³/s (255 m³/s) on basis of velocity-area study; minimum, 1.0 ft³/s (0.028 m³/s) Mar. 16, 1959.
Maximum stage known, about 15 ft (4.6 m), as determined in 1962 from old floodmarks. Major floods of Nov. 26, 1905 and Dec. 3, 1906, exceeded 20,000 ft³/s (566 m³/s) at Alma (downstream). See WSP 1313.

REMARKS.--Records fair. Possible minor regulation by Luna Lake, 27 mi (43 km) upstream. Diversions for irrigation of about 500 acres (202 hm²) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	47	9.3	7.5	16	30	86	30	5.1	3.9	5.1	4.9
2	4.5	44	10	8.2	13	47	71	24	7.0	5.4	5.0	5.0
3	4.5	39	8.6	7.5	14	78	70	16	6.3	5.1	4.9	5.3
4	4.5	35	9.3	6.4	14	79	69	19	5.4	4.8	4.8	11
5	4.5	30	9.6	7.5	14	70	68	19	4.8	3.6	4.6	11
6	4.8	28	9.3	7.8	12	89	67	18	4.3	3.8	4.6	24
7	43	24	8.2	9.3	12	87	64	16	4.3	4.6	4.5	19
8	9.3	24	8.9	8.6	12	91	67	14	4.8	5.1	4.4	62
9	8.6	24	6.8	9.3	10	222	68	14	5.6	3.2	4.2	288
10	8.2	23	6.4	7.6	13	199	77	14	6.4	1.4	4.6	92
11	8.9	19	7.1	7.2	13	155	79	16	6.2	28	4.8	62
12	8.2	18	7.8	6.3	13	123	72	14	6.0	3.2	5.4	52
13	8.9	16	7.8	7.6	14	96	67	13	6.1	3.2	5.8	41
14	10	17	6.4	8.1	15	102	61	12	6.5	3.2	5.6	32
15	8.2	16	6.8	8.2	18	112	61	11	7.3	6.4	5.5	28
16	6.4	15	8.2	8.5	17	98	60	11	8.0	7.0	6.4	23
17	6.8	15	7.8	8.5	16	98	60	13	8.4	7.3	5.9	19
18	6.4	14	7.8	8.6	14	79	66	12	8.8	7.7	5.9	26
19	6.1	14	7.1	8.8	14	91	67	11	8.4	7.5	5.8	39
20	6.1	13	7.5	7.9	15	113	61	10	8.7	7.3	5.9	29
21	6.1	13	7.8	8.5	15	125	56	7.8	8.7	7.1	6.4	20
22	8.6	12	7.8	8.5	13	122	54	6.9	8.3	7.1	7.4	17
23	13	12	7.8	7.9	13	105	54	5.9	8.3	7.0	6.8	16
24	14	10	6.4	8.4	15	85	53	4.8	8.6	7.7	6.2	15
25	10	10	2.0	8.9	15	85	46	3.1	8.1	6.3	5.9	14
26	8.6	8.9	4.0	9.0	15	91	44	2.2	7.0	5.9	5.8	14
27	10	8.9	6.0	9.4	17	76	43	4.6	6.5	5.8	5.6	13
28	10	9.3	8.2	11	21	69	40	7.0	5.8	5.6	5.4	13
29	131	8.9	10	12	---	67	37	8.8	5.0	5.6	5.2	13
30	101	8.2	8.9	27	---	56	33	8.1	4.3	5.6	5.0	12
31	54	---	6.8	25	---	69	---	5.6	---	5.4	5.0	---
TOTAL	538.7	576.2	236.4	295.0	403	3009	1821	371.8	199.0	190.8	168.4	1020.2
MEAN	17.4	19.2	7.63	9.52	14.4	97.1	60.7	12.0	6.63	6.15	5.43	34.0
MAX	131	47	10	27	21	222	86	30	8.8	28	7.4	288
MIN	4.5	8.2	2.0	6.3	10	30	33	2.2	4.3	1.4	4.2	4.9
AC-FT	1070	1140	469	585	799	5970	3610	737	395	378	334	2020

CAL YR 1974 TOTAL 3091.4 MEAN 8.47 MAX 131 MIN 2.0 AC-FT 6130
WTR YR 1975 TOTAL 8829.5 MEAN 24.2 MAX 288 MIN 1.4 AC-FT 17510

PEAK DISCHARGE (BASE, 450 CFS).--July 11 (1445) 929 cfs (6.80 ft); Sept. 9 (0700) 868 cfs (5.28 ft).

09443000 SAN FRANCISCO RIVER NEAR ALMA, N. MEX.

LOCATION.--Lat 33°22'05", long 108°54'35", in SW¼SE¼ sec.4, T.11 S., R.20 W., Catron County, on right bank 1.2 mi (1.9 km) downstream from Alma, 4 mi (6 km) northwest of Glenwood, 6 mi (10 km) upstream from Whitewater Creek, and at mile 523.5 (842.3 km).

DRAINAGE AREA.--1,546 mi² (4,004 km²).

PERIOD OF RECORD.--September 1904 to January 1914, fragmentary (see WSP 1313), January 1964 to current year. Prior to October 1911, published as "at Alma".

GAGE.--Water-stage recorder. Datum of gage is 4,841 ft (1,475.5 m) above mean sea level. Prior to Aug. 11, 1912, nonrecording gages at various sites, within 500 ft (150 m) of each other, 0.8 mi (1.3 km) upstream, at different datums. Aug. 11, 1912, to Feb. 2, 1914, nonrecording gage at approximately present site and datum. Prior to Nov. 1, 1972, at datum 3.00 ft (0.91 m) higher.

AVERAGE DISCHARGE.--11 years (1964-75), 73.4 ft³/s (2.079 m³/s), 53,180 acre-ft/yr (65.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,600 ft³/s (442 m³/s) Sept. 9 (gage height, 11.34 ft or 3.456 m); no flow, Oct. 4-5.
Period of record: Maximum discharge, 30,600 ft³/s (867 m³/s) Oct. 20, 1972 (gage height, 18.16 ft or 5.535 m, present datum, from floodmarks in well), from rating curve extended above 3,500 ft³/s (99.1 m³/s) on basis of slope-area measurement of peak flow; no flow many days.
Major floods probably occurred Jan. 19 and Oct. 14, 1916, when discharges of about 60,000 ft³/s (about 1,700 m³/s) were computed at Clifton, Ariz.

REMARKS.--Records fair. Diversions for irrigation of about 1,500 acres (607 hm²) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	68	10	11	86	48	166	82	11	2.0	4.1	.65
2	4.1	63	10	11	49	102	194	68	9.6	1.6	2.5	3.0
3	4.1	68	10	14	41	185	194	62	8.0	1.1	2.0	39
4	1.6	57	10	7.6	37	204	207	55	7.2	1.1	1.6	36
5	0	49	11	7.2	32	182	239	55	6.3	1.6	1.6	42
6	1.6	41	12	7.6	30	178	246	60	5.8	11	1.6	126
7	17	38	11	10	28	223	239	60	5.8	9.6	1.6	195
8	37	38	12	11	27	220	233	51	5.2	3.0	1.6	547
9	17	37	11	14	27	518	210	44	5.2	2.5	1.6	4270
10	16	37	9.6	14	27	535	223	37	4.7	2.0	1.1	475
11	12	36	8.0	12	26	455	239	34	4.1	2.0	1.1	598
12	22	36	8.8	13	26	335	250	27	3.6	83	8.6	395
13	22	31	9.6	6.8	26	274	236	18	3.0	27	17	365
14	17	28	10	9.6	30	256	198	20	3.0	16	21	245
15	14	26	9.6	11	36	270	191	23	3.0	6.3	16	131
16	13	24	7.2	14	41	256	182	16	3.0	1.1	10	83
17	11	23	9.6	13	37	246	194	32	3.6	1.1	6.8	53
18	8.8	20	9.6	13	34	217	214	33	3.6	50	4.7	43
19	8.0	19	10	13	28	204	198	15	3.6	27	1.6	80
20	7.2	18	9.6	14	30	217	188	14	3.0	6.3	1.6	180
21	7.2	18	9.6	8.8	31	246	162	13	3.0	5.2	1.6	107
22	8.8	16	9.6	7.2	30	270	166	12	3.0	6.3	1.6	63
23	47	15	10	6.3	30	263	166	12	3.0	7.2	3.6	46
24	37	15	8.0	5.2	26	233	159	12	3.0	12	4.2	36
25	27	14	3.3	5.2	27	198	156	12	3.0	34	2.5	31
26	41	13	4.7	5.2	27	210	150	12	3.0	27	1.1	27
27	68	12	7.6	5.8	26	214	137	11	2.5	21	.65	24
28	41	12	8.8	6.3	27	182	126	10	2.5	22	.65	22
29	216	12	11	6.3	---	146	115	10	2.5	21	.65	17
30	254	12	13	32	---	134	98	11	2.5	9.6	.65	12
31	107	---	11	182	---	123	---	12	---	5.8	.65	---
TOTAL	1092.1	896	295.2	497.1	922	7344	5676	933	130.3	426.4	125.55	8291.65
MEAN	35.2	29.9	9.52	16.0	32.9	237	189	30.1	4.34	13.8	4.05	276
MAX	254	68	13	182	86	535	250	82	11	83	21	4270
MIN	0	12	3.3	5.2	26	48	98	10	2.5	1.1	.65	.65
AC-FT	2170	1780	586	986	1830	14570	11260	1850	258	846	249	16450

CAL YR 1974 TOTAL 3936.11 MEAN 10.8 MAX 254 MIN 0 AC-FT 7810
WTR YR 1975 TOTAL 26629.30 MEAN 73.0 MAX 4270 MIN 0 AC-FT 52820

PEAK DISCHARGE (BASE, 1,000 CFS).--Sept. 9 (0045) 15,600 cfs (11.34 ft).

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, N. MEX.

LOCATION.--Lat 33°14'48", long 108°52'47", in NE¼NW¼ sec.23, T.12 S., R.20 W., Catron County, on left bank 0.2 mi (0.3 km) upstream from hot springs, 5 mi (8 km) south of Glenwood, 6 mi (10 km) downstream from Whitewater Creek, and at mile 511.5 (823.0 km).

DRAINAGE AREA.--1,653 mi² (4,281 km²).

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,552.06 ft (1,387.468 m) above mean sea level; prior to Feb. 15, 1934, at site 4.5 mi (7.2 km) upstream at datum 98.82 ft (30.120 m) higher.

AVERAGE DISCHARGE.--48 years, 71.1 ft³/s (2.014 m³/s), 51,510 acre-ft/yr (63.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,300 ft³/s (292 m³/s) Sept. 9 (gage height, 10.80 ft or 3.292 m); minimum, 16 ft³/s (0.45 m³/s) Aug. 12.

Period of record: Maximum discharge, 34,100 ft³/s (966 m³/s) Oct. 20, 1972 (gage height, 16.61 ft or 5.063 m), from rating curve extended above 22,000 ft³/s (623 m³/s); minimum, 1.5 ft³/s (0.042 m³/s) Aug. 6, 1961.

Major floods probably occurred Jan. 19 and Oct. 14, 1916 when discharges of about 60,000 ft³/s (about 1,700 m³/s) were computed for station at Clifton, Ariz. On Nov. 26, 1905, a peak of 25,000 ft³/s (708 m³/s) was measured (by float-area method) at station at Alma (about 12 mi or 19 km upstream, drainage area, 1,560 mi² or 4,040 km²); a similar measurement of 21,000 ft³/s (595 m³/s) was made at the Alma station for peak of Dec. 3, 1906.

REMARKS.--Records good except those for June, which are poor. Diversions for irrigation of about 2,000 acre (810 hm²) above station. Water quality records for the current year are published in Water Resources Data for New Mexico.

REVISIONS (WATER YEARS).--WSP 1213: 1931, 1934, 1936-37, 1940-42, 1943-44(M), 1945-47. WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	86	35	28	97	51	199	144	52	21	27	24
2	28	72	35	28	70	78	231	131	49	24	25	25
3	26	84	34	28	60	121	218	122	46	27	23	38
4	27	71	35	27	55	164	233	117	43	30	23	69
5	27	67	35	25	52	163	280	115	41	33	22	82
6	29	62	33	26	48	157	302	119	39	43	23	138
7	33	57	32	26	46	194	309	116	37	48	22	260
8	55	55	32	28	44	194	306	102	35	48	20	320
9	44	71	32	29	43	504	274	94	34	45	22	4020
10	40	68	32	30	43	596	257	88	33	46	21	578
11	39	60	30	29	42	443	279	90	35	47	19	946
12	45	54	30	25	41	375	286	92	31	98	30	389
13	47	49	30	25	40	321	277	87	28	90	33	246
14	44	46	29	25	43	283	257	88	26	67	45	182
15	40	44	29	27	46	295	234	90	28	48	48	128
16	39	43	27	27	49	296	229	92	30	33	41	99
17	38	41	27	27	50	279	244	95	27	77	33	81
18	36	41	28	28	49	263	268	98	27	77	30	71
19	35	39	28	27	47	229	256	88	28	76	26	87
20	32	39	28	27	46	242	235	81	25	44	25	117
21	31	38	27	27	46	313	213	77	24	58	32	93
22	36	38	28	25	48	334	218	70	23	40	33	73
23	52	38	28	24	46	324	225	66	22	36	41	62
24	60	38	25	23	44	298	223	60	24	35	31	56
25	48	36	23	23	45	256	218	58	22	65	28	52
26	46	36	23	22	45	256	212	58	22	54	25	48
27	81	36	24	23	45	245	207	58	23	43	23	46
28	52	36	26	22	46	207	191	60	22	40	23	43
29	123	36	27	22	---	196	171	66	21	40	22	40
30	261	36	28	28	---	179	155	62	21	37	22	38
31	121	---	28	147	---	167	---	56	---	28	24	---
TOTAL	1643	1517	908	928	1376	8023	7207	2740	918	1498	862	8451
MEAN	53.0	50.6	29.3	29.9	49.1	259	240	88.4	30.6	48.3	27.8	282
MAX	261	86	35	147	97	596	309	144	52	98	48	4020
MIN	26	36	23	22	40	51	155	56	21	21	19	24
AC-FT	3260	3010	1800	1840	2730	15910	14300	5430	1820	2970	1710	16760

CAL YR 1974 TOTAL 10245 MEAN 28.1 MAX 261 MIN 12 AC-FT 20320
WTR YR 1975 TOTAL 36071 MEAN 98.8 MAX 4020 MIN 19 AC-FT 71550

PEAK DISCHARGE (BASE, 800 CFS).--Sept. 9 (0300) 10,300 cfs (10.80 ft).

09444200. Blue River near Clifton, Ariz.

LOCATION.--Lat 33°17'27", long 109°11'44", in sec.6, T.2 S., R.31 E. (unsurveyed), Greenlee County, in Apache National Forest, on right bank 0.1 mi (0.2 km) downstream from county road crossing, 0.9 mi (1.4 km) upstream from Clear Creek, 8 mi (13 km) upstream from mouth, and 17 mi (27 km) northeast of Clifton.

DRAINAGE AREA.--506 mi^2 (1,311 km^2).

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,160 ft (1,268 m), from topographic map.

AVERAGE DISCHARGE.--7 years (1968-75), 59.1 ft^3/s (1.674 m^3/s), 42,830 acre-ft/yr (52.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 25,500 ft^3/s (722 m^3/s) Sept. 8 (gage height, 21.43 ft or 6.53 m), from rating curve extended above 880 ft^3/s (25 m^3/s) on basis of slope-area measurement at gage height 22.56 ft (6.876 m); minimum daily, 3.5 ft^3/s (0.099 m^3/s) Sept. 1.
Period of record: Maximum discharge, 30,000 ft^3/s (850 m^3/s) Oct. 20, 1972 (gage height, 22.56 ft or 6.876 m), from rating curve extended above 880 ft^3/s (25 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 1.7 ft^3/s (0.048 m^3/s) July 11, 12, 1974.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	56	16	10	35	47	110	98	25	4.5	30	3.5
2	7.0	53	15	11	35	65	104	94	23	17	20	3.7
3	6.7	52	15	10	35	92	103	90	20	11	20	3.7
4	6.6	48	15	9.7	35	104	103	89	18	9.7	20	16
5	6.5	44	15	9.6	32	102	106	88	17	9.2	10	28
6	6.2	40	15	10	30	106	110	86	16	9.3	10	50
7	11	36	15	10	30	118	121	80	16	10	7.8	217
8	13	35	15	11	29	144	123	74	15	24	7.0	2670
9	11	40	15	11	28	418	116	68	14	20	6.7	5080
10	9.6	36	14	12	28	313	121	63	14	13	7.1	1490
11	24	34	14	11	28	262	128	62	13	11	6.1	450
12	18	32	13	11	28	231	130	64	12	35	6.3	280
13	30	31	12	11	28	197	131	65	11	31	5.9	105
14	24	29	12	11	30	199	124	65	11	25	5.8	82
15	19	28	11	11	41	199	122	64	9.8	18	5.1	66
16	17	27	11	11	49	190	125	64	8.8	16	4.7	54
17	16	26	12	11	45	177	134	66	8.5	17	4.3	45
18	15	25	12	11	42	157	141	62	7.6	21	4.0	42
19	14	23	12	11	41	151	136	56	7.5	25	3.8	39
20	14	23	11	11	40	161	128	52	7.2	19	4.1	35
21	14	23	12	11	41	173	125	48	7.0	15	3.7	31
22	33	22	12	12	41	186	127	45	6.6	13	20	26
23	48	21	10	12	38	175	128	41	6.4	16	7.8	24
24	34	20	7.9	12	37	151	129	37	6.1	131	11	22
25	26	20	9.9	10	38	141	128	33	5.8	50	9.2	20
26	30	19	9.5	10	38	149	129	31	5.5	50	6.4	19
27	35	18	9.9	10	38	154	129	29	5.2	40	6.0	18
28	31	17	9.7	10	40	150	122	30	4.9	40	5.2	17
29	179	17	9.9	10	---	140	108	31	4.8	40	4.6	15
30	112	16	10	20	---	130	104	31	4.6	30	4.2	14
31	73	---	10	30	---	120	---	28	---	30	3.7	---
TOTAL	890.9	913	380.8	361.3	1000	5102	3645	1834	331.3	800.7	270.5	10965.9
MEAN	28.7	30.4	12.3	11.7	35.7	165	122	59.2	11.0	25.8	8.73	366
MAX	179	58	16	30	49	418	141	98	25	131	30	5080
MIN	6.2	16	7.9	9.6	28	47	103	28	4.6	4.5	3.7	3.5
AC-FT	1770	1810	755	717	1980	10120	7230	3640	657	1590	537	21750

CAL YR 1974 TOTAL 5478.9 MEAN 15.0 MAX 179 MIN 1.7 AC-FT 10870
WTR YR 1975 TOTAL 26495.4 MEAN 72.6 MAX 5080 MIN 3.5 AC-FT 52550

PEAK DISCHARGE (BASE, 800 CFS).--July 24 (1600) 2,700 cfs (10.20 ft); Sept. 8 (2130) 25,500 cfs (21.43 ft).

09444500. San Francisco River at Clifton, Ariz.

LOCATION.--Lat 33°02'58", long 109°17'43", in SW¼SE¼ sec.30, T.4 S., R.30 E., Greenlee County, on downstream side of right pier at Railroad Boulevard Bridge (U.S. Highway 666), at Clifton, 9.9 mi (15.9 km) upstream from mouth.

DRAINAGE AREA.--2,766 mi^2 (7,164 km^2).

PERIOD OF RECORD.--October 1910 to March 1911, July 1911 to June 1912, September 1912, November 1912 to March 1913, May 1913 to July 1918, July 1927 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as San Francisco River at dam above Clifton in 1911 and under both names in 1912.

GAGE.--Water-stage recorder. Datum of gage is 3,436.16 ft (1,047.342 m) above mean sea level. See WSP 1713 or 1733 for history of changes prior to Apr. 7, 1959. Apr. 7, 1959, to Mar. 23, 1961, at site 1,140 ft (347 m) downstream at datum 5.37 ft (1.637 m) lower.

AVERAGE DISCHARGE.--51 years (1913-15, 1916-17, 1927-75) 192 ft^3/s (5.437 m^3/s), 139,100 acre-ft/yr (172 hm^3/yr); median of yearly mean discharge, 130 ft^3/s (3.68 m^3/s), 94,200 acre-ft/yr (120 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 30,000 ft^3/s (850 m^3/s) Sept. 9 (gage height, 12.0 ft or 3.66 m, from high-water mark); minimum daily, 25 ft^3/s (0.71 m^3/s) Aug. 11.
Period of record: Maximum discharge, 64,000 ft^3/s (1,810 m^3/s) Oct. 20, 1972 (gage height, 17.0 ft or 5.18 m, from high-water mark), from rating curve extended above 6,400 ft^3/s (181 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 6.1 ft^3/s (0.17 m^3/s) June 21, 1971.

REMARKS.--Records good. Diversions for mining, municipal use, and for irrigation of about 2,700 acres (10.9 km^2) above station.

REVISIONS (WATER YEARS).--WSP 1049: 1911, 1913-15, 1917. WSP 1283: Drainage area. WSP 1313: 1927-30(M), 1932(M), 1934(M). WRD Ariz. 1972: 1917(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	231	81	65	224	131	305	300	97	42	65	38
2	56	196	81	65	158	147	355	271	87	41	56	39
3	56	179	80	65	134	231	350	246	83	60	50	40
4	56	179	80	65	117	340	345	246	78	58	45	55
5	55	164	83	65	110	385	370	243	78	63	44	178
6	56	149	83	63	105	380	400	246	76	60	41	247
7	62	134	78	63	101	415	435	239	76	65	34	688
8	74	134	78	62	95	470	455	224	69	60	35	3320
9	97	147	78	65	93	920	435	202	65	62	37	11800
10	87	185	76	68	93	1300	420	182	62	63	32	1900
11	80	161	76	65	95	1040	435	173	65	56	25	1040
12	103	142	74	63	93	902	455	176	62	59	47	1280
13	112	126	73	62	93	729	470	189	53	134	53	638
14	108	117	71	59	99	638	445	176	44	129	63	580
15	95	110	62	59	119	604	415	170	47	99	62	440
16	85	103	66	60	144	610	405	189	49	78	65	318
17	78	101	69	60	144	562	405	199	47	80	60	213
18	74	99	69	60	139	526	455	202	45	121	58	179
19	73	95	71	60	131	470	465	192	41	112	33	147
20	68	91	68	59	129	460	440	164	39	119	34	155
21	65	89	68	59	129	485	410	152	40	97	35	185
22	69	91	71	62	131	532	395	144	46	95	42	155
23	128	89	71	59	129	556	415	129	42	97	151	136
24	134	85	66	58	124	520	420	119	40	197	65	124
25	129	87	65	51	121	460	420	105	40	274	50	114
26	101	85	62	44	119	445	415	105	34	131	47	108
27	119	85	60	45	121	470	415	101	30	112	46	101
28	149	83	63	46	124	425	390	99	32	91	39	93
29	242	80	65	53	---	390	355	108	29	103	34	85
30	444	81	65	114	---	355	322	114	37	93	33	81
31	340	---	65	213	---	314	---	108	---	81	38	---
TOTAL	3451	3698	2218	2057	3414	16212	12217	5513	1633	2932	1519	24477
MEAN	111	123	71.5	66.4	122	523	407	178	54.4	94.6	49.0	816
MAX	444	231	83	213	224	1300	470	300	97	274	151	11800
MIN	55	80	60	44	93	131	305	99	29	41	25	38
AC-FT	6850	7330	4400	4080	6770	32160	24230	10940	3240	5820	3010	48550

CAL YR 1974	TOTAL	24503	MEAN	67.1	MAX	444	MIN 12	AC-FT 48600
WTR YR 1975	TOTAL	79341	MEAN	217	MAX	11800	MIN 25	AC-FT 157400

PEAK DISCHARGE (BASE, 2,000 CFS).--Sept. 9 (0030) 30,000 cfs (12.0 ft); Sept. 12 (0400) 2,800 cfs (5.30 ft).

09445000. Willow Creek diversion from Black River, near Morenci, Ariz.

LOCATION.--Lat 33°24'46", long 109°43'08", in SW¼ sec.23, T.1 N., R.25 E. (unsurveyed), Graham County, in San Carlos Indian Reservation, on left bank just downstream from end of diversion pipeline, 3.6 mi (5.8 km) northeast of Point of Pines, 5.0 mi (8.0 km) southeast of pumping plant on Black River, and 29 mi (47 km) northwest of Morenci.

PERIOD OF RECORD.--April 1945 to current year.

GAGE.--Water-stage recorder and steel-edged rectangular weir. Datum of gage is 5,957.16 ft (1,815.742 m) above mean sea level. Prior to June 26, 1946, at end of pipeline at that time, 3.5 mi (5.6 km) upstream at datum about 50 ft (15 m) higher.

AVERAGE DISCHARGE.--30 years, 9.78 ft^3/s (0.277 m^3/s), 7,090 acre-ft/yr (8.74 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 28 ft^3/s (0.79 m^3/s) May 18, 19, 21-26, 1970; no flow at times in each year.

REMARKS.--Records good. The entire flow consists of Black River (head of Salt River) water which is pumped into headwaters of Willow Creek (tributary of Eagle Creek) for industrial and municipal supply in vicinity of Morenci.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	5.8	6.0	5.8			14	21	22	0	22	26
2	15	5.8	6.0	5.8			22	22	22	6.6	22	26
3	17	5.8	6.0	5.8			22	22	22	22	22	26
4	17	5.8	6.0	5.8			19	22	22	22	24	26
5	17	5.8	6.0	5.8			17	22	22	22	26	26
6	17	6.0	6.0	5.8			17	22	22	23	26	24
7	14	6.0	6.0	5.8			17	21	22	23	26	23
8	12	6.0	6.0	5.8			17	21	22	23	26	19
9	12	6.0	6.0	5.9			14	21	23	22	26	15
10	12	6.0	6.0	5.8			12	21	24	23	25	15
11	12	6.0	6.0	2.6			12	21	23	23	26	17
12	12	6.0	6.0	0			12	21	22	23	26	17
13	8.4	6.0	6.0	0			12	21	21	23	26	18
14	6.0	6.0	6.0	0			12	21	22	23	26	18
15	6.0	6.0	6.0	0			15	21	22	24	26	18
16	6.0	6.0	6.0	0			18	21	22	25	26	18
17	9.0	6.0	6.0	0			18	21	22	26	26	18
18	12	6.0	6.0	0			18	22	22	26	26	17
19	9.9	6.0	6.0	0			18	22	22	26	26	17
20	12	6.0	6.0	0			18	22	22	25	26	17
21	12	6.0	6.0	0			18	22	22	25	25	20
22	12	6.0	6.0	0			17	20	22	19	23	21
23	12	6.0	6.0	0			18	22	22	20	23	21
24	12	6.0	6.0	0			17	22	22	24	25	22
25	12	6.0	6.0	0			18	22	22	25	26	22
26	12	6.0	6.0	0			17	22	22	24	26	22
27	12	6.0	6.0	0			18	22	12	24	26	22
28	12	6.0	5.8	0			18	22	6.6	25	26	22
29	12	6.0	5.8	0	---		18	22	2.5	24	26	22
30	8.7	6.0	5.8	0	---		20	22	0	25	26	22
31	5.8	---	5.8	0	---		---	22	---	24	26	---
TOTAL	360.8	179.0	185.2	60.7	0	0	503	668	596.1	689.6	783	617
MEAN	11.6	5.97	5.97	1.96	0	0	16.8	21.5	19.9	22.2	25.3	20.6
MAX	17	6.0	6.0	5.9	0	0	22	22	24	26	26	26
MIN	5.8	5.8	5.8	0	0	0	12	20	0	0	22	15
AC-FT	716	355	367	120	0	0	998	1320	1180	1370	1550	1220

CAL YR 1974 TOTAL 5274.70 MEAN 14.5 MAX 26 MIN 0 AC-FT 10460
WTR YR 1975 TOTAL 4642.40 MEAN 12.7 MAX 26 MIN 0 AC-FT 9210

09447000. Eagle Creek above pumping plant, near Morenci, Ariz.

LOCATION.--Lat 33°04'12", long 109°27'05", in SE¼NE¼ sec.22, T.4 S., R.28 E., Greenlee County, on right bank 3 mi (5 km) upstream from Phelps Dodge Corp. pumping plant, 5 mi (8 km) west of Morenci, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--613 mi^2 (1,588 km^2).

PERIOD OF RECORD.--April 1944 to current year.

GAGE.--Water-stage recorder, Parshall flume and weir. Datum of gage is 3,695 ft (1,126 m), unadjusted. Since Nov. 15, 1952, supplementary water-stage recorder 90 ft (27 m) upstream at datum of Parshall flume. Aug. 23, 1950, to Nov. 15, 1952, supplementary water-stage recorder at site 75 ft (23 m) downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--31 years, 43.9 ft^3/s (1.243 m^3/s), 31,810 acre-ft/yr (39.2 hm^3/yr); median of yearly mean discharges, 34 ft^3/s (0.96 m^3/s), 24,600 acre-ft/yr (30 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,550 ft^3/s (43.9 m^3/s) Sept. 9 (gage height, 5.60 ft or 1.707 m, at supplementary gage); minimum daily, 8.2 ft^3/s (0.23 m^3/s) July 4.
Period of record: Maximum discharge, 21,000 ft^3/s (595 m^3/s) Dec. 30, 1965 (gage height, 12.8 ft or 3.90 m, at supplementary gage); minimum, 3.2 ft^3/s (0.091 m^3/s) July 1, 1946.

REMARKS.--Records good. Diversions above station for irrigation of about 500 acres (2.02 km^2), mostly above Willow Creek. Water from Black River was pumped into Eagle Creek basin, 52 mi (84 km) upstream from this station, for 12 months (see sta 09445000) and water was pumped from wells into Eagle Creek near Double Circle Ranch below Willow Creek for 8½ months. The monthly quantities pumped are shown in table below. Diversion by pumping for industrial and municipal use in and near Morenci and Clifton are made from Eagle Creek, 3 mi (5 km) downstream from this station and from San Francisco River near Clifton. Monthly quantities diverted are shown in the table below; 98 percent of the pumpage was from Eagle Creek.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	38	32	35	37	29	48	40	26	10	28	24
2	32	36	32	35	36	29	40	40	25	9.8	26	25
3	32	35	32	35	35	29	42	40	24	8.9	25	27
4	36	34	32	34	35	29	45	40	24	8.2	25	32
5	37	34	34	33	34	29	45	38	24	10	25	37
6	40	34	34	33	32	29	40	38	26	16	26	44
7	45	32	32	33	32	28	43	38	25	19	26	53
8	44	34	32	35	32	31	46	36	24	21	26	114
9	40	35	32	37	32	37	46	35	24	22	25	721
10	37	34	33	37	32	47	45	35	24	22	26	123
11	44	32	33	35	32	83	46	34	25	22	26	68
12	41	32	32	35	30	106	52	32	25	24	28	49
13	49	32	32	34	28	134	59	32	25	25	28	42
14	41	32	33	34	29	115	63	32	23	24	26	40
15	34	30	33	33	32	107	61	32	22	23	25	37
16	32	31	32	32	34	107	61	32	22	23	25	35
17	32	31	32	32	34	100	63	32	22	30	25	32
18	30	32	33	32	33	90	64	32	22	26	24	31
19	32	31	34	32	32	81	64	31	23	25	24	30
20	34	31	33	32	32	76	61	30	23	25	26	30
21	35	31	34	32	32	73	59	30	22	24	30	28
22	41	32	34	32	33	70	56	28	22	26	33	28
23	48	31	34	32	32	67	54	28	21	30	32	30
24	38	31	35	32	30	65	51	27	21	80	24	31
25	37	31	32	32	30	61	49	27	20	48	24	31
26	47	31	33	32	30	59	48	27	20	34	24	31
27	40	30	34	32	30	57	45	25	19	30	26	30
28	39	30	32	32	30	55	44	25	19	29	25	30
29	46	32	32	33	---	52	42	26	16	34	25	30
30	48	32	34	40	---	52	41	27	12	30	24	30
31	43	---	34	40	---	50	---	27	---	28	24	---
TOTAL	1208	971	1020	1047	900	1977	1523	996	670	786.9	806	1893
MEAN	39.0	32.4	32.9	33.8	32.1	63.8	50.8	32.1	22.3	25.4	26.0	63.1
MAX	49	38	35	40	37	134	64	40	26	80	33	721
MIN	30	30	32	32	28	28	40	25	12	8.2	24	24
AC-FT	2400	1930	2020	2080	1790	3920	3020	1980	1330	1560	1600	3750
(†)	1,020	956	994	1,060	928	1,040	30	0	0	0	0	379
(‡)	1,690	1,660	1,750	1,710	1,520	1,630	983	1,240	1,040	1,070	1,370	1,560

CAL YR 1974 TOTAL 11717.0 MEAN 32.1 MAX 170 MIN 19 AC-FT 23240 † 6,680 ‡ 17,730
WTR YR 1975 TOTAL 13797.9 MEAN 37.8 MAX 721 MIN 8.2 AC-FT 27370 † 6,410 ‡ 17,220

PEAK DISCHARGE (BASE, 800 CFS).--Sept. 9 (0300) 1,550 cfs (5.60 ft)

† Pumpage, in acre-feet, into Eagle Creek, from Eagle Creek Wells.
‡ Pumpage, in acre-feet, to Clifton and Morenci, from San Francisco River and Eagle Creek.

09448500. Gila River at head of Safford Valley, near Solomon, Ariz.

LOCATION.--Lat 32°52'06", long 109°30'38", in SE¼NE¼ sec.31, T.6 S., R.28 E., Graham County, on left bank 0.6 mi (1.0 km) downstream from intake of Brown Canal, 8 mi (13 km) northeast of Solomon, and 17 mi (27 km) downstream from San Francisco River. Records include flow of Brown Canal, which is measured 2,000 ft (610 m) downstream from intake.

DRAINAGE AREA.--7,896 mi^2 (20,451 km^2).

PERIOD OF RECORD.--April 1914 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1932 and October 1940 to September 1949 published as "near Solomonsville" and October 1932 to October 1933 and May 1935 to September 1940 as "below Bonita Creek near Solomonsville."

GAGE.--Water-stage recorder. Datum of gage is 3,064.88 ft (934.175 m) above mean sea level. See WSP 1713 or 1733 for history of changes prior to Jan. 1, 1941. Supplementary water-stage recorder and Parshall flume on Brown Canal.

AVERAGE DISCHARGE.--61 years, 444 ft^3/s (12.57 m^3/s), 321,500 acre-ft/yr (396 hm^3/yr); median of yearly mean discharges, 310 ft^3/s (8.8 m^3/s), 225,000 acre-ft/yr (280 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 35,000 ft^3/s (991 m^3/s) Sept. 9 (gage height, 12.70 ft or 3.871 m); minimum daily, 47 ft^3/s (1.33 m^3/s) June 30.
Period of record: Maximum discharge, about 100,000 ft^3/s (2,830 m^3/s) Jan. 19, 1916 (gage height, 15.89 ft or 4.843 m, present datum), from rating curve extended above 35,000 ft^3/s (990 m^3/s) on basis of slope-area measurement at gage height 15.6 ft (4.75 m) and velocity-area study of peak flow; minimum, 11 ft^3/s (0.31 m^3/s) June 25, 1956.

REMARKS.--Records good. Records show water reaching head of Safford Valley. Diversions above station for mining, municipal use, and for irrigation of about 17,500 acres (70.8 km^2), much of it by pumping from ground water. Records of water temperatures and suspended-sediment loads for the current year are published on following pages.

COOPERATION.--Record for Brown Canal furnished by Gila Water Commissioner.

REVISIONS (WATER YEARS).--WSP 1059: 1914, 1916-17, 1923(M), 1924-25, 1927, 1929-31(M). WSP 1179: 1915, 1918-19(M). WSP 1313: 1934. WSP 1733: 1923.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	545	144	155	1,450	226	644	657	188	52	164	81
2	119	503	144	167	1,170	223	668	615	174	52	146	67
3	107	468	139	175	842	242	694	549	158	56	129	69
4	237	440	136	173	633	329	715	512	151	72	106	75
5	155	410	134	174	585	416	743	500	143	70	97	496
6	114	386	132	165	501	500	841	489	140	77	89	825
7	111	352	134	162	479	512	970	466	135	133	87	2,660
8	120	327	136	162	445	585	1,110	455	128	156	78	5,760
9	132	327	145	169	403	800	1,080	420	114	174	78	14,900
10	136	352	153	171	390	1,440	1,020	379	98	116	78	5,020
11	238	440	161	174	370	1,800	995	345	96	97	73	4,480
12	201	396	161	165	350	1,650	979	333	96	108	69	4,450
13	267	352	158	162	338	1,550	1,020	325	91	293	78	3,780
14	281	323	156	162	316	1,410	1,030	313	79	209	80	3,720
15	255	284	149	168	328	1,280	963	294	71	161	86	3,120
16	219	259	139	166	328	1,240	914	302	74	130	86	1,960
17	188	246	141	168	339	1,140	884	345	79	123	86	1,940
18	170	242	144	173	323	1,060	906	353	79	160	82	1,600
19	161	219	143	173	323	969	962	357	74	181	78	1,300
20	152	201	143	179	303	883	1,010	341	66	189	74	1,140
21	142	190	148	187	284	876	962	306	66	146	76	960
22	134	190	150	193	273	883	898	290	66	137	78	810
23	156	190	155	188	266	922	855	272	69	149	124	658
24	202	184	153	173	257	938	869	244	66	162	200	532
25	218	171	152	168	246	906	883	222	66	523	168	451
26	197	166	153	160	239	834	855	198	66	321	137	364
27	205	158	148	163	228	813	841	189	57	235	120	347
28	221	152	148	165	226	792	834	181	51	198	103	315
29	235	154	150	170	------	769	793	193	51	216	179	284
30	533	149	145	219	------	733	737	220	47	177	116	263
31	605	------	147	412	------	695	------	205	------	176	99	------
TOTAL	6,337	8,776	4,541	5,561	12,235	27,416	26,675	10,870	2,839	5,049	3,244	62,427
MEAN	204	293	146	179	437	884	889	351	94.6	163	105	2,081
MAX	605	545	161	412	1,450	1,800	1,110	657	188	523	200	14,900
MIN	107	149	132	155	226	223	644	181	47	52	69	67
AC-FT	12,570	17,410	9,010	11,030	24,270	54,380	52,910	21,560	5,630	10,010	6,430	123,800

CAL YR 1974 TOTAL 58,351 MEAN 160 MAX 1,560 MIN 27 AC-FT 115,700
WTR YR 1975 TOTAL 175,970 MEAN 482 MAX 14,900 MIN 47 AC-FT 349,000

PEAK DISCHARGE (BASE, 4,000 CFS).--Sept. 9 (0330) 35,000 cfs (12.70 ft).

09448500. Gila River at head of Safford Valley, near Solomon, Ariz.

LOCATION.--Lat 32°52'06", long 109°30'38", in SE¼NE¼ sec.31, T.6 S., R.28 E., Graham County, at gaging station 0.6 mi (1.0 km) downstream from intake of Brown Canal, 8 mi (13 km) northeast of Solomon, and 17 mi (27 km) downstream from San Francisco River.

DRAINAGE AREA.--7,896 mi² (20,451 km²).

PERIOD OF RECORD.--Specific conductance: January 1965 to September 1975 (discontinued).
Water temperatures: January 1965 to September 1975 (discontinued).
Sediment records: February 1965 to September 1975 (discontinued).

EXTREMES.--Current year:
Specific conductance: Maximum daily, 1,800 micromhos Aug. 13; minimum daily, 313 micromhos Sept. 8.
Water temperatures: Maximum observed 31.0°C Aug. 4, 5, 7; minimum observed, 5.0°C Dec. 23.
Sediment concentrations: Maximum daily, 33,900 mg/l Sept 6; minimum daily, 15 mg/l June 27, 30.
Sediment discharge: Maximum daily, 1,300,000 tons (1,180,000 tonnes) Sept. 9; minimum daily, 1.9 tons (1.7 tonnes) June 30.
Period of record:
Specific conductance (1967-75): Maximum daily, 2,250 micromhos July 6, 1974; minimum daily, 260 micromhos Feb. 15, 28, 29, Apr. 4, 1968, May 15-17, 1973.
Water temperatures (1967-75): Maximum observed, 37.0°C Aug. 2, 1974; minimum observed, 1.5°C Jan. 8, 1973.
Sediment concentrations: Maximum daily, 75,000 mg/l Oct. 20, 1972; minimum daily, 4 mg/l May 22, 29, 1971.
Sediment discharge: Maximum daily, 9,130,000 tons (8,280,000 tonnes) Oct. 20, 1972; minimum daily, 0.50 ton (0.45 tonne) May 29, 1971.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	550	800	950	425	650	400	484	839	1500	973	1240
2	1100	570	800	950	400	650	400	502	879	1460	1050	1320
3	1190	600	800	950	400	550	400	528	947	1490	1130	1370
4	600	640	800	980	400	550	400	549	948	1460	1180	1360
5	900	640	800	950	---	550	400	546	939	1410	910	664
6	1050	650	800	950	400	550	400	546	1020	1260	1340	516
7	1100	710	1000	950	600	550	400	544	952	1240	1330	386
8	1100	710	1000	950	650	550	400	553	1060	981	1490	313
9	1050	600	1000	950	650	550	400	594	1050	880	1420	342
10	1000	710	1000	950	650	350	382	597	1100	1090	1480	317
11	650	600	1000	575	650	350	400	629	1090	1260	1440	363
12	620	650	1000	---	650	350	397	638	1140	1230	1480	---
13	600	650	950	950	650	350	388	629	1150	666	1800	329
14	700	700	950	950	650	350	385	664	1180	939	1240	320
15	700	700	950	950	650	350	402	667	1270	946	1230	343
16	810	700	900	950	650	350	421	653	1250	1000	1280	363
17	840	700	900	950	650	350	432	612	1220	1130	1270	395
18	900	850	900	950	650	350	426	602	1260	905	1310	427
19	900	750	900	950	650	350	400	605	1290	871	1380	464
20	900	750	900	950	650	450	392	618	1260	799	1410	491
21	960	850	900	950	650	450	403	657	1330	937	1440	523
22	960	700	900	950	650	450	425	681	1400	1080	---	522
23	990	900	900	950	650	450	432	719	1330	943	---	553
24	760	900	900	950	650	450	426	753	1320	894	744	590
25	790	900	900	800	650	450	423	771	1340	520	853	623
26	810	900	900	1000	650	450	436	812	1340	760	994	650
27	810	900	900	1000	650	450	433	849	1280	771	1110	677
28	800	900	950	1000	650	450	431	854	1360	867	1100	725
29	710	900	950	1000	---	450	443	817	---	783	956	730
30	460	800	950	700	---	450	463	815	1390	940	1050	766
31	550	---	950	700	---	450	---	814	---	960	1110	---
MEAN	849	736	911	923	603	453	411	655	1170	1030	1220	610
YEAR	MAX	1800	MIN	313	MEAN	798						

09448500. Gila River at head of Safford Valley, near Solomon, Ariz.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	12.0	11.0	6.0	9.5	17.5	15.0	18.0	28.0	30.5	30.0	27.0
2	---	13.0	13.5	5.0	10.0	---	6.0	19.5	26.5	30.5	28.0	26.0
3	---	---	13.0	8.5	11.5	---	16.5	23.0	28.0	28.0	29.5	24.0
4	---	13.0	12.0	7.0	11.0	---	19.0	20.0	25.5	22.0	31.0	26.0
5	---	13.0	10.0	9.0	---	---	15.5	17.0	---	26.5	31.0	21.0
6	---	14.0	11.0	9.0	10.5	---	14.0	19.0	25.0	22.0	30.5	19.0
7	---	13.5	11.0	9.0	10.5	---	11.5	18.5	25.0	28.5	31.0	19.5
8	---	13.0	9.0	9.0	11.0	---	11.5	19.5	27.0	26.5	29.0	20.5
9	---	14.0	8.0	7.0	12.5	---	12.0	21.5	25.0	29.5	30.0	19.5
10	23.0	16.0	8.0	6.0	11.5	---	13.5	22.5	24.5	28.5	28.5	24.0
11	21.0	14.0	8.0	6.0	11.0	---	14.5	24.0	26.0	26.5	29.5	19.5
12	19.5	14.0	8.0	---	10.5	---	15.0	23.0	26.5	28.0	27.0	---
13	18.0	13.0	9.5	9.5	10.0	---	14.5	23.0	27.0	26.0	27.5	19.5
14	19.0	13.0	7.5	8.5	11.0	---	15.5	23.5	28.0	26.5	21.0	21.5
15	18.0	15.0	9.0	10.0	11.5	11.5	17.0	23.5	27.0	26.5	20.5	24.0
16	21.0	14.5	9.0	9.5	11.5	13.5	18.5	22.0	26.5	23.5	28.0	24.0
17	21.0	13.0	9.0	11.0	10.5	12.0	15.0	22.5	26.0	28.5	29.5	25.0
18	20.0	14.0	10.0	12.0	10.0	14.0	15.0	23.0	24.5	22.0	29.5	24.0
19	20.0	15.0	10.0	13.0	11.0	15.0	15.5	22.0	28.0	23.0	27.5	24.0
20	21.0	15.0	11.5	12.0	11.0	16.5	16.0	20.5	27.0	21.5	27.0	24.5
21	20.0	15.0	12.0	11.5	11.0	16.0	19.5	18.5	29.5	28.0	28.5	---
22	17.5	15.0	10.5	12.0	10.0	15.5	18.0	22.5	29.0	26.5	---	22.0
23	19.0	14.0	5.0	10.5	10.0	14.0	18.5	21.0	29.0	29.5	---	21.0
24	20.0	13.5	5.5	9.5	10.0	13.0	19.5	22.0	29.0	25.0	26.5	20.5
25	20.0	12.0	6.0	12.0	13.0	14.0	21.0	25.5	28.0	28.0	26.5	21.5
26	17.0	12.0	7.0	13.5	14.0	10.0	20.0	25.0	29.5	26.0	23.5	23.0
27	17.0	12.0	7.0	13.0	16.0	8.5	18.0	24.5	28.0	25.0	28.5	21.0
28	17.0	7.5	8.5	13.0	---	10.0	17.0	19.0	26.5	28.0	29.0	21.0
29	13.0	12.0	11.0	15.0	---	10.5	17.0	22.0	---	29.5	28.5	20.5
30	11.0	9.0	9.0	13.0	---	14.0	17.0	24.5	26.5	29.0	26.5	21.5
31	12.0	---	7.5	---	---	14.5	---	25.5	---	28.0	20.5	---
MEAN	---	13.0	9.5	10.0	11.0	---	16.0	22.0	27.0	26.5	27.5	22.5

YEAR MAX 31.0 MIN 5.0 MEAN 18.5

SUSPENDED-SEDIMENT CONCENTRATION (MG/L), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	305	3210	167	59	19100	238	682	554	54	17	1000	377
2	236	2220	123	62	8500	200	690	146	34	28	693	262
3	148	1500	101	57	3000	200	367	221	33	37	435	177
4	26500	1200	142	100	1400	760	195	115	38	23	276	562
5	11000	950	107	134	800	1630	229	471	33	28	318	17700
6	1900	700	98	112	602	1700	492	411	20	59	67	33900
7	446	207	138	26	429	1070	660	527	34	1860	73	17600
8	432	217	105	83	320	3590	2200	141	37	4700	54	13500
9	3700	1250	119	150	296	5550	1200	180	37	5650	54	30100
10	6000	1900	202	141	266	6200	770	252	50	2400	71	15800
11	9020	2050	201	139	202	6250	870	122	42	630	33	14100
12	11900	850	184	150	158	3600	1300	341	31	2400	43	20900
13	13000	387	145	284	126	1900	810	145	28	32000	1600	18400
14	7800	325	233	60	458	1270	680	207	58	7000	900	11800
15	4000	419	151	70	109	1020	521	242	16	4800	363	8000
16	1600	227	129	52	123	1090	554	151	40	2100	646	7800
17	800	225	109	73	180	950	546	83	33	900	1200	9100
18	500	220	86	49	488	790	868	70	34	2500	671	4400
19	434	345	84	70	567	690	452	187	18	7100	361	1200
20	300	151	83	51	410	792	402	84	21	9600	165	1200
21	256	188	106	122	314	599	343	139	34	6700	121	500
22	496	150	130	121	346	714	417	55	24	3500	700	491
23	333	150	130	90	320	652	436	72	27	2400	6640	467
24	1580	147	116	125	109	1260	651	94	34	6200	11300	370
25	1550	146	132	43	279	712	602	64	30	19200	9700	206
26	733	133	129	70	193	670	460	69	32	6600	4400	175
27	903	141	80	100	200	658	482	72	15	3200	1200	134
28	893	71	108	99	202	465	416	71	30	2600	500	177
29	1600	122	107	53	---	515	202	58	20	4300	6600	188
30	4370	82	117	206	---	253	753	90	15	1500	4800	139
31	3800	---	198	2960	---	299	---	90	---	1100	1300	---

YEAR MAX 33900 MIN 15

09448500. Gila River at head of Safford Valley, near Solomon, Ariz.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	4720	65	25	74800	145	1180	983	27	2.4	443	82
2	76	3020	48	28	26900	120	1240	242	16	3.9	273	47
3	43	1900	38	27	6820	131	688	328	14	5.6	152	33
4	21400	1430	52	46	2390	675	376	159	15	4.5	79	114
5	4600	1050	39	63	1260	1830	459	636	13	5.3	83	36300
6	585	730	35	50	814	2300	1120	543	7.6	12	16	73600
7	134	197	50	11	555	1480	1730	663	12	977	17	122000
8	140	192	39	36	384	5670	6590	173	13	2050	11	211000
9	1320	1100	47	68	322	12000	3500	204	11	2650	11	1300000
10	2200	1810	83	65	280	24100	2120	258	13	752	15	214000
11	6250	2440	87	65	202	30400	2340	114	11	165	6.5	174000
12	6460	909	80	67	149	16000	3440	307	8.0	1900	8.0	251000
13	9420	368	62	124	115	7950	2230	127	6.9	27500	337	188000
14	5470	283	98	26	391	4830	1890	175	12	3950	194	119000
15	2750	321	61	32	97	3520	1350	192	3.1	2090	84	67400
16	946	159	48	23	109	3650	1370	123	8.0	737	150	41300
17	406	149	41	33	165	2920	1300	77	7.0	299	279	47700
18	230	144	33	23	426	2260	2120	67	7.3	1080	149	19000
19	189	204	32	33	494	1810	1170	180	3.6	3470	76	4210
20	123	82	32	25	335	1890	1100	77	3.7	4900	33	3690
21	98	96	42	62	241	1420	891	115	6.1	2640	25	1300
22	179	77	53	63	255	1700	1010	43	4.3	1290	147	1070
23	140	77	54	46	230	1620	1010	53	5.0	966	2420	830
24	862	73	48	58	76	3190	1530	62	6.1	2710	6210	531
25	912	67	54	20	185	1740	1440	38	5.3	33000	4400	251
26	390	60	53	30	125	1510	1060	37	5.7	5720	1630	172
27	500	60	32	44	123	1440	1090	37	2.3	2030	389	126
28	533	29	43	44	123	994	937	35	4.1	1390	139	151
29	1020	51	43	24	---	1070	433	30	2.8	2770	3190	144
30	6520	33	46	122	---	501	1500	53	1.9	717	1500	99
31	6210	---	79	4500	---	561	---	50	---	523	347	---
MEAN	80210	21831	1617	5883	118366	139427	48214	6181	255	106309	22813	2877150
YEAR	TOTAL	3428258										

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ANALYSES MADE IN DISTILLED WATER)

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM
JULY							
13...	1000	277	26.0	39400	29500	56	69
AUG.							
24...	1745	266	26.0	14300	10300	57	74
SEP.							
06...	0930	616	19.0	34400	57200	51	68

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
JULY							
13...	96	--	100	--	--	--	--
AUG.							
24...	96	--	99	--	99	--	100
SEP.							
06...	89	99	--	99	--	100	--

09449000. Diversions from Gila River in Safford Valley, Ariz.

LOCATION.--Safford Valley lies along Gila River in Graham County, extending from vicinity of Bonita Creek on the east to San Carlos Indian Reservation on the west. Twelve canals and one pump, listed in the following table in downstream order, divert water from Gila River for irrigation in the valley. Intake of Brown Canal, at upper end of the valley, is 0.6 mi (1.0 km) upstream from station on Gila River near Solomon (09448500). Intake of Colvin-Jones Canal, at the lower end, is 25.8 mi (41.5 km) upstream from station at Calva (09466500). Record of canals obtained below wasteways used for regulation.

PERIOD OF RECORD.--January 1936 to current year (records of combined monthly diversions and annual diversions by each canal); records of monthly diversion 1914-15 and records of monthly and daily diversion 1920-31 for all canals except Colvin-Jones; records for Brown Canal also for water year 1931-32. Tidwell Canal was published as Michelana Canal in records for 1914-15 and 1920-31. Records of daily discharge since 1936 published in reports of Gila Water Commissioner.

GAGES.--Water-stage recorders and Parshall flumes.

REMARKS.--Record shows total diversions unadjusted for return flows. Decreed area for irrigation in Safford Valley is 32,512 acres (132 km^2). Water was issued for 32,306 acres (131 km^2) during calendar year 1974. Water obtained by pumping from ground water for irrigation in the valley is not included.

COOPERATION.--Records furnished by Gila Water Commissioner.

ANNUAL DIVERSIONS, IN ACRE-FEET, TO EACH CANAL DURING CALENDAR YEAR 1974 AND WATER YEAR 1975

	Canal	Calendar year 1974	Water year 1975
09449500.	Brown	1,840	3,380
09451500.	Tidwell	552	833
09452000.	Fourness	185	371
09452500.	San Jose	13,440	18,790
09453000.	Montezuma	15,590	21,410
09453500.	Union	18,570	31,120
09458000.	Graham	6,050	13,090
09459500.	Smithville	5,410	9,550
09461500.	Dodge-Nevada	5,080	8,910
09462500.	Curtis	7,010	9,260
09463500.	Fort Thomas	6,700	10,890
09464000.	Colvin-Jones	0	0
09464500.	T. D. Burton	0	88
	Total	80,430	127,700

COMBINED MONTHLY DISCHARGE OF CANALS DIVERTING FROM GILA RIVER IN SAFFORD VALLEY, ARIZ., DURING WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	Discharge, in cubic feet per second			Diversions in acre-feet
	Maximum	Minimum	Mean	
October	179	32	101	6,190
November	92	11	41.6	2,470
December	179	89	157	9,670
CAL YR 1974	366	11	111	80,430
January	228	154	186	11,420
February	310	244	277	15,380
March	378	235	347	21,330
April	386	291	357	21,230
May	389	205	324	19,920
June	193	52	93.7	5,570
July	296	50	148	9,090
August	139	47	81.1	4,980
September	89	0	7.4	438
WTR YR 1975	389	0	176	127,700

09457000. San Simon River near Solomon, Ariz.

LOCATION.--Lat 32°48'06", long 109°38'19", in NW¼NE¼ sec.25, T.7 S., R.26 E., Graham County, 1.0 mi (1.6 km) southwest of Solomon and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--2,192 mi^2 (5,677 km^2).

PERIOD OF RECORD.--June 1931 to September 1932, May 1935 to current year. Published as San Simon Creek near Solomonsville prior to October 1949 and as San Simon Creek near Solomon October 1949 to September 1961.

GAGE.--Water-stage recorder. Datum of gage is 2,960.15 ft (902.254 m) above mean sea level.

AVERAGE DISCHARGE.--41 years, 12.8 ft^3/s (0.362 m^3/s), 9,270 acre-ft/yr (11.4 hm^3/yr); median of yearly mean discharges, 9.2 ft^3/s (0.26 m^3/s), 6,700 acre-ft/yr (8.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,690 ft^3/s (105 m^3/s) Sept. 8 (gage height, 14.94 ft or 4.554 m); no flow for most of year.
Period of record: Maximum discharge, 27,500 ft^3/s (779 m^3/s) Aug. 9, 1931 (gage height, 19.0 ft or 5.79 m), by slope-area measurement of peak flow; no flow for most of time.

REMARKS.--Records fair. Records do not include waste water passing station from San Jose Canal, which diverts from Gila River. Irrigation of about 13,800 acres (55.8 km^2) above station, mostly by pumping from ground water. Floodflows are partly regulated by six flood-control detention structures on main stream and tributaries; combined maximum capacity in excess of 10,500 acre-ft (12.9 hm^3).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0		0
2	0									0		0
3	0									0		6.5
4	0									0		0
5	0									0		106
6	0									0		20
7	0									0		156
8	0									0		568
9	0									0		440
10	0									0		151
11	0									0		10
12	0									79		201
13	40									0		188
14	0									0		70
15	0									0		14
16	0									0		0
17	0									0		0
18	0									0		0
19	0									0		0
20	0									0		0
21	0									0		0
22	0									30		0
23	0									.50		0
24	0									62		0
25	0									179		0
26	0									42		0
27	0									0		0
28	0									0		0
29	20				---					2.6		0
30	0				---					0		0
31	0	---			---		---		---	0		---
TOTAL	60	0	0	0	0	0	0	0	0	395.10	0	1930.5
MEAN	1.94	0	0	0	0	0	0	0	0	12.7	0	64.4
MAX	40	0	0	0	0	0	0	0	0	179	0	568
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	119	0	0	0	0	0	0	0	0	784	0	3830

CAL YR 1974 TOTAL 2465.00 MEAN 6.75 MAX 466 MIN 0 AC-FT 4890
WTR YR 1975 TOTAL 2385.60 MEAN 6.54 MAX 568 MIN 0 AC-FT 4730

PEAK DISCHARGE (BASE, 2,500 CFS).--Sept. 8 (2000) 3,690 cfs (14.94 ft).

09458050. Marijilda Wash near Safford, Ariz.

LOCATION.--Lat 32°41'43", long 109°47'28", in NE¼ sec.33, T.8 S., R.25 E. (unsurveyed), Graham County, on right bank, in Coronado National Forest, 10 mi (16 km) southwest of Safford.

DRAINAGE AREA.--10.9 mi^2 (28.2 km^2).

PERIOD OF RECORD.--May 1971 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,500 ft (1,370 m), from topographic map.

EXTREMES,--Current year: Maximum discharge, 432 ft^3/s (12.2 m^3/s) Sept. 6 (gage height, 4.10 ft or 1.250 m); minimum daily, 0.03 ft^3/s (0.001 m^3/s) Aug. 9, 10.
Period of record: Maximum discharge, 668 ft^3/s (18.9 m^3/s) Dec. 28, 1972 (gage height, 4.70 ft or 1.433 m), from rating curve extended above 46 ft^3/s (1.30 m^3/s) by slope-area measurement of peak flow; no flow at times in most years.

REMARKS.--Records good. No regulation or diversion above station. Diversion to Lebanon ditch downstream for use by city of Safford.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	5.3	2.1	1.4	12	3.0	5.7	10	5.3	.37	.33	.06
2	2.4	4.4	1.9	1.6	8.7	3.3	5.5	10	4.9	.41	.23	.07
3	2.1	4.6	1.9	1.3	7.1	3.6	5.5	10	4.8	.41	.17	.26
4	1.9	4.0	1.9	1.3	5.9	3.8	5.7	10	4.8	.37	.11	.45
5	1.7	3.6	2.6	1.3	4.9	4.0	5.9	10	4.6	.68	.07	2.6
6	1.9	3.5	2.3	1.3	4.4	4.2	6.2	9.8	4.4	3.6	.07	130
7	2.1	3.5	2.1	1.4	4.0	4.0	7.4	9.3	4.0	1.4	.06	127
8	2.1	15	2.3	1.6	3.6	9.2	6.9	8.7	3.8	1.4	.04	77
9	2.4	34	1.9	2.4	3.5	15	6.7	8.1	3.6	1.6	.03	44
10	1.9	22	1.9	1.9	3.3	12	7.1	8.4	3.3	.80	.03	28
11	1.9	15	1.7	1.7	3.1	12	6.9	9.3	3.1	.69	.11	20
12	1.9	12	1.7	1.7	3.0	12	7.1	10	2.6	1.1	.49	16
13	1.9	9.8	1.6	1.7	2.8	11	6.9	12	2.4	.86	.59	16
14	1.7	8.4	1.4	1.7	3.8	10	6.7	12	2.3	.59	.37	16
15	1.6	7.1	1.4	1.7	4.4	10	6.7	13	1.7	.26	.26	15
16	1.3	6.4	1.3	1.9	3.8	9.8	6.9	13	1.6	.33	.20	11
17	1.3	5.7	1.3	1.9	3.6	9.3	7.6	13	1.6	.33	.14	9.6
18	1.2	5.1	1.3	1.9	3.5	8.7	8.4	12	1.6	.37	.11	8.1
19	1.2	4.6	1.3	2.1	3.3	8.4	7.9	11	1.6	.37	.11	7.4
20	1.2	4.2	1.2	2.1	3.1	8.7	7.6	9.8	1.4	.37	.11	6.4
21	1.3	3.8	1.2	2.1	3.1	8.7	7.9	9.3	1.2	.37	.17	5.5
22	2.1	3.5	1.2	2.4	3.0	8.7	9.0	8.7	1.1	.54	.29	5.1
23	2.6	3.3	1.3	2.1	2.8	8.1	9.8	7.6	1.1	.69	.37	4.6
24	1.9	3.1	1.1	2.1	2.8	7.6	10	7.1	.92	.69	.37	4.2
25	1.7	3.1	1.1	2.3	2.6	7.1	11	6.7	.86	.69	.23	3.6
26	1.7	2.8	1.1	2.4	2.6	7.9	12	6.2	.80	.69	.17	3.3
27	1.7	2.6	1.1	2.6	2.6	7.4	13	6.2	.69	.69	.20	3.1
28	1.9	2.6	1.3	3.0	2.8	7.1	12	6.2	.59	.69	.17	2.8
29	5.6	2.3	1.3	8.5	---	6.7	11	6.4	.59	.69	.11	2.6
30	5.3	2.1	1.2	39	---	6.2	10	6.2	.45	.69	.09	2.4
31	4.6	---	1.2	25	---	5.9	---	5.5	---	.45	.07	---
TOTAL	67.1	207.4	48.2	125.4	114.1	243.4	241.0	285.5	71.70	23.19	5.87	572.14
MEAN	2.16	6.91	1.55	4.05	4.08	7.85	8.03	9.21	2.39	.75	.19	19.1
MAX	5.6	34	2.6	39	12	15	13	13	5.3	3.6	.59	130
MIN	1.2	2.1	1.1	1.3	2.6	3.0	5.5	5.5	.45	.26	.03	.06
AC-FT	133	411	96	249	226	483	478	566	142	46	12	1130

CAL YR 1974 TOTAL 760.90 MEAN 2.08 MAX 49 MIN 0 AC-FT 1510
WTR YR 1975 TOTAL 2005.00 MEAN 5.49 MAX 130 MIN .03 AC-FT 3980

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11- 9	0330	2.43	39	9-6	1900	4.10	432
1-30	1500	2.65	59				

09458200. Deadman Creek near Safford, Ariz.

LOCATION.--Lat 32°43'59", long 109°48'57", in SW¼ sec.17, T.8 S., R.25 E. (unsurveyed), Graham County, in Coronado National Forest, on left bank 9 mi (14 km) southwest of Safford.

DRAINAGE AREA.--4.78 mi^2 (12.38 km^2).

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

GAGE.--Water-stage recorder and sharp-crested V-notch weir. Altitude of gage is 4,950 ft (1,509 m), from topographic map.

AVERAGE DISCHARGE.--8 years (1967-75), 1.31 ft^3/s (0.0371 m^3/s), 949 acre-ft/yr (1.17 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 82 ft^3/s (2.32 m^3/s) Sept. 6 (gage height, 3.20 ft or 0.975 m); minimum daily, 0.01 ft^3/s (0.0003 m^3/s) Aug. 30 to Sept. 1.
Period of record: Maximum discharge, 119 ft^3/s (3.37 m^3/s) Oct. 19, 1972 (gage height, 3.45 ft or 1.052 m), from rating curve extended above 18 ft^3/s (0.51 m^3/s) on basis of computation of flow over weir at gage height 3.25 ft (0.991 m); no flow at times in most years.

REMARKS.--Records good. No regulation or diversion above station. City of Safford diverts water about 1,000 ft (300 m) downstream, for municipal supply.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	1.2	.60	.41	3.4	.60	2.0	2.8	3.2	.27	.18	.01
2	.53	1.4	.60	.41	2.4	.60	1.8	3.0	3.2	.27	.15	.02
3	.53	1.5	.60	.36	2.0	.60	1.8	3.2	3.4	.27	.12	.03
4	.53	1.4	.60	.36	1.7	.67	1.8	3.4	3.4	.27	.10	.03
5	.53	1.2	.74	.36	1.4	.74	1.8	3.4	3.4	.27	.08	4.0
6	.53	1.2	.60	.36	1.4	.82	1.8	3.2	3.0	.47	.06	28
7	.67	1.1	.60	.41	1.2	.82	2.2	3.0	2.7	.36	.04	35
8	.60	2.1	.67	.41	1.2	3.8	2.0	2.8	2.7	.36	.03	24
9	.53	5.1	.53	.53	1.1	6.4	2.1	2.7	2.4	.31	.03	16
10	.47	4.0	.53	.47	1.0	4.2	2.2	2.8	2.2	.27	.03	11
11	.41	3.2	.53	.41	1.0	4.2	2.2	3.4	2.0	.27	.06	8.3
12	.53	2.7	.53	.31	.90	4.6	2.2	3.8	2.0	.27	.12	7.0
13	.67	2.4	.53	.31	.82	3.8	2.1	4.4	1.7	.27	.12	6.4
14	.53	2.1	.53	.36	1.2	3.6	2.0	5.1	1.5	.22	.12	5.4
15	.47	2.0	.47	.36	1.5	3.6	2.0	5.7	1.4	.18	.08	4.4
16	.41	1.7	.47	.36	1.2	3.2	2.0	6.7	1.2	.18	.08	3.8
17	.36	1.5	.47	.41	1.0	3.0	2.1	6.7	1.1	.27	.06	3.2
18	.31	1.5	.47	.41	.90	2.8	2.2	6.0	1.0	.27	.04	2.8
19	.31	1.4	.41	.41	.82	2.8	2.2	5.1	1.0	.27	.03	2.5
20	.31	1.3	.41	.41	.82	3.0	2.2	4.6	.90	.27	.03	2.4
21	.31	1.2	.41	.41	.82	3.0	2.2	4.4	.90	.18	.04	2.1
22	.74	1.1	.41	.53	.67	3.0	2.4	4.0	.74	.18	.04	2.0
23	.82	1.0	.41	.47	.67	2.8	2.5	3.6	.67	.48	.03	1.7
24	.74	1.0	.41	.47	.67	2.7	2.8	3.4	.60	.47	.03	1.7
25	.67	.90	.41	.53	.67	2.4	3.0	3.2	.53	.41	.02	1.5
26	.60	.74	.36	.53	.67	2.7	3.4	3.4	.53	.31	.02	1.4
27	.53	.74	.36	.60	.67	2.4	3.6	3.6	.41	.31	.02	1.2
28	.53	.74	.47	.82	.60	2.2	3.4	3.8	.36	.31	.02	1.2
29	3.0	.67	.60	2.8	---	2.1	3.2	3.8	.31	.41	.02	1.2
30	2.4	.67	.41	9.2	---	2.1	3.0	3.4	.31	.36	.01	1.1
31	1.7	---	.36	6.0	---	2.0	---	3.2	---	.27	.01	---
TOTAL	21.87	48.76	15.50	30.19	32.40	81.25	70.2	121.6	48.76	9.28	1.82	179.39
MEAN	.71	1.63	.50	.97	1.16	2.62	2.34	3.92	1.63	.30	.059	5.98
MAX	3.0	5.1	.74	9.2	3.4	6.4	3.6	6.7	3.4	.48	.18	35
MIN	.31	.67	.36	.31	.60	.60	1.8	2.7	.31	.18	.01	.01
AC-FT	43	97	31	60	64	161	139	241	97	18	3.6	356

CAL YR 1974 TOTAL 187.34 MEAN .51 MAX 5.1 MIN 0 AC-FT 372
WTR YR 1975 TOTAL 661.02 MEAN 1.81 MAX 35 MIN .01 AC-FT 1310

PEAK DISCHARGE (BASE, 10 CFS).--Jan. 30 (1500) 16 cfs (2.47 ft); Sept. 6 (1930) 82 cfs (3.20 ft).

09460150. Frye Creek near Thatcher, Ariz.

LOCATION.--Lat 32°44'32", long 109°50'24", in NE¼ sec.13, T.8 S., R.24 E. (unsurveyed), Graham County, in Coronado National Forest, on right bank and 9 mi (14 km) southwest of Thatcher.

DRAINAGE AREA.--3.91 mi^2 (10.13 km^2).

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

GAGE.--Water-stage recorder and sharp-crested V-notch weir. Altitude of gage is 5,800 ft (1,770 m), from topographic map.

AVERAGE DISCHARGE.--8 years (1967-75), 1.30 ft^3/s (0.0368 m^3/s), 942 acre-ft/yr (1.16 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 96 ft^3/s (2.72 m^3/s) Sept. 6 (gage height, 2.14 ft or 0.652 m), from rating curve extended above 45 ft^3/s (1.28 m^3/s); minimum daily, 0.09 ft^3/s (0.003 m^3/s) Sept. 3, 4.
Period of record: Maximum discharge, 96 ft^3/s (2.72 m^3/s) Sept. 6, 1975 (gage height, 2.14 ft or 0.652 m), from rating curve extended above 45 ft^3/s (1.28 m^3/s); no flow at times in most years.

REMARKS.--Records good. No regulation or diversion above station. City of Safford diverts from Frye Mesa Reservoir, 1 mi (2 km) downstream, for municipal supply.

REVISIONS.--WRD Ariz. 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.8	.90	.56	2.8	.83	1.8	2.3	4.8	.51	.56	.14
2	.98	1.9	.90	.56	2.2	.92	1.8	2.3	5.5	.51	.51	.12
3	.92	2.1	.80	.56	1.8	.98	1.7	2.3	5.9	.51	.46	.09
4	.92	2.0	.76	.56	1.7	1.1	1.7	2.6	6.3	.51	.41	.09
5	.92	1.9	.83	.56	1.6	1.1	1.7	2.8	6.3	.51	.41	.12
6	.92	1.8	.83	.56	1.4	1.1	1.7	2.6	5.5	.51	.36	33
7	.92	1.6	.83	.56	1.4	1.1	1.8	2.6	5.5	.51	.32	24
8	.92	5.4	.83	.56	1.2	2.8	1.7	2.3	5.5	.51	.32	25
9	1.1	9.3	.83	.56	1.2	7.2	1.7	2.3	5.1	.63	.28	20
10	1.1	5.1	.76	.56	1.2	4.8	1.7	2.6	4.4	.56	.24	14
11	1.1	3.9	.76	.56	1.1	4.2	1.7	3.2	4.2	.51	.24	10
12	.98	3.2	.76	.56	.98	3.4	1.7	4.2	3.6	.51	.24	9.1
13	.98	3.0	.76	.51	.92	3.0	1.4	4.8	3.2	.51	.24	6.8
14	.92	2.6	.76	.46	1.2	2.8	1.4	5.9	3.2	.51	.20	5.7
15	.92	2.3	.69	.46	1.2	2.8	1.7	6.8	2.8	.46	.20	4.8
16	.83	2.2	.69	.46	1.1	2.6	1.8	8.8	2.3	.41	.20	4.2
17	.76	2.0	.69	.46	.92	2.6	1.8	8.4	2.2	.41	.20	3.4
18	.69	2.0	.69	.51	.83	2.3	1.8	7.2	1.9	.41	.20	2.8
19	.69	1.9	.63	.51	.83	2.3	1.9	6.3	1.7	.41	.20	2.3
20	.69	1.7	.63	.56	.83	2.3	1.8	5.5	1.5	.56	.20	2.2
21	.69	1.6	.63	.56	.76	2.6	1.9	5.5	1.5	.56	.17	1.9
22	.69	1.4	.63	.63	.76	2.8	2.0	4.8	1.2	.63	.17	1.7
23	1.2	1.4	.63	.63	.76	2.8	2.2	4.4	1.1	2.0	.17	1.6
24	1.4	1.2	.63	.56	.69	2.6	2.3	4.2	.98	1.6	.17	1.4
25	1.2	1.1	.63	.56	.69	2.6	2.8	4.2	.83	1.2	.17	1.2
26	1.2	1.0	.63	.56	.76	2.6	3.0	4.8	.76	1.1	.20	1.2
27	1.2	1.1	.63	.56	.76	2.6	3.0	5.1	.69	.98	.20	1.2
28	1.1	1.0	.63	.56	.83	2.3	2.8	5.9	.63	.92	.20	1.1
29	1.2	1.0	.56	.76	---	2.0	2.8	5.5	.63	.83	.20	1.1
30	1.7	1.0	.56	3.2	---	1.9	2.6	5.1	.56	.76	.20	.98
31	1.7	---	.56	3.6	---	1.9	---	4.8	---	.63	.17	---
TOTAL	31.74	69.5	22.05	22.83	32.42	76.93	59.7	140.1	90.28	21.18	8.01	181.24
MEAN	1.02	2.32	.71	.74	1.16	2.48	1.99	4.52	3.01	.68	.26	6.04
MAX	1.7	9.3	.90	3.6	2.8	7.2	3.0	8.8	6.3	2.0	.56	33
MIN	.69	1.0	.56	.46	.69	.83	1.4	2.3	.56	.41	.17	.09
AC-FT	63	138	44	45	64	153	118	278	179	42	16	359

CAL YR 1974 TOTAL 272.35 MEAN .75 MAX 11 MIN 0 AC-FT 540
WTR YR 1975 TOTAL 755.98 MEAN 2.07 MAX 33 MIN .09 AC-FT 1500

PEAK DISCHARGE (BASE, 8.0 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-8	1930	1.56	17	9-6	1800	2.14	96
3-9	0400	1.40	8.0				

09466500. Gila River at Calva, Ariz.

LOCATION.--Lat 33°11'08", long 110°13'10", in SW¼ sec.8, T.3 S., R.21 E. (unsurveyed), Graham County, in San Carlos Indian Reservation, on right upstream abutment of Southern Pacific Railroad bridge at head of San Carlos Reservoir, 2.0 mi (3.2 km) west of Calva.

DRAINAGE AREA.--11,470 mi^2 (29,710 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 2,517.29 ft (767.270 m) above mean sea level. Prior to Oct. 1, 1954, and Aug. 25, 1958, to Dec. 31, 1962, at datum 2.52 ft (0.768 m) lower. Oct. 1, 1954, to Aug. 24, 1958, at datum 5.52 ft (1.682 m) lower. Dec. 31, 1962, to Sept. 30, 1974, at site 530 ft (162 m) downstream at datum 3.65 ft (1.113 m) lower. Oct. 20, 1972, to Sept. 30, 1974, supplementary gage at bridge on U.S. Highway 70, 6.2 mi (10.0 km) upstream at datum 2,560.19 ft (780.346 m) above mean sea level.

AVERAGE DISCHARGE.--46 years, 269 ft^3/s (7.618 m^3/s), 194,900 acre-ft/yr (240 hm^3/yr); median of yearly mean discharges, 190 ft^3/s (5.38 m^3/s), 138,000 acre-ft/yr (170 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 15,800 ft^3/s (447 m^3/s) Sept. 10 (gage height, 9.90 ft or 3.018 m; no flow Aug. 23-25, 31, Sept. 2, 3.

Period of record: Maximum discharge, 80,000 ft^3/s (2,270 m^3/s) Oct. 20, 1972 (gage height, 15.88 ft or 4.840 m at supplementary gage), from rating curve extended above 44,000 ft^3/s (1,250 m^3/s); no flow at times.

Maximum discharge since at least 1914, probably in excess of 100,000 ft^3/s (2,830 m^3/s) Jan. 20, 1916, determined on basis of peak discharge at stations near Solomon and at Kelvin.

REMARKS.--Records good. Diversion above station for metallurgical treatment of ores, municipal uses, and irrigation of about 69,000 acres (279 km^2).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	404	112	42	111	52	368	304	30	5.5	25	1.9
2	17	354	115	52	656	49	332	304	30	8.3	21	0
3	8.3	345	106	52	634	47	296	283	30	11	13	0
4	9.8	316	103	45	518	45	318	254	30	13	8.3	6.6
5	13	296	82	54	386	52	354	238	33	6.8	6.8	40
6	74	275	65	54	296	79	336	218	30	6.8	5.5	260
7	47	246	57	57	230	135	417	210	33	9.8	4.3	492
8	33	242	47	45	199	166	562	203	28	13	3.1	1320
9	21	218	40	45	170	214	661	191	25	8.3	2.0	2930
10	13	226	45	40	166	464	650	162	21	4.3	4.6	10200
11	19	250	45	35	148	880	578	132	19	4.3	15	6960
12	120	327	52	40	135	1110	540	115	21	4.3	7.1	4420
13	142	279	54	45	132	1040	546	88	19	3.1	5.5	4550
14	184	254	52	45	135	932	578	74	19	3.1	6.8	3620
15	283	246	47	42	115	802	562	62	19	28	4.3	3400
16	191	210	47	40	97	705	534	54	21	19	4.3	2440
17	159	191	47	38	91	678	485	52	19	13	2.0	1760
18	128	180	42	35	142	665	412	45	19	11	3.0	1340
19	106	162	42	33	122	634	450	45	15	8.3	3.0	1060
20	88	142	40	33	115	578	496	52	15	19	8.3	851
21	71	132	35	33	109	470	551	60	13	17	8.3	746
22	101	132	35	35	85	426	460	45	13	33	2.8	680
23	72	115	40	35	100	450	408	42	11	15	0	620
24	97	112	42	35	109	512	376	42	11	27	0	546
25	100	115	47	35	109	546	372	42	11	17	0	466
26	119	122	60	33	79	529	386	42	11	190	8.9	413
27	132	119	71	28	65	496	354	38	9.8	100	30	377
28	128	115	60	27	60	496	358	33	8.3	60	17	345
29	132	112	57	28	---	495	372	33	6.8	379	6.8	310
30	159	109	52	38	---	460	386	30	6.8	91	1.3	287
31	321	---	47	38	---	440	---	35	---	45	0	---
TOTAL	3118.1	6348	1786	1237	5314	14647	13498	3528	577.7	1173.9	228.0	50441.5
MEAN	101	212	57.6	39.9	190	472	450	114	19.3	37.9	7.35	1681
MAX	321	404	115	57	656	1110	661	304	33	379	30	10200
MIN	8.3	109	35	27	60	45	296	30	6.8	3.1	0	0
AC-FT	6180	12590	3540	2450	10540	29050	26770	7000	1150	2330	452	100100

CAL YR 1974 TOTAL 64407.2 MEAN 66.9 MAX 719 MIN .30 AC-FT 48410
WTR YR 1975 TOTAL 101897.2 MEAN 279 MAX 10200 MIN 0 AC-FT 202100

PEAK DISCHARGE (BASE, 3,000 CFS).--Sept. 10 (1500) 15,800 cfs (9.90 ft).

09466500. Gila River at Calva, Ariz.
(National stream-quality accounting network station)

LOCATION.--Lat 33°11'06", long 110°13'12", in SW¼ sec.8, T.3 S., R.21 E. (unsurveyed), Graham County, in San Carlos Indian Reservation, at gaging station, 530 ft (162 m) downstream from Southern Pacific Railroad bridge, and 2.2 mi (3.5 km) northwest of Calva.

DRAINAGE AREA.--11,470 mi^2 (29,710 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1974 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.										
21...	1030	80	40	--	--	--	--	120	26	380
NOV.										
20...	1030	180	38	7400	50	330	0	110	24	310
DEC.										
17...	1000	47	39	--	--	--	--	250	61	890
JAN.										
20...	1015	30	8.1	--	--	--	--	280	87	1100
FEB.										
18...	1000	142	33	13000	20	510	10	130	36	410
MAR.										
17...	1100	600	31	--	--	--	--	50	13	100
APR.										
14...	1100	700	31	--	--	--	--	54	14	140
MAY										
12...	1500	110	37	1300	20	60	10	190	56	660
JUNE										
16...	1330	20	31	--	--	--	--	360	95	1100
JULY										
15...	1100	7.0	37	--	--	--	--	110	31	530
AUG.										
19...	0730	3.8	32	320	20	270	250	270	80	1100
SEP.										
16...	1000	2400	33	--	--	--	--	37	7.2	53

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.									
21...	9.7	281	--	210	550	1.4	.67	.10	1510
NOV.									
20...	8.3	261	--	180	450	1.3	.55	.12	1270
DEC.									
17...	14	360	--	580	1400	1.7	1.3	.03	3460
JAN.									
20...	15	334	--	790	1800	.3	.41	.00	4340
FEB.									
18...	8.0	306	0	260	610	1.5	1.2	.14	1710
MAR.									
17...	3.6	173	0	81	130	1.3	.73	.11	504
APR.									
14...	4.2	178	0	91	190	1.1	--	--	625
MAY									
12...	19	326	0	420	980	1.6	--	--	2610
JUNE									
16...	22	232	0	770	1900	1.6	--	--	4500
JULY									
15...	11	256	0	310	720	2.1	1.0	.01	1900
AUG.									
19...	16	249	0	800	1700	1.5	.01	.01	4170
SEP.									
16...	3.4	132	0	54	56	.9	.21	.11	333

09466500. Gila River at Calva, Ariz.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
OCT.									
21...	1480	2.05	410	180	8.2	2580	8.2	18.0	8
NOV.									
20...	1250	1.73	370	160	7.0	2150	8.1	9.0	80
DEC.									
17...	3420	4.71	880	580	13	5740	8.0	5.0	30
JAN.									
20...	4250	5.90	1100	780	15	7040	8.1	6.5	20
FEB.									
18...	1650	2.33	470	220	8.2	2860	8.1	7.0	100
MAR.									
17...	499	.69	180	36	3.3	860	8.2	13.0	150
APR.									
14...	613	.85	190	46	4.4	1060	8.0	17.0	230
MAY									
12...	2520	3.55	710	440	11	4800	8.0	27.0	23
JUNE									
16...	4390	6.12	1300	1100	13	7000	7.9	32.0	13
JULY									
15...	1880	2.58	400	190	12	3180	8.1	32.0	3200
AUG.									
19...	4120	5.67	1000	800	15	--	7.9	20.0	2
SEP.									
16...	311	.45	120	14	2.1	--	7.5	24.0	700

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.						
21...	1030	.72	1.3	2.0	8.9	.84
NOV.						
20...	1030	.63	.25	.88	3.9	.19
DEC.						
17...	1000	1.3	.42	1.7	7.6	.12
JAN.						
20...	1015	.60	.52	1.1	5.0	.03
FEB.						
18...	1000	1.2	1.0	2.2	9.7	.52
MAR.						
17...	1100	.76	1.5	2.3	10	.98
APR.						
14...	1100	.71	2.6	3.3	15	.56
MAY						
12...	1500	1.4	.50	1.9	8.4	.10
JUNE						
16...	1330	.08	.76	.84	3.7	.02
JULY						
15...	1100	1.0	6.9	7.9	35	2.0
AUG.						
19...	0730	.03	.57	.60	2.7	.09
SEP.						
16...	1000	.21	4.4	4.6	20	1.6

09466500. Gila River at Calva, Ariz.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)
OCT. 21...	1030	--	--	380	--	--	--	--	--	--
NOV. 20...	1030	15	6	290	<10	1	<10	0	<50	1
DEC. 17...	1000	--	--	920	--	--	--	--	--	--
JAN. 20...	1015	--	--	1200	--	--	--	--	--	--
FEB. 18...	1000	7	4	430	10	0	0	0	<50	0
MAR. 17...	1100	--	--	110	--	--	--	--	--	--
MAY 12...	1500	2	4	--	10	0	0	0	<50	0
JULY 15...	1100	--	--	490	--	--	--	--	--	--
AUG. 19...	0730	6	4	1100	<10	1	20	10	<50	0
SEP. 16...	1000	--	--	50	--	--	--	--	--	--

DATE	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT. 21...	--	--	--	--	--	--	--	--	--
NOV. 20...	30	24	<100	2	.4	.3	0	0	20
DEC. 17...	--	--	--	--	--	--	--	--	--
JAN. 20...	--	--	--	--	--	--	--	--	--
FEB. 18...	70	6	<100	1	.1	.1	1	1	7
MAR. 17...	--	--	--	--	--	--	--	--	--
MAY 12...	30	4	<100	0	--	.0	1	1	0
JULY 15...	--	--	--	--	--	--	--	--	--
AUG. 19...	20	4	100	12	.0	.0	0	0	20
SEP. 16...	--	--	--	--	--	--	--	--	--

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL A MG/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL B MG/SQ M	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV. 20...	1030	--	--	--	--	--	--	--	5.4
DEC. 17...	1000	1700	--	--	--	--	--	--	--
JAN. 20...	1015	3300	--	--	--	--	--	--	--
FEB. 18...	1000	--	.0	1.2	.3	.1	--	--	12
MAR. 17...	1100	3300	--	--	--	--	--	--	--
MAY 12...	1500	7300	--	--	--	--	--	--	5.8
JUNE 16...	1330	20000	--	--	--	--	--	--	--
JULY 15...	1100	45000	--	--	--	--	2400	11000	--
AUG. 19...	0730	740	18	33.0	1.9	.4	490	440	5.8
SEP. 16...	1000	560	--	--	--	--	2100	8500	--

09468500. San Carlos River near Peridot, Ariz.

LOCATION.--Lat 33°19'16", long 110°26'54", in NW¼ sec.30, T.1 S., R.19 E. (unsurveyed), Gila County, in San Carlos Indian Reservation, on right bank 750 ft (229 m) downstream from highway crossing, 0.8 mi (1.3 km) north of Peridot, and 2.4 mi (3.9 km) south of San Carlos.

DRAINAGE AREA.--1,027 mi^2 (2,660 km^2).

PERIOD OF RECORD.--August 1910 to January 1911 (gage heights only), April 1914 to July 1915, August to September 1915 (monthly discharge only), October 1929 to current year. Prior to October 1929 published as "at San Carlos."

GAGE.--Water-stage recorder since Apr. 26, 1914. Datum of gage is 2,578.90 ft (786.049 m) above mean sea level. See WSP 1713 or 1733 for history of changes prior to Feb. 1, 1942. Feb. 1, 1942, to Mar. 4, 1969, at site 750 ft (229 m) upstream at different datums. Mar. 5, 1969, to Aug. 13, 1970, at site 300 ft (91 m) upstream at datum 0.88 ft (0.268 m) higher. Supplementary water-stage recorder Dec. 21, 1967, to July 2, 1968, at site 4 mi (6 km) downstream at datum in use prior to Feb. 1, 1942.

AVERAGE DISCHARGE.--46 years (1929-75), 47.0 ft^3/s (1.33 m^3/s), 34,050 acre-ft/yr (42.0 hm^3/yr); median of yearly mean discharges, 30 ft^3/s (0.85 m^3/s), 21,700 acre-ft/yr (26.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,960 ft^3/s (55.5 m^3/s) Apr. 11 (gage height, 4.10 ft or 1.25 m); minimum daily, 2.4 ft^3/s (0.068 m^3/s) Aug. 30.
Period of record: Maximum discharge, 40,600 ft^3/s (1,150 m^3/s) Mar. 14, 1941 (gage height, 11.4 ft or 3.47 m, site and datum then in use), from rating curve extended above 23,000 ft^3/s (650 m^3/s) on basis of rate of change in storage in San Carlos Reservoir; no flow at times in most years.

REMARKS.--Records good. Diversions above station for irrigation of about 600 acres (2.43 km^2). Small inflow from sewage treatment system about 2 miles (3.2 km) upstream.

REVISIONS.--WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	48	13	15	19	23	27	12	5.3	2.8	16	3.1
2	5.5	30	13	15	20	27	27	12	5.0	3.3	11	4.8
3	5.5	39	13	15	21	25	27	11	4.8	3.4	7.8	7.0
4	5.5	34	14	16	21	24	28	11	4.6	3.8	6.0	8.1
5	5.9	26	15	15	20	22	25	11	4.1	3.8	5.3	5.8
6	9.1	19	17	14	20	20	20	11	3.6	6.7	4.6	5.5
7	32	18	14	14	18	20	22	11	3.4	8.4	4.3	8.9
8	13	16	14	14	18	21	27	10	3.3	5.8	4.1	50
9	11	16	13	14	17	33	33	9.5	3.3	5.0	4.1	15
10	10	15	13	14	17	75	454	9.2	3.1	4.6	4.3	26
11	8.5	14	14	14	16	52	718	8.8	3.3	4.6	4.6	13
12	9.1	14	13	15	17	159	322	8.1	3.4	4.3	4.8	9.2
13	13	14	13	15	15	186	394	7.8	3.4	4.3	4.6	7.8
14	15	14	13	15	17	104	273	8.4	3.3	4.3	4.3	12
15	11	14	13	15	206	97	202	9.2	3.3	4.3	4.3	8.4
16	11	13	13	15	361	104	157	8.8	3.1	4.1	4.1	6.4
17	10	13	13	14	282	94	115	8.8	3.1	4.1	3.8	5.8
18	10	13	13	14	152	71	81	9.2	3.1	4.1	3.8	5.3
19	10	13	14	14	103	55	58	8.1	3.1	3.8	4.1	5.0
20	10	13	13	15	90	48	44	7.0	3.3	15	4.3	4.6
21	11	13	13	16	88	44	33	6.7	3.1	21	5.0	4.1
22	16	13	14	17	69	37	29	6.4	3.3	12	5.0	4.3
23	28	13	15	16	45	31	24	6.0	3.3	11	4.6	4.3
24	25	13	15	16	35	27	20	5.5	3.3	12	3.6	4.6
25	19	13	16	16	29	25	18	5.5	3.3	16	3.3	4.6
26	19	13	16	17	19	26	17	5.3	3.1	16	2.9	4.6
27	24	13	16	17	19	29	16	5.0	2.9	12	2.9	4.6
28	20	13	15	17	23	27	15	4.8	2.9	15	3.3	4.6
29	540	13	15	18	------	28	14	5.5	2.8	115	2.8	4.8
30	178	13	14	20	------	27	13	5.5	2.8	109	2.4	7.5
31	69	------	14	16	------	27	------	5.5	------	29	2.8	------
TOTAL	1,160.9	526	434	478	1,777	1,588	3,253	253.6	103.7	468.5	148.8	259.7
MEAN	37.4	17.5	14.0	15.4	63.5	51.2	108	8.18	3.46	15.1	4.80	8.66
MAX	540	48	17	20	361	186	718	12	5.3	115	16	50
MIN	5.5	13	13	14	15	20	13	4.8	2.8	2.8	2.4	3.1
AC-FT	2,300	1,040	861	948	3,520	3,150	6,450	503	206	929	295	515

CAL YR 1974 TOTAL 5,755.30 MEAN 15.8 MAX 540 MIN 0 AC-FT 11,420
WTR YR 1975 TOTAL 10,451.20 MEAN 28.6 MAX 718 MIN 2.4 AC-FT 20,730

PEAK DISCHARGE (BASE, 2,200 CFS).--No peak above base.

09469000. San Carlos Reservoir at Coolidge Dam, Ariz.

LOCATION.--Lat 33°10'32", long 110°31'38", in NW¼ sec.17, T.3 S., R.18 E. (unsurveyed), Gila County, in San Carlos Indian Reservation, at right intake tower of Coolidge Dam on Gila River.

DRAINAGE AREA.--12,886 mi^2 (33,375 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Jan. 15, 1937, series of stakes with tops at known elevations for reference points on right bank about 1,000 ft (300 m) upstream from dam. Jan. 15, 1937, to Dec. 31, 1947, water-stage recorder at present site at datum 0.72 ft (0.219 m) lower.

EXTREMES.--Current year: Maximum contents, 288,800 acre-ft (356 hm^3) Nov. 19, 20, 21 (elevation, 2,459.15 ft or 749.549 m); minimum, 76,080 acre-ft (93.8 hm^3) Sept. 7 (elevation, 2,423.65 ft or 738.729 m).
Period of record: Maximum contents, 843,300 acre-ft (1,040 hm^3) June 1, 1973 (elevation, 2,504.67 ft or 763.423 m); no usable contents at times.

REMARKS.--Reservoir is formed by concrete multiple-dome dam. Dam completed Oct. 25, 1928; storage began Nov. 15, 1928. Usable capacity (based on 1966 resurvey by Geological Survey; used since Jan. 1, 1969), 1,093,000 acre-ft (1,350 hm^3) between elevations 2,382.63 ft (726.226 m)—sill of lowest outlet gate—and 2,519.0 ft (767.79 m)—crest of spillway. Dead storage below elevation 2,382.63 ft (726.226 m), 900 acre-ft (1.11 hm^3). Figures given herein represent usable contents. Reservoir is used to store water for irrigation of San Carlos project and for power development, dependent on irrigation demands.

REVISIONS (WATER YEARS).--WSP 1049: 1929, 1934, 1937-38. WSP 1283: Drainage area.

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

2,423	73,690	2,450	217,800
2,430	102,200	2,460	296,000
2,440	153,600		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280200	283300	286800	272300	259200	251100	241200	245700	208100	160700	126100	82120
2	279700	284200	286600	271900	260000	249700	240900	245000	207100	159300	124900	81060
3	279100	284700	286400	271500	260700	248200	240600	244200	205600	157900	123800	79780
4	278700	285300	286300	271200	261000	246800	240300	243200	204500	156800	122800	78560
5	278200	285800	286200	270700	261200	245400	240100	242000	203100	155400	121400	77390
6	278300	286300	285800	270500	261100	243800	240000	241000	201700	154100	120000	76260
7	278100	286700	285500	270100	260900	242400	240200	240000	200300	152800	118700	76080
8	277900	287300	285200	270000	260600	241500	240500	238900	198800	151600	116900	77350
9	277500	287200	284500	269400	260300	240100	241200	237900	197400	150000	115300	80360
10	277100	287300	284100	269000	260000	239400	242200	236700	195800	148700	114000	90190
11	277100	287400	283600	268800	259600	239400	243800	235400	194100	147300	112400	106500
12	277200	287700	283100	268200	259200	240300	244700	234100	192500	146000	111000	114300
13	277300	287900	282700	267900	258900	241500	245700	232800	190800	144600	109500	122200
14	277400	288100	282100	267500	258900	242200	246700	231300	189100	143200	108000	128200
15	277500	288300	281600	267200	259600	242500	247600	229800	187400	141700	106600	133100
16	277700	288300	281000	266800	260100	242800	248200	228100	185500	140400	105100	136900
17	277900	288500	280400	266300	259900	242700	248400	226400	183700	139100	103600	139200
18	277900	288600	279800	265800	259100	243100	248700	224800	181600	137700	102200	140700
19	278100	288700	279200	265300	258900	243100	249100	223200	179700	136300	100700	141800
20	278200	288600	278500	264800	258700	243500	249400	221300	177700	135200	99400	142600
21	278000	288500	278100	264300	257700	243200	249800	219800	176200	133800	98090	143100
22	278600	288300	277800	263800	257300	243100	249700	218400	174500	132500	96610	142800
23	278800	288300	277100	263300	256700	242800	249500	217100	172800	131600	95220	142800
24	279100	288000	276700	262800	256100	242600	249300	216100	171200	131100	93860	142700
25	279300	287800	276100	262400	255300	242300	248900	214900	169600	130500	92240	142600
26	279300	287700	275600	261900	254300	242400	248300	213700	168200	130000	90900	142300
27	279300	287600	275100	261600	253300	242200	247800	212600	166700	129400	89400	141900
28	280700	287300	274400	260900	252200	242000	247500	211700	165200	128700	88000	141600
29	281200	287000	273900	260600	---	241900	247000	210800	163700	128500	86480	141400
30	281900	286900	273300	260200	---	241700	246400	210100	162200	127800	85190	141000
31	282500	---	272900	259700	---	241500	---	209000	---	127000	83860	---
MAX	282500	288700	286800	272300	261200	251100	249800	245700	208100	160700	126100	143100
MIN	277100	283300	272900	259700	252200	239400	240000	209000	162200	127000	83860	76080
(†)	2458.40	2458.93	2457.24	2455.60	2454.65	2453.26	2453.90	2448.73	2441.48	2435.14	2425.67	2437.76
(‡)	+1800	-4400	-14000	-13200	-7500	-10700	+4900	-37400	-46800	-35200	-43140	+57140

CAL YR 1974 MAX 615900 MIN 272900 ‡ -343,400
WTR YR 1975 MAX 288700 MIN 76080 ‡ -139,700

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

09469500. Gila River below Coolidge Dam, Ariz.

LOCATION.--Lat 33°10'10", long 110°31'50", in SW¼ sec.17, T.3 S., R.18 E. (unsurveyed), Pinal County, on left bank 2,200 ft (670 m) downstream from Coolidge Dam.

DRAINAGE AREA.--12,886 mi^2 (33,375 km^2).

PERIOD OF RECORD.--July to October 1899, April 1900 to March 1902, July to September 1902, December 1902 to December 1904; January to May 1905 (gage heights only); June to November 1905; August 1910 to February 1911 (gage heights only); April 1914 to current year. Published as "at San Carlos" 1899-1911, as "near San Carlos" 1914-26, and as "at Coolidge Dam" 1927-38.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 2,309.33 ft (703.884 m) above mean sea level. Prior to Feb. 5, 1911, nonrecording gage at various sites and datums upstream from mouth of San Carlos River. Apr. 29, 1914, to Mar. 8, 1937, water-stage recorder at various sites within 1 mi (1.6 km) upstream from present site at different datums.

AVERAGE DISCHARGE (adjusted for storage in San Carlos Reservoir).--63 years (1900-1901, 1903-4, 1914-75), 346 ft^3/s (9.799 m^3/s), 250,700 acre-ft/yr (309 hm^3/yr); median of yearly mean discharges, 210 ft^3/s (5.95 m^3/s), 152,000 acre-ft/yr (190 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 903 ft^3/s (25.6 m^3/s) June 18; minimum daily, 2.8 ft^3/s (0.08 m^3/s) Nov. 1-6.
1914-28: Maximum discharge, 130,000 ft^3/s (3,680 m^3/s) Jan. 20, 1916, estimated on basis of peak discharge near Solomon and at Kelvin; no flow at times.
1928-75: Maximum discharge, 1,350 ft^3/s (38.2 m^3/s) July 28, 1952 (gage height, 4.64 ft or 1.414 m); no flow at times prior to 1938; minimum daily since 1938, 0.4 ft^3/s (0.011 m^3/s) in several years.

REMARKS.--Records excellent except those below 10 ft^3/s (0.28 m^3/s), which are fair. Flow regulated by San Carlos Reservoir since Nov. 15, 1928. (See sta 09469000.) Record includes flow of Warm Springs which enters between dam and gage. Large diversions above San Carlos Reservoir for irrigation, metallurgical treatment of ore, and municipal supply; about 69,000 acres (279 km^2) of land was irrigated, a considerable portion by pumping from ground water.

REVISIONS (WATER YEARS).--WSP 629: 1915-16. WSP 1049: 1899-1904. WSP 1149: 1917(M), 1921, 1922(M), 1923, 1924(M). WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	2.8	150	306	324	732	503	693	472	667	496	678
2	218	2.8	176	265	324	744	503	693	524	667	516	639
3	218	2.8	197	248	324	790	506	689	628	701	519	645
4	218	2.8	213	248	332	815	500	689	621	582	522	628
5	218	2.8	225	248	351	836	496	689	674	645	635	628
6	213	2.8	227	239	368	844	496	686	678	642	667	618
7	218	11	227	225	371	840	496	686	701	649	693	564
8	218	4.8	239	230	371	840	503	686	701	594	761	574
9	218	229	263	230	371	836	471	686	701	697	748	503
10	218	150	272	230	371	836	471	744	777	697	690	500
11	8.0	146	272	230	377	840	391	748	798	682	748	509
12	4.2	130	272	243	400	720	354	748	794	689	750	471
13	4.2	124	278	246	400	720	351	769	790	693	725	503
14	4.2	124	311	251	400	720	321	790	815	693	700	496
15	3.7	124	324	251	400	720	321	815	815	671	700	519
16	3.7	124	340	265	429	720	321	865	811	642	700	525
17	3.2	124	349	300	450	720	377	870	840	622	700	522
18	3.2	124	349	298	420	551	412	874	903	621	700	453
19	3.7	124	349	298	400	551	412	874	899	621	700	423
20	3.2	124	349	298	400	506	412	849	899	621	675	471
21	3.7	154	296	298	417	506	420	748	840	625	667	500
22	3.7	171	275	298	450	503	570	724	790	625	667	525
23	3.7	171	275	298	450	597	567	678	794	414	667	525
24	3.7	169	293	300	493	601	594	594	757	295	693	525
25	3.2	169	300	300	554	638	618	601	724	282	697	525
26	3.2	169	300	300	597	649	621	597	701	320	701	525
27	3.2	171	324	303	597	611	645	597	693	400	701	503
28	3.2	173	349	311	628	594	642	525	671	409	701	468
29	3.2	158	312	321	------	546	642	519	667	459	701	450
30	3.2	150	327	324	------	541	693	522	667	481	674	368
31	3.2	------	303	324	------	500	------	525	------	471	674	------
TOTAL	2,253.5	3,334.6	8,736	8,526	11,769	21,167	14,629	21,773	22,145	17,877	20,888	15,783
MEAN	72.7	111	282	275	420	683	488	702	738	577	674	526
MAX	218	229	349	324	628	844	693	874	903	701	761	678
MIN	3.2	2.8	150	225	324	500	321	519	472	282	496	368
AC-FT	4,470	6,610	17,330	16,910	23,340	41,980	29,020	43,190	43,920	35,460	41,430	31,310

CAL YR 1974 TOTAL 181,984.1 MEAN 499 MAX 1,000 MIN 2.8 AC-FT 361,000
WTR YR 1975 TOTAL 168,881.1 MEAN 463 MAX 903 MIN 2.8 AC-FT 335,000

09470000. Gila River at Winkelman, Ariz.

LOCATION.--Lat 33°00'06", long 110°45'55", in NW¼NE¼ sec.13, T.5 S., R.15 E., Gila County, on right bank 1 mi (2 km) north of Winkelman, 2.2 mi (3.5 km) upstream from San Pedro River, and 29 mi (47 km) downstream from Coolidge Dam.

DRAINAGE AREA.--13,268 mi^2 (34,364 km^2), of which 382 mi^2 (989 km^2) is below Coolidge Dam.

PERIOD OF RECORD.--September 1917 to June 1918, September 1941 to current year.

GAGE.-- Water-stage recorder. Datum of gage is 1,921.76 ft (585.75 m) above mean sea level. Sept. 10, 1917, to June 27, 1918, non-recording gage at bridge 1.4 mi (2.3 km) downstream at different datum. Sept. 1941, to Jan. 5, 1964, at site about 400 ft (120 m) upstream at datum 0.81 ft (0.247 m) lower. Supplementary non-recording gage 1.3 mi (2.1 km) downstream since Aug. 9, 1963, at datum 13.68 ft (4.170 m) lower; supplementary water-stage recorder since Jan. 6, 1964, at bridge 1.4 mi (2.3 km) downstream at datum 14.76 ft (4.499 m) lower.

AVERAGE DISCHARGE (adjusted for storage in San Carlos Reservoir).--34 years (1941-75), 248 ft^3/s (7,023 m^3/s), 179,700 acre-ft/yr (222 hm^3/yr); median of yearly mean discharge, 170 ft^3/s (4.81 m^3/s), 123,000 acre-ft/yr (150 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,070 ft^3/s (86.9 m^3/s) Sept. 7 (gage height, 7.09 ft or 2.161 m); minimum daily, 14 ft^3/s (0.40 m^3/s) Nov. 7.
Period of record: Maximum discharge, 55,000 ft^3/s (1,560 m^3/s) of which 500 ft^3/s (14.2 m^3/s) was released by Coolidge Dam, Aug. 9, 1944 (gage height, 18.40 ft or 5.608 m), from rating curve extended above 2,900 ft^3/s (82 m^3/s) on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records good except those above 800 ft^3/s (22.7 m^3/s), which are poor. Large diversions above station for irrigation, metallurgical treatment of ore, and municipal supply, but none between Coolidge Dam and this station. About 69,000 acres (279 km^2) irrigated in the basin above Coolidge Dam, a considerable portion by pumping from ground water. Flow regulated by San Carlos Reservoir (See sta 09469000).

REVISIONS.--WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	237	20	164	296	315	680	496	721	477	736	564	767
2	225	23	163	288	312	774	495	730	433	741	588	745
3	226	29	199	250	312	780	496	733	536	759	602	758
4	226	18	203	248	313	858	498	730	595	836	601	737
5	226	16	229	246	326	863	485	724	630	713	656	725
6	231	15	225	246	341	892	479	723	671	705	750	704
7	242	14	225	228	356	898	491	721	682	705	788	906
8	231	15	227	226	358	903	490	718	703	767	850	764
9	233	18	250	233	361	896	475	717	705	712	880	641
10	229	228	269	234	366	891	519	750	744	771	953	556
11	197	166	270	232	367	911	441	796	808	776	822	555
12	94	160	270	234	387	859	368	799	821	765	867	610
13	45	154	271	249	396	762	344	810	822	774	844	567
14	55	146	277	248	407	759	327	831	835	776	828	544
15	40	142	310	248	424	765	308	861	865	765	809	541
16	30	141	310	246	415	764	303	903	863	739	807	553
17	25	141	327	284	463	762	324	940	881	724	800	543
18	25	141	327	290	462	669	363	947	948	699	799	506
19	20	142	327	290	408	555	388	943	995	702	800	454
20	20	143	329	291	402	531	389	927	999	703	789	452
21	15	143	322	290	399	499	389	860	967	704	778	485
22	36	175	273	289	439	495	460	775	894	703	770	500
23	86	180	270	288	448	546	560	725	865	667	763	521
24	35	181	270	290	449	613	581	641	850	390	775	518
25	24	181	290	289	533	642	612	593	814	379	792	514
26	18	181	292	291	588	683	629	588	779	369	791	512
27	17	181	290	293	610	675	644	588	762	448	790	500
28	51	181	320	291	607	610	664	552	751	485	789	458
29	45	181	301	316	---	574	662	482	738	516	792	430
30	35	171	324	317	---	552	684	482	736	547	781	394
31	25	---	296	315	---	519	---	480	---	553	766	---
TOTAL	3244	3627	8420	8376	11564	22180	14364	22790	23169	20629	23984	17460
MEAN	105	121	272	270	413	715	479	735	772	665	774	582
MAX	242	228	329	317	610	911	684	947	999	836	953	906
MIN	15	14	163	226	312	495	303	480	433	369	564	394
AC-FT	6430	7190	16700	16610	22940	43990	28490	45200	45960	40920	47570	34630

CAL YR 1974 TOTAL 178234 MEAN 488 MAX 2180 MIN 14 AC-FT 353500
WTR YR 1975 TOTAL 179807 MEAN 493 MAX 999 MIN 14 AC-FT 356600

PEAK DISCHARGE, UNADJUSTED FOR RELEASE FROM COOLIDGE DAM (BASE, 1,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 4	1915	5.36	1,560	9- 7	1900	7.09	3,070
7- 8	1815	5.06	1,400	9-12	2245	4.96	1,370
8-10	1915	5.16	1,540				

09470500. San Pedro River at Palominas, Ariz.

LOCATION.--Lat 31°22'48", long 110°06'38", in SW¼SE¼ sec.33, T.23 S., R.22 E., Cochise County, near left bank on downstream side of pier of bridge on State Highway 92, 0.7 mi (1.1 km) east of Palominas, 2.5 mi (4.0 km) upstream from Green Brush Draw, 4.5 mi (7.2 km) downstream from international boundary, and 12 mi (19 km) southwest of Bisbee.

DRAINAGE AREA.--741 mi^2 (1,919 km^2), of which 649 mi^2 (1,681 km^2) is in Mexico.

PERIOD OF RECORD.--May 1930 to October 1933, May 1935 to July 1941, July 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,187.62 ft (1,276.387 m) above mean sea level (State Highway Department bench mark). See WSP 1733 for history of changes prior to Nov. 24, 1955.

AVERAGE DISCHARGE.--33 years (1930-33, 1935-40, 1950-75), 30.8 ft^3/s (0.872 m^3/s), 22,310 acre-ft/yr (27.5 hm^3/yr); median of yearly mean discharges, 24 ft^3/s (0.68 m^3/s), 17,400 acre-ft/yr (21 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,840 ft^3/s (194 m^3/s) Sept. 14 (gage height, 11.03 ft or 3.362 m); no flow for many days.
Period of record: Maximum discharge, 22,000 ft^3/s (623 m^3/s) Aug. 14, 1940 (gage height, 16.16 ft or 4.926 m, present datum), from rating curve extended above 5,600 ft^3/s (160 m^3/s) on basis of slope-area measurement of peak flow; no flow at times most years.
Greatest flood since at least 1906 occurred Sept. 28, 1926 (gage height, about 23.9 ft or 7.28 m, present datum, from flood-marks; discharge not determined).

REMARKS.--Records fair. Small diversions for irrigation of a few hundred acres above station, mostly in Mexico. Record shows approximate flow of river at international boundary.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	3.9	2.6	2.0	2.3	1.6	1.4	.72	1.1	.08	6.8	1.5
2	.10	3.1	2.6	2.0	2.1	1.5	1.3	.93	1.3	0	4.6	1.2
3	0	3.1	2.8	2.0	2.0	1.5	1.4	.62	.75	.14	3.5	.66
4	0	3.0	2.5	2.0	2.0	1.2	1.3	.63	.31	.04	2.7	1.1
5	0	3.0	2.5	2.5	1.9	.84	1.0	.97	.46	.15	2.5	14
6	0	3.0	2.6	3.0	1.9	.60	1.2	1.2	.45	.08	2.0	37
7	0	3.0	3.1	4.0	1.8	.49	1.9	.91	.59	.30	1.5	111
8	0	3.1	3.1	5.0	1.8	.58	1.2	.52	.75	.19	1.5	20
9	0	3.1	3.1	3.0	1.8	.43	1.4	.22	1.4	.50	167	112
10	.10	3.1	3.1	2.5	1.7	.39	.88	.31	1.4	.02	99	13
11	.10	2.8	3.1	2.0	1.7	.48	.94	.25	1.7	0	5.1	4.0
12	83	2.8	3.6	2.0	1.7	.54	.73	.25	.95	223	4.0	19
13	30	2.8	3.3	2.0	1.8	.61	.66	.56	.70	460	2.3	517
14	6.7	3.0	2.6	2.0	1.8	.57	.43	.55	.80	4.7	1.5	1700
15	3.4	3.1	2.6	2.0	1.8	.61	.46	.53	.65	.12	4.0	107
16	3.0	3.0	2.5	2.0	1.8	.71	.63	.67	1.0	.27	1.1	34
17	2.3	3.1	2.3	2.0	1.8	.67	.65	.89	.47	.20	.61	16
18	2.0	3.1	2.3	2.0	1.9	.64	.72	1.0	.70	377	.52	10
19	1.8	3.0	2.3	2.0	1.9	.36	.85	.81	.16	172	.50	7.8
20	1.7	2.8	2.3	1.8	2.0	.41	.74	.69	.75	13	.48	6.4
21	1.7	2.8	2.1	1.7	2.0	.44	.65	.42	.90	11	.32	5.0
22	2.3	2.8	2.1	1.6	2.0	.52	.74	.34	1.4	1010	20	3.1
23	3.0	2.8	2.1	1.6	2.1	.77	1.0	.45	.85	1160	114	2.2
24	2.6	2.5	2.1	1.6	1.9	.68	1.1	.52	.75	639	51	2.0
25	2.0	2.5	2.5	1.6	2.1	.53	.92	.86	.14	169	5.9	1.4
26	1.9	2.5	2.5	1.5	1.9	.50	.74	1.0	.65	49	2.5	1.1
27	1.9	2.6	2.0	1.5	1.8	.37	.41	1.1	1.7	19	2.2	.90
28	2.2	2.6	2.0	1.6	1.7	.74	.43	.86	2.0	10	1.6	.93
29	3.3	2.5	2.0	2.0	---	1.1	.77	.51	1.9	61	.89	.65
30	4.1	2.6	2.0	2.5	---	1.2	.90	.66	2.2	65	1.1	.63
31	4.1	---	2.0	2.2	---	1.3	---	.99	---	34	1.4	---
TOTAL	163.50	87.1	78.3	67.2	53.0	22.88	27.45	20.94	28.88	4478.79	512.12	2750.57
MEAN	5.27	2.90	2.53	2.17	1.89	.74	.92	.68	.96	144	16.5	91.7
MAX	83	3.9	3.6	5.0	2.3	1.6	1.9	1.2	2.2	1160	167	1700
MIN	0	2.5	2.0	1.5	1.7	.36	.41	.22	.14	0	.32	.63
AC-FT	324	173	155	133	105	45	54	42	57	8880	1020	5460

CAL YR 1974 TOTAL 11101.60 MEAN 30.4 MAX 2520 MIN 0 AC-FT 22020
WTR YR 1975 TOTAL 8290.73 MEAN 22.7 MAX 1700 MIN 0 AC-FT 16440

PEAK DISCHARGE (BASE, 2,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-13	0115	8.25	2,400	7-22	2345	8.72	2,910
7-18	2100	8.50	2,560	9-14	0215	11.03	6,840

NOTE.--No gage-height record Dec. 19 to Jan. 19.

09471000. San Pedro River at Charleston, Ariz.

LOCATION.--Lat 31°37'33", long 110°10'26", in NE¼NE¼ sec.11, T.21 S., R.21 E., Cochise County, in Spanish land grant of San Juan de las Boquillas y Nogales, at downstream side of pier near center of highway bridge, 0.3 mi (0.5 km) south of Charleston, 1.5 mi (2.4 km) upstream from Charleston damsite, and 9 mi (14 km) upstream from Babocomari River.

DRAINAGE AREA.--1,219 mi^2 (3,157 km^2), of which 696 mi^2 (1,803 km^2) is in Mexico.

PERIOD OF RECORD.--January and February 1904 (gage heights only); March 1904 to August 1906; November 1910 to December 1911 (gage heights only); September 1912 to current year. Monthly discharge only October 1926 to May 1928 and December 1933 to April 1935, published in WSP 1313. Published as "near Lewis Springs" 1910-11, and as "near Fairbank" 1911-26.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,954.01 ft (1,205.182 m) above mean sea level. Prior to Dec. 1, 1942, nonrecording gage or water-stage recorder at various sites within 6.5 mi (10.5 km) downstream at different datums.

AVERAGE DISCHARGE.--64 years (1904-5, 1912-75), 60.0 ft^3/s (1.699 m^3/s), 43,470 acre-ft/yr (53.6 hm^3/yr); median of yearly mean discharges, 50 ft^3/s (1.42 m^3/s), 36,200 acre-ft/yr (44.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,020 ft^3/s (114 m^3/s) Sept. 14 (gage height, 6.25 ft or 1.905 m); minimum, 1.5 ft^3/s (0.042 m^3/s) June 29, 30.
Period of record: Maximum discharge, about 98,000 ft^3/s (2,780 m^3/s) Sept. 28, 1926 (gage height, 21.9 ft or 6.68 m, site and datum then in use), by slope-area measurement of peak flow; minimum since 1928, 0.4 ft^3/s (0.011 m^3/s) June 7, 1974.

REMARKS.--Records good. Diversions, mostly by pumping from ground water, for irrigation of 3,600 acres (146 km^2)—in 1966—above station, excluding an unknown amount in Mexico. Record shows flow available at Charleston damsite. Records of water temperatures and suspended-sediment loads for the current water year are published on following pages.

REVISIONS (WATER YEARS).--WSP 1119: 1939(M). WSP 1213: 1914, 1916(M), 1918(M), 1919, 1920(M), 1922-23(M). WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	12	12	14	15	14	12	12	5.5	2.0	26	4.8
2	9.0	12	12	14	15	14	12	11	4.8	71	21	7.0
3	8.0	11	13	14	15	15	13	11	3.8	4.8	15	6.2
4	8.0	12	13	14	15	15	13	12	3.8	4.8	13	18
5	7.0	12	13	15	15	15	13	12	3.8	6.1	10	7.6
6	8.0	12	12	15	15	15	13	12	4.5	13	8.4	23
7	9.0	12	12	15	15	14	15	14	4.8	57	8.4	60
8	7.5	12	13	18	15	14	15	14	4.5	26	8.0	70
9	7.5	11	13	15	15	14	15	14	3.6	10	15	58
10	7.0	11	12	15	15	14	15	12	3.2	4.8	149	32
11	7.5	11	12	15	15	14	14	11	3.4	4.2	24	13
12	80	11	12	15	15	14	12	10	3.4	135	15	11
13	66	11	13	15	15	15	12	10	3.2	360	14	145
14	24	11	13	15	15	13	12	10	2.8	50	9.7	1,550
15	18	11	12	15	15	13	12	9.5	2.5	16	8.4	168
16	12	12	12	15	15	13	12	9.0	2.5	4.4	9.1	86
17	12	12	13	15	15	13	11	9.0	2.5	8.9	8.4	60
18	11	13	12	15	15	13	11	9.0	2.3	46	7.2	36
19	9.5	14	12	15	15	13	11	8.5	2.2	374	6.8	22
20	8.0	13	13	15	15	12	11	8.5	2.0	37	6.8	15
21	9.5	13	12	15	15	12	11	8.5	2.2	56	6.4	15
22	10	14	13	15	15	12	11	8.5	3.0	845	6.4	9.1
23	11	13	12	15	15	12	11	9.0	3.8	1,380	84	9.7
24	11	13	13	15	15	11	11	8.9	3.2	888	61	7.2
25	10	13	14	14	15	10	11	8.9	2.8	153	15	6.0
26	10	13	14	14	14	11	13	7.5	2.5	103	9.7	5.6
27	11	13	13	13	14	12	13	6.6	2.0	48	8.0	5.6
28	11	13	14	13	14	12	15	6.2	2.0	35	6.8	5.2
29	12	13	14	14	------	12	14	5.0	1.9	26	6.4	5.2
30	12	12	14	15	------	12	12	6.2	1.9	74	4.8	5.6
31	12	------	14	15	------	12	------	5.9	------	44	4.8	------
TOTAL	448.0	366	396	457	417	405	376	296.9	93.6	4,887.0	596.5	2,466.8
MEAN	14.5	12.2	12.8	14.7	14.9	13.1	12.5	9.58	3.12	158	19.2	82.2
MAX	80	14	14	18	15	15	15	14	5.5	1,380	149	1,550
MIN	7.0	11	12	13	14	10	11	5.0	1.9	2.0	4.8	4.8
AC-FT	889	726	785	906	827	803	746	589	186	9,690	1,180	4,890

CAL YR 1974 TOTAL 19,951.30 MEAN 54.7 MAX 3,410 MIN .80 AC-FT 39,570
WTR YR 1975 TOTAL 11,205.80 MEAN 30.7 MAX 1,550 MIN 1.9 AC-FT 22,230

PEAK DISCHARGE (BASE, 3,000 CFS).--Sept. 14 (0800) 4,020 cfs (6.25 ft).

09471000. San Pedro River at Charleston, Ariz.

LOCATION.--Lat 31°37'33", long 110°10'26", in NE¼NE¼ sec.11, T.21 S., R.21 E., Cochise County, at gaging station in Spanish land grant of San Juan de las Boquillas y Nogales, at county highway bridge, 0.3 mi (0.5 km) south of Charleston, 1.5 mi (2.4 km) upstream from Charleston damsite, and 9 mi (14 km) upstream from Babocomari River.

DRAINAGE AREA.--1,219 mi² (3,157 km²), of which 696 mi² (1,903 km²) is in Mexico.

PERIOD OF RECORD.--Specific conductance: October 1964 to September 1975 (discontinued).
Water temperatures: July 1963 to September 1975 (discontinued).
Sediment records: July 1963 to September 1975 (discontinued).

EXTREMES.--Current year:
Specific conductance: Maximum daily, 460 micromhos Oct. 16, 29; minimum daily, 234 micromhos July 8.
Water temperatures: Maximum observed, 31.5°C June 19; minimum observed, freezing point during winter months.
Sediment concentrations: Maximum daily, 21,500 mg/l July 23; minimum daily, 5 mg/l Apr. 16.
Sediment discharge: Maximum daily, 88,100 tons (79,900 tonnes) July 23; minimum daily, 0.09 ton (0.08 tonne) June 18.
Period of record:
Specific conductance: Maximum daily, 1,550 micromhos Dec. 22, 1967; minimum daily, 140 micromhos Mar. 18, 1969.
Water temperatures: Maximum observed, 36.0°C July 12, 1968; minimum observed, freezing point on several days during winter months.
Sediment concentrations: Maximum daily, 30,600 mg/l July 29, 1966; minimum daily, 1.0 mg/l May 27, 28, 31, June 1, 2, 1966, Oct. 23, 24, Nov. 2, 12, 1969.
Sediment discharge: Maximum daily, 410,000 tons (372,000 tonnes) Aug. 14, 1964; minimum daily, 0.01 ton (0.01 tonne) July 3, 6, 7, 1969, July 10, 1971, June 22, 1973.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	350	360	375	350	290	300	300	334	314	314	358	332
2	350	360	375	350	375	300	300	331	315	328	353	334
3	350	360	375	350	350	300	300	328	---	352	381	---
4	350	360	375	350	280	300	300	329	325	338	318	---
5	350	360	400	350	350	300	300	334	332	322	323	---
6	350	360	400	350	350	300	450	332	315	267	337	---
7	350	360	375	350	350	300	450	365	327	320	321	---
8	350	350	375	350	350	300	300	343	324	234	321	---
9	350	350	360	350	300	300	300	343	317	321	316	---
10	360	350	360	350	300	450	300	339	332	313	305	---
11	410	---	360	350	300	350	300	349	325	311	275	---
12	---	340	360	350	325	350	300	337	313	372	370	375
13	280	340	360	---	350	350	300	341	321	357	320	380
14	340	340	360	---	350	350	300	325	326	286	341	254
15	430	340	360	---	350	350	300	342	315	347	349	242
16	460	350	360	---	350	350	300	345	316	341	343	310
17	360	360	360	---	350	350	300	332	318	316	340	346
18	350	360	360	---	350	350	300	325	325	365	349	398
19	350	360	360	350	350	300	300	333	325	315	331	354
20	350	360	360	350	350	350	400	331	334	267	333	359
21	350	360	360	260	350	350	400	327	336	334	331	335
22	390	---	350	260	350	350	400	329	342	323	323	354
23	350	---	350	260	350	350	400	354	348	285	287	336
24	360	---	375	260	350	350	336	322	344	351	325	321
25	360	---	375	280	375	350	375	325	314	260	302	348
26	350	375	350	280	400	400	330	323	320	242	357	320
27	350	375	350	340	400	450	333	353	307	350	347	318
28	350	375	350	350	400	400	331	318	310	374	358	314
29	460	375	350	350	---	300	330	322	311	356	385	319
30	360	375	350	400	---	300	329	313	310	260	343	319
31	360	---	350	350	---	300	---	314	---	279	---	---
MEAN	363	358	364	332	346	339	332	334	323	316	335	---
YEAR	MAX	460	MIN	234								

09471000. San Pedro River at Charleston, Ariz.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	7.0	5.0	4.0	0.5	6.0	9.0	13.0	13.0	16.0	30.0	19.0
2	15.0	12.0	9.0	10.0	7.0	9.0	5.0	8.0	20.0	21.5	27.0	23.0
3	16.5	8.0	12.5	10.0	6.0	5.0	---	12.0	---	30.0	29.0	---
4	15.5	11.0	11.0	0.0	5.0	6.0	6.0	10.0	22.0	20.0	19.0	---
5	19.0	18.0	13.0	0.5	2.5	---	9.0	13.0	24.5	21.0	20.5	---
6	17.5	17.0	6.0	0.5	6.5	8.0	9.0	23.0	29.0	23.0	31.0	---
7	19.0	16.5	11.5	3.5	5.0	5.5	6.5	26.5	16.0	20.5	16.0	---
8	21.0	12.0	9.5	0.0	7.5	12.0	8.0	26.0	18.0	21.5	24.0	---
9	20.0	11.5	5.0	6.0	5.5	8.0	17.5	23.0	15.5	21.0	21.0	---
10	21.0	9.0	5.0	2.0	7.5	8.0	22.0	27.5	18.0	24.0	18.0	---
11	19.0	---	1.0	4.0	6.0	7.5	23.5	25.0	15.5	24.0	20.5	---
12	---	9.0	4.0	0.5	18.0	8.0	25.5	11.0	18.0	24.0	20.0	25.5
13	14.0	6.5	2.5	2.0	16.5	19.0	15.0	15.0	15.5	20.0	22.5	18.0
14	11.0	7.0	3.5	1.0	12.5	19.5	5.5	11.5	21.5	21.0	26.0	20.5
15	14.0	6.5	1.5	3.0	4.5	5.0	10.0	26.5	15.0	20.0	20.5	19.5
16	10.0	9.0	6.0	3.0	3.0	8.0	9.5	14.0	16.0	28.0	19.0	28.5
17	16.0	8.5	13.0	14.0	5.0	7.0	14.0	19.0	15.5	31.0	20.0	18.5
18	10.0	12.0	12.0	0.0	3.0	6.0	7.0	12.0	18.0	26.0	20.0	28.0
19	14.0	7.0	11.0	6.0	1.0	17.5	8.5	18.0	30.5	18.5	21.5	19.0
20	11.5	10.0	11.5	0.0	4.0	9.5	7.0	11.0	27.0	22.0	20.0	21.0
21	15.0	17.0	2.5	4.0	6.5	11.0	13.0	11.0	15.5	21.5	21.0	16.5
22	13.0	---	3.0	4.0	1.0	14.5	8.0	13.0	17.0	23.0	19.0	27.0
23	13.5	---	4.5	3.0	0.0	8.0	13.5	28.0	14.5	25.0	21.0	13.0
24	21.0	---	0.0	2.0	5.0	11.5	17.0	11.0	17.0	24.0	21.0	18.0
25	23.0	---	0.0	3.0	3.0	6.0	23.5	15.0	14.0	21.0	22.5	22.5
26	12.0	26.0	5.5	3.0	19.0	9.5	12.0	13.0	23.0	22.5	20.0	23.0
27	12.0	4.0	0.0	12.0	16.0	17.0	9.0	22.5	14.5	26.5	20.0	22.0
28	14.5	4.0	4.0	7.0	21.0	12.0	7.0	13.0	20.0	29.0	27.0	15.0
29	12.0	3.0	0.5	8.0	---	7.0	14.0	18.0	15.5	21.0	31.5	14.0
30	8.0	4.0	4.0	18.0	---	7.5	8.0	11.0	22.0	29.0	17.0	17.0
31	8.0	---	1.0	13.0	---	6.0	---	16.0	---	20.5	---	---
MEAN	15.0	10.0	6.0	4.5	7.0	9.5	12.0	16.5	18.5	23.0	22.0	---
YEAR	MAX	31.5	MIN	0.0	MEAN	13.5						

SUSPENDED-SEDIMENT CONCENTRATION (MG/L), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	79	43	42	17	10	8	29	32	61	1100	17
2	125	73	70	29	22	14	23	84	32	4690	236	531
3	81	45	62	32	17	20	13	51	50	1400	114	1440
4	53	46	51	18	14	34	26	41	155	71	97	5200
5	52	50	44	51	17	22	14	35	27	347	62	300
6	69	56	38	30	11	12	13	56	19	1300	47	100
7	61	50	47	24	14	16	35	38	30	3290	24	2740
8	68	58	56	23	11	16	15	138	21	6130	147	5710
9	42	56	39	17	18	10	17	84	27	228	1190	3870
10	36	39	43	12	23	121	56	58	35	140	13600	1600
11	9	40	33	14	15	9	9	38	48	101	3100	20
12	3360	44	17	9	32	9	24	39	40	17200	500	160
13	7300	54	31	7	8	33	37	42	29	21200	210	6920
14	1450	35	36	10	6	17	9	33	24	4300	84	14100
15	400	39	47	17	15	13	10	39	19	700	63	3900
16	168	31	25	19	14	26	5	41	17	111	53	1100
17	95	30	34	22	24	16	13	40	16	1090	42	382
18	78	22	60	27	12	17	8	45	15	12400	74	186
19	43	38	41	16	20	29	19	35	18	18200	22	105
20	33	66	26	17	11	7	7	37	45	3600	31	67
21	26	26	51	16	20	13	12	23	17	2490	33	55
22	34	30	87	26	21	10	13	21	45	19600	32	96
23	66	35	57	12	16	16	12	32	60	21500	7720	27
24	30	40	122	14	11	24	36	22	61	16900	12500	25
25	27	50	39	30	12	12	76	21	29	4990	2700	34
26	38	63	90	19	15	12	45	24	41	3200	140	22
27	42	64	19	38	14	12	44	29	23	1200	122	213
28	28	64	23	17	19	71	21	23	47	280	44	23
29	97	40	39	28	---	12	33	63	51	200	40	21
30	152	49	36	32	---	16	26	33	45	7150	31	15
31	79	---	31	26	---	14	---	38	---	3200	20	---
YEAR	MAX	21500	MIN	5								

09471000. San Pedro River at Charleston, Ariz.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.6	1.4	1.6	.69	.38	.26	.94	.48	.33	77	.22
2	3.6	2.4	2.3	1.1	.93	.53	.75	2.5	.41	3700	13	32
3	1.7	1.3	2.2	1.2	.69	.81	.46	1.5	.51	18	4.6	35
4	1.1	1.2	1.8	.68	.57	1.4	.91	1.3	1.6	.92	3.4	398
5	.98	1.6	1.5	2.1	.69	.89	.49	1.1	.28	17	1.7	6.2
6	1.5	1.8	1.2	1.2	.45	.49	.46	1.8	.23	46	1.1	6.2
7	1.5	1.8	1.5	.97	.57	.60	1.4	1.4	.39	2110	.54	1320
8	1.4	1.9	2.0	1.1	.45	.60	.61	5.2	.24	559	3.2	1850
9	.85	1.7	1.4	.69	.77	.38	.69	3.2	.26	6.2	214	739
10	.68	1.2	1.4	.49	.93	4.6	2.3	1.9	.30	1.8	6900	138
11	.38	1.2	1.1	.61	.61	.34	.34	1.1	.44	1.1	201	.70
12	2220	1.3	.55	.36	1.3	.34	.78	1.1	.37	12100	20	4.8
13	1560	1.0	1.1	.28	.36	1.3	1.2	1.1	.25	30700	7.9	4100
14	94	1.0	1.3	.41	.24	.60	.29	.89	.18	581	2.2	72400
15	21	1.2	1.5	.69	.61	.46	.32	1.0	.13	30	1.4	1770
16	5.4	1.0	.81	.77	.57	.91	.16	1.0	.11	1.3	1.3	255
17	3.1	.97	1.2	.93	.97	.56	.39	.97	.11	72	.95	62
18	2.3	.77	1.9	1.1	.49	.60	.24	1.1	.09	2440	1.4	18
19	1.1	1.4	1.3	.65	.81	1.0	.56	.80	.11	28300	.40	6.2
20	.71	2.3	.91	.69	.45	.23	.21	.85	.24	360	.57	2.7
21	.67	.91	1.7	.65	.61	.42	.36	.53	.10	1180	.57	2.2
22	.94	1.1	3.1	1.1	.85	.32	.39	.48	.36	57100	.55	2.4
23	2.0	1.2	1.8	.49	.65	.52	.36	.69	.49	88100	3540	.71
24	.89	1.4	4.3	.57	.45	.71	1.1	.48	.53	52500	2250	.49
25	.73	1.3	1.5	1.1	.49	.32	2.3	.45	.22	2060	109	.55
26	1.0	2.2	3.4	.72	.57	.36	1.6	.49	.28	890	3.7	.33
27	1.2	2.2	.67	1.3	.53	.39	1.5	.52	.12	156	2.6	3.2
28	.83	2.2	.87	.60	.72	2.3	.85	.38	.25	26	.81	.32
29	3.1	1.4	1.5	1.1	---	.39	1.2	.85	.26	14	.69	.29
30	4.9	1.6	1.4	1.3	---	.52	.84	.55	.23	1680	.40	.23
31	2.6	---	1.2	1.1	---	.49	---	.61	---	380	.26	---
TOTAL	3942.05	46.31	49.78	27.63	18.22	23.76	23.30	36.78	9.57	285130.65	13364.24	83154.74

YEAR TOTAL 385827.03

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ANALYSES MADE IN DISTILLED WATER)

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
JULY											
12...	1330	265	27.0	37100	26500	52	61	87	96	98	100
22...	0900	1670	21.0	23100	104000	51	58	79	98	100	--

09471550. San Pedro River near Tombstone, Ariz.

LOCATION.--Lat 31°45'03", long 110°12'02", in SE¼ sec.28, T.19 S., R.21 E. (unsurveyed), Cochise County, in Spanish land grant of San Juan de las Boquillas y Nogales, on right bank 0.5 mi (0.8 km) downstream from Willow Wash, 2.6 mi (4.2 km) north of Fairbank, and 8 mi (13 km) northwest of Tombstone.

DRAINAGE AREA.--1,740 mi^2 (4,510 km^2) approximately, of which 696 mi^2 (1,800 km^2) is in Mexico.

PERIOD OF RECORD.--April 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,780 ft (1,152 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 41.2 ft^3/s (1.167 m^3/s), 29,850 acre-ft/yr (36.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,500 ft^3/s (127 m^3/s) Sept. 14 (gage height, 6.31 ft or 1.923 m); no flow June 16 to July 1, July 5, Sept. 2.
Period of record: Maximum discharge, 18,500 ft^3/s (524 m^3/s) July 20, 1974 (gage height, 10.43 ft or 3.179 m), from rating curve extended above 4,900 ft^3/s (140 m^3/s) on basis of slope-area measurements at gage heights 6.23 ft (1.899 m) and 8.89 ft (2.710 m); no flow at times during each summer.

REMARKS.--Records fair. Diversions above station, mostly by pumping from ground water, for irrigation of 3,600 acres (14.6 km^2)—in 1966—excluding an unknown amount in Mexico.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	13	6.5	13	9.6	8.7	13	12	5.1	0	67	.77
2	4.6	13	11	13	11	11	13	12	5.1	19	26	0
3	3.8	12	8.7	13	18	9.0	7.8	10	3.5	21	15	18
4	3.5	13	10	13	18	13	8.6	7.9	3.1	.38	10	275
5	3.6	11	9.1	15	16	8.8	7.0	8.6	2.7	0	8.0	124
6	3.7	9.5	11	15	14	11	8.3	7.6	3.9	2.2	7.0	116
7	4.0	6.2	10	15	12	13	11	8.1	5.1	220	6.5	141
8	4.8	10	13	20	12	14	11	9.6	6.2	70	6.0	305
9	4.0	11	12	15	9.9	13	10	8.7	3.5	30	30	210
10	3.2	10	14	13	14	12	12	7.2	3.9	28	175	189
11	3.4	11	15	13	10	11	12	5.4	3.9	28	50	105
12	14	12	16	13	12	12	13	7.3	3.5	268	25	76
13	111	11	14	13	11	12	12	8.8	3.1	615	15	496
14	28	10	13	13	13	9.3	12	7.6	2.7	129	10	1710
15	14	13	16	13	13	10	9.8	9.0	1.2	24	6.0	303
16	6.3	12	15	11	13	11	9.9	6.2	1.0	7.5	3.0	103
17	4.4	11	22	11	12	11	10	7.4	0	201	2.0	61
18	6.2	9.6	16	11	13	10	10	6.2	0	51	1.0	40
19	5.3	11	18	11	14	11	11	7.4	0	575	.83	27
20	3.3	10	16	11	8.9	12	10	7.4	0	99	1.2	22
21	4.6	10	13	11	9.4	11	11	6.2	0	35	.42	20
22	5.9	10	14	11	16	11	6.6	6.2	0	878	4.8	16
23	7.9	11	13	11	15	9.7	7.7	8.5	0	1450	104	13
24	8.7	11	12	11	12	9.3	11	7.4	0	933	216	10
25	7.3	13	13	9.9	11	11	10	7.4	0	286	84	8.5
26	7.5	10	13	9.7	10	9.9	11	9.7	0	215	31	7.0
27	9.5	12	13	8.5	13	12	11	8.5	0	110	17	5.8
28	8.2	10	13	6.6	12	11	10	6.2	0	61	8.0	5.1
29	15	12	13	8.2	---	9.1	13	6.2	0	34	3.5	4.5
30	14	14	13	8.8	---	11	13	7.4	0	134	2.2	4.0
31	8.1	---	13	7.1	---	12	---	7.4	---	92	1.7	---
TOTAL	333.0	332.3	409.3	367.8	352.8	339.8	315.7	245.5	57.5	6616.08	937.15	4415.67
MEAN	10.7	11.1	13.2	11.9	12.6	11.0	10.5	7.92	1.92	213	30.2	147
MAX	111	14	22	20	18	14	13	12	6.2	1450	216	1710
MIN	3.2	6.2	6.5	6.6	8.9	8.7	6.6	5.4	0	0	.42	0
AC-FT	661	659	812	730	700	674	626	487	114	13120	1860	8760

CAL YR 1974	TOTAL	22682.00	MEAN	62.1	MAX	4330	MIN 0	AC-FT 44990
WTR YR 1975	TOTAL	14722.60	MEAN	40.3	MAX	1710	MIN 0	AC-FT 29200

PEAK DISCHARGE (BASE, 3,000 CFS).--Sept. 14 (1000) 4,500 cfs (6.31 ft).

09471800. San Pedro River near Benson, Ariz.

LOCATION.--Lat 32°07'35", long 110°17'22", in SW¼ sec.15, T.15 S., R.20 E., Cochise County, on right bank, 6 mi (10 km) downstream from Tres Alamos Wash, and 11 mi (18 km) north of Benson.

DRAINAGE AREA.--2,500 mi^2 (6,475 km^2), of which 696 mi^2 (1,803 km^2) is in Mexico.

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

GAGE.--Water-stage recorder. Datum of gage is 3,303.5 ft (1,006.91 m) above mean sea level, unadjusted.

AVERAGE DISCHARGE.--9 years, 32.4 ft^3/s (0.918 m^3/s), 23,470 acre-ft/yr (28.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,920 ft^3/s (253 m^3/s) July 23 (gage height, 10.45 ft or 3.185 m); no flow for most of year. Period of record: Maximum discharge, 9,800 ft^3/s (278 m^3/s) Aug. 26, 1972 (gage height, 10.60 ft or 3.231 m), from rating curve extended above 4,500 ft^3/s (127 m^3/s) on basis of slope-area measurement at gage height 9.96 ft (3.036 m); maximum gage height, 10.85 ft or 3.307 m, July 20, 1974; no flow for most of each year.

REMARKS.--Records poor. Diversions above station, partly by pumping from ground water, for irrigation of 8,300 acres (33.6 km^2), in 1966, excluding an unknown amount in Mexico. Records of suspended-sediment loads for the current water year are published on following pages.

REVISIONS (WATER YEARS).--WRD Ariz. 1969: 1966-67(M,P).

DISCHARGE, IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	0	71
2	0									0	0	50
3	0									0	0	1.6
4	0									0	0	274
5	0									0	0	198
6	0									0	0	10
7	0									0	0	1.0
8	0									72	0	45
9	0									.50	0	20
10	0									0	33	5.0
11	0									0	74	0
12	0									0	3.5	0
13	35									201	0	33
14	20									108	0	1180
15	6									15	0	356
16	0									0	0	114
17	0									0	9	44
18	0									107	0	10
19	0									126	0	2.5
20	0									97	0	.90
21	0									5.0	0	.10
22	0									340	26	0
23	6.2									2020	73	0
24	.30									817	24	0
25	0									271	5.3	0
26	0									69	1.6	0
27	0									29	0	0
28	0									.50	0	0
29	0				---					9.6	0	0
30	0				---					0	0	0
31	0	---			---		---		---	2.0	0	---
TOTAL	61.50	0	0	0	0	0	0	0	0	4289.60	240.4	2416.10
MEAN	1.98	0	0	0	0	0	0	0	0	138	7.75	80.5
MAX	35	0	0	0	0	0	0	0	0	2020	74	1180
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	122	0	0	0	0	0	0	0	0	8510	477	4790

CAL YR 1974 TOTAL 15239.40 MEAN 41.8 MAX 3430 MIN 0 AC-FT 30230
WTR YR 1975 TOTAL 7007.60 MEAN 19.2 MAX 2020 MIN 0 AC-FT 13900

PEAK DISCHARGE (BASE, 3,000 CFS).--July 23 (0130) 8,920 cfs (10.45 ft); Sept. 4 (2200) 3,040 cfs (6.15 ft).

09471800. San Pedro River near Benson, Ariz.

LOCATION.--Lat 32°07'35", long 110°17'22", in SW¼ sec.15, T.15 S., R.20 E., Cochise County, at gaging station 6 mi (10 km) downstream from Tres Alamos Wash, and 11 mi (18 km) north of Benson.

DRAINAGE AREA.--2,500 mi^2 (6,475 km^2), of which 696 mi^2 (1,803 km^2) is in Mexico.

PERIOD OF RECORD.--Sediment records: March 1966 to current year.

REMARKS.--Records of temperature and specific conductance of individual samples available in district office at Tucson, Ariz. No flow many days each year.

MONTHLY AND ANNUAL SUMMARY OF SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	Discharge (cfs)	Suspended-sediment discharge (tons)
October 1974	61.50	2,055.83
November	0	0
December	0	0
January 1975	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	4,289.60	1,097,031.90
August	240.40	11,425.00
September	2,416.10	345,880.20
Total for year	7,007.60	1,559,222.93

09472000. San Pedro River near Redington, Ariz.

LOCATION.--Lat 32°22'50", long 110°26'45", in NE¼NW¼ sec.19, T.12 S., R.19 E., Cochise County, on left bank, 0.3 mi (0.5 km) upstream from Cochise-Pima County line, 4.3 mi (6.9 km) southeast of Redington, and 30 mi (48 km) north of Benson.

DRAINAGE AREA.--2,939 mi^2 (7,612 km^2), of which 696 mi^2 (1,803 km^2) is in Mexico.

PERIOD OF RECORD.--June 1943 to June 1947, July 1950 to current year (monthly discharge only, July 1954 to March 1955). Also extremes for water years 1948-50, published in WSP 1179.

GAGE.--Water-stage recorder. Datum of gage is 2,930.04 ft (893.076 m) above mean sea level. June 1943 to June 1947, and Oct. 1, 1962, to June 27, 1963, at present site at datum 7.49 ft (2.283 m) higher. July 1950 to Sept. 30, 1962, at site 400 ft (120 m) upstream at datum 10.47 ft (3.191 m) higher. Supplementary water-stage recorder 50 ft upstream at different datum since June 18, 1975.

AVERAGE DISCHARGE.--28 years (1943-46, 1950-75), 43.8 ft^3/s (1.240 m^3/s), 31,730 acre-ft/yr (39.1 hm^3/yr); median of yearly mean discharges, 30 ft^3/s (0.85 m^3/s), 21,700 acre-ft/yr (27 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,030 ft^3/s (227 m^3/s) July 23 (gage height, 14.61 ft or 4.453 m); no flow for many days.
Period of record: Maximum discharge, 28,600 ft^3/s (810 m^3/s) Aug. 2, 1951 (gage height, 20.2 ft or 6.16 m, present site and datum), from rating curve extended above 16,000 ft^3/s (450 m^3/s) on basis of slope-area measurement of peak flow; no flow at times in most years.
Maximum discharge since at least 1906, about 90,000 ft^3/s (2,550 m^3/s) Sept. 28, 1926 (gage height, 29.0 ft or 8.84 m, present site and datum, from floodmark), computed on basis of peak discharge of same flood for station at Charleston and for Gila River at Kelvin.

REMARKS.--Records fair except those below 200 ft^3/s (6 m^3/s), which are poor. Diversions above station for irrigation of about 9,700 acres (39.3 km^2) in 1966, excluding an unknown amount in Mexico. Diversion above gage into formerly used ditch on right bank was placed in operation in January 1972; diversion was observed Jan. 23 and May 6.

REVISIONS.--WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	2.5	.80	1.0						0	0	3.9
2	.50	2.0	1.0	1.7						0	0	132
3	.50	2.0	1.2	2.7						0	0	44
4	.40	1.7	1.2	2.0						0	0	135
5	.40	1.7	1.2	1.7						0	0	413
6	.40	1.7	1.4	1.5						0	0	30
7	.30	1.7	1.4	1.2						0	0	299
8	.30	3.4	1.4	1.0						50	0	266
9	4.9	2.4	1.4	.70						56	0	113
10	1.7	2.0	1.4	.50						18	0	15
11	1.5	2.0	1.4	.20						9.8	52	5.0
12	1.4	2.0	1.2	.20						14	6.6	4.0
13	1.2	1.7	1.0	0						27	1.4	47
14	31	1.7	1.0	0						198	.20	1070
15	16	1.7	1.2	0						49	0	543
16	8.5	1.5	1.0	0						28	0	102
17	6.0	1.5	1.0	0						14	0	24
18	4.0	1.4	1.0	0						68	0	20
19	3.0	1.4	1.0	0						106	0	.50
20	2.5	1.4	.80	0						150	0	0
21	2.5	1.4	.80	0						70	0	0
22	7.4	1.4	1.0	0						77	0	0
23	9.0	1.2	1.0	0						2080	55	0
24	3.4	1.0	1.2	0						730	7.6	0
25	3.0	1.0	1.5	0						284	5.5	0
26	2.5	1.0	1.4	0						57	3.7	0
27	2.5	1.0	1.4	0						24	0	0
28	2.0	1.0	1.2	0						14	0	0
29	2.0	.80	1.2	0	---					7.6	0	0
30	5.0	.80	1.2	0	---					1.7	0	0
31	3.0	---	1.2	0	---		---		---	0	0	---
TOTAL	127.30	48.00	36.10	14.40	0	0	0	0	0	4133.1	132.00	3266.40
MEAN	4.11	1.60	1.16	.46	0	0	0	0	0	133	4.26	109
MAX	31	3.4	1.5	2.7	0	0	0	0	0	2080	55	1070
MIN	.30	.80	.80	0	0	0	0	0	0	0	0	0
AC-FT	252	95	72	29	0	0	0	0	0	8200	262	6480

CAL YR 1974 TOTAL 13205.80 MEAN 36.2 MAX 3460 MIN 0 AC-FT 26190
WTR YR 1975 TOTAL 7757.30 MEAN 21.3 MAX 2080 MIN 0 AC-FT 15390

PEAK DISCHARGE (BASE, 3,000 CFS).--July 23 (0530) 8,030 cfs (14.61 ft); Sept. 14 (1900) 3,000 cfs (12.10 ft).

09473000. Aravaipa Creek near Mammoth, Ariz.

LOCATION.--Lat 32°50'37", long 110°37'07", in NW¼NW¼ sec.9, T.7 S., R.17 E., Pinal County, on right bank 6 mi (10 km) upstream from mouth and 9 mi (14 km) north of Mammoth.

DRAINAGE AREA.--541 mi² (1,401 km²).

PERIOD OF RECORD.--May 1931 to December 1942 (published as "near Feldman"), May 1966 to current year. Monthly discharge only July 1941 to December 1942, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 2,350 ft (716 m), from topographic map. May 1931 to December 1942 at site 0.3 mi (0.5 km) downstream at different datum.

AVERAGE DISCHARGE.--20 years, 28.3 ft³/s (0.801 m³/s), 20,500 acre-ft/yr (25.3 hm³/yr); median of yearly mean discharges, 20 ft³/s (0.57 m³/s), 14,500 acre-ft/yr (18 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 836 ft³/s (23.7 m³/s) Oct. 22 (gage height, 4.02 ft or 1.225 m); minimum daily, 1.9 ft³/s (0.054 m³/s) July 22, 23.

Period of record: Maximum discharge since at least 1931, 10,500 ft³/s (297 m³/s) Dec. 19, 1967 (gage height, 11.86 ft or 3.615 m, in gage well, 14.25 ft or 4.343 m, from profile past gage), from rating curve extended above 430 ft³/s (12.2 m³/s) on basis of slope-area measurement at gage height 12.5 ft (3.81 m), from profile past gage; minimum, 0.3 ft³/s (0.008 m³/s) Aug. 30, 1940.

A discharge of 20,000 ft³/s (566 m³/s) occurred Aug. 2, 1919, at site of former gaging station 6 mi (10 km) downstream, operated April 1919 to September 1921 (gage height, 6.3 ft or 1.920 m, from floodmark, site and datum then in use), from rating curve extended above 5,100 ft³/s (144 m³/s) on basis of velocity-area study.

REMARKS.--Records fair. Diversions for irrigation of several hundred acres above station.

REVISIONS (WATER YEARS).--WRD Ariz. 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	27	11	14	14	16	10	11	5.3	2.2	13	3.0
2	8.0	26	11	14	13	16	10	11	5.1	2.2	11	3.4
3	7.7	28	12	14	13	17	9.5	11	4.9	2.1	9.2	5.0
4	8.6	21	9.4	14	13	19	9.6	11	4.8	10	7.7	6.4
5	7.1	19	12	13	13	19	8.4	12	4.6	3.2	6.0	13
6	8.6	17	14	13	13	18	8.9	12	4.8	2.0	4.1	11
7	9.8	15	14	12	13	18	31	11	5.0	2.0	4.4	14
8	52	16	14	11	13	22	34	12	4.9	2.0	4.4	35
9	18	15	14	13	13	27	28	11	5.0	2.3	16	56
10	9.2	15	14	13	13	23	69	9.8	4.4	2.7	23	15
11	8.1	14	14	13	13	58	33	8.1	4.3	2.6	22	11
12	10	13	15	13	13	90	23	8.2	4.2	7.9	7.6	9.2
13	17	12	14	12	13	43	18	7.8	4.0	4.2	6.2	9.8
14	8.1	12	13	12	14	28	16	7.4	3.8	2.7	4.7	13
15	7.3	12	14	13	16	24	15	7.1	3.6	2.4	4.4	12
16	7.1	12	14	12	16	22	14	8.1	3.2	2.3	4.1	6.1
17	7.1	12	14	12	17	20	14	9.2	3.2	2.4	3.3	5.4
18	6.5	10	13	12	16	19	16	10	2.9	2.6	3.7	5.1
19	6.1	11	13	12	16	18	14	9.7	2.9	2.2	4.1	4.8
20	6.0	12	12	13	16	17	14	9.5	2.7	2.2	4.6	4.5
21	5.9	13	12	13	16	16	13	9.1	2.6	2.0	4.8	3.5
22	129	13	13	13	17	16	12	10	2.4	1.9	4.6	2.9
23	55	11	13	13	16	15	12	9.9	2.3	1.9	17	5.0
24	27	10	13	12	17	14	11	9.9	2.2	47	11	5.4
25	16	11	14	12	17	13	11	8.8	2.2	62	8.8	6.3
26	13	11	15	12	16	20	10	9.1	2.3	17	6.6	7.6
27	13	10	15	12	16	19	9.6	8.6	2.3	13	5.1	8.3
28	11	12	14	12	17	18	11	8.6	2.3	12	5.9	7.9
29	109	13	15	13	---	18	11	9.6	2.2	108	6.1	7.4
30	97	13	14	14	---	15	9.9	7.7	2.2	25	4.9	8.0
31	60	---	13	15	---	12	---	5.9	---	15	3.7	---
TOTAL	756.2	436	412.4	396	413	710	505.9	294.1	106.6	367.0	242.0	305.0
MEAN	24.4	14.5	13.3	12.8	14.8	22.9	16.9	9.49	3.55	11.8	7.81	10.2
MAX	129	28	15	15	17	90	69	12	5.3	108	23	56
MIN	5.9	10	9.4	11	13	12	8.4	5.9	2.2	1.9	3.3	2.9
AC-FT	1500	865	818	785	819	1410	1000	583	211	728	480	605

CAL YR 1974 TOTAL 6034.6 MEAN 16.5 MAX 340 MIN 1.9 AC-FT 11970
WTR YR 1975 TOTAL 4944.2 MEAN 13.5 MAX 129 MIN 1.9 AC-FT 9810

PEAK DISCHARGE (BASE, 2,500 CFS).--No peak above base.

09473500. San Pedro River at Winkelman, Ariz.

LOCATION.--Lat 32°58'38", long 110°46'11", in SE¼SW¼ sec.24, T.5 S., R.15 E., Pinal County, on right bank 0.7 mi (1.1 km) south of Winkelman, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--4,471 mi^2 (11,580 km^2), of which 696 mi^2 (1,803 km^2) is in Mexico.

PERIOD OF RECORD.--May to August 1890 (monthly discharge only), January 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,925 ft (587 m), from topographic map. Apr. 8 to Aug. 31, 1890, nonrecording gage at site about 1,000 ft (300 m) upstream at different datum. Jan. 1, 1966, to Sept. 30, 1968, water-stage recorder at present site at datum 0.27 ft (0.082 m) lower.

AVERAGE DISCHARGE.--9 years, 42.8 ft^3/s (1.212 m^3/s), 31,010 acre-ft/yr (38.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,050 ft^3/s (143 m^3/s) July 23 (gage height, 9.55 ft or 2.911 m); no flow for many days.
Period of record: Maximum discharge, about 15,000 ft^3/s (425 m^3/s) Dec. 20, 1967 (gage height, 11.95 ft or 3.642 m), from rating curve extended above 2,600 ft^3/s (74 m^3/s) and comparison with slope-area measurement for flood of Dec. 22-23, 1965, at site 3.5 mi (5.6 km) upstream; no flow at times each year.
Flood of Dec. 22-23, 1965, reached a stage of 12.2 ft (3.72 m), from floodmarks, present site, datum used Jan. 1, 1966, to Sept. 30, 1968—discharge, 16,800 ft^3/s (476 m^3/s) at site 3.5 mi (5.6 km) upstream—by slope-area measurement of peak flow.

REMARKS.--Records fair. Diversions above station, mostly by pumping from ground water, for municipal and industrial use, and for irrigation of about 12,700 acres (51.4 km^2). Records of water temperatures and suspended-sediment loads for the current water year are published on following pages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.7	1.9	2.9	4.4	5.9	2.4	.40		0	0	0
2	2.4	2.4	1.5	2.9	4.4	5.9	2.2	.40		0	0	0
3	2.2	1.9	1.2	2.9	3.9	5.9	2.2	.40		0	0	37
4	1.5	1.7	1.2	2.9	3.9	5.4	1.9	.40		0	0	13
5	1.0	1.7	2.4	2.9	3.9	4.9	1.7	.30		0	0	86
6	1.0	1.7	1.9	3.4	4.4	3.9	1.7	.20		0	0	18
7	1.5	1.7	1.9	3.9	4.4	3.4	3.4	.30		0	0	14
8	1.2	1.9	2.2	4.4	4.4	3.9	3.9	.20		0	0	77
9	18	2.2	2.4	4.9	4.9	4.4	2.4	.10		0	2.5	39
10	.20	2.2	2.4	4.9	4.9	3.9	9.8	.10		7.7	4.9	5.4
11	0	2.2	2.7	4.9	4.9	4.4	2.2	.10		6.6	11	4.9
12	0	2.2	2.9	5.4	4.9	23	1.0	.10		5.6	4.9	128
13	26	2.2	2.9	5.4	4.9	6.4	1.0	.15		0	7.9	7.4
14	2.9	2.2	3.4	5.9	5.9	3.9	.70	.10		12	7.4	28
15	.20	2.4	3.9	5.9	5.9	3.9	1.0	.10		15	5.9	782
16	1.7	2.4	4.4	5.9	5.9	4.4	.70	0		6.4	3.9	54
17	4.9	2.4	4.4	5.9	5.9	4.4	1.2	0		5.9	0	7.9
18	2.9	2.7	4.9	5.9	5.9	5.4	1.7	0		5.9	0	5.9
19	2.4	2.7	4.9	5.4	5.9	5.4	1.7	0		6.8	0	3.4
20	1.5	2.7	4.9	5.4	5.9	5.4	1.7	0		14	0	1.9
21	1.2	2.7	4.4	5.4	5.9	5.4	.70	0		13	0	.50
22	59	2.7	3.9	4.4	5.9	4.9	.50	.10		5.9	0	.30
23	84	2.4	3.4	4.4	5.9	4.4	.70	0		898	0	.30
24	2.4	2.4	3.9	4.4	5.9	4.9	.50	0		637	0	.20
25	1.7	2.2	3.4	5.4	5.9	4.9	.70	0		568	4.8	.10
26	1.7	1.9	3.4	5.4	6.4	4.9	.50	0		71	7.9	.10
27	2.9	1.9	3.4	5.4	5.9	4.4	.50	0		15	6.9	0
28	1.9	1.7	2.9	4.9	5.9	4.4	.40	0		5.4	10	0
29	40	1.7	2.9	4.9	------	3.4	.40	0		15	12	0
30	17	1.9	2.9	5.4	------	3.4	.40	0		13	9.5	0
31	28	------	2.9	4.9	------	2.7	------	0	------	.30	4.9	------
TOTAL	314.00	65.7	95.7	146.9	147.2	161.8	49.80	3.45	0	2,327.50	104.4	1,314.30
MEAN	10.1	2.19	3.09	4.74	5.26	5.22	1.66	.11	0	75.1	3.37	43.8
MAX	84	2.7	4.9	5.9	6.4	23	9.8	.40	0	898	12	782
MIN	0	1.7	1.2	2.9	3.9	2.7	.40	0	0	0	0	0
AC-FT	623	130	190	291	292	321	99	6.8	0	4,620	207	2,610

CAL YR 1974 TOTAL 12,109.10 MEAN 33.2 MAX 2,020 MIN 0 AC-FT 24,020
WTR YR 1975 TOTAL 4,730.75 MEAN 13.0 MAX 898 MIN 0 AC-FT 9,380

PEAK DISCHARGE (BASE, 4,000 CFS).--July 23 (1430) 5,050 cfs (9.55 ft).

NOTE.--Doubtful or no gage-height record July 10 to Aug. 20.

09473500. San Pedro River at Winkelman, Ariz.
(National stream-quality accounting network station)

LOCATION.--Lat 32°58'38", long 110°46'11", in SE¼SW¼ sec.24, T.5 S., R.15 E., Pinal County, at gaging station 0.7 mi (1.1 km) south of Winkelman, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--4,471 mi^2 (11,580 km^2), of which 696 mi^2 (1,803 km^2) is in Mexico.

PERIOD OF RECORD.--Chemical analyses: October 1974 to current year.
Specific conductance: January 1966 to current year.
Water temperatures: January 1966 to current year.
Sediment records: January 1966 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 2,210 micromhos July 12; minimum daily, 440 micromhos Sept. 16.
Water temperatures: Maximum observed, 37.5°C Aug. 9; minimum observed, 15.0°C Jan. 1, 2, 30.
Sediment concentrations: Maximum daily, 115,000 mg/l July 10; minimum daily, no flow on many days.
Sediment discharge: Maximum daily, 372,000 tons (337,000 tonnes) July 23; minimum daily, 0 ton (0 tonne) on many days.
Period of record:
Specific conductance: Maximum daily, 2,210 micromhos July 12, 1975; minimum daily, 300 micromhos Oct. 4, 1970.
Water temperatures: Maximum observed, 42.0°C Sept. 10, 1968; minimum observed, 2.0°C Dec. 31, 1966.
Sediment concentrations: Maximum daily, 138,000 mg/l June 14, 1972; minimum daily, no flow on many days.
Sediment discharge: Maximum daily, 961,000 tons (872,000 tonnes) Dec. 20, 1967; minimum daily, 0 ton (0 tonne) on many days.

REMARKS.--No flow many days each year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.										
21...	1145	1.6	39	--	--	--	--	130	26	170
NOV.										
20...	1300	10	36	120	30	10	0	120	27	170
DEC.										
17...	1510	4.4	37	--	--	--	--	140	28	180
JAN.										
20...	1050	4.9	33	--	--	--	--	140	30	180
FEB.										
18...	1500	5.9	33	220	10	30	20	150	36	190
MAR.										
17...	1640	4.9	37	--	--	--	--	150	37	190
APR.										
14...	1630	1.2	36	--	--	--	--	160	38	200
JULY										
15...	1130	16	23	--	--	--	--	78	17	60
AUG.										
27...	1350	6.4	38	88000	40	4300	10	110	24	170
SEP.										
16...	1200	35	18	--	--	--	--	33	5.6	34

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.									
21...	8.2	265	--	430	100	2.3	.40	.04	1050
NOV.									
20...	8.5	223	--	400	120	1.8	.01	.02	1060
DEC.									
17...	8.3	318	--	430	120	2.0	.25	.03	1120
JAN.									
20...	7.0	266	--	460	130	1.6	.46	.03	1130
FEB.									
18...	8.4	247	0	470	160	2.0	.27	.03	1180
MAR.									
17...	9.0	276	0	480	140	2.1	.58	.04	1230
APR.									
14...	9.3	255	0	490	170	1.9	.46	.01	1300
JULY									
15...	6.4	332	0	140	12	1.0	.09	.04	503
AUG.									
27...	9.9	249	0	400	83	2.3	1.1	.20	1010
SEP.									
16...	5.2	136	0	59	6.1	.9	.62	.06	237

09473500. San Pedro River at Winkelman, Ariz.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
OCT.									
21...	1040	1.43	430	210	3.6	1510	7.8	25.0	10
NOV.									
20...	994	1.44	410	230	3.7	1540	8.2	23.0	4
DEC.									
17...	1100	1.52	470	200	3.6	1610	8.0	19.5	10
JAN.									
20...	1120	1.54	470	260	3.6	1630	7.9	12.5	10
FEB.									
18...	1170	1.60	520	320	3.6	1760	8.1	23.5	3
MAR.									
17...	1180	1.67	530	300	3.6	1760	8.1	22.5	4
APR.									
14...	1230	1.77	560	350	3.7	181	8.0	28.0	2
JULY									
15...	502	.68	260	0	1.6	--	7.7	30.5	58000
AUG.									
27...	965	1.37	370	170	3.8	906	8.0	36.0	1200
SEP.									
16...	232	.32	110	0	1.4	--	7.9	27.0	19000

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.						
21...	1145	.95	.30	1.3	5.5	.13
NOV.						
20...	1300	.18	.43	.61	2.7	.06
DEC.						
17...	1510	.38	1.1	1.5	6.6	.08
JAN.						
20...	1050	.48	.34	.82	3.6	.04
FEB.						
18...	1500	.29	.30	.59	2.6	.02
MAR.						
17...	1640	.62	.13	.75	3.3	.03
APR.						
14...	1630	.46	.23	.69	3.1	.02
JULY						
15...	1130	.93	12	13	57	2.1
AUG.						
27...	1350	1.3	3.5	4.8	21	.90
SEP.						
16...	1200	.97	35	36	160	14

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV.									
20...	1300	--	--	--	--	--	--	--	9.2
DEC.									
17...	1510	3900	--	--	--	--	--	--	--
JAN.									
20...	1050	2400	--	--	--	--	--	--	--
FEB.									
18...	1500	1500	--	--	--	--	--	--	3.5
MAR.									
17...	1640	970	24	26	13	4.6	--	--	--
APR.									
14...	1630	1700	--	--	--	--	--	--	--
JULY									
15...	1130	55000	--	--	--	--	78000	E150000	--
AUG.									
27...	1350	25000	--	--	--	--	E12000	56000	32
SEP.									
16...	1200	2100	--	--	--	--	38000	90000	--

09473500. San Pedro River at Winkelman, Ariz.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)
OCT.										
21...	1145	--	--	300	--	--	--	--	--	--
NOV.										
20...	1300	11	10	240	10	2	<10	0	<50	1
DEC.										
17...	1510	--	--	260	--	--	--	--	--	--
JAN.										
20...	1050	--	--	230	--	--	--	--	--	--
FEB.										
18...	1500	3	5	290	<10	0	0	0	<50	0
APR.										
14...	1630	--	--	320	--	--	--	--	--	--
JULY										
15...	1130	--	--	150	--	--	--	--	--	--
AUG.										
27...	1350	53	13	270	10	0	90	10	100	0
SEP.										
16...	1200	--	--	40	--	--	--	--	--	--

DATE	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.									
21...	--	--	--	--	--	--	--	--	--
NOV.									
20...	<10	3	<100	1	.3	.3	1	0	30
DEC.									
17...	--	--	--	--	--	--	--	--	--
JAN.									
20...	--	--	--	--	--	--	--	--	--
FEB.									
18...	10	7	<100	1	.0	.0	1	1	7
APR.									
14...	--	--	--	--	--	--	--	--	--
JULY									
15...	--	--	--	--	--	--	--	--	--
AUG.									
27...	280	8	300	0	.4	.2	1	1	10
SEP.									
16...	--	--	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ANALYSES MADE IN DISTILLED WATER)

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM
JULY									
10...	1930	5.4	33.0	117000	1710	70	88	99	100
19...	1630	11	34.0	150000	4460	61	76	100	--
AUG.									
13...	1615	7.9	35.0	91400	1950	76	94	100	--
27...	1350	--	36.0	878	15	--	--	--	--
SEP.									
16...	1200	--	27.0	620	153	--	--	--	--

09473500. San Pedro River at Winkelman, Ariz.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.0	24.0	17.0	15.0	28.0	29.0	---	31.0		---	---	---
2	37.0	23.0	23.0	15.0	23.0	28.0	26.5	32.0		---	---	---
3	32.5	23.0	22.0	16.0	24.0	29.0	25.0	35.0		---	---	32.0
4	31.0	21.0	17.0	20.0	20.0	27.0	28.0	26.0		---	---	25.0
5	36.0	20.0	20.0	21.0	24.0	24.0	32.0	28.0		---	---	23.0
6	25.0	25.0	18.0	20.0	24.0	26.0	22.0	23.0		---	---	27.0
7	24.0	25.0	23.0	20.0	23.0	23.0	18.0	25.0		---	---	27.5
8	29.0	25.0	19.0	19.0	27.0	28.0	23.0	30.0		---	---	26.5
9	33.0	26.0	18.0	17.0	25.0	29.0	27.0	34.0		---	37.5	30.5
10	35.0	25.0	19.0	18.0	23.0	28.0	25.0	32.0		33.0	28.0	24.0
11	---	24.0	18.0	20.0	24.0	22.0	27.0	30.0		27.0	28.5	22.0
12	---	23.0	20.0	18.0	25.0	19.5	25.0	---		28.0	23.0	20.0
13	19.0	25.0	19.0	18.0	24.0	26.0	29.0	---		---	34.5	27.0
14	33.0	24.0	18.0	21.0	22.0	22.0	30.0	---		32.0	27.0	27.5
15	31.0	27.0	20.0	20.0	19.0	28.0	30.0	---		32.0	23.0	27.5
16	30.0	26.0	20.0	20.0	25.0	30.0	30.0	---		28.0	30.0	29.0
17	30.0	22.0	21.0	20.0	21.0	23.5	25.0	---		27.0	---	28.0
18	31.0	26.0	21.0	23.0	22.0	28.0	28.0	---		26.0	---	23.0
19	32.0	27.0	20.0	22.0	23.0	28.0	32.0	---		33.5	---	23.0
20	33.0	26.0	22.0	23.0	24.0	28.0	29.0	---		31.5	---	22.0
21	30.0	25.0	20.0	22.0	18.0	30.0	31.0	---		31.0	---	22.0
22	24.0	26.0	20.0	18.0	22.0	29.0	31.0	---		32.0	---	22.0
23	24.0	24.0	18.0	19.0	20.0	24.0	32.0	---		31.0	---	21.0
24	30.0	23.0	17.0	20.0	24.0	28.0	33.0	---		31.5	---	25.0
25	29.0	22.0	18.0	25.0	26.0	29.0	31.0	---		30.5	32.0	24.0
26	33.0	23.0	17.0	25.0	27.0	18.0	27.0	---		31.5	24.0	---
27	25.0	24.0	18.0	20.0	28.0	23.0	23.0	---		28.5	33.0	---
28	23.0	23.0	19.0	18.0	28.0	20.0	33.0	---		25.0	24.0	---
29	19.5	16.0	18.0	18.0	---	23.0	30.0	---		29.5	19.0	---
30	18.0	17.0	18.0	15.0	---	29.0	31.0	---		31.0	20.0	---
31	23.0	---	20.0	19.0	---	30.0	---	---		---	19.0	---
MEAN	29.0	23.5	19.5	19.5	23.5	26.0	28.0	---		---	---	---
YEAR	MAX	37.5	MIN	15.0	MEAN	25.0						

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1300	1100	1250	1350	1450	1400	1500	1400		---	---	---
2	1300	1200	1500	1350	1450	1600	1500	1990		---	---	---
3	1300	1300	1600	1350	1450	1600	1550	1960		---	---	1020
4	1300	1330	1450	1350	1450	1600	1600	2000		---	---	885
5	1400	1400	1560	1350	1280	1600	1600	2160		---	---	865
6	1100	1400	1500	1400	1450	1600	1600	2110		---	---	614
7	1210	1400	1500	1400	1450	1600	1600	2110		---	---	729
8	1300	1400	1480	1400	1500	1600	1600	2100		---	---	579
9	700	1400	1500	1450	1400	1600	1600	2100		---	878	473
10	1210	1400	1400	1450	1450	1600	700	2120		839	809	639
11	---	1400	1400	1450	1450	1600	1400	2180		1920	522	784
12	---	1400	1400	1450	1450	600	1400	---		2210	1210	959
13	1630	1400	1350	1450	1450	1000	1400	---		---	818	737
14	1400	1400	1400	1450	1400	1500	1400	---		784	1130	797
15	1400	1400	1400	1500	1400	1500	1400	---		607	1350	487
16	1300	1400	1400	1450	1400	1500	1400	---		667	1210	440
17	1350	1400	1400	1400	1400	1500	1400	---		1070	---	606
18	1350	1400	1400	1450	1400	1500	1400	---		1200	---	816
19	1350	1400	1450	1400	1400	1500	1400	---		898	---	1070
20	1350	1400	1400	1400	1400	1500	1400	---		634	---	1240
21	1350	1400	1500	1350	1400	1500	1400	---		536	---	1140
22	1200	1400	1500	1400	1400	1500	1400	---		668	---	1160
23	525	1400	1500	1400	1400	1500	1400	---		668	---	1150
24	900	1500	1500	1400	1400	1500	1400	---		486	---	1170
25	1250	1500	1400	1400	1400	1500	1400	---		488	1070	1170
26	1300	1500	1400	1450	1400	1500	1400	---		611	1350	1160
27	1300	1500	1400	1400	1400	1500	1400	---		777	1360	---
28	1300	1500	1400	1400	1400	1500	1400	---		677	1070	---
29	620	1500	1400	1400	---	1500	1400	---		1120	1460	---
30	690	1500	1400	1400	---	1500	1400	---		548	1700	---
31	610	---	1350	1400	---	1500	---	---		---	1550	---
MEAN	1180	1400	1440	1410	1420	1480	1430	---		---	---	862
YEAR	MAX	2210	MIN	440	MEAN	1320						

09473500. San Pedro River at Winkelman, Ariz.--Continued

SUSPENDED-SEDIMENT CONCENTRATION (MG/L), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	431	137	65	54	70	35	40	15	0	0	0	0
2	198	102	0	55	50	33	40	5	0	0	0	0
3	160	103	14	50	71	51	28	35	0	0	0	91400
4	162	104	32	63	64	33	36	38	0	0	0	59000
5	28	135	84	62	43	30	45	11	0	0	0	82000
6	312	145	128	54	42	24	20	50	0	0	0	81000
7	123	124	50	23	45	32	54	77	0	0	0	43000
8	23	51	28	18	48	59	45	15	0	0	0	76400
9	1940	47	58	60	25	21	34	47	0	0	20500	63400
10	410	47	46	32	27	14	638	81	0	115000	17600	25000
11	0	21	27	47	42	14	230	75	0	40300	17000	3600
12	0	10	42	15	28	1280	38	70	0	11500	27000	36400
13	7480	9	38	6	24	470	39	60	0	0	98000	35000
14	2500	10	35	27	29	51	34	40	0	52100	91000	67700
15	145	15	50	78	46	38	15	30	0	99000	16000	94200
16	22800	21	82	32	22	67	24	0	0	69000	847	47000
17	14000	25	41	38	16	55	9	0	0	34000	0	43000
18	2000	22	37	50	33	32	19	0	0	16000	0	29000
19	502	18	22	46	20	55	10	0	0	49600	0	11000
20	251	32	42	74	28	35	14	0	0	92600	0	3050
21	196	42	25	42	27	30	11	0	0	80000	0	581
22	3770	38	31	42	56	48	4	30	0	53000	0	287
23	11300	61	30	42	28	39	12	0	0	78000	0	292
24	928	50	61	47	27	109	17	0	0	77000	0	190
25	136	54	44	120	77	32	17	0	0	66500	34000	219
26	143	58	32	40	47	39	12	0	0	47000	20000	170
27	2910	61	42	40	27	47	13	0	0	61000	878	0
28	161	66	40	36	54	38	18	0	0	7300	36000	0
29	6100	73	68	82	---	61	12	0	0	31000	17000	0
30	3130	78	46	54	---	44	12	0	0	10000	2930	0
31	7210	---	88	66	---	29	---	0	---	1000	114	---

YEAR MAX 115000 MIN 0

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	1.0	.33	.42	.83	.56	.26	.02	0	0	0	0
2	1.3	.66	0	.43	.59	.53	.24	.01	0	0	0	0
3	.95	.53	.05	.39	.75	.81	.17	.04	0	0	0	16600
4	.66	.48	.10	.49	.67	.48	.18	.04	0	0	0	2070
5	.08	.62	.54	.49	.45	.40	.21	.01	0	0	0	29100
6	.84	.67	.66	.50	.50	.25	.09	.03	0	0	0	3940
7	.50	.57	.26	.24	.53	.29	.50	.06	0	0	0	1630
8	.07	.26	.17	.21	.57	.62	.47	.01	0	0	0	27000
9	152	.28	.38	.79	.33	.25	.22	.01	0	0	277	8030
10	.22	.28	.30	.42	.36	.15	27	.02	0	2780	225	364
11	0	.12	.20	.62	.56	.17	1.4	.02	0	973	505	48
12	0	.06	.33	.22	.38	102	.10	.02	0	275	357	49300
13	2190	.05	.30	.09	.32	8.1	.11	.02	0	0	2090	699
14	20	.06	.32	.43	.46	.54	.06	.01	0	2610	1820	7100
15	.08	.10	.53	1.2	.73	.40	.04	.01	0	4010	255	269000.0
16	105	.14	.97	.51	.35	.80	.05	0	0	1190	8.9	6850
17	185	.16	.49	.61	.25	.65	.03	0	0	542	0	917
18	16	.16	.49	.80	.53	.47	.09	0	0	255	0	462
19	3.3	.13	.29	.67	.32	.80	.05	0	0	1140	0	101
20	1.0	.23	.56	1.1	.46	.51	.06	0	0	4820	0	16
21	.64	.31	.30	.61	.43	.44	.02	0	0	2810	0	.78
22	4900	.28	.33	.50	.89	.64	.01	.01	0	844	0	.23
23	5020	.40	.28	.50	.46	.46	.02	0	0	372000.0	0	.24
24	6.0	.32	.64	.56	.43	1.4	.02	0	0	145000.0	0	.10
25	.62	.32	.40	1.7	1.2	.42	.03	0	0	118000.0	872	.06
26	.66	.30	.29	.58	.81	.52	.02	0	0	9010	427	.05
27	23	.31	.39	.58	.43	.56	.02	0	0	2470	16	0
28	.83	.30	.31	.48	.86	.45	.02	0	0	106	972	0
29	1850	.34	.53	1.1	---	.56	.01	0	0	1260	551	0
30	263	.40	.36	.79	---	.40	.01	0	0	351	75	0
31	902	---	.69	.87	---	.21	---	0	---	.81	1.5	---
TOTAL	15646	9.8	11	18	15	124	31	.34	0	670446.8	8452	423228.5

YEAR TOTAL 1117987

09474000. Gila River at Kelvin, Ariz.

LOCATION.--Lat 33°06'10", long 110°58'33", in NE¼NW¼ sec.12, T.4 S., R.13 E., Pinal County, on left bank at Kelvin, 500 ft (152 m) downstream from Mineral Creek, 18 mi (29 km) downstream from San Pedro River, and 19 mi (31 km) upstream from Ashurst-Hayden Dam.

DRAINAGE AREA.--18,011 mi^2 (46,648 km^2), of which 5,125 mi^2 (13,274 km^2) is below Coolidge Dam.

PERIOD OF RECORD.--January 1911 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,745.02 ft (531.882 m) above mean sea level. Prior to June 15, 1914, and Dec. 1, 1914, to Aug. 31, 1915, nonrecording gages at several sites within 2 mi (3 km) of present site at different datums. Sept. 1, 1915, to Sept. 30, 1963, water-stage recorder at site 900 ft (274 m) downstream at datum 1.80 ft (0.549 m) lower.

AVERAGE DISCHARGE (adjusted for storage in San Carlos Reservoir).--64 years, 462 ft^3/s (13.08 m^3/s), 334,700 acre-ft/yr (413 hm^3/yr); median of yearly mean discharges, 320 ft^3/s (9.06 m^3/s), 232,000 acre-ft/yr (286 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,650 ft^3/s (75.0 m^3/s) July 23 (gage height, 9.50 ft or 2.896 m); minimum daily, 23 ft^3/s (0.65 m^3/s) Oct. 21.
Period of record: Maximum discharge, about 132,000 ft^3/s (3,740 m^3/s) Jan. 20, 1916 (gage height, 19.5 ft or 5.94 m), from rating curve extended above slope-area measurement at gage height 16.2 ft (4.94 m) for flood of Sept. 28, 1926; minimum daily, 0.1 ft^3/s (0.003 m^3/s) June 25, 1961.
Maximum discharge since completion of Coolidge Dam, 42,800 ft^3/s (1,210 m^3/s) Aug. 8, 1930 (gage height, 12.6 ft or 3.84 m).

REMARKS.--Records fair. Large diversions above station for irrigation, of which about 90 percent is above Coolidge Dam. About 82,000 acres (332 km^2) irrigated, a considerable portion by pumping from ground water. Flow regulated by San Carlos Reservoir 49 mi (79 km) upstream since Nov. 15, 1928. (See sta 09469000.) San Pedro River contributes major portion of unregulated inflow. Records of chemical analyses, water temperatures, and suspended-sediment loads for the current year are published on following pages.

REVISIONS (WATER YEARS).--WSP 329: 1911. WSP 609: 1916(M). WSP 629: 1914-17. WSP 1119: 1913, 1915, 1917(M), 1921(M), 1922-23, 1927(M). WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	239	112	176	314	317	606	498	680	510	665	436	710
2	216	74	176	308	317	695	562	680	470	670	443	675
3	216	77	190	272	311	705	554	680	518	680	470	725
4	212	58	212	252	311	760	506	675	590	730	482	710
5	216	48	240	250	320	765	482	675	602	710	522	764
6	222	44	248	258	338	775	482	665	650	660	610	710
7	258	41	250	255	356	785	510	665	670	650	650	735
8	245	39	248	234	359	795	538	660	685	660	675	930
9	291	39	265	240	359	785	570	660	685	680	735	850
10	250	112	290	232	359	775	750	665	700	705	771	630
11	238	142	299	230	356	810	705	705	760	700	791	580
12	121	143	299	230	365	996	470	705	780	705	765	671
13	79	143	296	242	371	858	374	705	780	700	760	774
14	103	136	290	250	380	785	347	715	780	705	755	570
15	55	140	335	250	408	730	317	730	790	765	720	1060
16	45	143	347	250	450	730	311	750	795	700	725	709
17	40	146	365	299	443	725	320	780	800	700	725	526
18	37	146	368	314	458	685	368	780	834	630	720	474
19	29	148	368	311	404	574	408	785	870	640	715	412
20	26	149	365	311	374	558	418	780	882	670	715	380
21	23	150	365	311	371	510	422	765	870	700	705	415
22	25	166	305	311	384	506	450	700	822	640	705	432
23	72	184	285	308	412	518	554	670	790	1060	705	454
24	83	185	275	305	412	586	574	625	770	1070	710	474
25	55	190	296	299	470	606	602	578	750	859	725	482
26	39	192	305	299	534	655	615	570	710	489	730	490
27	33	194	308	299	578	670	625	570	695	387	730	498
28	33	194	332	296	582	645	640	562	680	418	735	474
29	152	194	335	311	---	606	640	514	660	412	735	446
30	316	191	332	323	---	574	655	510	670	498	730	429
31	270	---	326	317	---	550	---	510	---	436	700	---
TOTAL	4239	3920	9091	8681	11099	21323	15267	20714	21568	20694	21095	16189
MEAN	137	131	293	280	396	688	509	668	719	668	680	606
MAX	316	194	368	323	582	996	750	785	882	1070	791	1060
MIN	23	39	176	230	311	506	311	510	470	387	436	380
AC-FT	8410	7780	18030	17220	22010	42290	30280	41090	42780	41050	41840	32080

CAL YR 1974 TOTAL 197923 MEAN 542 MAX 2790 MIN 23 AC-FT 392600
WTR YR 1975 TOTAL 175880 MEAN 482 MAX 1070 MIN 23 AC-FT 348900

PEAK DISCHARGE (BASE, 4,000 CFS).--No peak above base.

09474000. Gila River at Kelvin, Ariz.
(National stream-quality accounting network station)

LOCATION.--Lat 33°06'11", long 110°58'26", in NE¼NW¼ sec.12, T.4 S., R.13 E., Pinal County, at Florence-Kelvin road bridge at Kelvin, 200 ft (60 m) upstream from Mineral Creek, 700 ft (200 m) upstream from gaging station, 18 mi (29 km) downstream from San Pedro River, 19 mi (31 km) upstream from Ashurst-Hayden Dam, and 49 mi (79 km) downstream from Coolidge Dam.

DRAINAGE AREA.--18,011 mi^2 (46,648 km^2) at gaging station, of which 5,125 mi^2 (13,274 km^2) is below Coolidge Dam.

PERIOD OF RECORD.--Chemical analyses: December 1950 to current year.
Water temperatures: December 1950 to current year.
Sediment records: January 1958 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 1,650 micromhos Oct. 27; minimum daily, 792 micromhos July 24.
Water temperatures: Maximum observed, 27.0°C on many days during July, August, September; minimum observed 8.0°C Jan. 6, 7, 10, 11, 12.
Sediment concentrations: Maximum daily, 76,000 mg/l July 24; minimum daily, 70 mg/l Jan. 14.
Sediment discharge: Maximum daily, 228,000 tons (207,000 tonnes) July 24; minimum daily, 47 ton (43 tonnes) Jan. 14.
Period of record:
Specific conductance: Maximum daily, 5,120 micromhos May 22, 1961; minimum daily, 406 micromhos Oct. 18, 1971.
Water temperatures: Maximum observed, 36.5°C July 25, Aug. 20, 1953; minimum observed, 3.5°C Jan. 13, 1962
Sediment concentrations: Maximum daily, 153,000 mg/l July 30, 1961; minimum daily, 0 mg/l July 3, 1971.
Sediment discharge: Maximum daily, 740,000 tons (671,000 tonnes) Dec. 23, 1965; minimum daily, 0 ton (0 tonne) on July 2-5, 11, 1971.

REMARKS.--No appreciable inflow from Mineral Creek between sampling point and gaging station except during periods of heavy local rains. Sediment discharge figures include sediment load from Mineral Creek.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.										
21...	1330	37	32	--	--	--	--	170	51	190
NOV.										
20...	1030	173	26	2000	20	160	0	79	22	140
DEC.										
17...	1400	368	27	--	--	--	--	70	19	140
JAN.										
20...	1340	302	26	--	--	--	--	74	22	150
FEB.										
18...	1400	454	22	4400	10	260	10	77	24	170
MAR.										
17...	1520	700	23	--	--	--	--	73	24	160
APR.										
14...	1540	359	23	--	--	--	--	81	26	180
MAY										
30...	1410	502	24	1400	0	--	0	71	21	170
JUNE										
30...	1320	645	26	--	--	--	--	71	22	170
JULY										
15...	1230	765	26	--	--	--	--	78	20	160
AUG.										
27...	1220	602	27	2200	20	360	0	67	25	210
SEP.										
16...	1300	655	23	--	--	--	--	54	5.9	110

09474000. Gila River at Kelvin, Ariz.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.									
21...	8.3	311	--	450	240	.9	.14	.08	1320
NOV.									
20...	6.3	226	--	150	200	.9	.01	.06	772
DEC.									
17...	5.7	207	--	130	190	1.0	.18	.04	700
JAN.									
20...	5.8	216	--	150	200	.9	.05	.02	759
FEB.									
18...	5.8	213	0	130	240	1.0	.12	.02	793
MAR.									
17...	6.0	211	0	130	230	1.1	.12	.06	783
APR.									
14...	6.0	224	0	160	230	.9	.02	.04	819
MAY									
30...	6.0	204	0	120	230	.9	.08	.02	763
JUNE									
30...	6.4	194		130	240	1.0	.06	.04	786
JULY									
15...	7.3	211	0	130	220	1.0	.27	.23	776
AUG.									
27...	7.6	187	0	160	290	1.1	.19	.08	903
SEP.									
16...	6.2	164	0	95	120	.8	--	--	537

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
OCT.									
21...	1300	1.80	630	380	3.3	1940	8.2	25.0	10
NOV.									
20...	736	1.05	290	100	3.6	--	8.1	13.5	30
DEC.									
17...	686	.95	250	83	3.8	1192	7.9	11.0	90
JAN.									
20...	736	1.03	280	98	3.9	1280	8.0	10.5	20
FEB.									
18...	776	1.08	290	120	4.3	1340	8.0	11.0	50
MAR.									
17...	752	1.06	280	110	4.2	1320	8.0	14.0	70
APR.									
14...	818	1.11	310	130	4.5	1402	8.0	18.5	9
MAY									
30...	744	1.04	260	96	4.6	1330	8.1	20.5	16
JUNE									
30...	762	1.07	270	110	4.5	1360	7.9	23.0	17
JULY									
15...	748	1.06	280	100	4.2	1290	7.9	25.0	9000
AUG.									
27...	881	1.23	270	120	5.6	--	7.9	28.0	35
SEP.									
16...	496	.73	160	25	3.8	--	7.8	25.0	6000

09474000. Gila River at Kelvin, Ariz.--Continued

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.						
21...	1330	.16	.48	.64	2.8	.14
NOV.						
20...	1030	.01	.42	.43	1.9	.02
DEC.						
17...	1400	.18	.76	.94	4.2	.49
JAN.						
20...	1340	.06	.37	.43	1.9	.07
FEB.						
18...	1400	.12	.77	.89	3.9	.17
MAR.						
17...	1520	.13	.49	.62	2.7	.13
APR.						
14...	1540	.04	.38	.42	1.9	.02
MAY						
30...	1410	.08	.62	.70	3.1	.08
JUNE						
30...	1320	.06	.57	.63	2.8	.15
JULY						
15...	1230	.38	8.6	9.0	40	1.4
AUG.						
27...	1220	.19	1.5	1.7	7.5	.20
SEP.						
16...	1300	.62	13	14	60	6.8

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ANALYSES MADE IN DISTILLED WATER)

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
JULY												
23...	1500	2650	25.0	136000	973000	43	51	82	90	90	99	100
AUG.												
27...	1220	--	28.0	533	866	--	--	--	--	100	--	--
SEP.												
16...	1300	--	25.0	15400	27200	--	--	--	--	--	--	--

09474000. Gila River at Kelvin, Ariz.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL A MG/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL B MG/SQ M	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV.									
20...	1030	--	--	--	--	--	--	--	3.2
DEC.									
17...	1400	1700	--	--	--	--	--	--	--
JAN.									
20...	1340	980	--	--	--	--	--	--	--
FEB.									
18...	1400	1700	--	--	--	--	--	--	40
MAR.									
17...	1520	730	--	--	--	--	--	--	--
APR.									
14...	1540	1000	--	--	3.2	.7	--	--	--
MAY									
30...	1410	1700	--	--	--	--	--	--	5.8
JUNE									
30...	1320	1700	1.9	4.8	15	3.2	63	7700	--
JULY									
15...	1230	22000	--	--	--	--	17000	71000	--
AUG.									
27...	1220	2600	--	--	--	--	200	5300	8.1
SEP.									
16...	1300	7300	--	--	--	--	B13000	87000	--

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)
OCT.										
21...	1330	--	--	210	--	--	--	--	--	--
NOV.										
20...	1030	10	6	150	<10	0	<10	0	<50	0
DEC.										
17...	1400	--	--	170	--	--	--	--	--	--
JAN.										
20...	1340	--	--	120	--	--	--	--	--	--
FEB.										
18...	1400	5	2	190	<10	0	0	0	<50	0
APR.										
14...	1540	--	--	170	--	--	--	--	--	--
MAY										
30...	1410	2	2	150	<10	0	0	0	<50	0
JUNE										
30...	1320	--	--	170	--	--	--	--	--	--
JULY										
15...	1230	--	--	180	--	--	--	--	--	--
AUG.										
27...	1220	7	7	200	<10	0	10	10	<50	0

DATE	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.									
21...	--	--	--	--	--	--	--	--	--
NOV.									
20...	<10	1	<100	5	.8	<.1	0	0	70
DEC.									
17...	--	--	--	--	--	--	--	--	--
JAN.									
20...	--	--	--	--	--	--	--	--	--
FEB.									
18...	30	5	<100	0	.1	.1	2	1	7
APR.									
14...	--	--	--	--	--	--	--	--	--
MAY									
30...	30	9	<100	2	.4	.2	0	0	0
JUNE									
30...	--	--	--	--	--	--	--	--	--
JULY									
15...	--	--	--	--	--	--	--	--	--
AUG.									
27...	20	6	<100	0	.5	.4	0	0	10

09474000. Gila River at Kelvin, Ariz.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1100	1250	1200	1150	1200	1250	1200	1300	1170	1320	1280	1450
2	1000	1450	1200	1150	1200	1250	1200	1300	1220	1340	1260	1550
3	1000	1400	1200	1200	1000	1200	1200	1300	1200	1320	1340	1450
4	1000	1450	1200	1200	1200	1200	1300	1300	1200	1320	1300	1440
5	1000	1600	1150	1200	1300	1200	1300	1300	1210	1370	1280	1540
6	1050	1600	1180	1100	1300	1200	1200	1120	1220	1370	1320	1500
7	1000	1600	1180	1150	1200	1400	1200	1130	1210	1350	1310	---
8	1100	1600	1180	1200	1200	1400	1200	1130	1230	1340	1350	1210
9	1100	1500	1200	1200	1200	1000	1200	1130	1230	1370	1350	1210
10	1100	1500	1200	1200	1200	1000	1200	1120	1220	1360	---	1600
11	1100	1300	1200	1200	1200	1000	1200	1120	1240	1380	1270	1600
12	1300	1300	1200	1200	1200	1000	---	1100	1230	1360	1340	1600
13	1390	---	1200	1200	1300	1000	1200	1120	1240	1370	1370	1420
14	1600	1300	1300	1200	1300	1000	1000	1110	1240	1370	1350	1450
15	1600	1300	1300	1200	1300	1000	1000	1110	1260	1300	1370	827
16	1600	1300	1300	---	1300	1000	1000	1140	1270	1360	1370	882
17	1600	1300	1200	1200	1300	1000	1000	1130	1290	1370	1380	956
18	1600	1300	1050	1200	1100	1000	1000	1130	1260	1390	1400	913
19	1600	1300	1150	1200	1300	1000	1000	1140	1310	1370	1390	869
20	1600	1350	1150	1200	1300	1000	1000	1140	1290	1380	1420	905
21	1600	1350	1150	1200	1300	1000	1000	1140	1300	1270	1420	932
22	1600	1150	1200	1200	1300	1000	1000	1130	1300	1370	1400	926
23	950	1150	1200	1200	1300	1000	1000	1140	1290	802	1420	1100
24	1000	1150	1200	1200	1300	1200	1000	1140	1300	792	1420	1090
25	1350	1150	1200	1200	1300	1200	1000	1150	1300	837	1430	1090
26	1550	1150	1200	1000	1200	1200	1000	1140	1260	1220	1440	1100
27	1650	---	1200	1000	1200	1200	1000	1140	1280	1320	1440	1070
28	1600	1150	---	1000	1200	---	1000	1140	1250	1410	1440	1080
29	1500	1150	1200	1000	---	1200	1300	1140	1290	1350	1450	1100
30	1200	1200	1200	1200	---	1200	1300	1150	1270	1370	1450	1110
31	1100	---	1000	1200	---	1200	---	1150	---	1420	1450	---
MEAN	1310	1330	1190	1170	1240	1120	1110	1160	1250	1300	1370	1210

YEAR MAX 1650 MIN 792 MEAN 1230

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	15.0	12.0	9.0	11.0	13.0	14.0	---	21.0	22.0	27.0	27.0
2	23.0	15.0	13.0	9.0	10.0	12.0	14.0	---	22.0	22.0	27.0	27.0
3	23.0	15.0	12.5	9.0	11.0	12.0	15.0	17.0	22.0	22.0	27.0	27.0
4	23.0	16.0	12.0	9.0	11.0	12.0	15.0	17.0	22.0	22.0	27.0	27.0
5	23.0	15.0	13.0	9.0	11.0	12.0	16.0	17.0	22.0	22.0	27.0	25.0
6	22.0	15.0	13.0	8.0	11.5	13.0	16.0	17.0	22.0	22.0	27.0	25.0
7	21.0	15.0	12.0	8.0	11.0	12.0	14.0	16.5	22.0	22.0	27.0	25.0
8	21.0	15.0	12.0	9.0	11.0	12.0	14.0	17.0	22.0	22.0	27.0	25.0
9	21.0	15.0	12.0	9.0	11.0	12.0	14.0	17.0	22.0	22.0	27.0	25.0
10	21.0	15.0	10.0	8.0	11.0	12.0	15.0	17.0	22.0	22.0	---	25.0
11	22.0	15.0	10.0	8.0	11.0	11.0	16.0	18.0	22.0	22.0	24.0	25.0
12	21.0	15.0	10.0	8.0	11.0	11.0	---	18.0	22.0	22.0	25.0	25.0
13	20.0	---	10.0	9.0	12.0	11.0	16.0	19.0	23.0	22.0	25.0	25.0
14	20.0	15.0	10.0	9.0	12.0	12.0	17.0	19.0	22.0	22.0	25.0	25.0
15	20.0	15.0	9.0	9.0	11.0	12.0	17.0	19.0	23.0	22.0	25.0	25.0
16	21.0	15.0	9.0	---	11.0	12.0	17.0	19.0	23.0	22.0	25.0	25.0
17	21.0	14.0	9.0	9.0	11.0	12.0	17.0	19.0	22.0	22.0	26.0	25.0
18	21.0	15.0	9.0	10.0	10.0	13.0	17.0	19.0	22.0	22.0	26.0	25.0
19	21.0	15.0	9.0	10.0	10.0	13.0	17.0	18.0	22.0	22.0	26.0	25.0
20	21.0	15.0	9.0	10.0	10.0	13.0	17.0	18.0	22.0	25.0	26.0	25.0
21	22.0	15.0	10.0	10.0	10.0	13.0	17.0	17.0	22.0	25.0	26.0	25.0
22	21.0	15.0	10.0	9.0	10.0	13.0	17.0	18.0	22.0	25.0	26.0	25.0
23	21.0	15.0	10.0	9.0	10.0	14.0	17.0	18.0	22.0	25.0	26.0	23.0
24	21.0	14.0	8.0	10.0	11.0	---	17.0	19.0	22.0	25.0	26.0	24.0
25	21.0	14.0	9.0	10.0	11.0	14.0	18.0	19.0	22.0	25.0	27.0	23.0
26	21.0	13.0	9.0	10.0	12.0	12.0	17.0	19.0	22.0	25.0	27.0	23.0
27	21.0	---	9.0	10.0	12.0	12.0	17.0	19.0	22.0	25.0	27.0	23.0
28	19.0	12.0	---	11.0	12.0	---	17.0	19.0	22.0	25.0	27.0	23.0
29	16.0	12.0	9.0	10.0	---	13.0	17.0	19.0	22.0	25.0	27.0	23.0
30	16.0	12.0	9.0	10.0	---	13.0	17.0	19.0	22.0	25.0	27.0	23.0
31	14.0	---	9.0	10.0	---	13.0	---	21.0	---	27.0	27.0	---
MEAN	20.5	14.5	10.5	9.5	11.0	12.5	16.0	18.0	22.0	23.0	26.5	25.0

YEAR MAX 27.0 MIN 8.0 MEAN 17.5

09474000. Gila River at Kelvin, Ariz.--Continued

SUSPENDED-SEDIMENT CONCENTRATION (MG/L), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(MEAN VALUES)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	537	1450	127	151	109	777	377	459	559	226	550	331
2	609	246	131	170	100	958	726	434	222	116	582	409
3	477	335	342	136	117	718	272	472	262	175	563	15700
4	449	178	378	131	101	741	207	347	420	594	525	8750
5	364	176	547	115	109	616	176	367	470	734	541	3160
6	450	180	447	164	204	1170	180	439	409	468	766	9000
7	814	185	361	145	218	574	232	381	401	330	741	12000
8	461	204	318	118	172	498	344	497	458	290	725	48000
9	1090	108	370	105	165	382	271	539	868	615	2000	28500
10	730	5590	503	130	148	365	312	513	386	1850	4810	6900
11	570	3500	483	101	143	374	334	516	363	1240	10400	1800
12	330	700	424	93	180	829	300	372	561	700	3000	5020
13	252	350	404	92	444	848	253	394	401	500	2200	17700
14	438	303	372	70	617	819	239	404	435	850	2300	11000
15	340	352	725	104	580	808	200	388	440	7600	1400	40400
16	300	269	611	100	217	500	205	516	320	4400	565	20500
17	750	248	703	98	369	517	159	898	300	1470	313	5500
18	700	229	594	152	306	517	536	481	395	800	647	1700
19	380	202	513	147	212	367	401	478	517	450	632	960
20	300	199	446	114	190	332	528	482	567	1700	763	565
21	260	356	398	106	170	363	1650	317	508	7200	714	672
22	250	467	275	121	220	422	190	404	322	3600	627	659
23	1400	379	224	95	221	369	457	323	357	37200	350	765
24	7350	299	209	105	207	318	368	401	261	76000	550	556
25	2000	265	236	105	546	439	395	431	282	52000	1680	596
26	380	215	213	81	652	477	339	423	470	21700	795	639
27	282	225	177	88	689	394	261	382	193	9000	553	464
28	283	231	200	95	583	375	436	556	231	3900	1160	307
29	1470	218	276	102	---	353	306	334	190	1000	641	511
30	2500	161	268	121	---	386	489	264	237	2600	590	345
31	5340	---	186	112	---	286	---	257	---	1100	554	---

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	347	595	60	128	93	1270	507	843	770	406	647	635
2	355	49	62	141	86	1800	1100	797	282	210	696	745
3	278	70	175	100	98	1370	407	867	366	321	714	30700
4	257	28	216	89	85	1520	283	632	669	1170	683	16800
5	212	23	354	78	94	1270	229	669	764	1410	762	7900
6	270	21	299	114	186	2450	234	788	718	834	1260	17300
7	567	20	244	100	210	1220	319	684	725	579	1300	34500
8	305	21	213	75	167	1070	500	886	847	517	1320	128000
9	904	11	265	68	160	810	417	960	1610	1130	3970	65400
10	493	3140	394	81	143	764	632	921	730	3520	20000	11700
11	366	1340	390	63	137	818	636	982	745	2340	24200	2820
12	108	270	342	58	177	2230	381	708	1180	1330	6200	16700
13	54	135	323	60	445	1960	255	750	844	945	4510	48600
14	145	111	291	47	633	1740	224	780	916	1620	4690	16900
15	50	133	656	70	639	1590	171	765	939	15700	2720	129000
16	36	104	572	68	264	986	172	1040	687	8320	1110	42500
17	81	98	693	79	441	1010	137	1890	648	2780	613	7810
18	70	90	590	129	378	956	533	1010	889	1360	1260	2180
19	30	81	510	123	231	569	442	1010	1210	778	1220	1070
20	21	80	440	96	192	500	596	1020	1350	3080	1470	580
21	16	144	392	89	170	500	1880	655	1190	13600	1360	753
22	17	209	226	102	228	577	231	764	715	6220	1190	769
23	308	188	172	79	246	516	684	584	761	201000	666	938
24	1650	149	155	86	230	503	570	677	543	228000	1050	712
25	297	136	189	85	693	718	642	673	571	128000	3290	776
26	40	111	175	65	940	844	563	651	901	31800	1570	845
27	25	118	147	71	1080	713	440	588	362	9400	1090	624
28	25	121	179	76	916	653	753	844	424	4400	2300	393
29	838	114	250	86	---	578	529	464	339	1110	1270	615
30	2340	83	240	106	---	598	865	364	429	3500	1160	400
31	4120	---	164	96	---	425	---	354	---	1290	1050	---
TOTAL	14625	7793	9378	2708	9362	32528	15332	24620	23124	676670	95341	588665
YEAR	TOTAL	1500146										

09475000. Gila River at Ashurst-Hayden Dam, near Florence, Ariz.

LOCATION.--Lat 33°05'59", long 111°14'46", in SW¼NW¼ sec.8, T.4 S., R.11 E., Pinal County, on left bank at Ashurst-Hayden Dam, 9 mi (14 km) northeast of Florence.

DRAINAGE AREA.--18,305 mi^2 (47,410 km^2).

PERIOD OF RECORD.--July 1923 to current year (head on crest of dam only). Records of monthly diversions to Florence-Casa Grande Canal, January 1928 to current year.

GAGE.--Gila River: Water-stage recorder. Permanent crest of dam is 1,563.00 ft (476.402 m) above mean sea level. For normal operation, crest is raised to 1,566.00 ft (477.317 m) by 3.0-ft (0.91-m) gates. Prior to December 1960, permanent crest at 1,562.6 ft (476.28 m) and normally raised about 1.2 ft (0.37 m) by use of flashboards. Prior to Apr. 12, 1932, nonrecording gage at same site and datum.
09475500. Florence-Casa Grande Canal: Water-stage recorder and Parshall flume at China Wash 2.6 mi (4.2 km) downstream from dam. Prior to Jan. 12, 1937, water-stage recorder 900 ft (270 m) downstream from dam.

EXTREMES.--Current year: Maximum head on dam, 1.80 ft (0.549 m) Sept. 15; no flow over dam for most of year.
Period of record: Maximum head on dam, 8.0 ft (2.44 m) Sept. 28, 1926; no flow over dam most of each year.

REMARKS.--Records show daily mean head on dam and monthly diversions to Florence-Casa Grande Canal. Mean head is often not representative of flow passing dam because of sluiceway- and crest-gate openings. Florence-Casa Grande Canal diverts water at dam supplemented by pumping from ground water for irrigation of land under 100,000-acre (400-km^2) San Carlos project. Canal records adjusted for sluicing through the dam or from the canal and pumping (but not natural losses), to show water available at dam, except for flow through dam or spill over dam during times of flood runoff. Flow regulated by San Carlos Reservoir. (See sta 09469000.) Diversions above station for irrigation of about 82,000 acres (330 km^2), a considerable portion of which is irrigated by pumping from ground water.

COOPERATION.--Records furnished by Bureau of Indian Affairs.

DAILY MEAN HEAD, IN FEET. OVER DAM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	(e)	0	0	0	0	0
3	0	0	0	0	0	(e)	(e)	0	0	0	0	.02
4	0	0	0	0	0	0	0	0	0	(e)	0	.06
5	0	0	0	0	0	.10	0	0	0	(e)	0	0
6	0	0	0	0	0	.12	0	0	0	0	(e)	.02
7	0	0	0	0	0	.01	0	0	0	0	.02	0
8	0	0	0	0	0	.02	(e)	0	0	.02	(e)	.25
9	0	0	0	0	0	.04	.05	0	0	.04	0	.03
10	0	0	0	0	0	.02	.11	0	(e)	0	0	(e)
11	0	0	0	0	0	.03	.14	(e)	0	0	.09	.02
12	0	0	0	0	0	.15	.01	0	0	(e)	(e)	.02
13	0	0	0	0	0	.18	0	0	0	.09	(e)	.28
14	0	0	0	0	0	.20	0	.03	0	0	0	0
15	0	0	0	0	0	.08	0	0	0	(e)	0	.46
16	0	0	0	0	0	.04	0	.01	0	0	0	.02
17	0	0	0	0	0	.02	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	.02
19	0	0	0	0	0	0	0	0	0	0	0	(e)
20	0	0	0	0	0	0	0	0	(e)	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	(e)	0	0	0	0	(e)
23	0	0	0	0	0	0	0	0	0	0	0	.02
24	0	0	0	0	0	0	0	0	0	.50	0	0
25	0	0	0	0	0	0	(e)	0	0	.40	(e)	0
26	0	0	0	0	0	0	0	0	0	.18	(e)	0
27	0	0	0	0	(e)	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	(e)	0	0
29	0	0	0	0	--	0	0	0	0	0	0	(e)
30	0	0	0	0	------	0	0	0	0	(e)	0	0
31	0	------	0	0	------	0	------	0	------	0	0	------

e Flow over crest of dam for short time, but mean for day less than 0.01 ft.

09475000. Gila River at Ashurst-Hayden Dam, near Florence, Ariz.--Continued

MONTHLY DIVERSIONS TO FLORENCE-CASA GRANDE CANAL
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	Discharge, in cubic feet per second			Diversions in acre-feet	Water sluiced above flume (acre-feet)†
	Maximum	Minimum	Mean		
October	400	25	149	9,140	2,570
November	193	30	111	6,600	992
December	326	153	263	16,140	0
CAL YR 1974	974	25	492	355,850	4,820
January	313	223	259	15,910	0
February	570	291	384	21,330	0
March	914	494	680	41,780	103
April	734	315	491	29,190	0
May	833	474	657	40,390	0
June	871	423	661	39,320	0
July	801	295	601	36,990	182
August	761	423	619	38,070	0
September	824	332	557	33,150	28
WTR YR 1975	914	25	453	328,000	3,880

† Included in first four columns of table.

NOTE.--Diversion records are those at canal gaging station at flume 2.6 mi (4.2 km) downstream from dam; values are adjusted for sluicing through the dam or from canal and pumping between intake and flume, but are not adjusted for natural losses. Adjusted values show water available at Ashurst-Hayden Dam, except for spill over the dam or water sluiced through the dam during times of flood runoff.

09479500. Gila River near Laveen, Ariz.

LOCATION.--Lat 33°15'25", long 112°09'59", in SW¼NW¼ sec.16, T.2 S., R.2 E., Pinal County, in Gila River Indian Reservation, on left abutment of highway bridge, 2.1 mi (3.4 km) upstream from Santa Cruz River, 2.6 mi (4.2 km) south of Komatke, and 7.3 mi (11.7 km) south of Laveen.

DRAINAGE AREA.--20,615 mi^2 (53,393 km^2), of which 696 mi^2 (1,803 km^2) is in Mexico.

PERIOD OF RECORD.--January 1940 to September 1946, December 1947 to current year.

GAGE.--Water-stage recorder above concrete diversion dam. Datum of gage is 1,018.90 ft (310.561 m) above mean sea level. Since July 9, 1969, supplementary water-stage recorder on overflow channel at highway bridge 0.2 mi (0.3 km) south at same datum. Oct. 16, 1940, to July 8, 1969, supplementary staff gage or water-stage recorder on overflow channel at datum 0.23 ft (0.070 m) lower.

AVERAGE DISCHARGE.--33 years, (1940-46, 1948-75), 22.2 ft^3/s (0.629 m^3/s), 16,080 acre-ft/yr (19.8 hm^3/yr); median of yearly mean discharges, 13 ft^3/s (0.37 m^3/s) 9,400 acre-ft/yr (12 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 19 ft^3/s (0.54 m^3/s) Nov. 2 (gage height, 3.93 ft or 1.198 m); no flow for most of year.
Period of record: Maximum discharge, 11,900 ft^3/s (337 m^3/s) Jan. 2, 1941 (gage height, 9.33 ft or 2.844 m); maximum gage height, 10.08 ft (3.072 m) Dec. 26, 1965; no flow at times in most years.

REMARKS.--Records fair. Records include flow over dam and in overflow channel. Large diversions above station for irrigation. Flow partly regulated by storage in San Carlos Reservoir. (See elsewhere in this report.)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	4.9								0		
2	0	14								0		
3	0	9.4								0		
4	0	1.5								0		
5	0	0								0		
6	0	0								0		
7	0	0								0		
8	0	0								0		
9	0	0								0		
10	0	0								0		
11	0	0								0		
12	0	0								0		
13	0	0								0		
14	0	0								1.9		
15	0	0								0		
16	0	0								.30		
17	0	0								1.3		
18	0	0								0		
19	0	0								0		
20	0	0								0		
21	0	0								0		
22	0	0								0		
23	0	0								0		
24	0	0								0		
25	0	0								0		
26	0	0								0		
27	0	0								0		
28	0	0								.10		
29	0	0			---					0		
30	.58	0			---					0		
31	0	---			---		---		---	0		---
TOTAL	.58	29.8	0	0	0	0	0	0	0	3.60	0	0
MEAN	.019	.99	0	0	0	0	0	0	0	.12	0	0
MAX	.58	14	0	0	0	0	0	0	0	1.9	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1.2	59	0	0	0	0	0	0	0	7.1	0	0

CAL YR 1974 TOTAL 3415.08 MEAN 9.36 MAX 768 MIN 0 AC-FT 6770
WTR YR 1975 TOTAL 33.98 MEAN .09 MAX 14 MIN 0 AC-FT 67

PEAK DISCHARGE (BASE, 700 CFS).--No peak above base.

NOTE.--No gage-height record Apr. 7 to May 23.

09480000. Santa Cruz River near Lochiel, Ariz.

LOCATION.--Lat 31°21'19", long 110°35'20", in SW¼ sec.11, T.24 S., R.17 E. (unsurveyed), Santa Cruz County, on southern border of Spanish land grant of San Rafael, near left bank on downstream side of pier of bridge on county road, 1.7 mi (2.7 km) upstream from international boundary and 2.5 mi (4.0 km) northeast of Lochiel.

DRAINAGE AREA.--82.2 mi^2 (212.9 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,620 ft (1,408 m), from topographic map.

AVERAGE DISCHARGE.--26 years, 2.99 ft^3/s (0.0847 m^3/s), 2,170 acre-ft/yr (2.68 hm^3/yr); median of yearly mean discharges, 1.9 ft^3/s (0.054 m^3/s), 1,400 acre-ft/yr (1.73 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,330 ft^3/s (94.3 m^3/s) July 22 (gage height, 9.13 ft or 2.783 m), from rating curve extended above 60 ft^3/s (1.7 m^3/s) on basis of slope-area measurement of peak flow; no flow for many days.
Period of record: Maximum discharge, 4,810 ft^3/s (136 m^3/s) Sept. 12, 1965 (gage height, 8.90 ft or 2.712 m), from rating curve extended above 1,600 ft^3/s (45 m^3/s) on basis of slope-area measurement of peak flow; no flow at times in most years.

REMARKS.--Records fair. Small diversions for irrigation of 200 acres (809,000 m^2) above station, mostly by pumping from ground water.

REVISIONS (WATER YEARS).--WSP 1733: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	.22	.53	.58	.23	.18	.25	.18	.02	0	.27	.44
2	.23	.22	.51	.55	.23	.18	.26	.17	.03	0	.25	6.5
3	.22	.23	.50	.53	.22	.18	.24	.17	.01	0	.22	2.7
4	.20	.24	.50	.52	.22	.19	.23	.15	0	0	.20	7.2
5	.21	.25	.56	.50	.22	.18	.23	.14	0	0	.19	17
6	.21	.26	.54	.50	.23	.18	.22	.14	.01	0	.17	3.0
7	.20	.26	.55	.51	.24	.18	.29	.13	.03	0	.14	.78
8	.19	.30	.55	.47	.23	.19	.25	.11	.01	1.1	.15	.72
9	.19	.30	.55	.52	.23	.18	.24	.11	.01	.07	.22	.57
10	.18	.28	.60	.47	.24	.19	.26	.10	0	0	.21	.52
11	.20	.29	.60	.44	.24	.20	.24	.08	0	5.6	50	.43
12	.23	.29	.61	.42	.24	.20	.25	.07	0	.13	2.6	.45
13	.20	.32	.61	.39	.24	.19	.24	.07	0	.03	2.2	.63
14	.18	.32	.65	.41	.25	.19	.22	.08	0	0	.97	1.4
15	.15	.33	.65	.41	.24	.20	.21	.06	0	0	.51	.51
16	.15	.34	.65	.37	.21	.19	.19	.05	0	0	.32	.47
17	.14	.35	.66	.33	.21	.20	.19	.06	0	0	.26	.44
18	.14	.38	.70	.31	.21	.20	.20	.06	0	8.0	.23	.41
19	.14	.37	.65	.29	.22	.21	.19	.05	0	.14	.25	.39
20	.14	.35	.61	.28	.22	.21	.19	.05	0	.03	.35	.37
21	.16	.38	.61	.26	.21	.22	.19	.05	0	.02	.30	.31
22	.18	.40	.66	.22	.18	.22	.19	.05	0	268	.26	.29
23	.17	.42	.69	.23	.19	.21	.19	.04	0	204	.26	.28
24	.17	.39	.66	.23	.20	.22	.20	.03	0	11	.26	.28
25	.16	.40	.65	.23	.21	.19	.21	.04	0	12	.20	.29
26	.14	.41	.67	.23	.19	.24	.19	.05	0	.55	.20	.30
27	.12	.45	.63	.21	.18	.24	.19	.04	0	.44	.20	.30
28	.14	.46	.62	.21	.18	.24	.19	.04	0	.40	.19	.30
29	.40	.46	.60	.27	---	.25	.19	.03	0	.35	.16	.31
30	.56	.47	.55	.28	---	.26	.19	.03	0	.30	.15	.33
31	.26	---	.56	.24	---	.25	---	.03	---	.28	.16	---
TOTAL	6.21	10.14	18.68	11.41	6.11	6.36	6.52	2.46	.12	512.44	62.05	47.92
MEAN	.20	.34	.60	.37	.22	.21	.22	.079	.004	16.5	2.00	1.60
MAX	.56	.47	.70	.58	.25	.26	.29	.18	.03	268	50	17
MIN	.12	.22	.50	.21	.18	.18	.19	.03	0	0	.14	.28
AC-FT	12	20	37	23	12	13	13	4.9	.2	1020	123	95

CAL YR 1974 TOTAL 617.94 MEAN 1.69 MAX 191 MIN 0 AC-FT 1230
WTR YR 1975 TOTAL 690.42 MEAN 1.89 MAX 268 MIN 0 AC-FT 1370

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-22	2245	9.13	3,330	8-11	1745	5.72	622
7-23	1800	7.38	1,800				

09480500. Santa Cruz River near Nogales, Ariz.

LOCATION.--Lat 31°20'40", long 110°51'03", in NW¼ sec.18, T.24 S., R.15 E. (unsurveyed), Santa Cruz County, in Spanish land grant of Maria Santisima del Carmen, on left bank 0.8 mi (1.3 km) downstream from international boundary and 5.5 mi (8.8 km) east of Nogales.

DRAINAGE AREA.--533 mi^2 (1,380 km^2), of which 348 mi^2 (901 km^2) is in Mexico.

PERIOD OF RECORD.--March to November 1907 and April 1909 to December 1912 (discharge measurements and fragmentary gage-height record), January 1913 to June 1922 (October 1915 to September 1916 monthly discharge only), May 1930 to December 1933, July 1935 to current year. Water-year estimates for 1913, 1915-16, 1920-22, 1930, 1934-35, published in WSP 1733.

GAGE.--Water-stage recorder. Datum of gage is 3,702.54 ft (1,128.534 m) above mean sea level (levels by International Boundary and Water Commission). Prior to June 30, 1922, nonrecording gage or water-stage recorder at various sites 5 to 6 mi (8 to 10 km) downstream at different datums.

AVERAGE DISCHARGE.--56 years (1912-22, 1929-75), 23.3 ft^3/s (0.660 m^3/s), 16,880 acre-ft/yr (20.8 hm^3/yr); median of yearly mean discharges, 19 ft^3/s (0.54 m^3/s), 13,800 acre-ft/yr (17.0 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 11,400 ft^3/s (323 m^3/s) July 22 (gage height, 10.76 ft or 3.280 m, from peak-stage indicator); no flow for most of year.
1930-75: Maximum discharge, 17,100 ft^3/s (484 m^3/s) Aug. 1, 1974 (gage height, 12.94 ft or 3.944 m), from rating curve extended above 3,700 ft^3/s (105 m^3/s) on basis of slope-area measurement of peak flow; maximum gage height, 13.71 ft (4.179 m) Aug. 20, 1955; no flow at times in most years.
Flood of Dec. 22, 1914, probably about the same as that of Aug. 1, 1974.

REMARKS.--Records fair except those for July 11-23, which are poor. Diversions above station of about 4,600 acre-ft/yr (5.67 hm^3/yr) for irrigation of about 2,300 acres (9.3 km^2) in Mexico. Diversion 19 mi (31 km) upstream for municipal supply of city of Nogales, Sonora, began in 1949; diversion in 1968 totaled 3,500 acre-ft/yr (4.32 hm^3/yr). Records of suspended-sediment loads for the current water year are published on following pages.

REVISIONS (WATER YEARS).--WSP 959: 1935(M). WSP 1213: 1915-16, 1930-32(M), 1934(M), 1936-37(M). WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.1	.40	1.7	2.1	1.7	1.7	.60	.10	0	5.8	376
2	1.1	.80	.40	1.8	2.0	1.7	1.7	.60	0	0	5.1	96
3	1.0	.80	.40	1.7	2.0	1.8	1.6	.60	0	0	5.1	14
4	1.0	.80	.50	1.7	2.0	1.8	1.4	.50	0	0	4.8	37
5	.90	.80	.60	1.7	2.0	2.0	1.4	.50	0	0	4.1	33
6	.80	.70	.60	1.6	2.0	1.8	1.4	.50	0	0	2.8	62
7	.80	.70	.60	1.3	2.0	2.0	2.0	.40	0	0	2.6	46
8	.80	.80	.60	1.3	2.0	2.1	2.0	.40	0	41	129	28
9	.70	.80	.70	1.3	2.0	2.0	1.8	.40	0	0	108	20
10	.60	.70	.70	1.3	2.0	2.1	2.0	.40	0	0	16	16
11	.60	.60	.80	1.3	2.0	2.2	1.8	.40	0	20	310	14
12	.70	.50	1.0	1.2	2.0	2.3	1.7	.40	0	5.0	49	13
13	.60	.50	1.1	1.3	2.0	2.2	1.7	.40	0	40	19	983
14	.50	.40	1.3	1.3	2.0	2.1	1.7	.30	0	5.0	8.0	301
15	.40	.40	1.4	1.4	2.0	2.0	1.6	.20	0	0	5.4	49
16	.40	.40	1.6	1.4	2.0	2.0	1.4	.20	0	10	6.1	30
17	.40	.40	1.8	1.4	2.0	1.8	1.4	.20	0	5.0	3.5	22
18	.40	.40	1.8	1.7	2.0	1.8	1.4	.20	0	1.0	2.5	16
19	.40	.40	2.1	1.7	2.0	1.8	1.3	.20	0	0	1.8	16
20	.40	.40	2.2	1.7	1.8	2.0	1.3	.20	0	20	1.8	14
21	.40	.40	2.2	1.7	1.8	2.0	1.3	.20	0	5.0	1.8	12
22	.60	.40	2.3	1.7	1.8	2.0	1.2	.20	0	3,500	2.6	11
23	.50	.40	2.3	1.7	1.7	2.0	1.2	.10	0	1,250	39	7.7
24	.40	.40	2.0	1.7	1.7	2.0	1.2	.10	0	598	59	6.1
25	.40	.40	2.3	1.8	1.7	1.8	1.2	.10	0	265	10	5.1
26	.40	.40	2.3	1.8	1.7	1.8	1.2	.10	0	70	6.1	4.6
27	.40	.40	2.1	2.0	1.7	2.0	1.1	.10	0	872	6.1	4.4
28	.40	.40	2.0	2.0	1.7	2.0	1.1	.10	0	257	4.1	4.1
29	.80	.40	1.4	2.2	------	2.0	1.1	.10	0	34	3.3	3.5
30	1.7	.30	1.3	2.6	------	1.8	.70	.10	0	16	2.2	2.8
31	1.3	------	1.4	2.3	------	1.7	------	.10	------	8.5	2.0	------
TOTAL	21.20	16.30	42.20	51.3	53.7	60.3	43.60	8.90	.10	7,022.5	826.6	2,247.3
MEAN	.68	.54	1.36	1.65	1.92	1.95	1.45	.29	.003	227	26.7	74.9
MAX	1.7	1.1	2.3	2.6	2.1	2.3	2.0	.60	.10	3,500	310	983
MIN	.40	.30	.40	1.2	1.7	1.7	.70	.10	0	0	1.8	2.8
AC-FT	42	32	84	102	107	120	86	18	.2	13,930	1,640	4,460

CAL YR 1974 TOTAL 8,297.30 MEAN 22.7 MAX 2,320 MIN 0 AC-FT 16,460
WTR YR 1975 TOTAL 10,394.00 MEAN 28.5 MAX 3,500 MIN 0 AC-FT 20,620

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-22	*1600	†10.76	11,400	8-11	1530	7.58	4,540
7-24	1930	6.50	2,730	9- 1	1530	8.70	6,700
7-27	1930	8.30	5,910	9-13	2200	8.03	5,400
8- 8	2200	6.41	2,580				

* About.
† From peak-stage indicator.

09480500. Santa Cruz River near Nogales, Ariz.

LOCATION.--Lat 31°21'40", long 110°51'03", in NW¼ sec.18, T.24 S., R.15 E. (unsurveyed), Santa Cruz County, in Spanish land grant of Maria Santisima del Carmen, 0.8 mi (1.3 km) downstream from international boundary and 5.5 mi (8.8 km) east of Nogales.

DRAINAGE AREA.--533 mi^2 (1,380 km^2), of which 348 mi^2 (901 km^2) is in Mexico.

PERIOD OF RECORD.--Sediment records: October 1970 to current year.

REMARKS.--No flow many days each year.

MONTHLY AND ANNUAL SUMMARY OF SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	Discharge (cfs)	Suspended-sediment discharge (tons)
October 1974	21.20	0.93
November	16.30	.54
December	42.20	3.51
January 1975	51.30	4.33
February	53.70	4.95
March	60.30	5.67
April	43.60	3.28
May	8.90	.17
June	.10	0
July	7,022.50	2,968,475.35
August	826.60	73,320.31
September	2,247.30	376,422.21
Total for year	10,394.00	3,418,241.25

09482000. Santa Cruz River at Continental, Ariz.

LOCATION.--Lat 31°51'12", long 110°58'40", in NE¼NE¼ sec.23, T.18 S., R.13 E. (unsurveyed), Pima County, in Spanish land grant of San Ignacio de la Canoa, near left bank on downstream side of pier of highway bridge at Continental.

DRAINAGE AREA.--1,662 mi^2 (4,305 km^2), of which 395 mi^2 (1,023 km^2) is in Mexico.

PERIOD OF RECORD.--May 1940 to December 1946, October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,832.35 ft (863.300 m) above mean sea level. Prior to Sept. 8, 1965, at datum 4.00 ft (1.219 m) higher.

AVERAGE DISCHARGE.--30 years, 18.0 ft^3/s (0.510 m^3/s), 13,040 acre-ft/yr (16.1 hm^3/yr); median of yearly mean discharges, 9.0 ft^3/s (0.25 m^3/s), 6,500 acre-ft/yr (8.0 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,350 ft^3/s (94.9 m^3/s) Sept. 1 (gage height, 8.15 ft or 2.484 m); no flow for most of year.

Period of record: Maximum discharge, 18,000 ft^3/s (510 m^3/s) Dec. 20, 1967 (gage height, 15.3 ft or 4.66 m), from rating curve extended above 6,000 ft^3/s (170 m^3/s) on basis of slope-area measurement of main channel at gage height 14.13 ft (4.307 m) and partial discharge measurement of main channel with contracted-opening measurement of bypass channel at gage height 15.3 ft (4.66 m); maximum gage height, 15.3 ft or 4.66 m (present datum) Aug. 19, 1955, and Dec. 20, 1967; no flow for most of each year.

REMARKS.--Records fair. Irrigation above station of about 12,500 acres (50.6 km^2), including about 2,300 acres (9.31 km^2) in Mexico, mostly by pumping from ground water.

REVISIONS.--WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	0	303
2										0	0	147
3										0	0	0
4										0	0	0
5										0	0	0
6										0	0	0
7										0	0	89
8										6.7	70	.30
9										.80	79	0
10										0	0	0
11										0	0	0
12										0	33	0
13										207	76	152
14										1.0	0	224
15										0	0	3.6
16										160	0	0
17										50	0	0
18										46	0	0
19										0	0	0
20										0	0	0
21										0	0	0
22										135	0	0
23										404	0	0
24										52	0	0
25										103	0	0
26										0	0	0
27										4.7	0	0
28										148	0	0
29					------					5.0	0	0
30					------					0	0	0
31		------			------		------		------	0	0	------
TOTAL	0	0	0	0	0	0	0	0	0	1,323.20	258	918.90
MEAN	0	0	0	0	0	0	0	0	0	42.7	8.32	30.6
MAX	0	0	0	0	0	0	0	0	0	404	79	303
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	2,620	512	1,820

CAL YR 1974 TOTAL 2,276.20 MEAN 6.24 MAX 579 MIN 0 AC-FT 4,510
WTR YR 1975 TOTAL 2,500.10 MEAN 6.85 MAX 404 MIN 0 AC-FT 4,960

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-16	1600	7.40	2,560	9- 1	1800	8.15	3,350
7-23	0030	7.35	2,500				

09482400. Airport Wash at Tucson, Ariz.

LOCATION.--Lat 32°09'09", long 110°58'52", in NE¼SE¼ sec.2, T.15 S., R.13 E., Pima County, 25 ft (7.6 m) upstream from Santa Clara Avenue, 0.7 mi (1.1 km) upstream from mouth, 4.3 mi (6.9 km) downstream from confluence of North and South Forks, and 4.9 mi (7.9 km) south of city hall in Tucson. Prior to July 1, 1974, at site 1.8 mi (2.9 km) upstream.

DRAINAGE AREA.--23.0 mi^2 (59.6 km^2). At site prior to July 1, 1974, 22.0 mi^2 (57.0 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,460 ft (750 m), from topographic map. Prior to July 1, 1974, at site 1.8 mi (2.9 km) upstream at different datum.

AVERAGE DISCHARGE.--10 years, 0.459 ft^3/s (0.0130 m^3/s), 333 acre-ft/yr (411,000 m^3/yr); median of yearly mean discharges, 0.37 ft^3/s (0.015 m^3/s), 270 acre-ft/yr (330,000 m^3/yr).

EXTREMES.--Current year: Maximum discharge, 377 ft^3/s (10.7 m^3/s) July 12 (gage height, 2.01 ft or 0.613 m), from rating curve extended above 57 ft^3/s (1.61 m^3/s) on basis of critical-depth computations; no flow for most of year.
Period of record: Maximum discharge, 823 ft^3/s (23.3 m^3/s) July 20, 1970 (gage height, 4.14 ft or 1.262 m), by slope-area measurement of peak flow; maximum gage height, 4.39 ft (1.338 m) Aug. 20, 1968; no flow for most of each year.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0								0		0
2	0	0								0		0
3	0	0								0		0
4	0	0								0		0
5	0	0								0		0
6	0	0								0		0
7	0	0								0		18
8	0	20								0		.10
9	0	.04								0		0
10	0	0								0		0
11	0	0								3.8		0
12	0	0								39		0
13	0	0								1.7		2.0
14	0	0								0		.20
15	0	0								0		0
16	0	0								0		0
17	0	0								0		0
18	0	0								0		0
19	0	0								0		0
20	0	0								0		0
21	0	0								0		0
22	0	0								0		0
23	0	0								0		0
24	0	0								0		0
25	0	0								0		0
26	0	0								0		0
27	0	0								0		0
28	0	0								0		0
29	15	0			---					0		0
30	.09	0			---					0		0
31	0	---			---		---		---	0		---
TOTAL	15.09	20.04	0	0	0	0	0	0	0	44.5	0	20.30
MEAN	.49	.67	0	0	0	0	0	0	0	1.44	0	.68
MAX	15	20	0	0	0	0	0	0	0	39	0	18
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	30	40	0	0	0	0	0	0	0	88	0	40

CAL YR 1974 TOTAL 244.98 MEAN .67 MAX 124 MIN 0 AC-FT 486
WTR YR 1975 TOTAL 99.93 MEAN .27 MAX 39 MIN 0 AC-FT 198

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-8	1115	1.66	175	9-7	1415	1.83	268
7-12	1845	2.01	377				

09482500. Santa Cruz River at Tucson, Ariz.

LOCATION.--Lat 32°13'16", long 110°58'52", in NE¼NE¼ sec.14, T.14 S., R.13 E. Pima County, on downstream side of center pier of Congress Street Bridge in Tucson.

DRAINAGE AREA.--2,222 mi^2 (5,755 km^2), of which 395 mi^2 (1,023 km^2) is in Mexico, adjusted for 15.2 mi^2 (39.4 km^2) of Tucson Arroyo drainage area contributing to this station effective July 1956.

PERIOD OF RECORD.--October 1905 to current year (monthly discharge only, January 1907 to September 1912, January to September 1914).

GAGE.--Water-stage recorder. Datum of gage is 2,317.82 ft (706.472 m) above mean sea level. Prior to Nov. 27, 1929, nonrecording gages or reference points for measuring to water surface at various places on bridge at same site and various datums. Nov. 27, 1929, to Oct. 27, 1970, water-stage recorder at present site: at datum 9.08 ft (2.768 m) higher Nov. 27, 1929, to June 18, 1958; at datum 5.08 ft (1.548 m) higher June 18, 1958, to May 21, 1963; at datum 0.62 ft (0.189 m) lower May 21, 1963, to Oct. 27, 1970. No gage Oct. 27, 1970, to Oct. 1, 1971.

AVERAGE DISCHARGE.--70 years, 21.4 ft^3/s (0.606 m^3/s), 15,500 acre-ft/yr (19.1 hm^3/yr); median of yearly mean discharges, 15 ft^3/s (0.42 m^3/s), 10,900 acre-ft/yr (13 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,480 ft^3/s (70.2 m^3/s) July 12 (gage height, 9.55 ft or 2.911 m); no flow for most of year.
Period of record: Maximum discharge, 16,600 ft^3/s (470 m^3/s) Aug. 23, 1961 (gage height, 20.68 ft or 6.303 m, present datum), from rating curve extended above 4,200 ft^3/s (120 m^3/s) on basis of slope-area measurement of peak flow, and partial discharge measurement at gage height 18.4 ft (5.61 m), present datum; no flow for most of each year.

REMARKS.--Records fair except those below 5 ft^3/s (0.1 m^3/s), which are poor. Irrigation above station of about 26,000 acres (105 km^2), including about 2,300 acres (9.31 km^2) in Mexico, mostly by pumping from ground water. Ground water is also pumped above the station for municipal supply and mining. Since October 1969 all flow past station is published, including waste water when known.

REVISIONS (WATER YEARS).--WSP 859: 1915(M). WSP 1283: Drainage area. WSP 1313: 1939(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0		0		0	0	0		0	0	106
2	0	0		0		0	0	0		3.2	0	269
3	0	0		0		0	0	0		0	0	3.4
4	0	0		0		0	0	0		0	0	2.0
5	0	0		0		0	0	0		0	0	.60
6	0	0		0		0	0	0		0	0	0
7	0	0		0		0	.20	0		5.3	0	160
8	0	43		0		0	0	.30		1.0	0	109
9	0	.50		0		.50	0	.10		0	0	1.1
10	0	0		0		0	0	0		0	0	0
11	2.2	0		0		.20	0	0		83	0	0
12	.10	0		0		.30	0	0		273	0	0
13	0	0		0		0	0	0		55	0	102
14	0	0		0		0	0	0		49	.80	432
15	0	0		0		0	0	0		0	0	5.0
16	0	0		0		0	0	0		163	0	0
17	0	0		0		0	0	0		131	0	0
18	0	0		0		0	0	0		42	0	0
19	0	0		0		0	0	0		20	0	0
20	0	0		0		0	0	0		5.0	0	0
21	0	0		0		0	0	0		1.0	5.7	0
22	0	0		0		0	0	0		0	.20	0
23	0	0		0		0	0	0		327	6.6	0
24	0	0		0		0	0	0		135	4.5	0
25	0	0		0		0	0	0		118	0	0
26	0	0		0		0	0	0		30	0	0
27	2.7	0		0		0	0	0		0	0	0
28	0	0		0		0	0	0		106	0	0
29	90	0		1.8	------	0	0	0		15	0	0
30	10	0		.10	------	0	0	0		0	0	0
31	0	------		0	------	0	------	0	------	0	0	------
TOTAL	105.00	43.50	0	1.90	0	1.00	.20	.40	0	1,562.5	17.80	1,190.10
MEAN	3.39	1.45	0	.061	0	.032	.007	.013	0	50.4	.57	39.7
MAX	90	43	0	1.8	0	.50	.20	.30	0	327	6.6	432
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	208	86	0	3.8	0	2.0	.4	.8	0	3,100	35	2,360

CAL YR 1974 TOTAL 4,075.90 MEAN 11.2 MAX 1,300 MIN 0 AC-FT 8,080
WTR YR 1975 TOTAL 2,922.40 MEAN 8.01 MAX 432 MIN 0 AC-FT 5,800

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-12	1800	9.55	2,480	9-13	2330	8.95	2,120
9-1	2230	9.26	2,380				

09483000. Tucson Arroyo at Vine Avenue, Tucson, Ariz.

LOCATION.--Lat 32°13'00", long 110°56'54", in SW¼NE¼ sec.18, T.14 S., R.14 E., Pima County, on right bank at Vine Avenue in Tucson, 0.2 mi (0.3 km) downstream from Arroyo Chico.

DRAINAGE AREA.--8.2 mi^2 (21.2 km^2) since June 1956. Prior to August 1945, 27.0 mi^2 (69.9 km^2). See WSP 1713 or WSP 1733 for history of progressive reduction of drainage area by flood-control diversion structures.

PERIOD OF RECORD.--June 1944 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,411.9 ft (735.14 m) above mean sea level (city of Tucson bench mark).

AVERAGE DISCHARGE.--8 years (1944-52), 0.68 ft^3/s (0.0193 m^3/s), 492 acre-ft/yr (607,000 m^3/yr), representing flow from 23.4 mi^2 (60.6 km^2); 19 years (1956-75), 0.91 ft^3/s (0.0258 m^3/s), 659 acre-ft/yr (813,000 m^3/yr).

EXTREMES.--Current year: Maximum discharge, 760 ft^3/s (21.52 m^3/s) July 25 (gage height, 6.44 ft or 1.963 m); no flow for most of year.
Period of record: Maximum discharge, 5,000 ft^3/s (142 m^3/s) Aug. 22, 1961 (gage height, 10.35 ft or 3.155 m), from rating curve extended above 2,100 ft^3/s (60 m^3/s) on basis of slope-area measurements at gage heights 10.13 and 10.35 ft (3.088 and 3.155 m); no flow for most of each year.

REMARKS.--Records good. A flood-control project, at upper end of natural basin, diverts runoff from 3.6 mi^2 (9.3 km^2) into Lakeside Reservoir (Atterbury) which is in Pantano Wash drainage area. Another flood-control project diverts runoff from 15.2 mi^2 (39.4 km^2) near the upper end of basin into a flood-control detention reservoir in SE¼ sec.29, T.14 S., R.14 E., from which reservoir water is released to Julian Wash, which enters Santa Cruz River upstream from Tucson Arroyo. Since October 1969, all flow past the station is published. Some flow is waste water dumped into stream.

REVISIONS.--WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0		0	0		0	0		1.3
2	0	0	0	0		0	0		0	2.9		0
3	0	0	0	0		0	0		0	0		0
4	0	0	0	0		0	0		0	0		0
5	0	0	1.2	0		0	0		0	0		0
6	0	0	0	0		0	0		0	0		0
7	0	0	0	0		0	.13		0	1.6		8.0
8	0	29	0	0		0	0		0	2.8		0
9	0	0	0	0		.42	.10		0	0		0
10	0	0	0	0		0	0		0	0		0
11	2.0	0	0	0		12	0		0	4.0		0
12	1.5	0	0	0		6.7	0		0	41		0
13	0	0	0	0		0	0		0	.26		0
14	0	0	0	0		0	0		0	0		0
15	0	0	0	0		0	0		0	0		0
16	0	0	0	0		0	0		0	8.0		0
17	0	0	0	0		0	0		0	0		0
18	0	0	0	0		0	0		0	0		0
19	0	0	0	0		0	0		0	0		0
20	0	0	0	0		0	0		0	0		0
21	0	0	0	0		0	0		.17	0		0
22	0	0	0	0		0	0		0	0		0
23	0	0	0	0		0	0		0	0		0
24	0	0	0	0		0	0		0	11		0
25	0	0	0	0		0	0		0	38		0
26	0	0	0	0		0	0		0	.18		0
27	6.5	0	0	0		0	0		0	0		0
28	.01	0	0	0		0	0		0	0		0
29	38	0	0	2.6	------	0	0		0	0		0
30	6.8	0	0	0	------	0	0		0	0		0
31	.08	------	0	0	------	0	------		------	0		------
TOTAL	54.89	29	1.2	2.6	0	19.12	.23	0	.17	109.74	0	9.3
MEAN	1.77	.97	.039	.084	0	.62	.008	0	.006	3.54	0	.31
MAX	38	29	1.2	2.6	0	12	.13	0	.17	41	0	8.0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	109	58	2.4	5.2	0	38	.5	0	.3	218	0	18

CAL YR 1974 TOTAL 216.16 MEAN .59 MAX 38 MIN 0 AC-FT 429
WTR YR 1975 TOTAL 226.25 MEAN .62 MAX 41 MIN 0 AC-FT 449

PEAK DISCHARGE (BASE, 300 CFS).--July 12 (1830) 588 cfs (6.02 ft); July 25 (1730) 760 cfs (6.44 ft).

09483010. High School Wash at Tucson, Ariz.

LOCATION.--Lat 32°13'28", long 110°56'48", in SE¼SE¼ sec.7, T.14 S., R.14 E., Pima County, on right bank 200 ft upstream from Cherry Avenue in Tuscon.

DRAINAGE AREA.--0.95 mi^2 (1.53 km^2).

PERIOD OF RECORD.--October 1973 to September 1975.

GAGE.--Water-stage recorder and concrete flume. Altitude of gage is 2,415 ft (736 m), from topographic map.

EXTREMES.--Water year 1974: Maximum discharge, 126 ft^3/s (3.57 m^3/s) Aug. 2 (gage height, 2.55 ft or 0.777 m); no flow for most of year.
Water year 1975: Maximum discharge, 195 ft^3/s (5.52 m^3/s) July 16 (gage height, 3.21 ft or 0.978 m); no flow for most of year.

REMARKS.--Entire drainage basin is an urban, residential area.

COOPERATION.--Records furnished by Water Resources Research Center, University of Arizona.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0				.01	.93	0
2						0				.68	3.9	0
3						0				.01	.01	0
4						0				0	.36	0
5						0				0	0	0
6						0				0	0	4.8
7						0				0	0	.04
8						0				0	0	0
9						.90				0	0	0
10						0				0	0	0
11						0				0	0	0
12						0				0	0	0
13						0				0	0	0
14						0				0	.04	0
15						0				0	.04	.31
16						0				0	0	0
17						0				0	0	0
18						0				1.3	0	0
19						0				2.7	0	0
20						0				2.6	0	2.7
21						0				0	0	.74
22						0				0	0	.18
23						0				0	0	0
24						0				0	0	0
25						0				0	0	.39
26						0				0	0	0
27						0				0	0	0
28						0				0	0	0
29					---	0				0	0	0
30					---	0				0	0	0
31		---			---	0	---		---	0	0	---
TOTAL	0	0	0	0	0	.90	0	0	0	7.30	5.28	9.16
MEAN	0	0	0	0	0	.029	0	0	0	.24	.17	.31
MAX	0	0	0	0	0	.90	0	0	0	2.7	3.9	4.8
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	1.8	0	0	0	14	10	18

WTR YR 1974 TOTAL 22.64 MEAN .062 MAX 4.8 MIN 0 AC-FT 45

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-19	1850	1.78	65	9-6	1647	2.36	109
8- 2	1634	2.55	126				

09483010. High School Wash at Tucson, Ariz.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0			0		0	0			0	0	1.2
2	0			0		0	0			1.1	0	0
3	0			0		0	0			0	0	0
4	0			0		0	0			0	0	0
5	0			0		0	0			0	0	0
6	0			0		0	0			0	0	0
7	0			0		0	0			1.3	0	2.5
8	0			0		.80	.57			.76	0	.17
9	0			0		0	.26			0	0	0
10	0			0		0	0			0	.37	0
11	.95			0		1.7	0			.42	0	0
12	.39			0		1.0	0			7.1	0	0
13	0			0		0	0			0	0	0
14	0			0		0	0			0	0	0
15	0			0		0	0			0	0	0
16	0			0		0	0			4.1	0	0
17	0			0		0	0			0	0	0
18	0			0		0	0			0	0	0
19	0			0		0	0			0	0	0
20	0			0		0	0			0	0	0
21	0			0		0	0			0	0	0
22	0			0		0	0			0	0	0
23	0			0		0	0			0	0	0
24	0			0		0	0			2.4	0	0
25	0			0		0	0			.18	0	0
26	0			0		0	0			.12	0	0
27	.10			0		0	0			.26	0	0
28	0			0		0	0			0	0	0
29	4.4			1.5	---	0	0			0	0	0
30	1.3			0	---	0	0			0	0	0
31	0	---		0	---	0	---		---	0	0	---
TOTAL	7.14	0	0	1.5	0	3.50	.83	0	0	17.74	.37	3.87
MEAN	.23	0	0	.048	0	.11	.028	0	0	.57	.012	.13
MAX	4.4	0	0	1.5	0	1.7	.57	0	0	7.1	.37	2.5
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	14	0	0	3.0	0	6.9	1.6	0	0	35	.7	7.7

CAL YR 1974 TOTAL 29.78 MEAN .082 MAX 4.8 MIN 0 AC-FT 59
WTR YR 1975 TOTAL 34.95 MEAN .096 MAX 7.1 MIN 0 AC-FT 69

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-12	1800	2.74	144	7-24	1757	2.42	114
7-16	1506	3.21	195	9- 7	1339	2.05	84

09484560. Cienega Creek near Pantano, Ariz.

LOCATION.--Lat 31°59'08", long 110°33'57", in NW¼ sec.1, T.17 S., R.17 E., Pima County, on downstream end of first pier from right abutment of bridge on Interstate Highway 10, and 1.2 mi (1.9 km) southeast of Pantano.

DRAINAGE AREA.--289 mi^2 (749 km^2).

PERIOD OF RECORD.--March 1968 to September 1975 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 3,560.32 ft (1,085.186 m) above mean sea level (Arizona State Highway Department bench mark).

AVERAGE DISCHARGE.--7 years, 2.35 ft^3/s (0.0666 m^3/s), 1,700 acre-ft/yr (2.10 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,550 ft^3/s (43.9 m^3/s) Sept. 2 (gage height, 4.40 ft or 1.341 m), from rating curve extended as explained below; no flow for most of year.
Period of record: Maximum discharge, 2,570 ft^3/s (72.8 m^3/s) July 19, 1974 (gage height, 5.05 ft or 1.539 m), from rating curve extended above 450 ft^3/s (13 m^3/s) on basis of slope-area measurement at gage height 3.98 ft (1.213 m); no flow for most of each year.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0		71
2										0		95
3										0		3.0
4										0		0
5										0		2.6
6										0		0
7										0		7.9
8										0		1.2
9										0		1.9
10										0		0
11										0		0
12										0		.02
13										0		.85
14										0		7.6
15										0		0
16										0		0
17										0		0
18										.33		0
19										5.7		0
20										0		0
21										0		0
22										0		0
23										0		0
24										0		0
25										.50		0
26										0		0
27										0		0
28										0		0
29					---					0		0
30					---					0		0
31		---			---		---		---	0		---
TOTAL	0	0	0	0	0	0	0	0	0	6.53	0	191.07
MEAN	0	0	0	0	0	0	0	0	0	.21	0	6.37
MAX	0	0	0	0	0	0	0	0	0	5.7	0	95
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	13	0	379

CAL YR 1974	TOTAL	2265.80	MEAN 6.21	MAX 486	MIN 0	AC-FT	4490
WTR YR 1975	TOTAL	197.60	MEAN .54	MAX 95	MIN 0	AC-FT	392

PEAK DISCHARGE (BASE, 1,000 CFS).--Sept. 2 (2030) 1,550 cfs (4.40 ft).

09484590. Davidson Canyon Wash near Vail, Ariz.

LOCATION.--Lat 31°59'37", long 110°38'40", in SW¼SE¼ sec.31, T.16 S., R.17 E., Pima County, on right bank 0.3 mi (0.5 km) upstream from Interstate Highway 10, 2.0 mi (3.2 km) upstream from mouth, and 5.5 mi (8.8 km) southeast of Vail.

DRAINAGE AREA.--50.5 mi^2 (130.8 km^2).

PERIOD OF RECORD.--February 1968 to September 1975 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder. Altitude of gage is 3,420 ft (1,042 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 0.703 ft^3/s (0.0199 m^3/s), 509 acre-ft/yr (0.628 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 708 ft^3/s (20.1 m^3/s) July 8 (gage height, 3.20 ft or 0.980 m); no flow for most of year.
Period of record: Maximum discharge, 6,860 ft^3/s (194 m^3/s) July 20, 1970 (gage height, 7.95 ft or 2.423 m, from high-water mark in gage well), from rating curve extended above 630 ft^3/s (18 m^3/s) on basis of slope-area measurement at gage height 5.14 ft (1.567 m); no flow for most of time.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	0	0
2	0									0	0	0
3	0									0	0	0
4	0									0	0	0
5	0									0	0	0
6	0									0	0	0
7	0									0	0	49
8	0									14	39	0
9	0									0	.50	0
10	0									0	0	0
11	0									0	0	0
12	0									0	0	0
13	0									0	0	0
14	0									0	0	0
15	0									0	0	0
16	0									0	0	0
17	0									0	0	0
18	0									0	0	0
19	0									0	0	0
20	0									0	0	0
21	0									0	0	0
22	0									0	0	0
23	0									0	0	0
24	0									1.9	0	0
25	0									0	0	0
26	0									0	0	0
27	0									0	0	0
28	0									0	0	0
29	0				---					0	0	0
30	.10				---					0	0	0
31	0	---			---		---		---	0	0	---
TOTAL	.10	0	0	0	0	0	0	0	0	15.9	39.50	49
MEAN	.003	0	0	0	0	0	0	0	0	.51	1.27	1.63
MAX	.10	0	0	0	0	0	0	0	0	14	39	49
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	.2	0	0	0	0	0	0	0	0	32	78	97

CAL YR 1974 TOTAL 380.07 MEAN 1.04 MAX 75 MIN 0 AC-FT 754
WTR YR 1975 TOTAL 104.50 MEAN .29 MAX 49 MIN 0 AC-FT 207

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-8	1415	3.20	708	9-7	1615	3.15	665
8-8	2015	3.10	625				

09486000. Rillito Creek near Tucson, Ariz.

LOCATION.--Lat 32°17'41", long 110°59'00", in SW¼SE¼ sec.14, T.13 S., R.13 E., on right bank 600 ft (183 m) downstream from Pima Canyon, 1,800 ft (549 m) downstream from bridge on U.S. Highway 89, 4.8 mi (7.7 km) upstream from mouth, and 5.4 mi (8.7 km) north of city hall in Tucson.

DRAINAGE AREA.--918 mi^2 (2,378 km^2). At former site (sta 09485850), 892 mi^2 (2,310 km^2).

PERIOD OF RECORD.--October 1908 to September 1975 (discontinued as a continuous-record station; converted to a crest-stage partial-record station). Prior to October 1917, monthly discharge only.

GAGE.--Water-stage recorder. Datum of gage is 2,280.16 ft (694.993 m) above mean sea level. Prior to July 19, 1945, water-stage recorder or nonrecording gage at site of former highway bridge, 1,300 ft (396 m) upstream. July 19, 1945, to Dec. 27, 1965, water-stage recorder at site 500 ft (152 m) downstream. Dec. 28, 1965, to Dec. 12, 1966, nonrecording gage at site 1,800 ft (549 m) upstream, on U.S. Highway 89 bridge. Dec. 13, 1966, to Sept. 30, 1973, water-stage recorder 1.5 mi (2.4 km) upstream. Prior to Oct. 1, 1973, all gages at different and various datums.

AVERAGE DISCHARGE.--67 years, 16.1 ft^3/s (0.456 m^3/s), 11,660 acre-ft/yr (14.4 hm^3/yr); median of yearly mean discharges, 7.9 ft^3/s (0.22 m^3/s), 5,700 acre-ft/yr (7.0 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,270 ft^3/s (64.3 m^3/s) July 16 (gage height, 6.94 ft or 2.115 m); no flow for most of year. Period of record: Maximum discharge, 24,000 ft^3/s (680 m^3/s) Sept. 23, 1929 (gage height, 24 ft or 7.3 m, from floodmark, site and datum then in use), from rating curve extended above 12,000 ft^3/s (340 m^3/s) on basis of velocity-area studies; no flow for most of each year.

REMARKS.--Records poor. Several small diversions above station for irrigation and for municipal and domestic supply, mostly by pumping from ground water.

REVISIONS (WATER YEARS).--WSP 1283: Drainage area. WSP 1313: 1912-13, 1915, 1917-18 (monthly discharge only). WSP 1343: May 1915 (runoff in acre-ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0								0		0
2	0	0								0		0
3	0	0								0		0
4	0	0								0		0
5	0	0								0		0
6	0	0								0		0
7	0	0								0		10
8	0	35								0		10
9	0	0								0		0
10	0	0								0		0
11	0	0								0		0
12	0	0								15		0
13	0	0								0		0
14	0	0								0		0
15	0	0								0		0
16	0	0								147		0
17	0	0								0		0
18	0	0								0		0
19	0	0								0		0
20	0	0								0		0
21	0	0								0		0
22	0	0								0		0
23	0	0								0		0
24	0	0								8.0		0
25	0	0								15		0
26	0	0								0		0
27	0	0								0		0
28	0	0								0		0
29	40	0			---					0		0
30	0	0			---					0		0
31	0	---			---		---		---	0		---
TOTAL	40	35	0	0	0	0	0	0	0	185.0	0	20
MEAN	1.29	1.17	0	0	0	0	0	0	0	5.97	0	.67
MAX	40	35	0	0	0	0	0	0	0	147	0	10
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	79	69	0	0	0	0	0	0	0	367	0	40

CAL YR 1974 TOTAL 501.41 MEAN 1.37 MAX 174 MIN 0 AC-FT 995
WTR YR 1975 TOTAL 280.00 MEAN .77 MAX 147 MIN 0 AC-FT 555

PEAK DISCHARGE (BASE, 1,000 CFS).--July 16 (1745) 2,270 cfs (6.94 ft).

09486300. Canada del Oro near Tucson, Ariz.

LOCATION.--Lat 32°22'27", long 111°00'31", in SW¼NW¼ sec.22, T.12 S., R.13 E., Pima County, on right bank at upstream side of Overton Road, 4.7 mi (7.6 km) upstream from mouth, and 10.5 mi (16.9 km) north of city hall in Tucson.

DRAINAGE AREA.--250 mi^2 (648 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,380 ft (725 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 1.84 ft^3/s (0.052 m^3/s), 1,330 acre-ft/yr (1.64 hm^3/yr); median of yearly mean discharges, 1.2 ft^3/s (0.03 m^3/s), 870 acre-ft/yr (1.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 454 ft^3/s (12.9 m^3/s) Sept. 4 (gage height, 3.50 ft or 1.067 m); no flow for most of year.
Period of record: Maximum discharge, 13,900 ft^3/s (394 m^3/s) Dec. 20, 1967 (gage height, 7.65 ft or 2.332 m, from high-water mark in gage well), from rating curve extended above 580 ft^3/s (16.4 m^3/s) on basis of slope-area measurement of peak flow; no flow for most of each year.

REMARKS.--Records poor. Lago del Oro—capacity 9,400 acre-ft (11.6 hm^3)—16 mi (26 km) upstream, has contained no storage since May 4, 1971, as gates were opened by court order; however, peak flows are regulated while passing through the lake.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0		0
2										0		0
3										0		0
4										0		11
5										0		0
6										0		0
7										0		0
8										0		0
9										0		0
10										0		0
11										0		0
12										.50		0
13										9.1		0
14										0		0
15										0		0
16										0		0
17										.40		0
18										0		0
19										0		0
20										0		0
21										0		0
22										0		0
23										0		0
24										0		0
25										0		0
26										0		0
27										0		0
28										0		0
29					---					0		0
30					---					0		0
31		---			---		---		---	0		---
TOTAL	0	0	0	0	0	0	0	0	0	10.00	0	11
MEAN	0	0	0	0	0	0	0	0	0	.32	0	.37
MAX	0	0	0	0	0	0	0	0	0	9.1	0	11
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	20	0	22

CAL YR 1974 TOTAL 431.60 MEAN 1.18 MAX 375 MIN 0 AC-FT 856
WTR YR 1975 TOTAL 21.00 MEAN .05 MAX 11 MIN 0 AC-FT 42

PEAK DISCHARGE (BASE, 500 CFS).--No peak above base.

09486500. Santa Cruz River at Cortaro, Ariz.

LOCATION.--Lat 32°21'04", long 111°05'38", in NW¼NW¼ sec.35, T.12 S., R.12 E., Pima County, on downstream side of right bridge pier 0.5 mi (0.8 km) southwest of Cortaro, 2.6 mi (4.2 km) downstream from Canada del Oro, and 3.7 mi (6.0 km) downstream from Rillito Creek.

DRAINAGE AREA.--3,503 mi^2 (9,073 km^2), of which 395 mi^2 (1,023 km^2) is in Mexico.

PERIOD OF RECORD.--October 1939 to June 1947 (published as "at Rillito"), July 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,133.13 ft (650.178 m) above mean sea level (State Highway Department bench mark). Prior to June 30, 1947, at site 5.5 mi (8.8 km) downstream at different datum. July 8, 1950, to Jan. 20, 1966, at present site at datum 4.00 ft (1.219 m) higher.

AVERAGE DISCHARGE (unadjusted for waste water and sewage effluent).--32 years (1939-46, 1950-75), 35.2 ft^3/s (0.997 m^3/s), 25,500 acre-ft/yr (31.4 hm^3/yr); median of yearly mean discharges, 28 ft^3/s (0.79 m^3/s), 20,300 acre-ft/yr (25 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,200 ft^3/s (147 m^3/s) July 12 (gage height, 10.35 ft or 3.155 m); minimum daily, 30 ft^3/s (0.85 m^3/s) Oct. 15.
Period of record: Maximum discharge, 17,000 ft^3/s (481 m^3/s) Aug. 14, 1940 (gage height, 9.9 ft or 3.02 m, site and datum then in use); no natural flow for most of each year. (See REMARKS.)

REMARKS.--Records poor. Many diversions above station, mostly by pumping from ground water, for irrigation of about 34,000 acres (138 km^2). Waste water from irrigation and from sewage-disposal plant is included in flow past station; included only in water years 1951, 1952, and since 1970 water year. This year most of flow shown below 60 ft^3/s (1.70 m^3/s) is waste water.

REVISIONS.--WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	39	66	62	58	46	40	44	35	46	45	47
2	40	34	75	66	56	42	36	46	35	52	45	369
3	39	38	56	66	58	50	34	48	40	54	40	44
4	40	42	48	69	54	48	36	46	40	44	40	44
5	40	42	48	64	62	44	36	46	40	42	45	45
6	39	44	48	69	54	42	36	42	35	46	45	44
7	44	46	48	69	50	46	38	42	35	54	40	193
8	46	149	48	71	54	50	42	40	35	58	40	190
9	40	44	50	69	52	52	40	40	40	46	168	55
10	39	38	52	73	54	40	38	35	40	52	81	52
11	38	46	52	66	54	66	36	35	40	123	50	57
12	96	50	52	73	48	54	36	35	40	649	60	53
13	34	54	54	71	50	48	40	40	40	122	135	56
14	39	60	54	64	46	46	39	40	40	83	70	480
15	30	62	54	60	48	44	36	40	40	44	50	70
16	33	62	56	62	48	42	38	40	40	301	45	60
17	40	60	56	56	50	43	39	40	40	391	45	66
18	46	66	56	62	50	43	40	40	48	113	45	67
19	46	71	58	71	46	42	40	40	48	101	45	68
20	46	66	58	64	50	42	42	40	50	78	45	60
21	56	71	60	69	50	39	40	40	48	85	50	69
22	54	69	56	69	54	35	42	40	46	88	50	70
23	54	66	60	69	48	32	42	40	46	335	50	67
24	56	62	62	60	54	32	44	40	48	190	50	63
25	58	73	60	56	50	32	46	40	46	260	50	63
26	56	75	58	56	54	32	39	35	48	97	48	62
27	58	73	64	56	46	34	40	35	46	50	50	57
28	62	77	62	58	46	36	44	35	46	135	52	54
29	201	73	64	69	---	38	42	35	44	70	51	71
30	87	80	64	56	---	36	42	35	44	50	46	54
31	44	---	66	52	---	39	---	35	---	50	49	---
TOTAL	1643	1832	1765	1997	1444	1315	1183	1229	1263	3909	1725	2750
MEAN	53.0	61.1	56.9	64.4	51.6	42.4	39.4	39.6	42.1	126	55.6	91.7
MAX	201	149	75	73	62	66	46	48	50	649	168	480
MIN	30	34	48	52	46	32	34	35	35	42	40	44
AC-FT	3260	3630	3500	3960	2860	2610	2350	2440	2510	7750	3420	5450

CAL YR 1974 TOTAL 23528 MEAN 64.5 MAX 1840 MIN 24 AC-FT 46670
WTR YR 1975 TOTAL 22055 MEAN 60.4 MAX 649 MIN 30 AC-FT 43750

PEAK DISCHARGE (BASE, 2,700 CFS).--July 12 (2000) 5,200 cfs (10.35 ft).

09486800. Altar Wash near Three Points, Ariz.

LOCATION.--Lat 31°50'10", long 111°24'11", in SE¼NE¼ sec.27, T.18 S., R.9 E., Pima County, on left abutment of former highway bridge, 0.1 mi (0.2 km) downstream from Chiltipines Wash, 0.2 mi (0.3 km) upstream from bridge on State Highway 286, and 18 mi (29 km) south of Three Points.

DRAINAGE AREA.--463 mi^2 (1,199 km^2).

PERIOD OF RECORD.--January 1966 to September 1975 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 2,972.43 ft (905.997 m) above mean sea level. Prior to Sept. 5, 1970, on right abutment at datum 0.04 ft (0.012 m) lower.

AVERAGE DISCHARGE.--9 years, 7.46 ft^3/s (0.211 m^3/s), 5,400 acre-ft/yr (6.66 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,700 ft^3/s (275 m^3/s) Aug. 8 (gage height, 8.90 ft or 2.713 m); no flow for most of year.
Period of record: Maximum discharge, 22,000 ft^3/s (623 m^3/s) Sept. 4, 1970 (gage height, 13.85 ft or 4.221 m, recorded, 14.3 ft or 4.36 m, profile past present site), from rating curve extended above 11,000 ft^3/s (312 m^3/s) on basis of velocity-area determination of peak flow; no flow for most of each year.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0								0	0	539
2	0	0								36	0	110
3	0	0								0	0	170
4	0	0								0	0	235
5	0	0								0	0	21
6	0	0								0	0	0
7	0	0								0	0	195
8	0	.20								44	803	4.0
9	0	0								.20	90	0
10	0	0								0	0	0
11	0	0								0	0	0
12	0	0								194	0	0
13	0	0								91	0	96
14	0	0								0	0	3.0
15	0	0								0	0	0
16	0	0								87	0	0
17	0	0								23	0	0
18	0	0								0	0	0
19	0	0								0	0	0
20	0	0								0	202	0
21	0	0								0	5.0	0
22	0	0								0	0	0
23	0	0								0	0	0
24	0	0								0	0	0
25	0	0								0	0	0
26	0	0								0	0	0
27	43	0								0	0	0
28	0	0								0	0	0
29	48	0			---					0	0	0
30	20	0			---					0	0	0
31	0	---			---		---		---	0	0	---
TOTAL	111	.20	0	0	0	0	0	0	0	475.20	1100.0	1373.0
MEAN	3.58	.007	0	0	0	0	0	0	0	15.3	35.5	45.8
MAX	48	.20	0	0	0	0	0	0	0	194	803	539
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	220	.4	0	0	0	0	0	0	0	943	2180	2720

CAL YR 1974 TOTAL 5174.20 MEAN 14.2 MAX 1720 MIN 0 AC-FT 10260
WTR YR 1975 TOTAL 3059.40 MEAN 8.38 MAX 803 MIN 0 AC-FT 6070

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-12	2230	6.51	3,320	9-1	1630	6.61	3,620
7-16	2030	5.85	1,700	9-2	2300	6.49	3,280
8- 8	2030	8.90	9,700	9-4	1400	5.60	1,020
8-20	1800	6.11	2,220	9-7	1800	5.90	1,800

09488500. Santa Rosa Wash near Vaiva Vo, near Sells, Ariz.

LOCATION.--Lat 32°40'03", long 111°55'39", in SW¼SW¼ sec.2, T.9 S., R.4 E., Pinal County, in Papago Indian Reservation, on right bank about 1 mi (2 km) downstream from Tat Momolikot Dam, 3.3 mi (5.3 km) south of Vaiva Vo, 10 mi (16 km) southwest of Chuichu, 12 mi (19 km) downstream from Gu Komelik and 52 mi (84 km) north of Sells.

DRAINAGE AREA.--1,782 mi^2 (4,615 km^2).

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,470 ft (448 m), from topographic map.

AVERAGE DISCHARGE.--21 years, 13.4 ft^3/s (0.379 m^3/s), 9,710 acre-ft/yr (12.0 hm^3/yr); median of yearly mean discharges, 7.4 ft^3/s (0.21 m^3/s), 5,400 acre-ft/yr (6.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 580 ft^3/s (16.4 m^3/s) July 17 (gage height, 7.40 ft or 2.256 m); no flow for most of year. Period of record: Maximum discharge, 53,100 ft^3/s (1,500 m^3/s) Sept. 27, 1962 (gage height, 16.9 ft or 5.15 m), from rating curve extended above 840 ft^3/s (24 m^3/s) on basis of slope-area measurement of peak flow; no flow for most of each year.

REMARKS.--Records fair. Beginning July 1974, flood flows are regulated by Lake St. Clair, formed by Tat Momolikot Dam, about 1 mi (2 km) upstream—total capacity, 384,000 acre-ft (473 hm^3).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	0	
2	0									0	0	
3	0									0	0	
4	0									0	0	
5	0									0	0	
6	0									0	0	
7	0									0	0	
8	0									0	0	
9	0									0	0	
10	0									18	0	
11	0									4.9	0	
12	0									0	0	
13	0									1.0	0	
14	0									0	0	
15	0									0	0	
16	0									0	0	
17	0									45	0	
18	0									.70	0	
19	0									0	0	
20	0									0	16	
21	0									0	0	
22	0									0	0	
23	0									0	0	
24	0									0	0	
25	0									0	0	
26	0									0	0	
27	0									0	0	
28	.30									0	0	
29	9.4				------					0	0	
30	0				------					0	0	
31	0	------			------		------		------	0	0	------
TOTAL	9.70	0	0	0	0	0	0	0	0	69.60	16	0
MEAN	.31	0	0	0	0	0	0	0	0	2.25	.52	0
MAX	9.4	0	0	0	0	0	0	0	0	45	16	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	19	0	0	0	0	0	0	0	0	138	32	0

CAL YR 1974 TOTAL 49.30 MEAN .14 MAX 24 MIN 0 AC-FT 98
WTR YR 1975 TOTAL 95.30 MEAN .26 MAX 45 MIN 0 AC-FT 189

PEAK DISCHARGE (BASE, 700 CFS).--No peak above base.

09489000. Santa Cruz River near Laveen, Ariz.

LOCATION.--Lat 33°13'56", long 112°10'08", in NE¼NE¼ sec.29, T.2 S., R.2 E., Pinal County, in Gila River Indian Reservation, on downstream side of highway bridge, 3.4 mi (5.5 km) upstream from mouth, 4.3 mi (6.9 km) south of Komatke, and 9 mi (14 km) south of Laveen.

DRAINAGE AREA.--8,581 mi² (22,225 km²).

PERIOD OF RECORD.--January 1940 to September 1946, December 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,020.86 ft (311.158 m) above mean sea level.

AVERAGE DISCHARGE.--33 years (1940-46, 1948-75), 19.0 ft³/s (0.538 m³/s), 13,770 acre-ft/yr (17.0 hm³/yr); median of yearly mean discharges, 12 ft³/s (0.34 m³/s), 8,700 acre-ft/yr (11 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 203 ft³/s (5.75 m³/s) July 14 (gage height, 10.00 ft or 3.048 m); no flow for most of year. Period of record: Maximum discharge, 9,200 ft³/s (261 m³/s) Sept. 29, 1962 (gage height, 17.50 ft or 5.334 m); no flow for most of time in recent years.

REMARKS.--Records poor. Many diversions above station, mostly by pumping from ground water, for municipal uses and for irrigation of about 240,000 acres (970 km²), not including San Carlos Project. Some low flow is drainage and wasteway return from irrigated lands upstream.

REVISIONS.--WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	5.0	0		0	0	0	0	.09	0	0	0
2	0	10	0		0	0	0	0	0	0	0	0
3	0	3.0	0		0	0	0	0	0	0	0	0
4	0	1.0	0		0	0	0	0	0	0	0	0
5	0	0	1.0		0	0	0	0	0	0	0	0
6	0	0	0		0	0	0	0	0	0	0	0
7	0	0	0		0	0	0	0	0	0	0	0
8	0	0	0		0	0	0	0	0	0	0	0
9	0	0	0		0	0	0	0	0	0	0	0
10	0	0	0		0	0	0	0	0	0	0	0
11	0	0	0		0	0	2.2	0	0	0	0	0
12	0	0	0		0	1.0	.39	0	0	0	0	1.6
13	0	0	0		0	5.0	.05	0	0	2.8	0	.50
14	0	0	0		0	2.0	0	0	0	66	0	.30
15	0	0	0		6.0	1.0	0	0	0	5.1	0	0
16	0	0	0		1.7	0	.02	0	0	9.5	0	0
17	0	0	0		9.1	0	0	0	0	12	0	0
18	0	0	0		6.5	0	0	0	0	5.8	0	0
19	0	0	0		11	0	.01	0	0	12	0	10
20	0	0	0		6.9	0	0	0	0	7.9	0	8.1
21	0	0	0		.10	0	0	0	0	8.3	.10	6.1
22	0	0	0		5.6	0	0	0	0	14	0	5.8
23	0	0	0		21	0	0	0	0	5.1	0	5.0
24	0	0	0		6.0	0	0	0	0	.60	0	2.5
25	0	0	0		1.0	0	0	0	0	.30	0	1.4
26	0	0	0		0	0	0	0	0	.20	0	.48
27	0	0	0		0	0	0	.15	0	.10	0	1.4
28	0	0	0		0	0	0	.28	0	0	0	.99
29	5.0	0	0		---	0	0	.05	0	0	0	1.7
30	20	0	0		---	0	0	.58	0	0	0	5.7
31	8.0	---	0		---	0	---	.40	---	0	0	---
TOTAL	33.0	19.0	1.0	0	74.90	9.0	2.67	1.46	.09	149.70	.10	51.57
MEAN	1.06	.63	.032	0	2.68	.29	.089	.047	.003	4.83	.003	1.72
MAX	20	10	1.0	0	21	5.0	2.2	.58	.09	66	.10	10
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	65	38	2.0	0	149	18	5.3	2.9	.2	297	.2	102

CAL YR 1974 TOTAL 225.72 MEAN .62 MAX 72 MIN 0 AC-FT 448
WTR YR 1975 TOTAL 342.49 MEAN .94 MAX 66 MIN 0 AC-FT 679

PEAK DISCHARGE (BASE, 380 CFS).--No peak above base.

NOTE.--No gage-height record Feb. 25 to Apr. 8.

09489000. Santa Cruz River near Laveen, Ariz.
(National stream-quality accounting network station)

LOCATION.--Lat 33°13'56", long 112°10'08", in NE¼NE¼ sec.29, T.2 S., R.2 E., Pinal County, in Gila River Indian Reservation, at gaging station at highway bridge, 3.4 mi (5.5 km) upstream from mouth, 4.3 mi (6.9 km) south of Komatke, and 9 mi (14 km) south of Laveen.

DRAINAGE AREA.--8,581 mi^2 (22,225 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1974 to current year.

REMARKS.--Many diversions above station, mostly by pumping ground water. Some low flow is entirely waste water from irrigated lands. No flow for most of each year. No water-quality data collected during 1975 water year owing to lack of flow.

09489070. North Fork of East Fork Black River near Alpine, Ariz.

LOCATION.--Lat 33°54'11", long 109°19'20", in SW¼NE¼ sec.19, T.6 N., R.29 E. (unsurveyed), Apache County, in Apache National Forest, on right bank 1.4 mi (2.3 km) downstream from Crosby Crossing and 12 mi (19 km) northwest of Alpine.

DRAINAGE AREA.--38.1 mi^2 (98.7 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,650 ft (2,637 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 13.8 ft^3/s (0.391 m^3/s), 10,000 acre-ft/yr (12.3 hm^3/yr); median of yearly mean discharges, 9.8 ft^3/s (0.28 m^3/s) 7,100 acre-ft/yr (8.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 577 ft^3/s (16.3 m^3/s) Apr. 25 (gage height, 3.84 ft or 1.170 m); maximum gage height, 4.75 ft (1.448 m) Mar. 11 (result of ice jam); minimum daily discharge, 0.66 ft^3/s (0.019 m^3/s) Oct. 1-5.
Period of record: Maximum discharge, 1,070 ft^3/s (30.3 m^3/s) Apr. 17, 1973 (gage height, 4.64 ft or 1.414 m), from rating curve extended above 260 ft^3/s (7.4 m^3/s) on basis of culvert and road overflow computation at 3.80 ft (1.158 m); maximum gage height, 4.75 ft (1.448 m) Mar. 11, 1975 (result of ice jam); minimum daily discharge, 0.20 ft^3/s (0.006 m^3/s) Dec. 20, 1968, to Mar. 15, 1969, and Jan. 6-10, 1971.

REMARKS.--Records good except those for Nov. 8-16, Dec. 1 to Apr. 14, which are poor. Minor storage at headwaters for recreation and stock purposes; the largest is Big Lake. No diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.66	14	2.1	1.0	1.0	2.0	25	178	7.9	1.4	1.3	.84
2	.66	14	2.0	1.0	1.0	2.0	25	175	6.9	1.7	1.2	.84
3	.66	13	1.5	1.0	1.0	3.0	25	155	6.2	1.7	1.1	1.1
4	.66	12	1.5	1.0	1.0	3.0	25	131	6.9	1.7	1.1	1.2
5	.66	10	1.8	1.0	1.0	3.0	50	85	5.2	1.8	1.1	1.7
6	1.4	9.8	1.6	1.0	1.0	15	50	53	4.6	1.8	1.4	2.0
7	5.9	10	1.6	1.0	1.0	15	50	48	4.4	2.1	1.4	5.6
8	4.2	10	1.6	1.0	1.0	15	50	53	4.6	2.1	1.4	5.8
9	3.2	10	1.5	1.0	1.0	70	50	57	4.2	1.7	1.5	15
10	2.8	10	1.4	1.0	1.0	40	50	56	4.0	1.8	1.5	5.8
11	3.8	10	1.4	1.0	1.0	30	40	51	4.1	2.5	2.0	3.8
12	4.8	10	1.4	1.0	1.0	30	40	46	3.2	2.3	2.5	3.0
13	4.5	10	1.3	1.0	1.0	30	40	40	3.0	2.6	1.7	3.8
14	3.4	10	1.3	1.0	1.0	30	40	36	2.8	2.3	1.4	3.4
15	2.6	10	1.2	1.0	1.0	20	38	35	2.7	2.8	1.3	2.6
16	2.2	10	1.0	1.0	1.0	20	62	35	2.6	1.8	1.3	2.1
17	1.9	9.4	1.0	1.0	1.0	20	69	36	2.5	2.0	1.2	2.0
18	1.7	9.4	1.0	1.0	1.0	20	53	31	3.6	2.0	.94	2.5
19	1.6	8.8	1.0	1.0	1.0	20	69	26	3.8	1.7	.94	2.6
20	1.6	7.4	1.0	1.0	1.0	20	114	27	2.2	1.7	1.8	2.5
21	1.7	7.4	1.0	1.0	1.0	30	187	24	2.1	1.7	2.8	1.7
22	3.6	7.0	1.0	1.0	1.0	30	274	18	1.9	1.4	1.4	1.5
23	7.4	5.6	1.0	1.0	1.0	30	309	14	1.8	1.4	1.2	1.4
24	3.8	4.2	1.0	1.0	1.0	30	350	13	1.7	1.4	1.2	1.3
25	3.0	4.0	1.0	1.0	1.0	30	398	12	1.5	1.7	.94	1.3
26	2.4	3.6	1.0	1.0	1.0	30	368	11	1.5	2.3	.84	1.3
27	3.6	3.2	1.0	1.0	1.0	30	252	9.8	1.5	1.8	.94	1.2
28	3.6	3.0	1.0	1.0	1.0	30	186	12	1.5	1.7	1.1	1.2
29	10	2.6	1.0	1.0	------	30	193	14	1.4	1.8	.84	1.1
30	12	2.4	1.0	1.0	------	30	184	12	1.4	1.5	.74	1.2
31	13	------	1.0	1.0	------	30	------	8.7	------	1.3	.74	------
TOTAL	113.00	250.5	39.2	31.0	28.0	738.0	3,666	1,502.5	101.7	57.5	40.82	81.38
MEAN	3.65	8.35	1.26	1.00	1.00	23.8	122	48.5	3.39	1.85	1.32	2.71
MAX	13	14	2.1	1.0	1.0	70	398	178	7.9	2.8	2.8	15
MIN	.66	2.4	1.0	1.0	1.0	2.0	25	8.7	1.4	1.3	.74	.84
AC-FT	224	497	78	61	56	1,460	7,270	2,980	202	114	81	161

CAL YR 1974 TOTAL 1,127.32 MEAN 3.09 MAX 43 MIN .35 AC-FT 2,240
WTR YR 1975 TOTAL 6,649.60 MEAN 18.2 MAX 398 MIN .66 AC-FT 13,190

PEAK DISCHARGE (BASE, 75 CFS).--Mar. 9 (probably 1800) about 200 cfs; Apr. 25 (1800) 577 cfs (3.84 ft).

NOTE.--No gage-height record Dec. 17 to Mar. 8, Mar. 11 to Apr. 13.

09489100. Black River near Maverick, Ariz.

LOCATION.--Lat 33°42'27", long 109°26'48", in SW¼ sec.30, T.4 N., R.28 E., Apache County, in Apache National Forest, on right bank 1.0 mi (1.6 km) downstream from Fish Creek, 1.1 mi (1.8 km) upstream from Conklin Creek, and 6 mi (10 km) southeast of Maverick.

DRAINAGE AREA.--315 mi^2 (816 km^2).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,850 ft (2,088 m), from topographic map. Prior to Sept. 19, 1973, at datum 0.85 ft (0.259 m) higher.

AVERAGE DISCHARGE.--13 years, 140 ft^3/s (3.965 m^3/s), 101,400 acre-ft/yr (125 hm^3/yr); median of yearly mean discharges, 120 ft^3/s (3.40 m^3/s), 86,900 acre-ft/yr (107 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,360 ft^3/s (66.8 m^3/s) Mar. 8 (gage height, 4.72 ft or 1.439 m); minimum daily, 17 ft^3/s (0.48 m^3/s) Dec. 25.
Period of record: Maximum discharge, 11,100 ft^3/s (314 m^3/s) Oct. 20, 1972 (gage height, 8.14 ft or 2.481 m), from rating curve extended above 2,100 ft^3/s (59 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 13 ft^3/s (0.37 m^3/s) July 4-7, 1964, Nov. 30, Dec. 3, 1968, Dec. 22-27, 1973, July 4, 5, 1974.

REMARKS.--Records good. Minor storage for recreational and stock purposes near headwaters. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	235	47	25	38	395	539	1100	104	24	25	18
2	21	237	45	28	33	505	472	1090	95	26	24	22
3	21	227	38	25	40	545	494	1030	91	28	22	28
4	21	203	40	23	37	505	586	974	89	26	21	27
5	21	189	47	24	35	499	695	854	86	27	20	35
6	22	172	43	26	34	643	826	674	80	30	21	40
7	102	155	34	28	35	551	862	587	74	34	25	118
8	105	160	38	27	40	1120	708	527	69	32	24	229
9	93	239	26	28	43	1400	675	488	67	29	26	889
10	70	213	25	26	50	984	655	476	64	26	27	440
11	88	179	28	27	47	728	662	476	60	38	30	268
12	105	163	30	24	46	574	636	482	57	80	48	198
13	129	155	28	27	54	488	593	466	53	73	42	162
14	107	144	26	28	62	494	611	435	50	62	32	140
15	86	134	23	28	48	510	715	405	48	53	29	111
16	71	119	27	28	54	472	945	410	47	48	28	89
17	61	107	25	29	51	451	1140	415	44	43	26	76
18	54	104	26	29	42	425	1020	365	43	60	24	80
19	48	95	24	30	51	545	907	303	43	51	22	90
20	44	84	25	29	57	682	1060	275	42	42	27	69
21	42	81	27	31	62	833	1300	245	37	37	47	57
22	70	77	27	31	53	841	1550	218	34	33	37	50
23	150	70	25	27	50	749	1680	188	32	31	28	46
24	122	57	18	30	60	655	1730	169	30	33	27	43
25	97	54	17	35	74	770	1870	154	28	34	24	40
26	83	49	26	43	102	812	1830	140	27	35	22	39
27	83	48	32	46	159	624	1590	130	26	44	21	38
28	88	45	28	39	253	574	1240	130	25	35	21	35
29	148	40	30	37	---	499	1220	145	25	40	21	33
30	203	35	28	42	---	467	1130	142	24	35	19	32
31	216	---	25	43	---	516	---	115	---	29	18	---
TOTAL	2593	3870	928	943	1710	19856	29941	13608	1594	1218	828	3542
MEAN	83.6	129	29.9	30.4	61.1	641	998	439	53.1	39.3	26.7	118
MAX	216	239	47	46	253	1400	1870	1100	104	80	48	889
MIN	21	35	17	23	33	395	472	115	24	24	18	18
AC-FT	5140	7680	1840	1870	3390	39380	59390	26990	3160	2420	1640	7030

CAL YR 1974 TOTAL 21044 MEAN 57.7 MAX 271 MIN 13 AC-FT 41740
WTR YR 1975 TOTAL 80631 MEAN 221 MAX 1870 MIN 17 AC-FT 159900

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 8	2145	4.72	2,360	9-9	0745	3.63	1,280
4-25	2345	4.61	2,330				

09489200. Pacheta Creek at Maverick, Ariz.

LOCATION.--Lat 33°44'23", long 109°32'24", at corner of secs.28, 29, 32, 33, T.4½ N., R.27 E. (unsurveyed), Apache County, in Fort Apache Indian Reservation, on left bank 0.5 mi (0.8 km) southeast of Maverick.

DRAINAGE AREA.--14.8 mi^2 (38.3 km^2).

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1970 published as Pachete Creek at Maverick.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,850 ft (2,393 m), by barometer.

AVERAGE DISCHARGE.--18 years, 8.43 ft^3/s (0.239 m^3/s), 6,110 acre-ft/yr (7.53 hm^3/yr); median of yearly mean discharges, 7.1 ft^3/s (0.20 m^3/s), 5,100 acre-ft/yr (6.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 132 ft^3/s (3.74 m^3/s) Apr. 25 (gage height, 3.67 ft or 1.119 m); minimum daily, 1.3 ft^3/s (0.037 m^3/s) Oct. 27, Jan. 6-23.
Period of record: Maximum discharge, 323 ft^3/s (9.15 m^3/s) May 13, 1973 (gage height, 4.36 ft or 1.329 m); minimum daily, 0.2 ft^3/s (0.006 m^3/s) many days in 1959-60.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	3.6	1.7	1.5	1.5	5.4	29	84	14	2.4	1.7	1.6
2	1.5	3.8	1.7	1.5	1.6	6.8	32	84	13	2.3	1.7	1.5
3	1.5	4.0	1.6	1.5	1.6	7.3	29	84	12	2.3	1.6	1.5
4	1.5	3.6	1.7	1.5	1.6	7.0	36	86	9.2	2.3	1.6	1.6
5	1.5	2.9	1.7	1.5	1.6	7.0	46	60	9.2	2.2	1.6	1.6
6	1.7	3.1	1.6	1.3	1.6	7.7	55	47	9.9	2.2	1.6	1.7
7	3.8	3.1	1.6	1.3	1.6	8.0	49	52	9.5	2.1	1.6	2.9
8	2.4	3.5	1.6	1.3	1.6	17	44	57	8.8	2.1	1.7	2.4
9	1.6	3.3	1.5	1.3	1.6	26	52	52	8.4	2.0	1.7	3.8
10	1.6	2.9	1.5	1.3	1.7	24	35	39	8.1	2.0	1.7	2.1
11	1.6	2.7	1.5	1.3	1.6	16	30	34	7.4	1.9	1.7	2.3
12	2.7	2.6	1.6	1.3	1.6	15	27	52	7.1	1.8	1.9	4.8
13	2.6	2.4	1.6	1.3	1.7	16	24	49	6.2	1.8	1.7	5.6
14	2.0	2.2	1.5	1.3	1.7	15	26	34	5.6	1.7	1.7	5.4
15	1.6	2.2	1.5	1.3	1.9	14	35	36	5.1	1.7	1.7	4.6
16	1.5	1.9	1.5	1.3	1.7	14	50	49	4.2	1.6	1.7	3.8
17	1.5	2.0	1.5	1.3	1.9	14	55	49	4.2	1.6	1.7	3.3
18	1.6	2.0	1.5	1.3	1.9	15	53	34	4.0	1.6	1.7	3.3
19	1.7	2.0	1.5	1.3	1.9	19	45	35	3.8	1.6	1.6	4.0
20	1.7	1.6	1.5	1.3	1.7	25	50	33	3.5	1.7	1.6	3.6
21	1.7	1.5	1.5	1.3	1.9	32	64	28	3.5	2.1	1.9	2.9
22	2.0	1.7	1.5	1.3	1.7	33	77	23	3.1	2.0	1.7	2.3
23	1.9	1.6	1.5	1.3	2.4	28	87	16	2.9	1.9	1.7	1.9
24	1.6	1.7	1.5	1.5	2.0	30	97	18	2.7	1.7	1.7	1.6
25	1.6	1.7	1.5	1.5	2.3	36	109	20	2.7	1.7	1.7	1.5
26	1.5	1.7	1.5	1.6	2.6	24	120	18	2.7	1.7	1.5	1.5
27	1.3	1.7	1.6	1.5	3.1	23	111	18	2.6	1.7	1.5	1.5
28	1.5	1.6	1.5	1.5	4.0	21	95	17	2.6	1.7	1.6	1.5
29	4.0	1.6	1.5	1.6	------	17	92	17	2.4	1.7	1.5	1.5
30	3.6	1.6	1.5	1.6	------	18	87	15	2.4	1.9	1.5	1.5
31	4.0	------	1.5	1.6	------	37	------	13	------	1.7	1.5	------
TOTAL	61.8	71.8	48.0	43.3	53.6	578.2	1,741	1,253	180.8	58.7	51.3	79.1
MEAN	1.99	2.39	1.55	1.40	1.91	18.7	58.0	40.4	6.03	1.89	1.65	2.64
MAX	4.0	4.0	1.7	1.6	4.0	37	120	86	14	2.4	1.9	5.6
MIN	1.3	1.5	1.5	1.3	1.5	5.4	24	13	2.4	1.6	1.5	1.5
AC-FT	123	142	95	86	106	1,150	3,450	2,490	359	116	102	157

CAL YR 1974 TOTAL 879.1 MEAN 2.41 MAX 12 MIN 1.2 AC-FT 1,740
WTR YR 1975 TOTAL 4,220.6 MEAN 11.6 MAX 120 MIN 1.3 AC-FT 8,370

PEAK DISCHARGE (BASE, 35 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 9	1600	3.10	35	4- 9	0630	3.36	71
3-25	1645	3.24	53	4-25	2230	3.67	132

09489500. Black River below pumping plant, near Point of Pines, Ariz.

LOCATION.--Lat 33°28'36", long 109°45'48", in W½ sec.32, T.2 N., R.25 E. (unsurveyed), Graham County, in San Carlos Indian Reservation, on left bank 0.9 mi (1.4 km) downstream from Phelps Dodge Corp. pumping plant, 1.3 mi (2.1 km) downstream from Freezeout Creek, 8 mi (13 km) northwest of Point of Pines, and 63 mi (101 km) upstream from confluence with White River.

DRAINAGE AREA.--560 mi^2 (1,450 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,725 ft (1,745.0 m), from topographic map.

AVERAGE DISCHARGE (adjusted for diversion to Willow Creek).--22 years, 192 ft^3/s (5.437 m^3/s), 139,100 acre-ft/yr (172 hm^3/yr); median of yearly mean discharges, 140 ft^3/s (3.96 m^3/s), 101,000 acre-ft/yr (125 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,840 ft^3/s (80.4 m^3/s) Mar. 9 (gage height, 7.31 ft or 2.228 m); minimum daily, 11 ft^3/s (0.31 m^3/s) Sept. 1.
Period of record: Maximum discharge, 17,900 ft^3/s (507 m^3/s) Oct. 19, 1972 (gage height, 18.0 ft or 5.49 m, from floodmarks), from rating curve extended above 5,000 ft^3/s (140 m^3/s); minimum daily, 2.6 ft^3/s (0.074 m^3/s) July 5, 1974.

REMARKS.--Records good. Water is diverted at pumping plant 0.9 mi (1.4 km) upstream and pumped into headwaters of Willow Creek (tributary of Eagle Creek) for mining, metallurgical treatment of ores, and domestic supply in vicinity of Morenci. (see sta 09445000.)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	233	53	49	78	347	675	1170	144	45	31	11
2	28	234	61	42	68	519	585	1150	133	40	26	14
3	24	238	61	36	64	600	610	1110	125	25	23	17
4	24	230	54	41	65	636	645	1070	118	26	19	35
5	24	203	61	44	62	548	710	977	115	29	17	42
6	28	188	65	60	60	619	815	800	109	33	15	47
7	45	174	60	65	57	638	914	711	103	42	16	65
8	117	165	51	49	58	796	820	644	98	41	21	183
9	105	191	52	49	62	2170	704	601	94	37	20	620
10	159	223	41	45	64	1540	761	574	85	31	24	537
11	87	200	44	45	71	1170	735	555	83	29	28	295
12	108	178	52	38	68	930	762	555	79	60	28	231
13	134	167	56	52	67	782	706	546	75	95	41	195
14	144	160	47	56	82	749	698	518	69	88	38	173
15	123	148	44	58	104	760	825	495	63	71	29	148
16	106	140	41	58	88	727	968	475	61	64	26	123
17	89	129	51	56	92	700	1210	482	58	57	23	104
18	78	120	51	56	80	620	1150	459	56	48	20	94
19	71	115	49	52	75	685	1040	400	52	62	18	99
20	64	108	44	51	87	793	1040	365	52	58	20	101
21	61	99	49	54	93	969	1200	324	49	48	34	80
22	65	96	45	49	91	1060	1460	298	45	46	48	66
23	101	93	39	51	84	974	1590	266	42	41	40	57
24	154	86	27	49	83	810	1660	238	38	34	28	50
25	128	74	23	44	93	859	1780	217	35	48	24	46
26	109	70	49	49	129	998	1860	200	30	52	20	42
27	101	66	42	54	174	776	1740	183	39	49	18	39
28	102	64	54	58	244	716	1380	173	42	50	17	36
29	120	61	54	56	---	675	1310	173	45	47	15	35
30	203	56	44	65	---	575	1220	174	45	47	14	33
31	222	---	41	87	---	655	---	164	---	39	12	---
TOTAL	2957	4309	1505	1618	2443	25396	31573	16067	2182	1482	753	3618
MEAN	95.4	144	48.5	52.2	87.3	819	1052	518	72.7	47.8	24.3	121
MAX	222	238	65	87	244	2170	1860	1170	144	95	48	620
MIN	24	56	23	36	57	347	585	164	30	25	12	11
AC-FT	5870	8550	2990	3210	4850	50370	62630	31870	4330	2940	1490	7180
MEAN †	107	150	54.5	54.2	87.3	819	1069	540	92.6	70.1	49.5	141
AC-FT †	6580	8900	3350	3330	4850	50370	63620	33190	5510	4310	3050	8400

CAL YR 1974 TOTAL 23726.8 MEAN 65.0 MAX 238 MIN 2.6 AC-FT 47060 MEAN † 79.5 AC-FT † 57,520
WTR YR 1975 TOTAL 93903.0 MEAN 257 MAX 2170 MIN 11 AC-FT 186300 MEAN † 270 AC-FT † 195,500

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 9	0400	7.31	2,840	4-26	0800	6.62	2,260
3-22	0545	5.13	1,180	9- 9	1530	4.93	1,060

† Adjusted for Willow Creek diversion from Black River, near Morenci, Ariz.

09489700. Big Bonito Creek near Fort Apache, Ariz.

LOCATION.--Lat 33°40'02", long 109°50'46", in NE¼ sec.28, T.4 N., R.24 E. (unsurveyed), Apache County, in Fort Apache Indian Reservation, near right bank on downstream side of pier of highway bridge, 1.9 mi (3.1 km) upstream from Tonto Creek, 3.7 mi (6.0 km) southeast of Chino Springs, and 12 mi (19 km) southeast of Fort Apache.

DRAINAGE AREA.--119 mi^2 (308 km^2).

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1969 published as Big Bonita Creek near Fort Apache.

GAGE.--Water-stage recorder. Altitude of gage is 5,910 ft (1,801 m), by barometer.

AVERAGE DISCHARGE.--18 years, 62.4 ft^3/s (1.767 m^3/s), 45,210 acre-ft/yr (55.7 hm^3/yr); median of yearly mean discharges, 57 ft^3/s (1.61 m^3/s), 41,300 acre-ft/yr (453 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 453 ft^3/s (12.8 m^3/s) Apr. 26 (gage height, 4.31 ft or 1.314 m); minimum daily, 8.7 ft^3/s (0.25 m^3/s) Aug. 31, Sept. 1.
Period of record: Maximum discharge, 1,870 ft^3/s (53.0 m^3/s) Oct. 20, 1972 (gage height, 7.11 ft or 2.167 m); maximum gage height, 8.43 ft (2.569 m) Oct. 20, 1972 (backwater from bridge downstream); minimum daily discharge, 4.3 ft^3/s (0.12 m^3/s) June 28, 29, 1961.

REMARKS.--Records good except those for December and January, which are fair. No storage or diversion above station.

REVISIONS (WATER YEARS).--WRD Ariz. 1969: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	63	18	14	23	111	127	290	75	13	15	8.7
2	9.8	62	18	13	22	121	119	296	76	14	14	9.7
3	9.8	62	17	12	22	121	124	301	80	14	13	17
4	10	58	17	11	21	116	142	315	81	13	12	19
5	10	55	19	11	20	108	169	310	77	16	11	21
6	13	51	18	13	19	111	196	259	72	17	13	19
7	39	46	16	14	20	107	212	223	66	21	13	32
8	32	45	16	14	21	193	186	205	62	18	13	66
9	35	52	16	14	21	318	170	198	57	17	15	120
10	25	50	16	14	22	235	170	206	54	14	15	73
11	28	46	16	14	22	191	161	233	49	21	15	64
12	50	43	16	14	21	158	164	257	44	66	17	57
13	61	40	16	14	23	137	147	265	39	70	17	46
14	49	38	15	14	25	134	153	261	36	51	13	43
15	39	35	15	16	26	135	205	257	32	31	12	34
16	31	34	15	16	28	125	261	263	29	40	11	28
17	26	31	15	16	28	120	290	253	26	30	11	24
18	22	29	15	16	26	108	248	214	24	25	11	25
19	20	27	15	16	33	125	214	185	24	27	10	31
20	18	25	15	16	39	158	217	161	21	26	13	24
21	18	24	15	16	35	198	251	148	19	28	21	21
22	23	23	15	16	30	215	312	132	18	25	16	19
23	49	22	12	16	34	196	363	117	16	22	13	18
24	39	19	10	16	35	177	375	107	14	18	12	16
25	34	20	10	16	56	188	401	105	13	28	11	16
26	28	18	10	16	66	206	421	106	12	29	9.7	15
27	27	19	11	17	85	178	404	108	13	23	9.7	14
28	31	18	13	16	96	155	345	108	13	21	11	13
29	62	14	15	16	---	134	318	102	12	26	10	13
30	75	16	15	22	---	120	298	91	12	22	9.0	13
31	64	---	15	26	---	124	---	81	---	18	8.7	---
TOTAL	987.6	1085	465	475	919	4823	7163	6157	1166	804	395.1	919.4
MEAN	31.9	36.2	15.0	15.3	32.8	156	239	199	38.9	25.9	12.7	30.6
MAX	75	63	19	26	96	318	421	315	81	70	21	120
MIN	9.8	14	10	11	19	107	119	81	12	13	8.7	8.7
AC-FT	1960	2150	922	942	1820	9570	14210	12210	2310	1590	784	1820

CAL YR 1974 TOTAL 10714.2 MEAN 29.4 MAX 141 MIN 5.1 AC-FT 21250
WTR YR 1975 TOTAL 25359.1 MEAN 69.5 MAX 421 MIN 8.7 AC-FT 50300

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 9	0200	3.90	345	4-26	2115	4.31	453
3-21	2230	3.46	231	9- 9	0515	3.06	158
4- 6	2215	3.45	226				

09490500. Black River near Fort Apache, Ariz.

LOCATION.--Lat 33°42'46", long 110°12'40", in NW¼ sec.12, T.4 N., R.20 E. (unsurveyed), Gila County, on downstream side of first pier from right on highway bridge, 5 mi (8 km) upstream from confluence with White River and 14 mi (23 km) west of Fort Apache.

DRAINAGE AREA.--1,232 mi^2 (3,191 km^2).

PERIOD OF RECORD.--October 1912 to December 1915, September 1916, October 1917 to January 1918, April 1918, October 1957 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 4,345 ft (1,324.4 m), from river-profile map. November 1912 to July 1918, non-recording gages or water-stage recorders at several sites within 1 mi (2 km) of present site at various datums.

AVERAGE DISCHARGE.--21 years (1912-15, 1957-75), 378 ft^3/s (10.70 m^3/s), 273,900 acre-ft/yr (338 hm^3/yr); median of yearly mean discharges, 280 ft^3/s (7.93 m^3/s), 203,000 acre-ft/yr (250 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,360 ft^3/s (123 m^3/s) Mar. 9 (gage height, 9.1 ft or 2.77 m, from high-water mark in well); minimum daily, 28 ft^3/s (0.79 m^3/s) Sept. 4.
Period of record: Maximum discharge, 28,400 ft^3/s (804 m^3/s) Oct. 20, 1972 (gage height, 21.40 ft or 6.523 m), from rating curve extended above 8,900 ft^3/s (250 m^3/s) on basis of slope-area measurement at gage height 14.70 ft (4.481 m); minimum daily, 11 ft^3/s (0.31 m^3/s) July 6, 1974.

REMARKS.--Records fair. One transbasin diversion for industrial and municipal use (see record of Willow Creek diversion from Black River, near Morenci). Negligible storage in several small recreational lakes.

REVISIONS (WATER YEARS).--WSP 1313: 1914-15, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	315	79	68	175	630	860	1560	261	58	58	29
2	50	363	80	72	156	742	870	1510	236	66	49	29
3	50	384	80	57	130	830	785	1500	221	62	41	29
4	50	339	84	55	122	850	805	1450	215	59	37	28
5	50	314	87	55	114	770	885	1410	209	55	35	29
6	60	280	86	55	111	742	1030	1260	200	45	34	36
7	150	256	90	60	104	845	1230	1030	192	78	32	47
8	150	237	84	60	100	1500	1260	900	180	77	32	68
9	110	227	77	60	98	3000	1300	845	170	74	32	500
10	144	255	72	60	100	2500	1840	790	160	62	31	550
11	119	288	67	60	104	2000	1750	780	150	59	32	600
12	124	263	53	55	109	2000	1440	810	140	279	33	360
13	148	240	55	55	109	1860	1370	840	133	118	38	274
14	180	222	62	60	115	1540	1210	825	122	189	34	232
15	189	215	57	74	810	1330	1300	790	112	143	39	200
16	162	203	51	79	775	1330	1500	765	104	115	38	173
17	139	193	60	80	805	1120	1720	770	98	101	34	144
18	119	180	55	75	372	974	1750	746	93	94	32	122
19	100	167	57	74	286	895	1570	690	88	81	32	109
20	90	160	58	77	283	1050	1410	614	86	74	31	109
21	83	150	52	73	315	1240	1500	590	82	88	31	114
22	84	141	58	79	266	1420	1780	550	78	117	31	98
23	130	131	64	83	196	1390	2070	500	74	78	36	82
24	141	126	52	69	173	1230	2190	450	67	74	43	70
25	184	119	44	73	244	1110	2300	410	61	67	37	62
26	164	109	45	80	426	1260	2460	400	57	79	32	57
27	177	99	46	80	514	1260	2410	400	53	87	31	53
28	135	95	61	84	550	1030	2060	380	49	77	30	50
29	956	92	73	90	---	915	1750	350	53	86	30	48
30	351	87	77	104	---	830	1680	310	57	88	29	47
31	324	---	64	205	---	775	---	290	---	68	29	---
TOTAL	4963	6250	2030	2311	7662	38968	46085	24515	3801	2798	1083	4349
MEAN	160	208	65.5	74.5	274	1257	1536	791	127	90.3	34.9	145
MAX	956	384	90	205	810	3000	2460	1560	261	279	58	600
MIN	50	87	44	55	98	630	785	290	49	45	29	28
AC-FT	9840	12400	4030	4580	15200	77290	91410	48630	7540	5550	2150	8630

CAL YR 1974 TOTAL 37869 MEAN 104 MAX 956 MIN 11 AC-FT 75110
WTR YR 1975 TOTAL 144815 MEAN 397 MAX 3000 MIN 28 AC-FT 287200

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	0645	7.35	2,640	4-10	2400	7.24	2,550
2-15	1415	5.75	1,460	4-26	1800	7.57	2,820
3- 9	unknown	a9.1	4,360	7-12	1800	6.10	1,690
3-22	1830	5.92	1,560				

a From high-water mark in well.

09490800. North Fork White River near Greer, Ariz.

LOCATION.--Lat 34°00'55", long 109°38'37", in SW¼ sec.7, T.7 N., R.26 E. (unsurveyed), Apache County, in Fort Apache Indian Reservation, on right bank 300 ft (91 m) upstream from Bear Cienega Creek and 11 mi (18 km) west of Greer.

DRAINAGE AREA.--39 mi^2 (101 km^2), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 8,372 ft (2,551.8 m). Prior to Nov. 13, 1965, at datum 1.08 ft (0.329 m) higher.

AVERAGE DISCHARGE.--10 years, 25.7 ft^3/s (0.728 m^3/s), 18,620 acre-ft/yr (23.0 hm^3/yr); median of yearly mean discharges, 23 ft^3/s (0.651 m^3/s) 16,700 acre-ft/yr (21 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 157 ft^3/s (4.45 m^3/s) May 15 (gage height, 3.11 ft or 0.948 m); maximum gage height, 3.29 ft (1.003 m), backwater from dirt dam; minimum daily discharge, 6.0 ft^3/s (0.17 m^3/s) Nov. 24 to Dec. 9, Dec. 13 to Feb. 27.
Period of record: Maximum discharge, 510 ft^3/s (14.4 m^3/s) Apr. 28, 1973 (gage height, 4.15 ft or 1.265 m); minimum daily, 4.8 ft^3/s (0.14 m^3/s) June 24, 1971.

REMARKS.--Records fair except those for December to April and for September, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	18	6.0	6.0	6.0	10	28	60	66	24	12	8.5
2	7.6	20	6.0	6.0	6.0	12	28	60	71	23	12	15
3	8.5	20	6.0	6.0	6.0	12	28	60	81	22	12	14
4	10	16	6.0	6.0	6.0	11	30	56	86	21	11	13
5	12	17	6.0	6.0	6.0	12	35	45	89	20	10	13
6	20	17	6.0	6.0	6.0	12	40	36	87	19	12	14
7	44	15	6.0	6.0	6.0	11	40	32	86	18	12	20
8	22	14	6.0	6.0	6.0	14	40	33	85	17	14	20
9	19	16	6.0	6.0	6.0	18	35	36	84	17	13	25
10	18	15	6.8	6.0	6.0	15	30	41	83	16	12	20
11	20	14	8.0	6.0	6.0	14	28	49	81	20	14	19
12	32	15	7.0	6.0	6.0	13	25	59	79	25	23	19
13	30	13	6.0	6.0	6.0	14	23	64	76	25	15	18
14	27	12	6.0	6.0	6.0	17	20	68	76	21	12	17
15	22	12	6.0	6.0	6.0	14	25	81	75	20	12	16
16	19	12	6.0	6.0	6.0	12	30	91	78	18	12	16
17	18	12	6.0	6.0	6.0	11	46	90	75	17	11	16
18	17	10	6.0	6.0	6.0	12	39	77	78	20	10	17
19	16	10	6.0	6.0	6.0	12	40	70	74	18	10	17
20	15	8.5	6.0	6.0	6.0	15	39	69	64	17	13	16
21	17	9.5	6.0	6.0	6.0	18	55	68	58	15	19	16
22	22	7.6	6.0	6.0	6.0	18	63	63	49	15	12	15
23	24	7.2	6.0	6.0	6.0	17	65	60	44	15	12	15
24	19	6.0	6.0	6.0	6.0	20	94	59	39	15	10	14
25	16	6.0	6.0	6.0	6.0	22	100	62	36	15	9.5	14
26	15	6.0	6.0	6.0	6.0	40	94	67	32	20	9.0	14
27	20	6.0	6.0	6.0	6.0	30	67	73	30	18	10	14
28	19	6.0	6.0	6.0	7.0	40	60	76	28	17	9.5	14
29	24	6.0	6.0	6.0	---	35	62	74	26	18	8.5	14
30	25	6.0	6.0	6.0	---	32	57	67	25	14	8.5	14
31	14	---	6.0	6.0	---	30	---	64	---	13	8.0	---
TOTAL	600.1	352.8	189.8	186.0	169.0	563	1366	1910	1941	573	368.0	477.5
MEAN	19.4	11.8	6.12	6.00	6.04	18.2	45.5	61.6	64.7	18.5	11.9	15.9
MAX	44	20	8.0	6.0	7.0	40	100	91	89	25	23	25
MIN	7.6	6.0	6.0	6.0	6.0	10	20	32	25	13	8.0	8.5
AC-FT	1190	700	376	369	335	1120	2710	3790	3850	1140	730	947

CAL YR 1974 TOTAL 5410.7 MEAN 14.8 MAX 50 MIN 6.0 AC-FT 10730
WTR YR 1975 TOTAL 8696.2 MEAN 23.8 MAX 100 MIN 6.0 AC-FT 17250

PEAK DISCHARGE (BASE, 100 CFS).--Apr. 25 (1515) 146 cfs (3.30 ft); May 15 (1630) 157 cfs (3.11 ft).

09491000. North Fork White River near McNary, Ariz.

LOCATION.--Lat 34°02'47", long 109°44'02", in E½ sec.31, T.8 N., R.25 E. (unsurveyed), Apache County, in Fort Apache Indian Reservation, on left bank 1.9 mi (3.1 km) downstream from Paradise Creek and 7 mi (11 km) southeast of McNary.

DRAINAGE AREA.--66 mi^2 (171 km^2), approximately.

PERIOD OF RECORD.--June 1945 to June 1947, May 1948 to June 1949, May 1950 to September 1954 (monthly discharge only, July to September 1954), June 1957 to current year. Maximum discharge only for water years 1955-56, published in WSP 1513. Prior to Oct. 1, 1963, published as White River near McNary.

GAGE.--Water-stage recorder. Datum of gage is 7,723 ft (2,354.0 m) above mean sea level.

AVERAGE DISCHARGE.--23 years (1945-46, 1950-54, 1957-75), 43.8 ft^3/s (1.240 m^3/s), 31,730 acre-ft/yr (39.1 hm^3/yr); median of yearly mean discharges, 38 ft^3/s (1.08 m^3/s), 27,500 acre-ft/yr (34 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, about 350 ft^3/s (9.9 m^3/s) May 15 or 16; maximum gage height, 3.67 ft (1.119 m) Feb. 20 (backwater from ice); minimum daily discharge, 10 ft^3/s (0.28 m^3/s) Oct. 2-4, Jan. 2-8, Feb. 5-9.
Period of record: Maximum discharge, 1,290 ft^3/s (36.5 m^3/s) Sept. 19, 1946 (gage height, 5.36 ft or 1.634 m), from rating curve extended above 350 ft^3/s (9.9 m^3/s); minimum recorded, 4 ft^3/s (0.11 m^3/s) Nov. 19, 1948, and Nov. 29, 1950, caused by ice jam upstream.

REMARKS.--Records fair except those for periods of no gage-height record and those for winter periods, which are poor. No storage above station. Water diverted about 5 mi (8 km) upstream from station for use at McNary.

REVISIONS.--WSP 1243: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	35	16	11	11	30	47	190	130	32	19	15
2	10	35	16	10	11	35	50	200	140	32	18	20
3	10	33	15	10	11	35	49	200	150	30	17	20
4	10	30	15	10	11	35	62	210	170	30	17	20
5	11	30	14	10	10	35	81	210	160	28	17	20
6	22	28	13	10	10	33	100	190	150	27	17	22
7	56	25	13	10	10	30	97	170	150	26	19	30
8	35	23	14	10	10	40	86	170	140	26	20	35
9	35	26	15	11	10	50	82	180	140	24	21	47
10	30	24	15	11	11	50	64	190	140	23	19	28
11	25	23	15	11	11	45	57	200	130	32	24	28
12	40	21	15	11	11	40	55	210	130	46	28	25
13	45	21	15	11	11	35	50	230	122	47	25	25
14	40	20	15	11	11	30	49	250	124	34	21	23
15	35	19	15	11	11	28	62	270	121	28	20	21
16	30	18	14	11	12	29	90	300	115	26	20	20
17	25	18	14	11	12	26	101	290	109	24	19	21
18	22	17	13	11	12	26	87	260	104	25	18	25
19	20	17	12	11	12	32	85	230	99	26	18	24
20	20	16	12	11	12	41	100	210	87	23	21	22
21	20	16	12	11	12	52	153	200	77	22	28	20
22	35	16	12	11	13	55	207	180	70	21	21	19
23	35	15	12	11	14	52	220	160	62	20	20	18
24	33	14	12	11	14	52	230	150	57	19	19	18
25	30	14	12	11	14	69	250	150	52	20	18	18
26	30	14	11	11	14	69	250	160	47	22	17	18
27	30	14	11	11	14	55	220	170	44	23	18	17
28	30	14	11	11	15	69	200	180	40	23	18	17
29	55	14	11	11	---	81	200	170	37	24	17	17
30	45	14	11	11	---	76	190	150	34	21	16	17
31	40	---	11	11	---	56	---	140	---	19	16	---
TOTAL	915	624	412	334	330	1391	3574	6170	3131	823	606	670
MEAN	29.5	20.8	13.3	10.8	11.8	44.9	119	199	104	26.5	19.5	22.3
MAX	56	35	16	11	15	81	250	300	170	47	28	47
MIN	10	14	11	10	10	26	47	140	34	19	16	15
AC-FT	1810	1240	817	662	655	2760	7090	12240	6210	1630	1200	1330

CAL YR 1974 TOTAL 9486.7 MEAN 26.0 MAX 91 MIN 9.3 AC-FT 18820
WTR YR 1975 TOTAL 18980 MEAN 52.0 MAX 300 MIN 10 AC-FT 37650

PEAK DISCHARGE (BASE, 180 CFS).--Apr. 25 or 26, about 300 cfs; May 15 or 16, about 350 cfs.

NOTE.--No gage-height record Oct. 9 to Nov. 6, Dec. 23 to Feb. 22, Apr. 24 to May 1, May 4 to June 12.

09492400. East Fork White River near Fort Apache, Ariz.

LOCATION.--Lat 33°49'20", long 109°48'50", in SE¼ sec.16, T.5 N., R.24 E. (unsurveyed), Apache County, in Fort Apache Indian Reservation, on left bank 600 ft (180 m) downstream from highway bridge, 0.1 mi (0.2 km) upstream from Rock Creek and 10 mi (16 km) east of Fort Apache.

DRAINAGE AREA.--38.8 mi^2 (100.5 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,050 ft (1,844 m), by barometer. Prior to Dec. 29, 1960, at site 600 ft (180 m) upstream at datum 12.78 ft (3.895 m) higher. Dec. 29, 1960, to Sept. 28, 1962, at site 600 ft (180 m) upstream at datum 12.92 ft (3.938 m) higher.

AVERAGE DISCHARGE.--18 years, 32.4 ft^3/s (0.918 m^3/s), 23,470 acre-ft/yr (28.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 232 ft^3/s (6.57 m^3/s) May 16 (gage height, 2.62 ft or 0.799 m); maximum gage height, 2.64 ft (0.805 m) Dec. 27 (backwater from ice); minimum daily discharge, 7.0 ft^3/s (0.20 m^3/s) Oct. 3.
Period of record: Maximum discharge, 663 ft^3/s (18.8 m^3/s) Aug. 17, 1961 (gage height, 4.82 ft or 1.469 m, present site and datum, from floodmark), from rating curve extended above 170 ft^3/s (4.8 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 4.6 ft^3/s (0.13 m^3/s) July 3, 1959.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	32	13	8.6	9.2	37	39	96	94	23	14	9.7
2	7.5	32	11	8.5	8.9	43	37	102	110	22	13	11
3	7.0	30	11	8.0	8.9	43	39	110	131	21	13	15
4	7.3	27	11	8.0	8.9	41	45	123	142	21	12	14
5	7.8	27	10	8.0	8.6	38	53	126	135	21	12	13
6	12	25	9.5	8.0	8.3	36	59	110	126	21	13	14
7	35	24	9.0	8.3	8.6	32	62	98	117	20	12	25
8	28	25	9.0	8.3	8.9	61	53	94	110	20	13	37
9	35	27	10	8.6	9.2	83	48	98	108	17	15	67
10	25	26	11	9.0	9.5	65	45	114	102	16	14	51
11	24	25	10	9.0	9.5	53	44	144	94	21	13	43
12	32	24	10	9.0	9.7	43	43	173	85	32	14	36
13	40	24	12	9.0	9.7	39	39	182	81	36	15	32
14	34	24	11	9.0	11	37	42	188	77	26	12	30
15	28	24	10	8.9	10	37	55	199	75	25	12	27
16	25	23	9.0	9.2	11	34	71	218	72	32	12	25
17	22	22	9.0	8.9	9.7	35	79	205	72	24	11	22
18	20	21	9.0	9.2	13	34	67	175	70	22	11	27
19	18	20	9.0	9.5	15	43	61	154	70	22	11	26
20	17	19	9.0	9.5	14	54	66	135	65	21	13	21
21	16	18	9.0	9.5	12	61	77	134	60	20	20	19
22	24	18	9.0	9.2	13	63	94	117	55	19	14	17
23	30	17	9.0	10	16	55	102	104	50	18	12	16
24	29	14	9.0	10	14	49	102	102	45	16	11	15
25	26	13	9.0	9.2	18	52	112	112	40	16	11	14
26	24	12	9.0	9.5	19	57	126	131	35	17	10	14
27	27	12	9.0	9.5	25	49	123	146	33	17	11	14
28	26	12	9.0	9.5	30	43	104	144	30	19	11	13
29	49	11	9.0	9.5	---	38	100	124	28	20	10	12
30	39	13	9.0	10	---	35	94	102	25	17	9.7	12
31	32	---	9.0	10	---	36	---	90	---	15	9.5	---
TOTAL	754.4	641	301.5	280.4	348.6	1426	2081	4150	2337	657	384.2	691.7
MEAN	24.3	21.4	9.73	9.05	12.5	46.0	69.4	134	77.9	21.2	12.4	23.1
MAX	49	32	13	10	30	83	126	218	142	36	20	67
MIN	7.0	11	9.0	8.0	8.3	32	37	90	25	15	9.5	9.7
AC-FT	1500	1270	598	556	691	2830	4130	8230	4640	1300	762	1370

CAL YR 1974 TOTAL 6901.9 MEAN 18.9 MAX 65 MIN 5.7 AC-FT 13690
WTR YR 1975 TOTAL 14052.8 MEAN 38.5 MAX 218 MIN 7.0 AC-FT 27870

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 8	2145	1.87	102	5-16	2100	2.62	232
4-26	2200	2.06	131	5-27	2145	2.25	160
5- 5	0015	2.08	132	6- 4	2000	2.19	149

09494000. White River near Fort Apache, Ariz.

LOCATION.--Lat 33°44'11", long 110°09'58", in SE¼ sec.32, T.4½ N., R.21 E. (unsurveyed), Gila County, in Fort Apache Indian Reservation, on right bank 2,200 ft (670 m) downstream from highway bridge, 4.5 mi (7.2 km) upstream from confluence with Black River, and 11 mi (18 km) west of Fort Apache.

DRAINAGE AREA.--632 mi^2 (1,637 km^2).

PERIOD OF RECORD.--October 1917 to September 1918 (published as "at Wanslee's Ranch"), October 1957 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,365.99 ft (1,330.754 m) above mean sea level. Oct. 12, 1917, to Aug. 31, 1918, nonrecording gage at site 2,100 ft (640 m) upstream at different datum.

AVERAGE DISCHARGE.--19 years, 176 ft^3/s (4.984 m^3/s), 127,500 acre-ft/yr (157 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,930 ft^3/s (54.7 m^3/s) Apr. 27 (gage height, 6.31 ft or 1.923 m); minimum daily, 23 ft^3/s (0.65 m^3/s) Oct. 3.
Period of record: Maximum discharge, 8,670 ft^3/s (246 m^3/s) Aug. 12, 1971 (gage height, 13.8 ft or 4.21 m), from rating curve extended above 3,800 ft^3/s (110 m^3/s) on basis of slope-area measurements at gage heights 9.2 and 13.8 ft (2.80 and 4.21 m); no flow July 18-21, 1963.

REMARKS.--Records good except those for December to February, and September, which are fair. Small diversions above station for irrigation of about 1,460 acres (5.91 km^2). Negligible storage above station in several small recreational lakes.

REVISIONS.--WRD Ariz. 1971: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	153	52	60	70	188	408	1020	369	77	64	40
2	27	149	62	60	65	245	309	1060	378	77	60	50
3	23	147	65	60	60	268	369	1060	404	78	58	60
4	24	129	75	60	60	260	422	1080	442	80	54	60
5	24	118	70	60	55	245	512	1020	439	86	51	60
6	30	113	64	60	55	245	595	840	414	86	48	60
7	108	103	60	60	55	238	665	735	390	90	45	60
8	104	99	53	60	55	324	540	670	369	84	44	80
9	84	99	53	60	50	882	524	640	354	81	44	300
10	73	101	60	60	50	670	625	650	339	77	65	150
11	65	94	60	60	50	560	512	705	321	75	87	100
12	91	87	60	60	50	404	536	792	294	122	84	88
13	100	87	60	60	50	339	488	840	279	173	81	81
14	96	80	60	60	50	342	464	852	260	163	78	98
15	84	77	60	60	100	339	536	864	248	126	74	73
16	75	74	60	55	100	312	705	924	238	110	71	66
17	70	73	60	55	90	300	846	960	222	103	70	60
18	64	71	60	50	85	232	705	852	220	99	68	63
19	63	70	60	50	80	285	605	740	200	92	67	74
20	59	68	60	50	80	372	640	650	185	87	66	67
21	57	66	60	50	75	439	735	620	169	82	68	60
22	123	67	60	50	70	532	972	564	157	80	71	55
23	115	64	60	50	70	496	1150	508	145	80	64	51
24	91	63	60	50	68	411	1200	468	131	70	62	50
25	80	58	60	50	77	436	1360	456	120	66	58	49
26	143	57	60	50	94	556	1600	472	108	66	55	49
27	143	57	60	50	120	411	1650	500	103	68	50	48
28	103	57	60	50	155	369	1230	516	94	73	48	45
29	740	57	60	50	---	357	1180	512	92	177	45	44
30	268	50	60	60	---	300	1060	472	86	88	43	45
31	181	---	60	70	---	363	---	397	---	73	40	---
TOTAL	3336	2588	1874	1740	2039	11720	23143	22439	7570	2889	1883	2186
MEAN	108	86.3	60.5	56.1	72.8	378	771	724	252	93.2	60.7	72.9
MAX	740	153	75	70	155	882	1650	1080	442	177	87	300
MIN	23	50	52	50	50	188	309	397	86	66	40	40
AC-FT	6620	5130	3720	3450	4040	23250	45900	44510	15020	5730	3730	4340

CAL YR 1974 TOTAL 30419 MEAN 83.3 MAX 740 MIN 11 AC-FT 60340
WTR YR 1975 TOTAL 83407 MEAN 229 MAX 1650 MIN 23 AC-FT 165400

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	0615	6.23	1,860	5-17	0800	5.20	1,020
3- 9	0515	5.20	1,020	7-29	0530	5.32	1,100
4-27	0745	6.31	1,930	9- 9	unknown	a5.60	1,310

a From high-water mark in well.

09495000. Forestdale Creek diversion from Show Low Creek, near Show Low, Ariz.

LOCATION.--Lat 34°10'40", long 110°00'56", in SE¼NW¼ sec.16, T.9 N., R.22 E., Navajo County, in Sitgreaves National Forest, on right bank 170 ft (50 m) downstream from terminal structure of Show Low Creek diversion works, 4,350 ft (1,330 m) west of pumping plant on Show Low Lake, and 5 mi (8 km) south of Show Low.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 6,621.57 ft (2,018.255 m) above mean sea level (Bureau of Reclamation bench mark).

EXTREMES.--Period of record: Maximum daily discharge, 28 ft^3/s (0.79 m^3/s) June 2, 3, 5, 1973, Mar. 17-25, 27-30, Apr. 2-15, Apr. 18 to May 5, 1975; no flow for most of time.

REMARKS.--Records good. Entire flow consists of water pumped from Show Low Lake, in Little Colorado River basin, into headwaters of Forestdale Creek in Gila River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0				0	27	28	23	22	11	
2		0				0	28	28	23	22	3.7	
3		0				0	28	28	23	21	0	
4		0				16	28	28	23	21	0	
5		0				24	28	28	22	21	0	
6		0				25	28	26	22	21	0	
7		0				24	28	24	22	20	0	
8		0				23	28	24	22	21	0	
9		0				23	28	24	22	21	0	
10		0				25	28	24	22	20	0	
11		13				27	28	24	22	20	0	
12		21				27	28	24	22	20	0	
13		17				27	28	24	22	20	0	
14		2.5				27	28	24	22	19	0	
15		3.5				27	28	24	22	19	0	
16		5.4				27	25	23	22	19	0	
17		9.0				28	27	23	22	19	0	
18		6.9				28	28	23	22	19	0	
19		5.6				28	28	23	22	19	0	
20		5.6				28	28	23	22	19	0	
21		4.6				28	28	23	22	19	0	
22		3.2				28	28	23	22	19	0	
23		0				28	28	23	22	19	0	
24		0				28	28	23	22	19	0	
25		0				28	28	23	22	19	0	
26		0				24	28	23	22	10	0	
27		0				28	28	23	22	11	0	
28		0				28	28	12	22	19	0	
29		0			---	28	28	14	19	19	0	
30		0			---	28	28	23	20	16	0	
31		---			---	27	---	23	---	14	0	---
TOTAL	0	97.3	0	0	0	737	835	730	659	587	14.7	0
MEAN	0	3.24	0	0	0	23.8	27.8	23.5	22.0	18.9	.47	0
MAX	0	21	0	0	0	28	28	28	23	22	11	0
MIN	0	0	0	0	0	0	25	12	19	10	0	0
AC-FT	0	193	0	0	0	1460	1660	1450	1310	1160	29	0

CAL YR 1974 TOTAL 900.3 MEAN 2.47 MAX 23 MIN 0 AC-FT 1790
WTR YR 1975 TOTAL 3660.0 MEAN 10.0 MAX 28 MIN 0 AC-FT 7260

09496000. Corduroy Creek near mouth, near Show Low, Ariz.

LOCATION.--Lat 34°01'06", long 110°14'30", in sec.8, T.7 N., R.20 E. (unsurveyed), Navajo County, in Fort Apache Indian Reservation, on right bank 4 mi (6 km) upstream from mouth and 20 mi (32 km) southwest of Show Low.

DRAINAGE AREA.--203 mi^2 (526 km^2).

PERIOD OF RECORD.--September 1951 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Concrete control May 29, 1956, to Dec. 25, 1971 (destroyed by flood). Altitude of gage is 5,000 ft (1,520 m), from topographic map.

AVERAGE DISCHARGE.--24 years, 22.7 ft^3/s (0.643 m^3/s), 16,450 acre-ft/yr (20.3 hm^3/yr); median of yearly mean discharges, 12 ft^3/s (0.34 m^3/s), 8,700 acre-ft/yr (11 hm^3/yr), unadjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 348 ft^3/s (9.86 m^3/s) Apr. 12 (gage height, 3.02 ft or 0.920 m); minimum daily, 0.70 ft^3/s (0.020 m^3/s) Nov. 27-30, Dec. 15-20.
Period of record: Maximum discharge, 10,900 ft^3/s (309 m^3/s) Jan. 18, 1952, Dec. 30, 1965; maximum gage height, 11.75 ft (3.581 m) Dec. 30, 1965; minimum daily discharge, 0.70 ft^3/s (0.020 m^3/s) Nov. 27-30, Dec. 15-20, 1974.

REMARKS.--Records good except those for December and January, which are fair. No storage or diversion from creek above station. Records include transbasin diversions from Show Low Creek. (See elsewhere in this report.)

REVISIONS (WATER YEARS).--WSP 1393: 1951. WSP 1926: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	17	.90	2.5	10	60	162	30	21	20	16	1.4
2	1.5	13	.93	1.2	7.8	69	95	30	21	22	12	3.1
3	1.5	22	.82	1.2	7.0	57	111	30	21	23	6.5	1.9
4	1.8	13	1.0	1.2	7.4	40	134	29	21	22	2.8	1.8
5	1.8	8.8	2.8	1.2	5.3	47	101	29	20	22	2.4	2.3
6	2.4	6.8	2.0	1.3	3.8	52	73	29	20	22	2.1	2.9
7	3.1	5.5	2.3	1.4	3.1	58	70	26	21	23	1.8	3.1
8	2.1	4.5	1.5	1.5	2.8	53	71	26	21	29	1.8	4.9
9	2.1	3.7	1.2	1.5	2.4	136	76	25	20	22	2.1	3.1
10	1.9	2.7	1.2	1.2	2.1	104	207	25	20	22	2.1	2.4
11	1.8	2.0	1.2	1.2	1.8	87	208	25	20	22	2.1	1.9
12	2.4	14	1.0	1.2	2.1	81	240	25	20	22	2.1	1.7
13	3.0	27	.95	1.2	2.1	79	233	25	20	22	1.8	1.7
14	2.1	20	.95	1.2	4.2	84	165	25	20	21	1.8	1.7
15	1.8	4.4	.70	1.5	14	93	136	25	20	20	1.8	1.6
16	1.6	3.3	.70	1.2	14	98	93	25	20	20	1.8	1.6
17	1.5	6.4	.70	1.2	15	90	69	25	20	20	1.8	1.6
18	1.5	7.8	.70	1.2	12	70	64	25	20	20	1.8	1.7
19	1.6	7.4	.70	1.2	12	72	56	25	20	20	1.8	1.7
20	1.6	6.5	.70	1.2	14	75	50	24	20	20	1.8	1.6
21	1.3	6.5	.96	1.2	16	64	44	24	20	20	2.1	1.5
22	2.9	5.3	.98	1.2	11	60	39	24	20	20	2.1	1.6
23	2.1	6.1	1.0	1.2	10	52	36	24	20	20	1.7	1.5
24	1.6	2.1	1.0	1.2	9.1	47	35	24	20	19	1.5	1.5
25	1.3	1.0	1.0	1.2	12	43	34	24	20	20	1.4	1.6
26	1.5	.92	1.2	1.2	17	55	32	23	20	22	1.4	1.6
27	1.4	.70	1.2	1.2	28	74	32	23	20	14	1.5	1.5
28	2.2	.70	1.3	1.2	48	66	31	24	20	15	1.5	1.5
29	60	.70	1.3	1.2	------	69	31	13	20	21	1.4	1.5
30	50	.70	2.5	4.2	------	66	31	17	18	20	1.4	1.5
31	29	------	3.0	16	------	105	------	22	------	16	1.4	------
TOTAL	191.9	220.52	38.39	57.5	294.0	2,206	2,759	770	604	641	85.6	59.0
MEAN	6.19	7.35	1.24	1.85	10.5	71.2	92.0	24.8	20.1	20.7	2.76	1.97
MAX	60	27	3.0	16	48	136	240	30	21	29	16	4.9
MIN	1.3	.70	.70	1.2	1.8	40	31	13	18	14	1.4	1.4
AC-FT	381	437	76	114	583	4,380	5,470	1,530	1,200	1,270	170	117

CAL YR 1974 TOTAL 1,973.41 MEAN 5.41 MAX 60 MIN .70 AC-FT 3,910
WTR YR 1975 TOTAL 7,926.91 MEAN 21.7 MAX 240 MIN .70 AC-FT 15,720

PEAK DISCHARGE (BASE, 500 CFS).--No peak above base.

09496500. Carrizo Creek near Show Low, Ariz.

LOCATION.--Lat 33°59'07", long 110°16'49", in sec.24, T.7 N., R.19 E. (unsurveyed), Gila County, in Fort Apache Indian Reservation, on upstream side of center pier of bridge on U.S. Highway 60, 1 mi (2 km) downstream from Corduroy Creek, 23 mi (37 km) southwest of Show Low, and 24 mi (39 km) upstream from mouth.

DRAINAGE AREA.--439 mi^2 (1,137 km^2).

PERIOD OF RECORD.--June 1951 to June 1961, June 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,750.25 ft (1,447.876 m) above mean sea level.

AVERAGE DISCHARGE.--17 years (1951-60, 1967-75), 42.9 ft^3/s (1.215 m^3/s), 31,080 acre-ft/yr (38.3 hm^3/yr); median of yearly mean discharges, 25 ft^3/s (0.71 m^3/s), 18,100 acre-ft/yr (22 hm^3/yr), unadjusted for transbasin diversion.

EXTREMES.--Current year: Maximum discharge, 726 ft^3/s (20.6 m^3/s) Oct. 29 (gage height, 2.77 ft or 0.844 m); maximum gage height, 6.12 ft (1.865 m) July 11, backwater from construction work; minimum daily discharge, 1.5 ft^3/s (0.042 m^3/s) Aug. 31, Sept. 1, 4.
Period of record: Maximum discharge, 20,500 ft^3/s (581 m^3/s) Jan. 18, 1952 (gage height, 12.08 ft or 3.682 m), from rating curve extended above 2,000 ft^3/s (57 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 0.2 ft^3/s (0.006 m^3/s) July 12, 1951, Sept. 21, 1959.
Maximum discharge since at least 1951, about 23,000 ft^3/s (650 m^3/s) Dec. 30, 1965 (gage height, 13.0 ft or 3.96 m, from flood-mark), from rating curve extended above 2,000 ft^3/s (57 m^3/s) on basis of slope-area measurement at gage height 12.08 ft (3.682 m).

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Diversions for irrigation above station of less than 300 acres (1.21 km^2). Records include transbasin diversion from Show Low Creek. (See sta 09495000.)

REVISIONS.--WRD Ariz. 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	37	6.9	6.5	15	56	252	47	37	20	17	1.5
2	8.4	33	6.9	6.4	10	62	163	45	36	23	13	5.0
3	8.4	43	6.9	6.5	10	56	183	44	36	24	8.0	2.0
4	8.9	36	6.9	6.0	10	44	241	44	35	24	3.5	1.5
5	8.9	27	12	6.0	10	48	193	43	35	24	3.0	3.0
6	12	22	8.0	7.0	10	53	130	43	35	24	2.5	5.0
7	21	20	7.4	7.4	10	56	121	38	35	29	2.0	5.0
8	17	17	6.9	7.4	10	53	125	37	35	47	2.0	20
9	15	17	8.9	8.4	10	180	116	37	34	59	2.0	50
10	14	15	5.6	8.0	10	203	335	37	34	90	2.0	10
11	14	14	5.6	8.0	10	163	403	34	33	200	5.0	5.0
12	15	17	5.2	6.9	10	141	460	34	32	29	2.0	3.0
13	18	29	4.4	8.4	10	121	472	34	31	37	2.0	2.5
14	17	27	4.8	8.0	15	133	369	35	31	26	2.0	2.0
15	16	12	4.8	8.5	30	149	348	36	30	22	2.0	2.0
16	15	11	4.8	8.0	25	172	270	38	29	21	2.0	2.0
17	14	12	4.8	8.0	25	169	169	41	29	23	2.0	2.0
18	14	14	4.8	8.0	25	128	141	43	28	22	2.0	2.0
19	14	14	4.8	8.0	22	133	103	41	29	21	2.0	2.0
20	14	13	4.8	8.0	19	149	86	41	28	18	2.0	2.0
21	15	13	4.8	8.0	22	118	71	41	28	18	3.0	2.0
22	30	12	4.8	8.0	20	99	59	43	27	18	2.5	2.0
23	25	12	4.8	8.0	16	75	53	41	26	19	2.0	2.0
24	17	9.5	4.0	8.0	14	59	50	40	25	18	2.0	2.0
25	17	8.9	4.0	8.0	17	53	47	38	25	18	1.8	2.0
26	16	8.4	4.5	8.0	19	69	43	37	24	18	1.8	2.0
27	18	7.4	5.5	8.0	30	99	41	36	24	20	2.0	2.0
28	18	7.4	6.0	8.0	45	78	44	37	23	16	2.0	2.0
29	248	7.4	6.9	8.0	---	84	48	30	23	18	1.8	2.0
30	94	6.9	6.9	10	---	76	48	29	19	18	1.8	2.0
31	57	---	6.9	20	---	146	---	38	---	18	1.5	---
TOTAL	828.0	522.9	184.3	251.4	479	3225	5184	1202	896	982	100.2	147.5
MEAN	26.7	17.4	5.95	8.11	17.1	104	173	38.8	29.9	31.7	3.23	4.92
MAX	248	43	12	20	45	203	472	47	37	200	17	50
MIN	8.4	6.9	4.0	6.0	10	44	41	29	19	16	1.5	1.5
AC-FT	1640	1040	366	499	950	6400	10280	2380	1780	1950	199	293

CAL YR 1974 TOTAL 4605.92 MEAN 12.6 MAX 248 MIN .72 AC-FT 9140
WTR YR 1975 TOTAL 14002.30 MEAN 38.4 MAX 472 MIN 1.5 AC-FT 27770

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

NOTE.--No gage-height record Jan. 16 to Feb. 19, July 24 to Sept. 30.

09497500. Salt River near Chrysotile, Ariz.

LOCATION.--Lat 33°47'53", long 110°29'57", in sec.25, T.5 N., R.17 E. (unsurveyed), Gila County, in San Carlos Indian Reservation, on left bank 1,200 ft (366 m) upstream from bridge on U.S. Highway 60, 5.7 mi (9.2 km) northeast of Chrysotile, 8 mi (13 km) upstream from Cibecue Creek, and 33 mi (53 km) downstream from confluence of Black and White Rivers.

DRAINAGE AREA.--2,849 mi^2 (7,379 km^2).

PERIOD OF RECORD.--September 1924 to current year (monthly discharge only July to December 1954).

GAGE.--Water-stage recorder. Datum of gage is 3,354.57 ft (1,022.473 m) above mean sea level.

AVERAGE DISCHARGE.--51 years, 598 ft^3/s (16.94 m^3/s), 433,300 acre-ft/yr (534 hm^3/yr); median of yearly mean discharges, 480 ft^3/s (13.6 m^3/s), 348,000 acre-ft/yr (430 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 7,080 ft^3/s (201 m^3/s) Oct. 29 (gage height, 6.49 ft or 1.978 m); minimum daily, 108 ft^3/s (3.06 m^3/s) Sept. 2.
Period of record: Maximum discharge, 52,900 ft^3/s (1,500 m^3/s) Feb. 7, 1937 (gage height, 15.18 ft or 4.627 m); minimum, 49 ft^3/s (1.39 m^3/s) July 6, 7, 1955.
Flood peak of 74,000 ft^3/s (2,100 m^3/s) occurred prior to 1924 and is believed to be the peak of the flood of Jan. 19, 1916 (gage height, 18 ft or 5.5 m, from floodmarks), from rating curve extended above 52,000 ft^3/s (1,500 m^3/s).

REMARKS.--Records good. Several diversions for irrigation above station of about 3,100 acres (12.5 km^2), one diversion into the basin (see record of Forestdale Creek diversion from Show Low Creek, near Show Low), and one diversion out of the basin (see record of Willow Creek diversion from Black River, near Morenci).

REVISIONS (WATER YEARS).--WSP 859: 1926-27, 1929-30, 1934, 1936. WSP 899: 1927, 1932, 1937, 1938(M). WSP 1313: 1925-26(M), 1929-30(M), 1935-36(M), 1944(M). WSP 1343: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	600	168	154	319	753	1370	2700	761	260	232	111
2	125	650	168	164	289	915	1430	2660	746	251	211	108
3	122	700	179	168	251	1080	1360	2650	746	265	190	137
4	116	650	175	144	232	1140	1410	2620	761	265	175	116
5	116	550	194	131	224	1070	1520	2550	777	274	161	147
6	116	500	198	137	215	1010	1660	2320	746	294	150	182
7	190	450	186	161	206	1060	1900	1950	720	324	140	202
8	255	400	182	175	194	1090	1970	1730	700	450	135	412
9	232	372	171	186	190	2700	1770	1590	670	300	206	849
10	274	372	161	182	194	4080	2670	1530	627	250	141	708
11	269	412	147	171	198	2760	3080	1540	591	237	161	824
12	265	406	141	157	198	3060	2430	1630	564	304	202	598
13	294	372	131	150	202	2650	2520	1730	537	584	164	498
14	340	372	137	141	215	2090	2120	1740	511	479	175	472
15	361	350	150	161	620	1780	2040	1730	485	436	161	406
16	340	329	141	179	1100	1790	2360	1730	466	361	157	356
17	304	314	137	179	1000	1580	2630	1810	442	340	150	314
18	274	299	147	179	613	1410	2720	1730	424	314	141	284
19	246	289	147	175	442	1230	2390	1560	412	289	131	269
20	228	274	150	175	412	1390	2150	1380	400	269	131	265
21	215	265	144	171	436	1620	2230	1270	383	255	157	260
22	232	255	144	171	448	1900	2660	1190	361	265	171	251
23	591	241	150	171	329	1950	3180	1140	345	383	164	228
24	350	232	154	168	284	1740	3420	1050	329	251	164	206
25	329	224	128	161	294	1520	3630	950	309	237	161	194
26	340	211	113	164	430	1720	3990	900	294	304	147	182
27	466	198	119	171	571	1830	4100	900	284	251	134	179
28	383	190	137	168	671	1510	3580	950	274	269	125	171
29	2790	186	161	175	---	1380	3040	924	265	389	122	164
30	1070	182	171	194	---	1280	2880	898	260	324	119	161
31	700	---	168	294	---	1190	---	816	---	274	113	---
TOTAL	12061	10845	4799	5277	10777	52278	74210	49868	15190	9748	4891	9254
MEAN	389	362	155	170	385	1686	2474	1609	506	314	158	308
MAX	2790	700	198	294	1100	4080	4100	2700	777	584	232	849
MIN	116	182	113	131	190	753	1360	816	260	237	113	108
AC-FT	23920	21510	9520	10470	21380	103700	147200	98910	30130	19340	9700	18360

CAL YR 1974 TOTAL 94196 MEAN 258 MAX 2790 MIN 70 AC-FT 186800
WTR YR 1975 TOTAL 259198 MEAN 710 MAX 4100 MIN 108 AC-FT 514100

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1030	6.49	7,080	4-27	0130	5.30	4,400
3- 9	2215	5.83	5,200				

09497800. Cibecue Creek near Chrysotile, Ariz.

LOCATION.--Lat 33°50'35", long 110°33'25", in E½ sec.8, T.5 N., R.17 E. (unsurveyed), Gila County, in Fort Apache Indian Reservation, on right bank 0.5 mi (0.8 km) upstream from mouth and 7 mi (11 km) north of Chrysotile.

DRAINAGE AREA.--295 mi^2 (764 km^2).

PERIOD OF RECORD.--May 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,200 ft (975 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 38.9 ft^3/s (1.102 m^3/s), 28,180 acre-ft/yr (34.7 hm^3/yr); median of yearly mean discharges, 29 ft^3/s (0.82 m^3/s), 21,000 acre-ft/yr (26 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,180 ft^3/s (90.1 m^3/s) Oct. 29 (gage height, 6.5 ft or 1.98 m); minimum daily, 9.5 ft^3/s (0.27 m^3/s) Dec. 25.
Period of record: Maximum discharge, 8,800 ft^3/s (249 m^3/s) Dec. 30, 1965 (gage height, 10.70 ft or 3.261 m), from rating curve extended above 2,200 ft^3/s (62 m^3/s) on basis of slope-area measurement at gage height 10.50 ft (3.200 m); minimum daily, 4.1 ft^3/s (0.12 m^3/s) Aug. 17-19, 1968.

REMARKS.--Records fair. Small diversions for irrigation in the vicinity of the village of Cibecue.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	36	13	13	12	24	65	48	17	11	15	12
2	10	51	13	13	12	34	71	44	16	11	15	12
3	10	44	13	10	12	43	72	41	15	11	15	12
4	10	36	13	10	12	51	74	38	13	12	15	12
5	10	37	24	13	12	51	80	36	14	11	15	18
6	10	34	15	16	12	49	88	33	13	16	13	17
7	65	30	13	14	12	44	101	32	15	35	13	32
8	40	27	12	13	12	50	103	31	15	97	16	300
9	20	25	12	15	12	52	104	30	14	39	14	63
10	15	23	12	12	12	59	105	29	13	18	22	21
11	15	22	12	12	12	64	88	27	12	14	75	18
12	19	21	12	11	12	91	97	25	13	22	25	17
13	36	19	12	12	12	74	105	24	12	29	15	27
14	27	19	12	12	16	65	101	22	13	25	15	21
15	16	18	12	12	25	60	137	21	12	19	15	18
16	15	18	13	13	20	56	156	21	12	18	12	18
17	15	16	12	12	20	54	145	21	12	22	12	17
18	14	16	12	12	19	57	129	20	11	25	12	16
19	15	16	12	11	19	62	115	18	13	18	12	18
20	14	15	11	11	16	77	107	18	13	18	15	17
21	14	16	12	11	16	89	101	18	13	16	15	14
22	59	14	12	11	14	91	95	19	13	31	12	15
23	130	14	12	11	15	91	89	19	12	63	15	14
24	60	15	10	12	17	86	83	15	12	22	12	14
25	41	14	9.5	12	15	81	75	18	11	18	12	14
26	36	14	12	12	16	81	67	17	11	129	12	14
27	35	14	14	12	16	69	64	16	12	95	12	13
28	37	13	15	12	16	67	59	15	12	70	12	13
29	810	14	16	12	---	64	56	18	11	30	12	13
30	35	14	13	15	---	62	51	20	11	20	12	13
31	33	---	13	14	---	60	---	15	---	18	12	---
TOTAL	1676	659	398.5	381	422	1978	2783	775	386	983	499	823
MEAN	54.1	22.0	12.9	12.3	15.1	63.8	92.8	25.0	12.9	31.7	16.1	27.4
MAX	810	51	24	16	25	91	156	48	17	129	75	300
MIN	10	13	9.5	10	12	24	51	15	11	11	12	12
AC-FT	3320	1310	790	756	837	3920	5520	1540	766	1950	990	1630

CAL YR 1974 TOTAL 8117.2 MEAN 22.2 MAX 810 MIN 8.0 AC-FT 16100
WTR YR 1975 TOTAL 11763.5 MEAN 32.2 MAX 810 MIN 9.5 AC-FT 23330

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	0700	6.5	3,180	9-8	1915	6.18	2,830
7-26	1645	4.9	1,500				

09497900. Cherry Creek near Young, Ariz.

LOCATION.--Lat 34°04'58", long 110°55'25", in SE¼NE¼ sec.32, T.9 N., R.14 E., Gila County, on left bank 0.3 mi (0.5 km) downstream from Deadman Canyon and 2 mi (3 km) southeast of Young.

DRAINAGE AREA.--62.1 mi^2 (161 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,950 ft (1,509 m), from topographic map. Prior to June 11, 1973, at datum 2.07 ft (0.631 m) higher.

AVERAGE DISCHARGE.--12 years, 11.1 ft^3/s (0.314 m^3/s), 8,040 acre-ft/yr (9.91 hm^3/yr); median of yearly mean discharges, 7.8 ft^3/s (0.22 m^3/s), 5,700 acre-ft/yr (7.0 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 258 ft^3/s (7.31 m^3/s) July 22 (gage height, 2.95 ft or 0.899 m), from rating curve extended above 70 ft^3/s (2.0 m^3/s) on basis of slope-area measurements at gage heights 5.90 and 8.93 ft (1.798 and 2.722 m); maximum gage height, 3.01 ft (0.917 m) Oct. 29 (backwater from irrigation diversion dam); minimum daily discharge, 0.10 ft^3/s (0.003 m^3/s) Oct. 1, 2.

Period of record: Maximum discharge, 7,290 ft^3/s (206 m^3/s) Oct. 19, 1972 (gage height, 8.93 ft or 2.722 m), from rating curve extended above 70 ft^3/s (2.0 m^3/s) on basis of slope-area measurements at gage heights 5.90 and 8.93 ft (1.798 and 2.722 m); no flow July 18, 20, 1972.

REMARKS.--Records fair except those for May to September, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	15	2.0	1.4	1.7	26	29	3.9	2.4	.54	.30	.23
2	.10	12	2.0	1.4	1.7	23	23	3.8	2.3	.50	.30	.28
3	.11	24	1.8	1.4	1.7	19	28	3.5	2.3	.50	.30	.28
4	.12	22	1.8	1.4	1.7	15	25	3.4	2.2	.50	.30	.30
5	.13	13	2.5	1.4	1.7	11	17	3.2	2.1	.50	.20	.30
6	.25	9.0	1.8	1.4	1.7	9.5	12	3.1	2.0	.50	.20	.35
7	.21	6.6	1.8	1.4	1.5	8.6	13	2.9	1.9	.50	.20	.41
8	.16	5.9	1.8	1.4	1.5	8.6	16	2.9	1.8	.50	.20	.39
9	.12	4.9	1.7	1.4	1.4	55	20	2.8	1.7	.40	.20	.35
10	.13	4.2	1.7	1.4	1.4	49	77	2.7	1.6	.40	.20	.34
11	.16	3.5	1.7	1.4	1.4	48	107	2.7	1.5	.40	12	.33
12	.34	3.2	1.7	1.5	1.4	43	111	2.6	1.5	.40	.57	.31
13	.25	3.0	1.7	1.5	1.4	47	129	2.6	1.4	.40	.29	.32
14	.25	3.0	1.7	1.5	1.4	55	128	2.6	1.3	.40	.25	.30
15	.30	2.5	1.7	1.5	2.5	50	96	2.5	1.2	.40	.23	.29
16	.41	2.5	1.7	1.5	2.7	51	55	2.5	1.2	.40	.23	.28
17	.46	2.5	1.7	1.5	3.2	72	33	2.5	1.1	.40	.22	.27
18	.46	2.5	1.7	1.5	3.2	76	26	2.5	1.1	.40	.21	.27
19	.42	2.2	1.7	1.5	3.2	78	20	2.5	1.0	.40	.22	.27
20	.48	2.2	1.7	1.5	3.2	53	16	2.5	.96	.40	.26	.27
21	.55	2.2	1.7	1.5	2.7	32	12	2.5	.91	.30	.26	.26
22	4.7	2.2	1.7	1.6	2.7	22	10	2.5	.87	21	.28	.24
23	4.8	2.2	1.5	1.6	2.7	15	8.6	2.4	.82	8.0	.25	.25
24	4.4	2.2	1.4	1.6	3.0	11	7.1	2.4	.78	.50	.23	.25
25	4.0	2.2	1.5	1.6	3.2	10	6.6	2.4	.74	.50	.22	.26
26	3.8	2.0	1.6	1.6	9.0	14	6.3	2.4	.70	.50	.23	.26
27	5.3	2.0	1.6	1.6	26	15	5.6	2.4	.67	.50	.24	.26
28	6.3	2.0	1.6	1.6	28	12	4.9	2.4	.64	.50	.23	.26
29	95	2.0	1.6	1.6	------	11	4.6	2.4	.60	.41	.23	.25
30	32	2.0	1.6	1.6	------	12	4.2	2.4	.57	.41	.23	.26
31	27	------	1.4	1.7	------	22	------	2.4	------	.34	.23	------
TOTAL	192.81	164.7	53.1	46.5	116.9	973.7	1,050.9	84.3	39.86	41.80	19.51	8.69
MEAN	6.22	5.49	1.71	1.50	4.18	31.4	35.0	2.72	1.33	1.35	.63	.29
MAX	95	24	2.5	1.7	28	78	129	3.9	2.4	21	12	.41
MIN	.10	2.0	1.4	1.4	1.4	8.6	4.2	2.4	.57	.30	.20	.23
AC-FT	382	327	105	92	232	1,930	2,080	167	79	83	39	17

CAL YR 1974 TOTAL 1,362.31 MEAN 3.73 MAX 95 MIN .08 AC-FT 2,700
WTR YR 1975 TOTAL 2,792.77 MEAN 7.65 MAX 129 MIN .10 AC-FT 5,540

PEAK DISCHARGE (BASE, 250 CFS).--July 22 (2045) 258 cfs (2.95 ft).

09497980. Cherry Creek near Globe, Ariz.

LOCATION.--Lat 33°49'40", long 110°51'20", in SW¼ sec.30, T.6 N., R.15 E. (unsurveyed), Gila County, in Tonto National Forest, on left bank 0.2 mi (0.3 km) upstream from Devils Chasm, 13 mi (21 km) upstream from mouth, and 30 mi (48 km) north of Globe.

DRAINAGE AREA.--200 mi^2 (518 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 3,200 ft (975 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 35.1 ft^3/s (0.994 m^3/s), 25,430 acre-ft/yr (31.4 hm^3/yr); median of yearly mean discharges, 21 ft^3/s (0.59 m^3/s), 15,200 acre-ft/yr (19 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 715 ft^3/s (20.2 m^3/s) Oct. 24 (gage height, 3.83 ft or 1.167 m, from high-water mark in gage well); minimum daily, 5.8 ft^3/s (0.16 m^3/s) Sept. 1.
Period of record: Maximum discharge, 8,300 ft^3/s (235 m^3/s) Oct. 19, 1972 (gage height, 14.0 ft or 4.27 m, from floodmarks), from rating curve extended above 330 ft^3/s (9.3 m^3/s) on basis of slope-area measurements at gage heights 5.85, 6.70, 8.70, and 12.3 ft (1.783, 2.042, 2.652, and 3.75 m); minimum, 3.2 ft^3/s (0.091 m^3/s) Aug. 27, 28, Sept. 17, 1965, Aug. 14, 1970.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	17	7.7	7.8	7.6	54	41	17	8.6	6.0	6.6	5.8
2	6.3	14	7.7	8.1	7.4	43	43	16	8.3	6.0	6.4	6.8
3	6.0	12	7.6	7.7	7.5	33	46	15	8.0	6.0	6.3	6.4
4	6.0	11	8.5	7.5	8.1	27	44	15	8.0	6.3	6.3	6.3
5	6.8	10	11	7.6	7.7	23	35	14	7.7	7.1	6.3	6.4
6	7.1	9.5	8.4	7.5	7.5	20	30	14	7.7	6.8	6.4	7.5
7	7.1	9.1	8.0	7.6	7.7	18	32	14	7.7	8.0	6.2	8.7
8	6.3	8.8	7.8	7.6	7.7	20	44	13	7.7	6.5	6.2	8.8
9	6.3	8.6	7.7	10	7.7	113	60	13	7.7	6.3	7.2	6.9
10	6.3	8.3	7.7	8.2	8.2	94	166	12	7.4	7.7	6.6	6.5
11	6.3	8.0	7.7	7.8	8.2	140	220	12	7.4	6.8	6.4	6.3
12	6.3	8.0	7.7	7.6	7.7	131	225	11	7.1	68	17	6.3
13	6.3	8.0	7.7	7.6	7.8	102	211	11	7.1	25	9.4	6.2
14	6.0	8.0	7.7	7.6	9.3	99	236	11	7.1	13	7.1	6.4
15	6.0	8.0	7.7	7.5	20	93	173	11	7.1	12	6.4	6.2
16	6.0	8.0	7.6	7.4	20	99	92	11	6.8	10	6.3	6.1
17	6.0	7.9	7.6	7.4	23	100	64	11	6.8	8.0	6.2	6.1
18	6.0	7.9	7.6	7.4	21	89	50	11	6.8	7.0	6.1	6.3
19	6.1	7.9	7.6	7.4	20	108	39	10	6.8	7.0	6.1	6.5
20	6.1	7.7	7.5	7.4	19	80	35	9.9	6.8	7.0	6.4	6.5
21	6.1	7.7	7.4	7.4	18	54	31	9.9	6.8	7.0	6.4	6.3
22	11	7.7	7.7	7.4	16	40	28	9.9	6.5	29	6.4	6.4
23	8.8	7.6	7.7	7.4	16	32	26	9.9	6.5	29	6.2	6.5
24	160	7.4	7.5	7.4	16	27	24	9.5	6.5	16	6.0	6.5
25	68	7.4	7.7	7.4	20	24	23	9.2	6.3	13	6.0	6.5
26	38	7.4	8.2	7.4	32	28	22	8.9	6.3	10	6.0	6.4
27	25	7.4	7.8	7.4	57	29	21	8.9	6.3	7.2	6.1	6.4
28	26	7.6	7.7	7.6	64	28	20	8.9	6.3	7.2	6.0	6.4
29	29	7.7	7.8	7.7	---	25	19	9.5	6.3	8.0	6.0	6.4
30	26	7.7	7.6	8.2	---	26	18	9.2	6.3	7.0	5.9	6.6
31	21	---	7.6	8.0	---	29	---	8.9	---	6.8	5.9	---
TOTAL	544.7	263.3	243.2	238.0	472.1	1828	2118	354.6	212.7	370.7	208.8	197.4
MEAN	17.6	8.78	7.85	7.68	16.9	59.0	70.6	11.4	7.09	12.0	6.74	6.58
MAX	160	17	11	10	64	140	236	17	8.6	68	17	8.8
MIN	6.0	7.4	7.4	7.4	7.4	18	18	8.9	6.3	6.0	5.9	5.8
AC-FT	1080	522	482	472	936	3630	4200	703	422	735	414	392

CAL YR 1974 TOTAL 4047.8 MEAN 11.1 MAX 160 MIN 5.8 AC-FT 8030
WTR YR 1975 TOTAL 7051.5 MEAN 19.3 MAX 236 MIN 5.8 AC-FT 13990

PEAK DISCHARGE (BASE, 750 CFS).--No peak above base.

09498500. Salt River near Roosevelt, Ariz.

LOCATION.--Lat 33°37'10", long 110°55'15", in SE¼NE¼ sec.9, T.3 N., R.14 E. (unsurveyed), Gila County, in Tonto National Forest on left bank 100 ft (30 m) downstream from bridge on State Highway 288, 0.3 mi (0.5 km) downstream from Pinal Creek, 1 mi (2 km) upstream from diversion dam for power canal, 14 mi (23 km) east of village of Roosevelt, and 17 mi (27 km) upstream from Roosevelt Dam.

DRAINAGE AREA.--4,306 mi^2 (11,153 km^2).

PERIOD OF RECORD.--January 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,177.14 ft (663.592 m) above mean sea level. Prior to 1925, nonrecording gage at diversion dam about 1 mi (2 km) downstream at different datum. Nonrecording gage at present site and datum 1925 to Jan. 17, 1935. May 20, 1955, to July 30, 1959, supplementary water-stage recorder at diversion dam.

AVERAGE DISCHARGE.--62 years, 842 ft^3/s (23.85 m^3/s), 610,000 acre-ft/yr (752 hm^3/yr); median of yearly mean discharges, 660 ft^3/s (18.7 m^3/s), 478,000 acre-ft/yr (590 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 10,100 ft^3/s (286 m^3/s) Oct. 29 (gage height, 13.42 ft or 4.090 m); minimum daily, 125 ft^3/s (3.54 m^3/s) Sept. 2.
Period of record: Maximum discharge, 117,000 ft^3/s (3,310 m^3/s) Mar. 14, 1941 (gage height, 24.4 ft or 7.44 m), from rating curve extended above 55,000 ft^3/s (1,600 m^3/s) on basis of velocity-area studies and float-area measurements at 66,000 ft^3/s (1,870 m^3/s) and 102,000 ft^3/s (2,890 m^3/s); maximum gage height, 25.8 ft (7.86 m) Dec. 23, 1965; minimum discharge, 59 ft^3/s (1.67 m^3/s) all or part of each day, July 1-4, 7-12, 1955.
A discharge of about 42 ft^3/s (1.19 m^3/s) was reported Aug. 5, 1911.

REMARKS.--Records good. Several small diversions for irrigation of about 4,000 acres (16.2 km^2) above station and 2 transbasin diversions above station, 1 into basin from Show Low Creek and 1 out of basin to Willow Creek. Records show inflow to Roosevelt Lake; Tonto Creek also contributes to Roosevelt Lake; see records elsewhere in this report.

REVISIONS (WATER YEARS).--WSP 1049: 1914, 1916, 1918-19, 1926. WSP 1343: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	896	262	226	341	1,040	1,520	2,990	812	212	277	129
2	156	763	256	223	326	1,180	1,760	2,940	742	218	244	125
3	156	854	244	223	304	1,390	1,680	2,910	707	212	220	127
4	158	889	253	218	283	1,510	1,560	2,880	728	247	210	143
5	156	749	277	200	261	1,450	1,800	2,840	735	241	190	147
6	161	652	283	188	262	1,290	1,930	2,680	735	247	188	163
7	178	598	280	192	256	1,270	2,030	2,300	707	289	163	198
8	301	535	262	210	250	1,390	2,340	1,990	664	406	163	271
9	310	490	256	232	244	2,000	2,220	1,800	640	475	145	1,240
10	283	470	244	247	238	5,800	3,690	1,690	604	301	208	587
11	307	485	235	238	244	3,900	4,160	1,640	570	256	208	893
12	307	515	218	220	247	4,100	3,230	1,720	545	241	258	749
13	318	495	212	210	253	3,600	3,400	1,860	515	318	241	580
14	366	465	210	198	274	2,860	3,100	1,900	470	545	192	515
15	394	455	210	198	322	2,470	2,800	1,880	450	445	190	475
16	390	435	208	205	1,350	2,320	2,960	1,860	422	490	185	394
17	354	414	208	226	1,320	2,160	3,180	1,880	414	398	170	350
18	314	406	202	229	1,140	1,910	3,340	1,910	382	354	163	304
19	286	386	210	229	694	1,700	3,000	1,740	366	330	158	274
20	259	374	215	218	604	1,800	2,670	1,540	358	310	147	271
21	244	358	215	226	520	1,980	2,570	1,250	342	286	143	253
22	268	338	210	220	410	2,200	2,890	1,260	326	271	158	250
23	532	330	212	226	390	2,340	3,420	1,160	304	256	182	247
24	545	318	212	223	390	2,190	3,840	1,060	289	274	175	226
25	374	304	208	220	370	1,880	4,060	980	277	382	165	212
26	342	298	182	220	426	1,960	4,300	924	268	350	163	198
27	334	289	163	223	676	2,220	4,500	910	253	247	156	190
28	435	277	172	229	896	1,900	4,280	931	241	346	143	185
29	3,850	268	202	235	------	1,700	3,540	952	226	330	137	180
30	2,980	265	215	241	------	1,530	3,280	966	215	455	133	175
31	1,200	------	229	262	------	1,420	------	896	------	322	133	------
TOTAL	16,423	14,371	6,965	6,855	13,298	66,460	89,050	54,239	14,307	10,054	5,608	10,051
MEAN	530	479	225	221	475	2,144	2,968	1,750	477	324	181	335
MAX	3,850	896	283	262	1,350	5,800	4,500	2,990	812	545	277	1,240
MIN	156	265	163	188	238	1,040	1,520	896	215	212	133	125
AC-FT	32,580	28,500	13,820	13,600	26,380	131,800	176,600	107,600	28,380	19,940	11,120	19,940

CAL YR 1974 TOTAL 119,095 MEAN 326 MAX 3,850 MIN 86 AC-FT 236,200
WTR YR 1975 TOTAL 307,681 MEAN 843 MAX 5,800 MIN 125 AC-FT 610,300

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1800	13.42	10,100	4-11	1400	11.25	4,540
3-10	0430	12.22	6,950	4-27	0900	11.25	4,700

09498800. Tonto Creek near Gisela, Ariz.

LOCATION.--Lat 34°07'44", long 111°15'17", in NE¼ sec.18, T.9 N., R.11 E., Gila County, in Tonto National Forest, on left bank 0.2 mi (0.3 km) upstream from Houston Creek, and 1.5 mi (2.4 km) northeast of Gisela.

DRAINAGE AREA.--430 mi^2 (1,114 km^2).

PERIOD OF RECORD.--December 1964 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 2,940 ft (896 m), from topographic map.

AVERAGE DISCHARGE.--10 years (1965-75), 120 ft^3/s (3.398 m^3/s), 86,940 acre-ft/yr (107 hm^3/yr); median of yearly mean discharges, 82 ft^3/s (2.32 m^3/s), 59,400 acre-ft/yr (73 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,860 ft^3/s (52.7 m^3/s) Oct. 29 (gage height, 7.38 ft or 2.249 m); minimum daily, 6.7 ft^3/s (0.19 m^3/s) Oct. 3.
Period of record: Maximum discharge, 38,000 ft^3/s (1,080 m^3/s) Sept. 5, 1970 (gage height, 29.2 ft or 8.90 m, from profile past gage), by slope-area measurement of peak flow; minimum, 1.5 ft^3/s (0.042 m^3/s) July 13, 1971.

REMARKS.--Records fair except those for period of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	119	18	14	22	110	264	96	22	9.3	8.6	7.6
2	6.9	120	18	15	20	119	232	92	22	10	8.2	7.2
3	6.7	504	18	16	19	114	243	86	22	11	7.9	7.6
4	6.9	303	18	14	20	95	249	82	21	10	7.2	8.2
5	7.2	163	25	15	20	78	225	78	20	12	7.9	9.3
6	7.2	113	35	16	20	78	188	71	19	33	8.2	8.2
7	9.0	82	25	17	19	68	210	64	19	21	7.9	11
8	11	63	22	16	19	62	243	60	18	24	8.2	26
9	9.3	58	20	19	18	287	345	54	17	25	8.2	19
10	9.0	64	18	21	18	315	1080	53	17	19	8.6	14
11	7.9	56	18	17	21	441	1000	51	16	95	9.3	10
12	8.2	48	15	16	23	539	874	49	16	68	34	9.6
13	9.0	43	15	15	21	518	934	45	15	53	27	110
14	9.6	39	14	17	24	428	784	44	14	39	18	25
15	9.3	36	14	17	61	388	640	43	14	42	13	16
16	8.6	34	13	17	78	420	504	42	14	19	10	13
17	7.9	31	13	16	120	354	404	42	14	17	10	13
18	7.9	30	13	16	120	276	306	41	14	14	9.6	13
19	7.6	29	12	16	120	312	243	41	14	12	9.6	12
20	7.6	27	12	16	114	309	215	39	14	12	10	12
21	7.6	25	12	16	106	240	215	36	14	11	10	11
22	9.0	23	12	15	82	200	225	35	13	12	10	11
23	13	23	12	15	68	145	210	35	13	20	10	10
24	17	22	12	16	61	113	190	34	12	12	9.3	10
25	12	21	13	16	63	100	182	31	11	10	9.0	10
26	10	20	14	16	88	153	170	28	10	9.6	8.2	10
27	11	20	15	16	94	208	143	27	10	10	8.2	10
28	24	20	15	16	108	198	124	26	9.6	9.6	8.2	9.3
29	1120	20	15	18	---	157	112	27	9.3	11	7.9	10
30	324	19	15	19	---	157	106	27	9.0	10	7.6	9.0
31	240	---	15	23	---	182	---	25	---	9.0	7.6	---
TOTAL	1951.6	2175	506	512	1567	7164	10860	1504	452.9	669.5	327.4	452.0
MEAN	63.0	72.5	16.3	16.5	56.0	231	362	48.5	15.1	21.6	10.6	15.1
MAX	1120	504	35	23	120	539	1080	96	22	95	34	110
MIN	6.7	19	12	14	18	62	106	25	9.0	9.0	7.2	7.2
AC-FT	3870	4310	1000	1020	3110	14210	21540	2980	898	1330	649	897

CAL YR 1974 TOTAL 16540.6 MEAN 45.3 MAX 1120 MIN 5.0 AC-FT 32810
WTR YR 1975 TOTAL 28141.4 MEAN 77.1 MAX 1120 MIN 6.7 AC-FT 55820

PEAK DISCHARGE (BASE, 1,000 CFS).--Oct. 29 (0900) 1,860 cfs (7.38 ft); Apr. 10 (2000) 1,460 cfs (6.90 ft).

NOTE.--No gage-height record Dec. 2 to Jan. 2.

09498870. Rye Creek near Gisela, Ariz.

LOCATION (revised).--Lat 34°01'57", long 111°17'26", in SW¼ sec.13, T.8 N., R.10 E., Gila County, in Tonto National Forest, on right bank, 0.5 mi (0.8 km) upstream from mouth, 0.8 mi (1.3 km) downstream from bridge on county road, and 4.8 mi (7.7 km) south of Gisela.

DRAINAGE AREA.--122 mi^2 (316 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,730 ft (832 m), from topographic map. Prior to Dec. 19, 1967, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--9 years, 15.6 ft^3/s (0.442 m^3/s), 11,300 acre-ft/yr (13.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,020 ft^3/s (28.9 m^3/s) July 8 (gage height, 3.75 ft or 1.143 m); minimum daily, 0.90 ft^3/s (0.025 m^3/s) Oct. 1-5, 10, 11, 15-27.
Period of record: Maximum discharge, 44,400 ft^3/s (1,260 m^3/s) Sept. 5, 1970 (gage height, 14.1 ft or 4.30 m, in gage well, 18.7 ft or 5.70 m, from profile past gage), from rating curve extended above 850 ft^3/s (24 m^3/s) on basis of slope-area measurements at gage heights 9.0 and 14.1 ft (2.74 and 4.30 m), present datum; minimum daily, 0.20 ft^3/s (0.006 m^3/s) July 5, 6, 1970.

REMARKS.--Records poor.

REVISIONS (WATER YEARS).--WRD Ariz. 1969: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	2.3	1.4	2.2	1.9	1.8	14	9.5	3.9	2.2	2.1	1.3
2	.90	15	1.4	2.2	1.9	1.8	14	9.1	3.9	2.2	2.1	1.3
3	.90	74	1.4	2.2	1.9	1.8	14	8.2	3.9	2.2	2.0	1.3
4	.90	23	1.5	2.2	1.9	1.8	14	7.9	3.9	2.2	2.0	18
5	.90	9.5	2.3	2.2	1.9	1.8	14	7.7	3.9	2.2	2.0	1.4
6	1.0	3.1	2.2	2.2	1.9	1.8	15	7.4	3.9	22	1.9	1.3
7	1.1	1.6	2.2	2.2	1.9	1.8	18	7.1	3.9	10	1.9	1.5
8	1.0	1.5	2.1	2.2	1.9	1.8	21	7.1	3.7	77	2.1	1.3
9	1.0	1.4	2.1	2.2	1.9	1.8	22	6.8	3.7	9.1	2.0	1.2
10	.90	1.4	2.1	2.2	1.9	1.8	57	6.6	3.7	3.5	3.6	1.2
11	.90	1.4	2.1	2.2	1.9	3.1	81	6.6	3.7	4.7	2.2	1.2
12	1.1	1.4	2.1	2.1	1.9	13	118	6.6	3.5	6.6	6.9	1.2
13	1.0	1.4	2.0	2.1	1.9	13	118	6.3	3.5	3.5	2.0	1.2
14	1.0	1.4	2.0	2.1	1.9	18	157	6.0	3.5	3.4	1.8	1.2
15	.90	1.4	2.0	2.1	2.0	26	161	5.8	3.5	3.2	1.8	1.2
16	.90	1.4	2.0	2.1	1.9	35	107	5.8	3.4	3.2	1.8	1.1
17	.90	1.4	2.0	2.1	1.9	39	75	6.8	3.4	3.7	1.8	1.1
18	.90	1.4	2.0	2.1	1.9	36	53	5.5	3.4	3.1	1.8	1.1
19	.90	1.4	2.0	2.0	1.9	39	39	5.5	3.2	3.0	1.7	1.1
20	.90	1.4	2.0	2.0	1.9	44	35	5.3	3.1	2.8	1.7	1.1
21	.90	1.4	2.2	2.0	1.9	40	31	5.1	3.0	2.8	1.7	1.1
22	.90	1.4	2.2	2.0	1.8	30	28	5.1	2.8	2.7	1.7	1.1
23	.90	1.4	2.2	2.0	1.8	20	24	4.9	2.7	2.7	1.7	1.1
24	.90	1.4	2.2	2.0	1.8	16	20	4.7	2.7	2.7	1.6	1.1
25	.90	1.4	2.2	2.0	1.8	13	18	4.7	2.6	2.8	1.6	1.1
26	.90	1.4	2.2	2.0	1.8	16	15	4.7	2.5	2.7	1.6	1.1
27	.90	1.4	2.2	2.0	1.8	14	14	4.5	2.3	2.6	1.6	1.1
28	11	1.4	2.2	2.0	1.8	13	12	4.3	2.2	2.5	1.5	1.1
29	217	1.4	2.2	1.9	------	12	11	4.3	2.2	2.3	1.4	1.1
30	3.5	1.4	2.2	1.9	------	11	9.9	4.3	2.2	2.2	1.4	1.3
31	2.3	------	2.2	1.9	------	11	------	4.1	------	2.1	1.4	------
TOTAL	259.00	160.8	63.1	64.6	52.6	480.1	1,329.9	188.3	97.8	197.9	62.4	52.5
MEAN	8.35	5.36	2.04	2.08	1.88	15.5	44.3	6.07	3.26	6.38	2.01	1.75
MAX	217	74	2.3	2.2	2.0	44	161	9.5	3.9	77	6.9	18
MIN	.90	1.4	1.4	1.9	1.8	1.8	9.9	4.1	2.2	2.1	1.4	1.1
AC-FT	514	319	125	128	104	952	2,640	373	194	393	124	104

CAL YR 1974 TOTAL 1,494.30 MEAN 4.09 MAX 217 MIN .90 AC-FT 2,960
WTR YR 1975 TOTAL 3,009.00 MEAN 8.24 MAX 217 MIN .90 AC-FT 5,970

PEAK DISCHARGE (BASE, 600 CFS).--Oct. 29 (0200) 860 cfs (3.55 ft); July 8 (1600) 1,020 cfs (3.75 ft).

09499000. Tonto Creek above Gun Creek, near Roosevelt, Ariz.

LOCATION.--Lat 33°58'48", long 111°18'10", in SW¼NE¼ sec.2, T.7 N., R.10 E., Gila County, in Tonto National Forest, on left bank 600 ft (183 m) upstream from Gun Creek, 17 mi (27 km) upstream from high-water line of Roosevelt Lake, and 24 mi (39 km) northwest of Roosevelt.

DRAINAGE AREA.--675 mi^2 (1,750 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 2,523.14 ft (769.053 m) above mean sea level.

AVERAGE DISCHARGE.--34 years (1941-75), 115 ft^3/s (3.257 m^3/s), 83,320 acre-ft/yr (103 hm^3/yr); median of yearly mean discharges, 82 ft^3/s (2.32 m^3/s), 59,400 acre-ft/yr (73 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,020 ft^3/s (57.2 m^3/s) Oct. 29 (gage height, 8.03 ft or 2.448 m); minimum daily, 2.9 ft^3/s (0.082 m^3/s) Aug. 1, 2, Sept. 3.
Period of record: Maximum discharge, 53,000 ft^3/s (1,500 m^3/s) Sept. 5, 1970 (gage height, 18.2 ft or 5.55 m), from rating curve extended above 27,000 ft^3/s (765 m^3/s) on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records good. Small diversions above station for irrigation.

REVISIONS.--WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	150	20	19	24	107	263	86	20	7.2	2.9	4.1
2	8.2	114	20	21	23	117	259	80	18	8.2	2.9	3.2
3	6.4	532	19	21	23	117	267	75	17	7.2	3.2	2.9
4	5.6	382	20	21	24	105	271	74	17	8.2	3.5	14
5	5.3	197	35	19	25	87	259	74	17	6.0	3.5	11
6	5.6	129	40	21	25	87	232	66	16	27	4.1	8.2
7	6.8	88	27	22	24	80	235	60	15	71	3.8	11
8	6.8	72	24	22	24	81	271	58	14	100	4.1	16
9	6.8	66	21	23	24	191	340	60	13	64	5.0	25
10	6.0	70	20	25	24	340	1,040	56	13	35	5.0	20
11	5.6	62	20	22	25	376	1,180	52	12	65	6.4	14
12	6.8	56	19	21	25	562	926	51	12	86	13	11
13	7.2	49	19	19	25	554	1,070	49	9.4	62	25	57
14	6.8	45	18	18	25	448	878	48	8.8	43	21	48
15	7.2	42	18	19	49	430	750	40	8.8	54	14	25
16	7.2	40	18	19	87	472	562	34	8.8	35	10	20
17	7.2	36	19	20	109	424	436	37	10	27	6.4	17
18	6.8	28	18	19	135	355	350	36	9.4	24	6.0	16
19	7.6	23	17	18	117	370	280	31	10	20	5.3	13
20	8.2	23	17	18	115	376	232	33	10	17	5.3	10
21	7.6	24	17	17	105	325	232	32	11	16	5.3	8.2
22	8.8	25	17	17	98	271	232	28	10	14	6.4	8.2
23	12	25	17	17	80	210	224	25	9.4	15	7.2	6.4
24	14	24	17	17	74	155	204	24	9.4	19	6.8	6.4
25	16	22	17	17	72	137	185	25	9.4	12	6.4	6.0
26	13	20	17	17	81	150	179	22	11	8.2	5.6	6.4
27	12	20	20	17	93	239	141	21	9.4	6.4	5.3	6.0
28	42	20	19	18	105	232	109	21	8.8	6.0	5.6	3.5
29	1,250	19	21	19	------	194	98	23	6.4	6.0	4.7	3.8
30	306	20	20	20	------	185	88	22	6.4	6.4	5.0	4.4
31	271	------	20	22	------	207	------	21	------	6.0	4.4	------
TOTAL	2,092.5	2,423	631	605	1,660	7,984	11,793	1,364	350.4	881.8	213.1	405.7
MEAN	67.5	80.8	20.4	19.5	59.3	258	393	44.0	11.7	28.4	6.87	13.5
MAX	1,250	532	40	25	135	562	1,180	86	20	100	25	57
MIN	5.3	19	17	17	23	80	88	21	6.4	6.0	2.9	2.9
AC-FT	4,150	4,810	1,250	1,200	3,290	15,840	23,390	2,710	695	1,750	423	805

CAL YR 1974 TOTAL 17,395.30 MEAN 47.7 MAX 1,250 MIN 0 AC-FT 34,500
WTR YR 1975 TOTAL 30,403.50 MEAN 83.3 MAX 1,250 MIN 2.9 AC-FT 60,310

PEAK DISCHARGE (BASE, 17,000 CFS).--Oct. 29 (1130) 2,020 cfs (8.03 ft).

09501000. Reservoir system on Salt River at and below Roosevelt Dam, Ariz.

LOCATION.--This system comprises four storage reservoirs created by four separate dams on Salt River: Roosevelt Lake, formed by Roosevelt Dam, in sec.20, T.4 N., R.12 E. (unsurveyed), on State Highway 88; Apache Lake, formed by Horse Mesa Dam, 17 mi (27 km) downstream from Roosevelt Dam; Canyon Lake, formed by Mormon Flat Dam, 27 mi (43 km) downstream from Roosevelt Dam; Saguaro Lake, formed by Stewart Mountain Dam, 37 mi (60 km) downstream from Roosevelt Dam. Contents given herein are combined contents of the four reservoirs.

DRAINAGE AREA.--6,211 mi^2 (16,086 km^2), at Stewart Mountain Dam.

PERIOD OF RECORD.--April 1910 to current year. Prior to October 1934, monthend contents only, published in WSP 1313. Evaporation: April 1958 to June 1963.

GAGES.--Roosevelt Lake, water-stage indicator in powerplant connected to long distance transmitter on lake (water-stage recorder prior to Jan. 1, 1967); Apache Lake, water-stage indicator in powerplant connected to long distance transmitter on lake since April 1949 (prior to that date, nonrecording gage or reference mark); Canyon and Saguaro Lakes, mercury column gages.

EXTREMES.--Water year 1974: Maximum contents of system, 1,447,000 acre-ft (1,780 hm^3) Oct. 1; minimum, 927,300 acre-ft, revised (1,140 hm^3) Sept 30.
Water year 1975: Maximum contents of system, 1,354,000 acre-ft (1,670 hm^3) May 14, 15, 19; minimum, 925,400 acre-ft (1,140 hm^3) Oct. 4, 5.
Period of record: Maximum contents of system, 1,764,000 acre-ft (2,180 hm^3) May 22, 1941; minimum, 20,680 acre-ft (25.5 hm^3) Sept. 16, 1940.

REMARKS.--Total capacity of the four reservoirs is 1,755,000 acre-ft (2,160 hm^3), divided as follows: Roosevelt Lake, 1,382,000 acre-ft (1,700 hm^3); Apache Lake, 245,000 acre-ft (302 hm^3); Canyon Lake, 58,000 acre-ft (71.5 hm^3); Saguaro Lake, 70,000 acre-ft (86.3 hm^3). Dead storage negligible. Dams forming these reservoirs were built as follows: Roosevelt 1905-11; Horse Mesa 1924-27; Mormon Flat 1923-26; Stewart Mountain 1928-30. The four dams forming these reservoirs completely develop the fall in the Salt River from Roosevelt Lake to Stewart Mountain Dam. Elevation of water surface varies from 1,422.0 ft (433.43 m), sill of lowest outlet in Stewart Mountain Dam, to 2,136 ft (651.1 m), top of spillway gates in raised position on Roosevelt Dam. Since 1910, spill over Roosevelt Dam because of capacity or near capacity storage has occurred only during the following periods: Apr. 15 to June 21, 1915, Jan. 19 to May 30, 1916, Apr. 21 to June 7, 1917, Feb. 17 to June 3, 1920, Apr. 13 to July 24, 1941, Dec. 30, 1965, to Jan. 10, 1966, Feb. 16 to Apr. 26, 1968, and Mar. 18 to Apr. 24, Apr. 27 to May 1, May 3, 6, 8-11, 16-19, 21-24, 28, 1973; during each period a considerable amount of water was uncontrolled or released down the Salt River channel past the Stewart Mountain damsite and could not be diverted for irrigation. Records given herein represent usable contents. Water from this system is used for irrigation of Salt River Valley and for generation of power.

COOPERATION.--Records of daily contents furnished by Salt River Valley Water Users' Association.

REVISIONS.--WSP 1283: Drainage area. Revised figures of contents for the water year 1974, superseding those published in WRD Ariz. 1974, are given herein.

CONTENTS, IN ACRE-FEET, AT 0800*, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1447000	1380000	1385000	1394000	1427000	1438000	1414000	1363000	1286000	1186000	1094000	1000000
2	1444000	1378000	1385000	1395000	1428000	1429000	1413000	1361000	1283000	1182000	1090000	996600
3	1441000	1377000	1385000	1395000	1428000	1434000	1412000	1359000	1281000	1178000	1087000	992800
4	1438000	1377000	1386000	1396000	1429000	1433000	1411000	1355000	1278000	1175000	1085000	989400
5	1435000	1378000	1386000	1396000	1429000	1430000	1410000	1354000	1276000	1171000	1082000	988300
6	1432000	1378000	1386000	1397000	1430000	1428000	1411000	1352000	1271000	1167000	1080000	984800
7	1430000	1378000	1387000	1398000	1430000	1426000	1407000	1350000	1268000	1164000	1078000	981700
8	1427000	1378000	1387000	1401000	1431000	1425000	1406000	1347000	1265000	1161000	1077000	978100
9	1424000	1378000	1387000	1403000	1432000	1424000	1406000	1345000	1261000	1158000	1075000	975600
10	1422000	1377000	1388000	1406000	1431000	1423000	1404000	1342000	1259000	1155000	1073000	972900
11	1420000	1379000	1388000	1409000	1431000	1423000	1402000	1340000	1256000	1151000	1071000	965100
12	1417000	1379000	1388000	1409000	1432000	1422000	1401000	1337000	1252000	1148000	1068000	962200
13	1415000	1379000	1388000	1410000	1432000	1421000	1399000	1336000	1249000	1145000	1066000	958500
14	1413000	1379000	1389000	1411000	1433000	1422000	1399000	1334000	1246000	1142000	1060000	955300
15	1412000	1380000	1390000	1412000	1433000	1419000	1396000	1331000	1242000	1140000	1060000	952900
16	1409000	1379000	1390000	1413000	1434000	1418000	1395000	1329000	1239000	1138000	1056000	949900
17	1407000	1380000	1390000	1414000	1434000	1430000	1393000	1326000	1236000	1135000	1051000	947900
18	1405000	1380000	1390000	1414000	1435000	1424000	1390000	1324000	1233000	1132000	1047000	945200
19	1403000	1380000	1391000	1415000	1435000	1425000	1387000	1322000	1229000	1129000	1044000	942800
20	1400000	1380000	1391000	1416000	1435000	1423000	1385000	1318000	1225000	1125000	1040000	940500
21	1398000	1381000	1391000	1417000	1436000	1423000	1382000	1316000	1222000	1125000	1036000	938400
22	1396000	1381000	1391000	1418000	1436000	1423000	1381000	1314000	1219000	1122000	1032000	939600
23	1394000	1382000	1392000	1420000	1436000	1423000	1378000	1312000	1215000	1121000	1030000	935800
24	1392000	1382000	1392000	1420000	1436000	1424000	1376000	1310000	1212000	1119000	1027000	935300
25	1390000	1382000	1392000	1421000	1437000	1426000	1374000	1310000	1208000	1115000	1023000	932800
26	1389000	1383000	1392000	1423000	1437000	1426000	1372000	1306000	1205000	1113000	1020000	931400
27	1388000	1384000	1393000	1424000	1437000	1426000	1371000	1304000	1202000	1110000	1016000	930500
28	1387000	1384000	1393000	1424000	1437000	1415000	1369000	1301000	1198000	1107000	1013000	928500
29	1386000	1384000	1393000	1425000	---	1415000	1367000	1297000	1193000	1104000	1009000	927900
30	1384000	1384000	1394000	1426000	---	1416000	1366000	1293000	1190000	1100000	1006000	927300
31	1382000	---	1394000	1427000	---	1415000	---	1289000	---	1096000	1005000	---
MAX	1447000	1384000	1394000	1427000	1437000	1438000	1414000	1363000	1286000	1186000	1094000	1000000
MIN	1382000	1377000	1385000	1394000	1427000	1415000	1366000	1289000	1190000	1096000	1005000	927300
(†)	-67000	+5000	+9000	+33000	+11000	-24000	-51000	-77000	-100000	-92000	-94000	-73300

CAL YR 1973 MAX 1749000 MIN 1132000 † +262000
WTR YR 1974 MAX 1447000 MIN 927300 † -520300

* Prior to Oct. 1, 1972, contents were given at 2400.
† Change in contents, in acre-feet (from 0800 first of month).
NOTE.--Contents at 0800 Oct. 1, 1974, 926,700 acre-feet.

09501000. Reservoir system on Salt River at and below Roosevelt Dam, Ariz.--Continued

CONTENTS, IN ACRE-FEET, AT 0800*, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	926700	960400	992200	1004000	1014000	1040000	1159000	1328000	1344000	1265000	1177000	1074000
2	926200	962100	992400	1004000	1014000	1041000	1160000	1333000	1342000	1261000	1174000	1070000
3	925500	963000	992700	1005000	1015000	1046000	1162000	1341000	1340000	1257000	1170000	1067000
4	925400	965900	993300	1004000	1018000	1047000	1164000	1345000	1338000	1255000	1168000	1063000
5	925400	967000	994500	1005000	1018000	1048000	1167000	1347000	1335000	1252000	1164000	1060000
6	925600	969500	994600	1005000	1019000	1050000	1168000	1349000	1333000	1249000	1161000	1057000
7	926500	970600	994700	1005000	1019000	1050000	1171000	1351000	1331000	1246000	1158000	1054000
8	927400	972000	996000	1006000	1021000	1051000	1174000	1352000	1329000	1243000	1155000	1051000
9	928300	972900	996300	1005000	1020000	1053000	1178000	1353000	1327000	1241000	1151000	1050000
10	927900	974100	996500	1006000	1021000	1057000	1182000	1353000	1325000	1238000	1149000	1050000
11	928400	974300	996800	1007000	1021000	1067000	1192000	1352000	1323000	1236000	1145000	1048000
12	928500	975500	996900	1007000	1022000	1074000	1206000	1353000	1321000	1233000	1142000	1047000
13	929000	976700	996900	1007000	1021000	1086000	1212000	1353000	1318000	1231000	1138000	1046000
14	929400	976500	998400	1005000	1023000	1089000	1218000	1354000	1315000	1229000	1137000	1044000
15	931400	978600	997900	1004000	1025000	1094000	1226000	1354000	1313000	1226000	1132000	1042000
16	930700	979300	998000	1008000	1025000	1101000	1233000	1353000	1310000	1224000	1129000	1039000
17	932200	980900	997400	1009000	1028000	1102000	1240000	1353000	1307000	1221000	1125000	1036000
18	933000	980900	998300	1010000	1031000	1106000	1246000	1353000	1303000	1219000	1124000	1035000
19	933300	981900	999300	1009000	1033000	1110000	1253000	1354000	1300000	1215000	1118000	1032000
20	933500	986200	999400	1010000	1034000	1115000	1260000	1353000	1298000	1212000	1116000	1029000
21	932300	987500	998200	1010000	1035000	1120000	1264000	1353000	1295000	1210000	1112000	1027000
22	933700	988300	999400	1010000	1036000	1125000	1269000	1352000	1291000	1206000	1108000	1025000
23	936000	989100	999700	1011000	1037000	1130000	1274000	1351000	1289000	1203000	1105000	1023000
24	935700	989300	999900	1011000	1039000	1137000	1281000	1351000	1286000	1200000	1102000	1020000
25	936800	990000	1001000	1011000	1040000	1138000	1288000	1350000	1283000	1197000	1099000	1017000
26	939800	990100	1000000	1011000	1041000	1145000	1297000	1350000	1280000	1192000	1095000	1014000
27	940200	990700	1002000	1012000	1042000	1148000	1305000	1349000	1276000	1190000	1091000	1011000
28	940700	991200	1002000	1012000	1043000	1150000	1310000	1348000	1274000	1188000	1088000	1009000
29	942600	992300	1002000	1012000	---	1154000	1317000	1347000	1270000	1185000	1084000	1007000
30	952600	991700	1002000	1013000	---	1156000	1323000	1346000	1267000	1182000	1081000	1005000
31	957500	---	1004000	1014000	---	1157000	---	1345000	---	1180000	1078000	---
MAX	957500	992300	1004000	1014000	1043000	1157000	1323000	1354000	1344000	1265000	1177000	1074000
MIN	925400	960400	992200	1004000	1014000	1040000	1159000	1328000	1267000	1180000	1078000	1005000
(†)	+33700	+31800	+11800	+10000	+26000	+119000	+169000	+16000	-79000	-88000	-103000	-72000

CAL YR 1974 MAX 1438000 MIN 925400 † -390000
WTR YR 1975 MAX 1354000 MIN 925400 † +75300

* Prior to Oct. 1, 1972, contents were given at 2400.
† Change in contents, in acre-feet (from 0800 first of month).
NOTE.--Contents at 0800 Oct. 1, 1975, 1,002,000 acre-ft.

09502000. Salt River below Stewart Mountain Dam, Ariz.

LOCATION.--Lat 33°33'10", long 111°34'33", in NW¼NW¼ sec.6, T.2 N., R.8 E. (unsurveyed), Maricopa County, on left bank 3.5 mi (5.6 km) downstream from Stewart Mountain Dam and 6 mi (10 km) upstream from Verde River.

DRAINAGE AREA.--6,232 mi^2 (16,141 km^2) of which 21 mi^2 (54 km^2) is below Stewart Mountain Dam.

PERIOD OF RECORD.--March 1930 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Stewart Mountain Dam" 1934-41.

GAGE.--Water-stage recorder. Altitude of gage is 1,370 ft (418 m), from topographic map. Prior to Sept. 27, 1934, at site 3.2 mi (5.1 km) upstream at different datum. Sept. 27, 1934, to Jan. 20, 1950, at site 2.8 mi (4.5 km) upstream at datum 1,396.33 ft (425.601 m) above mean sea level.

AVERAGE DISCHARGE.--45 years, 833 ft^3/s (23.59 m^3/s), 603,500 acre-ft/yr (744 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 1,780 ft^3/s (50.4 m^3/s) Sept. 19; no flow for many days.
Period of record: Maximum discharge, 51,600 ft^3/s (1,460 m^3/s) Jan. 1, 1966 (gage height, 22.4 ft or 6.83 m, from floodmarks); maximum daily discharge, 38,600 ft^3/s (1,090 m^3/s) Jan. 1, 1966; no flow at times in recent years.

REMARKS.--Records good. Flow regulated by four reservoirs above station. (See elsewhere in this report.) Entire flow (except during infrequent periods of extreme flooding) is diverted at Granite Reef Dam, 10 mi (16 km) downstream, for irrigation in Salt River Valley and for municipal use by the city of Phoenix. Records of chemical analyses and water temperatures for the current water year are published on following pages.

REVISIONS.--WSP 1343: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	506	.86	.88	2.8	3.6	650	1060	0	1350	1670	1640	1740
2	515	.65	.96	2.8	3.6	655	1060	0	1640	1670	1640	1740
3	107	.36	1.3	2.7	3.8	655	1090	0	1690	1670	1640	1710
4	27	.09	1.7	2.7	3.8	660	1090	0	1690	1670	1640	1720
5	5.3	0	2.4	2.6	3.6	750	1150	949	1700	1670	1640	1700
6	3.6	0	2.2	2.5	3.4	726	1090	1250	1670	1660	1650	1690
7	4.0	0	2.5	2.4	3.2	762	1040	1430	1610	1650	1640	1610
8	3.2	0	2.7	2.4	3.2	756	814	1520	1530	1700	1670	1230
9	2.2	0	2.9	2.5	3.0	756	744	1540	1550	1660	1660	1120
10	2.3	0	3.3	2.5	3.2	760	694	1540	1550	1640	1640	1160
11	1.5	0	3.7	2.5	3.0	760	144	1480	1650	1660	1650	1170
12	1.1	0	4.4	2.5	3.0	695	12	1470	1690	1660	1650	1280
13	.80	0	4.5	2.6	2.9	580	6.5	1550	1710	1660	1680	1350
14	.60	0	4.3	2.5	3.8	580	4.6	1660	1690	1670	1670	1220
15	.40	0	4.2	2.5	4.7	57	3.4	1660	1700	1660	1670	1370
16	.10	0	4.0	2.6	3.3	9.2	2.5	1710	1720	1680	1690	1520
17	0	0	4.0	2.6	3.4	12	2.1	1670	1710	1680	1700	1670
18	0	0	3.9	2.6	3.2	5.8	2.3	1480	1700	1660	1690	1740
19	0	0	4.0	2.7	2.9	3.5	2.2	1430	1720	1660	1690	1780
20	0	0	3.8	2.6	2.9	3.0	1.4	1590	1720	1680	1700	1390
21	0	0	3.9	2.7	3.0	3.0	1.1	1520	1710	1670	1710	968
22	.61	0	3.5	2.8	2.9	2.2	.77	1420	1690	1730	1710	1200
23	.71	0	3.4	2.9	2.9	2.0	5.6	1360	1700	1740	1710	1490
24	.33	0	3.2	3.0	2.9	1.9	2.3	1320	1690	1740	1700	1530
25	.06	0	3.3	3.0	2.8	904	1.2	1250	1690	1720	1700	1470
26	0	0	3.0	2.9	2.9	1130	.60	1210	1670	1680	1720	1430
27	0	0	3.0	3.0	2.9	972	.30	1300	1670	1640	1740	1310
28	.42	.01	2.9	3.0	354	845	0	1370	1670	1600	1720	1290
29	2.2	.50	3.3	3.4	---	776	0	1400	1680	1630	1710	1220
30	1.8	.79	2.9	3.6	---	700	0	1450	1660	1630	1700	1190
31	1.3	---	2.9	3.6	---	855	---	1460	---	1640	1720	---
TOTAL	1187.53	3.26	96.94	85.5	441.8	16026.6	10024.87	38989	49820	51750	52090	43008
MEAN	38.3	.11	3.13	2.76	15.8	517	334	1258	1661	1669	1680	1434
MAX	515	.86	4.5	3.6	354	1130	1150	1710	1720	1740	1740	1780
MIN	0	0	.88	2.4	2.8	1.9	0	0	1350	1600	1640	968
AC-FT	2360	6.5	192	170	876	31790	19880	77330	98820	102600	103300	85310

CAL YR 1974 TOTAL 310777.18 MEAN 851 MAX 2020 MIN 0 AC-FT 616400
WTR YR 1975 TOTAL 263523.50 MEAN 722 MAX 1780 MIN 0 AC-FT 522700

09502000. Salt River below Stewart Mountain Dam, Ariz.
(National stream-quality accounting network station)

LOCATION.--Lat 33°33'59", long 111°32'08", in sec.33, T.3 N., R.8 E. (unsurveyed), Maricopa County, at Stewart Mountain Dam, 3.5 mi (5.6 km) upstream from gaging station, and 9.5 mi (15.3 km) upstream from Verde River.

DRAINAGE AREA.--6,232 mi^2 (16,140 km^2), at gaging station, of which 21 mi^2 (54 km^2) is downstream from Stewart Mountain Dam.

PERIOD OF RECORD.--Chemical analyses: December 1950 to current year.
Water temperatures: December 1950 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 1,210 micromhos on Sept 1; minimum daily, 825 micromhos on several days during April.
Water temperatures: Maximum, 22.0°C on several days during September; minimum, 10.0°C on April 10.
Period of record:
Specific conductance: Maximum daily, 2,490 micromhos Aug. 20, 1951; minimum daily, 615 micromhos on several days during April 1974.
Water temperatures: Maximum, 29.0°C Aug. 24, 26, 27, 1951, Sept. 11, 12, 1969; minimum, 9.5°C Feb. 14, 1951.

REMARKS.--No inflow between sampling point and gaging station except during periods of heavy local rains. No flow at sampling point Oct. 4 to Feb. 28, March 15 to March 23, April 11 to May 4.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
MAR.										
05...	1200	816	15	230	10	20	0	50	12	100
APR.										
02...	1100	1000	16	--	--	--	--	49	12	100
MAY										
13...	0930	1580	16	--	--	--	--	47	12	110
JUNE										
10...	0900	1570	16	150	10	30	10	49	12	120
JULY										
30...	0845	1630	17	--	--	--	--	50	15	150
SEP.										
10...	0845	1200	15	--	--	--	--	52	15	160

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
MAR.									
05...	4.7	155	0	43	150	.3	.01	.02	466
APR.									
02...	5.0	156	0	47	160	.5	.00	.01	463
MAY									
13...	4.4	149	0	50	160	.3	.09	.04	481
JUNE									
10...	4.4	157	0	52	170	.3	.01	.02	515
JULY									
30...	5.1	159	0	62	230	.3	.03	.00	608
SEP.									
10...	4.9	154	0	53	240	.3	.03	.00	649

DATE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)
MAR.									
05...	452	.63	170	47	3.3	900	8.2	11.0	2
APR.									
02...	466	.63	170	44	3.3	860	7.8	13.0	2
MAY									
13...	474	.65	170	45	3.7	850	8.1	15.0	2
JUNE									
10...	501	.70	170	43	4.0	880	7.8	17.0	2
JULY									
30...	608	.83	190	56	4.8	1200	7.1	19.0	4
SEP.									
10...	616	.88	190	65	5.0	1165	7.1	19.0	5

09502000. Salt River below Stewart Mountain Dam, Ariz.--Continued

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
MAR.								
05...	1200	--	.00	.06	.17	.23	1.0	.01
APR.								
02...	1100	--	.00	.01	.21	.22	.97	.03
MAY								
13...	0930	--	.00	.09	.25	.34	1.5	.01
JUNE								
10...	0900	--	.00	.01	.04	.05	.22	.01
JULY								
30...	0845	--	.01	.04	.47	.51	2.3	.04
SEP.								
10...	0845	.02	.01	.03	.16	.19	.84	.04

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
MAR.					
05...	1200	1200	--	--	4.4
05...	1615	--	<1	B14	--
APR.					
02...	1100	910	<1	<1	--
MAY					
13...	0930	1200	1	4	--
JUNE					
10...	0900	1700	B8	B24	3.2
JULY					
30...	0845	370	B8	B7	--
SEP.					
10...	0845	490	B4	B10	--

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)
MAR.										
05...	1200	3	2	70	<10	1	0	0	<50	2
APR.										
02...	1100	--	--	60	--	--	--	--	--	--
MAY										
13...	0930	--	--	620	--	--	--	--	--	--
JUNE										
10...	0900	4	4	80	<10	0	0	0	<50	0
JULY										
30...	0845	--	--	60	--	--	--	--	--	--
SEP.										
10...	0845	--	--	110	--	--	--	--	--	--

DATE	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
MAR.									
05...	10	2	<100	1	.1	.1	0	0	7
APR.									
02...	--	--	--	--	--	--	--	--	--
MAY									
13...	--	--	--	--	--	--	--	--	--
JUNE									
10...	10	1	<100	0	.0	.0	0	0	0
JULY									
30...	--	--	--	--	--	--	--	--	--
SEP.									
10...	--	--	--	--	--	--	--	--	--

09502000. Salt River below Stewart Mountain Dam, Ariz.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						935	825	---	930	1020	1140	1210
2						930	830	---	945	1020	1150	1170
3						935	825	---	945	1020	1140	1170
4						930	825	---	930	1040	1140	1180
5						930	830	860	920	1040	1140	1180
6						935	830	870	935	1040	1140	1180
7						935	830	860	940	1040	1150	1180
8						930	835	865	940	1030	1150	1170
9						950	840	865	940	1050	1170	1170
10						935	840	860	930	1050	1160	1180
11						940	---	865	940	1060	1160	1180
12						935	---	870	950	1080	1160	---
13						935	---	870	950	1080	1160	1180
14						935	---	870	965	1080	1170	1170
15						---	---	870	960	1080	1160	1170
16						---	---	880	965	1080	1160	1180
17						---	---	880	965	1090	1160	1170
18						---	---	880	965	1100	1160	1180
19						---	---	890	965	1080	1160	1170
20						---	---	900	965	1080	1160	1190
21						---	---	910	970	1090	1160	1190
22						---	---	925	970	1100	1160	1200
23						---	---	920	970	1100	1160	1180
24						935	---	925	970	1080	1160	1180
25						---	---	930	975	1080	1170	1180
26						950	---	945	975	1110	1170	1180
27						955	---	1040	980	1100	1160	1170
28						940	---	1100	975	1120	1160	1170
29						940	---	980	980	1120	1160	1160
30						940	---	925	980	1120	1160	1160
31						935	---	940	---	1140	1160	---
MEAN						---	---	907	956	1070	1160	1180
YEAR	MAX	1210	MIN	825	MEAN	1030						

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						13.0	13.0	---	20.0	18.0	---	19.0
2						13.0	13.0	---	15.0	19.0	19.0	19.0
3						13.0	13.0	---	18.0	20.0	19.0	19.0
4						13.0	13.0	---	18.0	18.0	19.0	19.0
5						13.0	13.0	13.0	19.0	18.0	---	19.0
6						13.0	13.0	14.0	18.0	18.0	19.0	18.0
7						13.0	13.0	14.0	17.0	18.0	20.0	17.0
8						13.0	13.0	14.0	17.0	18.0	20.0	18.0
9						13.0	11.0	14.0	17.0	18.0	20.0	18.0
10						13.0	10.0	15.0	17.0	18.0	20.0	18.0
11						13.0	---	15.0	17.0	18.0	20.0	18.0
12						13.0	---	15.0	17.0	20.0	20.0	---
13						13.0	---	15.0	17.0	20.0	20.0	20.0
14						13.0	---	15.0	17.0	20.0	20.0	21.0
15						---	---	15.0	17.0	20.0	20.0	21.0
16						---	---	15.0	17.0	20.0	19.0	21.0
17						---	---	15.0	17.0	20.0	19.0	21.0
18						---	---	15.0	17.0	20.0	19.0	22.0
19						---	---	15.0	17.0	18.0	19.0	22.0
20						---	---	15.0	19.0	18.0	19.0	20.0
21						---	---	15.0	17.0	18.0	19.0	19.0
22						---	---	15.0	17.0	19.0	19.0	20.0
23						---	---	15.0	17.0	19.0	20.0	19.0
24						13.0	---	15.0	17.0	19.0	21.0	18.0
25						---	---	15.0	17.0	19.0	20.0	20.0
26						13.0	---	15.0	17.0	20.0	20.0	20.0
27						13.0	---	15.0	17.0	19.0	20.0	19.0
28						13.0	---	15.0	18.0	18.0	19.0	19.0
29						13.0	---	15.0	18.0	19.0	20.0	19.0
30						13.0	---	15.0	19.0	18.0	19.0	19.0
31						13.0	---	11.0	---	19.0	19.0	---
MEAN						---	---	14.5	17.5	19.0	19.5	19.5
YEAR	MAX	22.0	MIN	10.0	MEAN	17.0						

09502800. Williamson Valley Wash near Paulden, Ariz.

LOCATION.--Lat 34°52'00", long 112°36'45", in SE¼SE¼ sec.7, T.17 N., R.3 W., Yavapai County, on left bank 3.6 mi (5.8 km) north of Simmons and 8.5 mi (13.7 km) west of Paulden.

DRAINAGE AREA.--255 mi^2 (660 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 4,447 ft (1,355.4 m) above mean sea level. Prior to Oct. 1, 1970, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--10 years, 8.35 ft^3/s (0.236 m^3/s), 6,050 acre-ft/yr (7.46 hm^3/yr); median of yearly mean discharges, 4.0 ft^3/s (0.11 m^3/s), 2,900 acre-ft/yr (3.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 112 ft^3/s (3.17 m^3/s) Nov. 2 (gage height, 3.57 ft or 1.088 m); minimum daily, 0.45 ft^3/s (.013 m^3/s) June 25.
Period of record: Maximum discharge, 3,630 ft^3/s (103 m^3/s) Dec. 30, 1965 (gage height, 7.38 ft or 2.249 m, present datum), from rating curve extended above 500 ft^3/s (14 m^3/s) on basis of slope-area measurement of peak flow; no flow at times in most years.

REMARKS.--Records fair except those for December and January, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	2.4	2.2	1.8	2.4	2.8	3.7	3.0	2.0	.56	2.4	.86
2	1.0	27	2.2	1.8	2.4	2.8	3.4	3.0	1.9	.63	2.4	1.0
3	1.0	3.4	2.2	1.8	2.4	2.6	3.4	2.8	1.6	.70	2.2	1.7
4	1.0	2.4	2.4	1.8	2.8	2.6	3.3	2.8	1.7	.86	2.2	1.2
5	1.0	2.0	3.0	1.8	2.8	2.9	3.2	2.8	1.6	.95	2.2	1.2
6	1.0	2.0	2.4	2.0	2.6	2.9	3.1	2.8	1.5	.95	2.8	1.3
7	1.0	1.9	2.2	2.0	2.6	2.7	3.3	3.0	1.3	1.2	2.4	1.5
8	1.0	1.9	2.0	2.0	2.8	2.8	3.4	2.8	1.4	1.3	2.2	2.0
9	1.0	1.7	1.8	2.0	2.8	3.1	3.3	2.6	1.5	1.4	2.0	1.9
10	1.0	1.7	1.8	2.0	2.8	3.0	3.1	2.4	1.3	1.5	1.9	1.6
11	1.0	1.7	1.8	2.0	2.8	3.3	3.2	2.2	1.2	1.4	1.9	1.5
12	1.0	1.9	1.8	2.0	2.8	3.2	3.8	2.0	1.0	1.5	1.7	1.5
13	1.0	1.9	1.8	2.0	2.8	3.4	3.6	2.0	1.0	1.7	1.7	1.7
14	1.0	1.9	1.8	2.5	3.0	3.7	3.1	1.9	.86	4.5	1.6	1.7
15	1.0	1.9	1.8	2.8	3.6	4.0	2.9	1.6	.78	11	1.5	1.6
16	1.0	1.9	2.0	2.6	2.9	3.6	3.0	1.7	.63	3.6	1.4	1.6
17	1.0	1.9	2.0	2.8	3.2	3.4	3.2	1.9	.63	2.6	1.4	1.6
18	1.0	2.0	2.0	2.8	2.8	3.4	3.6	1.9	.56	2.6	1.3	1.6
19	1.0	2.0	2.0	3.0	2.7	3.4	3.2	1.7	.56	2.4	1.2	1.6
20	1.0	2.0	2.0	3.0	2.7	3.4	3.4	1.6	.56	2.4	1.3	1.6
21	1.2	2.0	2.0	3.4	2.9	3.4	3.4	1.6	.63	2.4	1.3	1.5
22	3.0	2.2	2.0	2.6	2.3	3.4	3.2	2.0	.63	2.2	1.3	1.5
23	2.0	2.0	2.0	2.8	2.8	3.7	3.2	2.2	.56	2.2	1.2	1.4
24	1.6	2.0	1.5	2.8	2.8	3.4	3.2	2.0	.56	2.2	1.1	1.4
25	1.6	2.0	1.5	2.6	2.8	3.5	3.2	2.0	.45	2.0	1.0	1.5
26	1.6	2.2	1.5	2.6	2.8	3.8	3.0	1.9	.50	2.2	.95	1.5
27	1.7	2.2	1.5	2.6	2.8	3.6	3.2	1.6	.56	2.2	.86	1.5
28	2.2	2.2	1.5	2.6	2.8	3.3	3.4	1.6	.56	4.6	.86	1.5
29	3.2	2.2	1.8	2.4	---	3.4	3.2	1.7	.56	3.0	.86	1.5
30	3.8	2.2	1.8	2.4	---	3.3	3.2	1.9	.56	2.9	.86	1.5
31	2.8	---	1.8	2.4	---	3.5	---	2.0	---	2.6	.86	---
TOTAL	44.7	86.7	60.1	73.7	77.7	101.3	98.4	67.0	29.15	72.25	48.85	45.06
MEAN	1.44	2.89	1.94	2.38	2.78	3.27	3.28	2.16	.97	2.33	1.58	1.50
MAX	3.8	27	3.0	3.4	3.6	4.0	3.8	3.0	2.0	11	2.8	2.0
MIN	1.0	1.7	1.5	1.8	2.3	2.6	2.9	1.6	.45	.56	.86	.86
AC-FT	89	172	119	146	154	201	195	133	58	143	97	89

CAL YR 1974 TOTAL 933.76 MEAN 2.56 MAX 100 MIN .39 AC-FT 1850
WTR YR 1975 TOTAL 804.91 MEAN 2.21 MAX 27 MIN .45 AC-FT 1600

PEAK DISCHARGE (BASE, 100 CFS).--Nov. 2 (0745) 112 cfs (3.57 ft).

09503700. Verde River near Paulden, Ariz.

LOCATION.--Lat 34°53'42", long 112°20'26", in SW¼SW¼ sec.35, T.18 N., R.1 W., Yavapai County, in Prescott National Forest, on right bank 0.3 mi (0.5 km) upstream from Verde Valley Ranch, 7 mi (11 km) east of Paulden, 8 mi (13 km) upstream from Hell Canyon, 8 mi (13 km) downstream from Granite Creek, and 10 mi (16 km) downstream from Sullivan Lake.

DRAINAGE AREA.--2,530 mi^2 (6,550 km^2), approximately (includes 373 mi^2 or 966 km^2 in Aubrey Valley Playa, a closed basin).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,100 ft (1,250 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 33.0 ft^3/s (0.935 m^3/s), 23,910 acre-ft/yr (29.5 hm^3/yr); median of yearly mean discharges, 27 ft^3/s (0.76 m^3/s), 19,600 acre-ft/yr (24 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 73 ft^3/s (2.07 m^3/s) July 9 (gage height, 2.48 ft or 0.756 m); minimum daily, 23 ft^3/s (0.65 m^3/s) Oct 10-12, 14-19, Jan. 10-16, 22, May 5.
Period of record: Maximum discharge, 6,130 ft^3/s (174 m^3/s) Dec. 30, 1965 (gage height, 8.48 ft or 2.585 m), from rating curve extended above 1,700 ft^3/s (48 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 15 ft^3/s (0.42 m^3/s) May 13-23, 1964.

REMARKS.--Records good. Diversions and storage above station for irrigation and municipal use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	25	25	24	24	26	26	24	26	27	28	25
2	24	27	25	24	24	26	26	24	26	28	27	25
3	24	26	25	24	25	27	26	24	26	30	26	25
4	24	25	25	24	25	27	26	24	26	30	25	25
5	24	25	25	24	25	26	26	23	26	30	25	25
6	24	25	24	24	24	26	25	24	27	31	25	26
7	24	25	24	24	25	26	24	24	27	31	25	26
8	24	25	25	24	25	26	24	24	27	32	26	26
9	24	25	24	24	25	27	24	24	27	37	26	26
10	23	25	24	23	25	26	24	24	27	33	27	25
11	23	25	24	23	25	27	24	24	28	33	27	25
12	23	25	24	23	25	26	24	24	28	33	27	25
13	24	25	24	23	26	26	24	24	28	33	26	27
14	23	25	24	23	25	26	24	24	28	33	26	24
15	23	25	24	23	25	26	24	24	28	38	26	24
16	23	25	24	23	25	27	24	24	28	35	26	24
17	23	25	24	24	25	27	24	24	28	33	26	24
18	23	25	24	24	24	27	24	24	28	33	26	24
19	23	25	24	24	25	27	24	24	28	32	25	24
20	24	25	24	24	25	27	24	24	28	31	26	24
21	24	25	24	24	25	27	24	24	28	31	26	24
22	26	25	24	23	24	26	24	24	27	30	25	24
23	25	25	24	24	24	27	25	25	27	30	26	24
24	25	25	24	24	25	27	25	25	27	29	26	24
25	24	25	24	24	25	27	24	25	27	31	26	25
26	24	25	24	24	26	26	24	25	27	31	26	25
27	25	25	24	24	26	26	24	25	25	31	26	25
28	25	25	24	24	26	26	24	25	27	31	26	25
29	25	25	24	24	------	27	24	25	27	30	25	24
30	27	25	24	24	------	26	24	25	27	30	25	24
31	25	------	24	24	------	26	------	25	------	29	25	------
TOTAL	747	753	750	736	698	820	733	752	814	976	803	743
MEAN	24.1	25.1	24.2	23.7	24.9	26.5	24.4	24.3	27.1	31.5	25.9	24.8
MAX	27	27	25	24	26	27	26	25	28	38	28	27
MIN	23	25	24	23	24	26	24	23	25	27	25	24
AC-FT	1,480	1,490	1,490	1,460	1,380	1,630	1,450	1,490	1,610	1,940	1,590	1,470

CAL YR 1974 TOTAL 9,102 MEAN 24.9 MAX 115 MIN 22 AC-FT 18,050
WTR YR 1975 TOTAL 9,325 MEAN 25.5 MAX 38 MIN 23 AC-FT 18,500

PEAK DISCHARGE (BASE, 300 CFS).--No peak above base.

09504000. Verde River near Clarkdale, Ariz.

LOCATION.--Lat 34°51'05", long 112°03'55", in SE¼NW¼ sec.17, T.17 N., R.3 E., Yavapai County, in Prescott National Forest, on left bank 1.7 mi (2.7 km) downstream from Sycamore Creek and 5.6 mi (9.0 km) north of Clarkdale.

DRAINAGE AREA.--3,520 mi^2 (9,120 km^2), approximately (includes 373 mi^2 or 966 km^2 in Aubrey Valley Playa, a closed basin).

PERIOD OF RECORD.--June 1915 to October 1916, June 1917 to June 1921, April 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,520 ft (1,073 m), from topographic map. June 1915 to June 1921 at site 2.5 mi (4.0 km) downstream at different datum.

AVERAGE DISCHARGE.--14 years (1915-16, 1917-20, 1965-75), 187 ft^3/s (5.296 m^3/s), 135,500 acre-ft/yr (167 hm^3/yr); median of yearly mean discharges, 150 ft^3/s (4.25 m^3/s), 109,000 acre-ft/yr (134 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,560 ft^3/s (44.2 m^3/s) Mar. 20 (gage height, 4.55 ft or 1.387 m); minimum daily, 67 ft^3/s (1.90 m^3/s) June 17, 23.
Period of record: Maximum discharge, 50,600 ft^3/s (1,430 m^3/s) Feb. 21, 1920 (gage height, 19.1 ft or 5.82 m, site and datum then in use), from rating curve extended above 2,500 ft^3/s (71 m^3/s) on basis of float-area measurement at 35,000 ft^3/s (990 m^3/s); minimum daily, 55 ft^3/s (1.56 m^3/s) Aug. 31, Sept. 1, 1920.

REMARKS.--Records fair except those for period of no gage-height record, which are poor.

REVISIONS (WATER YEARS).--WSP 1213: 1917, 1920.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	80	80	80	75	100	83	91	76	72	82	75
2	80	90	80	80	75	169	110	91	76	73	80	75
3	75	111	80	80	75	163	99	91	75	76	79	75
4	75	96	80	80	75	141	120	89	74	77	79	75
5	75	90	80	80	75	113	127	90	74	79	79	75
6	75	87	82	80	74	97	108	90	74	78	78	90
7	75	84	82	80	75	149	98	90	74	79	78	120
8	75	81	82	80	74	127	92	89	75	81	78	130
9	75	80	82	80	74	122	85	87	73	82	93	110
10	75	79	82	80	74	157	82	87	72	85	86	100
11	75	79	83	80	74	155	106	87	72	85	79	90
12	75	79	83	80	74	124	278	86	72	91	80	90
13	75	80	82	80	74	103	511	86	70	88	79	150
14	75	80	82	80	74	102	590	84	70	114	77	200
15	75	80	82	78	75	105	386	84	69	90	77	120
16	75	80	83	78	75	99	248	84	69	96	76	100
17	75	80	80	78	75	176	190	85	67	91	75	100
18	76	80	80	76	74	181	153	85	68	87	75	100
19	76	80	80	76	73	700	139	84	69	85	74	90
20	76	80	80	78	74	897	131	84	69	84	74	90
21	76	80	80	76	73	495	118	84	68	84	78	80
22	81	80	80	75	73	326	108	84	68	83	75	80
23	82	80	80	76	73	205	100	82	67	82	74	80
24	82	80	80	76	73	138	96	82	68	82	73	80
25	78	80	80	76	74	111	93	81	68	83	72	80
26	78	80	80	76	73	101	93	80	69	91	72	80
27	78	80	80	76	73	95	93	79	70	85	74	80
28	79	80	80	76	73	89	93	78	70	84	73	80
29	80	80	80	76	------	83	93	78	71	85	73	80
30	86	80	80	76	------	80	91	78	72	87	74	80
31	82	------	80	76	------	80	------	76	------	83	75	------
TOTAL	2,395	2,476	2,505	2,419	2,073	5,783	4,714	2,626	2,129	2,622	2,391	2,855
MEAN	77.3	82.5	80.8	78.0	74.0	187	157	84.7	71.0	84.6	77.1	95.2
MAX	86	111	83	80	75	897	590	91	76	114	93	200
MIN	75	79	80	75	73	80	82	76	67	72	72	75
AC-FT	4,750	4,910	4,970	4,800	4,110	11,470	9,350	5,210	4,220	5,200	4,740	5,660

CAL YR 1974 TOTAL 30,874 MEAN 84.6 MAX 444 MIN 59 AC-FT 61,240
WTR YR 1975 TOTAL 34,988 MEAN 95.9 MAX 897 MIN 67 AC-FT 69,400

PEAK DISCHARGE (BASE, 2,000 CFS).--No peak above base.

NOTE.--No gage-height record Aug. 30 to Sept. 30.

09504500. Oak Creek near Cornville, Ariz.

LOCATION.--Lat 34°45'56", long 111°53'24", in NW¼SE¼ sec.23, T.16 N., R.4 E., Yavapai County, near left bank on downstream side of pier of county highway bridge, 0.2 mi (0.3 km) upstream from Page Springs, 4 mi (6 km) northeast of Cornville, and 15 mi (24 km) upstream from mouth.

DRAINAGE AREA.--357 mi^2 (925 km^2).

PERIOD OF RECORD.--July 1940 to September 1945, April 1948 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,470 ft (1,058 m), from topographic map.

AVERAGE DISCHARGE.--32 years, 82.6 ft^3/s (2.339 m^3/s), 59,840 acre-ft/yr (73.8 hm^3/yr); median of yearly mean discharges, 70 ft^3/s (1.98 m^3/s), 50,700 acre-ft/yr (63 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,820 ft^3/s (137 m^3/s) July 14 (gage height, 8.5 ft or 2.59 m); minimum daily, 17 ft^3/s (0.48 m^3/s) June 27, July 1, 2, Aug. 5.
Period of record: Maximum discharge, 24,700 ft^3/s (700 m^3/s) Sept. 5, 1970 (gage height, 16.48 ft or 5.023 m); minimum, 6 ft^3/s (0.17 m^3/s) July 27, 1940.
Maximum stage since at least 1885, 23 ft (7.0 m) in March 1938, from floodmarks (upstream side of bridge).

REMARKS.--Records good. Regulation during low flow by several small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1149: 1948(M). WRD Ariz. 1974: 1973.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	44	39	38	41	144	90	47	25	17	25	23
2	22	178	39	38	38	226	85	42	25	17	20	24
3	21	83	39	40	37	221	82	38	23	18	21	24
4	25	51	38	39	38	182	107	35	22	20	21	24
5	25	47	44	38	39	142	124	35	23	21	17	33
6	26	49	43	38	39	234	121	35	23	31	19	27
7	27	54	40	37	37	218	113	32	23	26	19	32
8	25	55	39	37	37	171	84	32	23	26	19	44
9	24	53	39	39	37	274	72	33	23	28	21	44
10	24	55	40	40	38	314	72	33	20	24	24	32
11	24	46	40	38	48	160	102	30	20	22	26	30
12	26	41	40	38	61	110	184	31	21	24	22	27
13	27	40	37	37	59	105	262	29	20	28	27	51
14	27	40	37	36	58	100	650	29	20	258	25	32
15	26	39	37	37	76	95	774	26	20	111	23	29
16	26	38	38	37	70	93	590	25	21	40	22	25
17	27	37	38	36	61	127	295	26	20	111	23	25
18	26	37	39	36	53	178	237	29	20	43	23	27
19	27	37	39	35	47	485	220	28	19	32	21	25
20	26	37	39	36	48	665	160	26	19	28	22	24
21	26	38	38	35	58	424	160	29	18	27	22	24
22	30	37	38	36	53	351	170	36	20	24	23	25
23	33	37	39	35	45	187	145	33	22	22	22	21
24	31	37	39	36	42	142	124	31	19	20	21	21
25	31	36	38	36	68	108	108	28	18	20	23	23
26	31	37	39	36	89	110	104	26	19	21	22	23
27	51	37	39	37	111	93	94	25	17	27	23	24
28	43	37	38	35	114	74	75	24	18	26	23	25
29	99	37	40	37	---	67	62	24	18	25	21	25
30	150	39	39	39	---	62	55	22	18	38	23	25
31	61	---	38	42	---	79	---	24	---	26	22	---
TOTAL	1092	1433	1209	1154	1542	5941	5521	943	617	1201	685	838
MEAN	35.2	47.8	39.0	37.2	55.1	192	184	30.4	20.6	38.7	22.1	27.9
MAX	150	178	44	42	114	665	774	47	25	258	27	51
MIN	21	36	37	35	37	62	55	22	17	17	17	21
AC-FT	2170	2840	2400	2290	3060	11780	10950	1870	1220	2380	1360	1660

CAL YR 1974 TOTAL 13348 MEAN 36.6 MAX 357 MIN 12 AC-FT 26480
WTR YR 1975 TOTAL 22176 MEAN 60.8 MAX 774 MIN 17 AC-FT 43990

PEAK DISCHARGE (BASE, 1,300 CFS).--Apr. 15 (0145) 1,370 cfs (5.75 ft); July 14 (2045) 4,820 cfs (8.5 ft).

09505200. Wet Beaver Creek near Rimrock, Ariz.

LOCATION.--Lat 34°40'29", long 111°40'17", in NW¼SW¼ sec.24, T.15 N., R.6 E., Yavapai County, in Coconino National Forest, on right bank 4.5 mi (7.2 km) northeast of Rimrock and 5.7 mi (9.2 km) upstream from Red Tank Draw.

DRAINAGE AREA.--111 mi² (287 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,020 ft (1,225 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 32.0 ft³/s (0.906 m³/s), 23,180 acre-ft/yr (28.6 hm³/yr); median of yearly mean discharges, 25 ft³/s (0.71 m³/s), 18,100 acre-ft/yr (22 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,060 ft³/s (30.0 m³/s) Apr. 13 (gage height, 6.97 ft or 2.124 m); minimum daily, 6.7 ft³/s (0.19 m³/s) Oct. 11, 16-18.
Period of record: Maximum discharge, 7,670 ft³/s (217 m³/s) Sept. 5, 1970 (gage height, 12.41 ft or 3.783 m); minimum, 5.4 ft³/s (0.15 m³/s) Aug. 14, 1962, July 1, 2, 5, 8, 9, 12, 21, 1967.

REMARKS.--Records fair. No known diversion or regulation above station.

REVISIONS.--WRD Ariz. 1969: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	6.9	6.9	6.9	7.1	61	122	13	7.9	7.6	7.3	7.3
2	6.9	10	6.9	7.1	7.1	78	57	11	7.9	7.9	7.3	7.2
3	6.9	10	6.9	7.1	7.1	61	94	9.9	7.9	7.9	7.1	7.2
4	7.0	9.0	7.1	7.1	7.1	45	158	9.7	7.9	7.6	7.1	7.2
5	7.0	8.1	8.0	7.1	7.1	52	151	9.5	7.9	7.6	7.1	7.2
6	7.1	7.9	7.1	7.1	7.1	74	137	9.0	7.9	8.1	7.1	7.2
7	7.1	7.3	7.0	7.1	7.1	67	78	8.5	7.9	9.0	7.3	7.2
8	7.0	7.1	6.9	7.1	7.1	57	45	8.5	8.1	8.1	7.3	7.2
9	7.0	7.1	6.9	7.1	7.1	111	58	8.2	7.9	7.9	7.3	7.2
10	6.8	7.1	7.0	7.1	7.1	144	122	8.3	7.9	7.6	7.3	7.2
11	6.7	6.9	7.1	7.1	7.1	59	324	8.3	7.9	7.9	8.1	7.2
12	6.8	6.9	7.1	6.9	7.1	30	287	8.2	7.9	8.4	7.9	7.2
13	6.9	6.9	7.0	6.9	7.1	72	410	8.1	7.9	7.9	7.3	7.2
14	6.8	6.9	7.0	7.1	7.3	66	398	8.1	7.9	8.1	7.3	7.2
15	6.8	6.9	7.1	7.1	7.9	43	372	8.1	7.6	7.6	7.3	7.2
16	6.7	6.9	7.1	7.1	7.3	142	266	8.2	7.6	7.6	7.1	7.2
17	6.7	6.9	7.1	7.1	7.6	141	189	8.1	7.9	7.6	7.1	7.2
18	6.7	6.9	7.1	7.1	7.1	139	77	8.1	7.9	7.6	7.1	7.2
19	6.8	6.9	7.1	7.1	7.1	192	73	8.1	7.9	7.3	7.3	7.2
20	6.8	6.9	7.1	7.1	7.1	178	79	8.1	7.9	7.6	7.6	7.2
21	6.8	6.9	7.1	7.0	7.1	133	133	8.4	7.9	7.6	7.3	7.2
22	7.0	6.9	7.1	6.9	7.1	118	149	8.4	7.6	7.6	7.3	7.2
23	7.1	6.9	7.1	7.0	7.1	70	116	8.1	7.6	7.6	7.3	7.2
24	7.0	6.9	7.1	7.1	7.1	74	91	8.1	7.6	7.3	7.3	7.2
25	6.8	6.9	6.9	7.1	7.6	59	78	8.1	7.6	7.6	7.1	7.2
26	6.9	6.9	7.1	7.1	13	64	67	8.1	7.6	7.9	7.3	7.2
27	7.0	6.9	7.1	7.1	36	29	37	8.1	7.6	8.1	7.3	7.2
28	7.1	6.9	7.1	7.2	51	29	25	8.1	7.6	7.9	7.3	7.2
29	8.9	6.9	7.1	7.1	---	33	20	7.9	7.6	7.9	7.3	7.2
30	7.3	6.9	7.1	7.2	---	42	16	7.9	7.3	7.6	7.3	7.2
31	7.0	---	7.1	7.3	---	117	---	7.9	---	7.3	7.3	---
TOTAL	216.4	218.5	219.4	219.5	279.7	2580	4229	266.1	233.6	241.3	226.4	216.1
MEAN	6.98	7.28	7.08	7.08	9.99	83.2	141	8.58	7.79	7.78	7.30	7.20
MAX	8.9	10	8.0	7.3	51	192	410	13	8.1	9.0	8.1	7.3
MIN	6.7	6.9	6.9	6.9	7.1	29	16	7.9	7.3	7.3	7.1	7.2
AC-FT	429	433	435	435	555	5120	8390	528	463	479	449	429

CAL YR 1974 TOTAL 3446.7 MEAN 9.44 MAX 83 MIN 6.7 AC-FT 6840
WTR YR 1975 TOTAL 9146.0 MEAN 25.1 MAX 410 MIN 6.7 AC-FT 18140

PEAK DISCHARGE (BASE, 600 CFS).--Apr. 13 (1800) 1,060 cfs (6.97 ft).

NOTE.--No gage-height record Sept. 2-30.

09505250. Red Tank Draw near Rimrock, Ariz.

LOCATION.--Lat 34°41'43", long 111°42'49", in SE¼NE¼ sec.16, T.15 N., R.6 E., Yavapai County, in Coconino National Forest, on left bank 2.5 mi (4.0 km) downstream from confluence of Rarick and Mullican Canyons, and 3.5 mi (5.6 km) northeast of Rimrock.

DRAINAGE AREA.--49.4 mi^2 (128 km^2).

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

GAGE.--Water-stage recorder. Concrete control prior to Sept. 5, 1970. Altitude of gage is 3,920 ft (1,195 m), from topographic map. Prior to Sept. 5, 1970, at datum 0.29 ft (0.088 m) higher.

AVERAGE DISCHARGE.--18 years, 6.99 ft^3/s (0.198 m^3/s), 5,060 acre-ft/yr (6.24 hm^3/yr); median of yearly mean discharges, 4.4 ft^3/s (0.12 m^3/s) 3,200 acre-ft/yr (3.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 407 ft^3/s (11.5 m^3/s) Apr. 13 (gage height, 5.42 ft or 1.652 m); no flow for many days.
Period of record: Maximum discharge, 10,500 ft^3/s (297 m^3/s) Sept. 5, 1970 (recorded gage height, 12.69 ft or 3.868 m, about 13.3 ft or 4.05 m, from profile), from rating curve extended above 480 ft^3/s (14 m^3/s), on basis of slope-area meansurement of peak flow; no flow for many days in each year.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.02	.02	0	11	34	.39	.12			
2		0	.02	.02	0	10	13	.37	.11			
3		0	.01	.02	0	5.6	7.3	.35	.10			
4		0	.02	.01	0	3.6	7.9	.33	.08			
5		0	.05	.01	0	2.1	6.5	.32	.06			
6		0	.04	.02	0	1.4	3.8	.32	0			
7		0	.02	.02	0	1.4	2.7	.30	0			
8		0	.02	.02	0	1.7	3.0	.29	0			
9		0	.02	.02	0	1.6	3.8	.29	0			
10		0	.02	.02	0	30	28	.28	0			
11		.01	.02	.01	0	8.3	120	.27	0			
12		.05	.02	.01	0	4.6	101	.26	0			
13		.05	.02	.01	0	14	140	.25	0			
14		.05	.02	.01	0	27	127	.24	0			
15		.06	.02	0	.04	15	77	.24	0			
16		.06	.02	0	.03	49	40	.23	0			
17		.06	.02	0	.04	55	14	.23	0			
18		.06	.02	0	.03	59	6.7	.23	0			
19		.06	.02	0	.02	79	3.4	.22	0			
20		.06	.01	0	.02	62	2.2	.21	0			
21		.06	.01	0	.03	22	1.6	.22	0			
22		.05	.02	0	.04	13	1.2	.22	0			
23		.05	.02	0	.12	6.7	.91	.21	0			
24		.04	.01	0	.68	3.5	.79	.20	0			
25		.04	.01	0	.64	2.5	.68	.18	0			
26		.03	.02	0	20	2.0	.61	.17	0			
27		.03	.02	0	31	1.9	.56	.16	0			
28		.03	.02	0	18	2.5	.49	.15	0			
29		.02	.02	0	---	2.6	.46	.15	0			
30		.02	.02	0	---	2.5	.42	.14	0			
31		---	.02	0	---	19	---	.14	---			---
TOTAL	0	.89	.62	.22	70.69	519.5	749.02	7.56	.47	0	0	0
MEAN	0	.030	.020	.007	2.52	16.8	25.0	.24	.016	0	0	0
MAX	0	.06	.05	.02	31	79	140	.39	.12	0	0	0
MIN	0	0	.01	0	0	1.4	.42	.14	0	0	0	0
AC-FT	0	1.8	1.2	.4	140	1030	1490	15	.9	0	0	0

CAL YR 1974 TOTAL 50.31 MEAN .14 MAX 11 MIN 0 AC-FT 100
WTR YR 1975 TOTAL 1348.97 MEAN 3.70 MAX 140 MIN 0 AC-FT 2680

PEAK DISCHARGE (BASE, 200 CFS).--Apr. 13 (0015) 407 cfs (5.42 ft).

09505300. Rattlesnake Canyon near Rimrock, Ariz.

LOCATION.--Lat 34°46'01", long 111°40'23", in NW¼SW¼ sec.24, T.16 N., R.6 E., Yavapai County, in Coconino National Forest, on left bank 2.6 mi (4.2 km) upstream from mouth, 7 mi (11 km) northeast of Beaver Creek Ranger Station, and 9 mi (14 km) northeast of Rimrock.

DRAINAGE AREA.--24.6 mi^2 (63.7 km^2).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,870 ft (1,484 m), from topographic map.

AVERAGE DISCHARGE.--18 years, 7.20 ft^3/s (0.204 m^3/s), 5,220 acre-ft/yr (6.44 hm^3/yr); median of yearly mean discharge, 4.8 ft^3/s (0.14 m^3/s), 3,500 acre-ft/yr (4.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 311 ft^3/s (8.81 m^3/s) Apr. 13 (gage height, 5.31 ft or 1.618 m); no flow for most of year.
Period of record: Maximum discharge, 3,590 ft^3/s (102 m^3/s) Sept. 5, 1970 (gage height, 11.50 ft or 3.505 m), from rating curve extended above 1,100 ft^3/s (31 m^3/s) on basis of computation of peak flow over weir at gage height 8.50 ft (2.591 m) and slope-area measurement at gage height 11.50 ft (3.505 m); no flow for many days in each year.

REMARKS.--Records good except those for period of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.01	0	17	24	3.4				
2			0	.01	0	25	11	1.2				
3			0	.01	0	26	18	.29				
4			.01	.01	0	23	35	.07				
5			.05	.01	0	19	35	.02				
6			.05	.01	0	20	32	.01				
7			.03	.01	0	14	19	.01				
8			.01	.01	0	16	14	.01				
9			0	.01	0	55	19	.01				
10			0	0	0	35	45	.01				
11			0	.05	0	15	79	0				
12			0	.43	0	15	75	0				
13			0	1.2	0	29	116	0				
14			0	.96	0	30	119	0				
15			0	.81	0	10	96	0				
16			0	.10	0	20	70	0				
17			0	0	.02	30	49	0				
18			0	0	.09	30	23	0				
19			0	0	.10	50	18	0				
20			0	0	.19	63	31	0				
21			0	0	.74	59	45	0				
22			0	0	.19	46	43	0				
23			0	0	.08	21	35	0				
24			0	0	.56	16	28	0				
25			.50	0	20	18	26	0				
26			1.5	0	19	18	22	0				
27			1.0	0	13	12	11	0				
28			.50	0	12	11	9.1	0				
29			.10	0	---	9.5	7.7	0				
30			.10	0	---	20	6.1	0				
31		---	.02	0	---	39	---	0	---			---
TOTAL	0	0	3.87	3.64	65.97	811.5	1160.9	5.03	0	0	0	0
MEAN	0	0	.12	.12	2.36	26.2	38.7	.16	0	0	0	0
MAX	0	0	1.5	1.2	20	63	119	3.4	0	0	0	0
MIN	0	0	0	0	0	9.5	6.1	0	0	0	0	0
AC-FT	0	0	7.7	7.2	131	1610	2300	10.0	0	0	0	0

CAL YR 1974 TOTAL 387.14 MEAN 1.06 MAX 42 MIN 0 AC-FT 768
WTR YR 1975 TOTAL 2050.91 MEAN 5.62 MAX 119 MIN 0 AC-FT 4070

PEAK DISCHARGE (BASE, 150 CFS, REVISED).--Apr. 13 (1800) 311 cfs (5.31 ft).

NOTE.--No gage-height record Oct. 16 to Nov. 15, Dec. 24 to Jan. 8, Mar. 14-19.

09505350. Dry Beaver Creek near Rimrock, Ariz.

LOCATION.--Lat 34°43'43", long 111°46'30", in NE¼NW¼ sec.1, T.15 N., R.5 E., Yavapai County, in Coconino National Forest, on left upstream abutment of abandoned highway bridge, 400 ft (122 m) upstream from present State Highway 179 and 5.5 mi (8.8 km) north of Rimrock.

DRAINAGE AREA.--142 mi^2 (368 km^2).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,694.38 ft (1,126.047 m) above mean sea level (Arizona Highway Department bench mark).

AVERAGE DISCHARGE.--15 years, 36.5 ft^3/s (1.034 m^3/s), 26,440 acre-ft/yr (32.6 hm^3/yr); median of yearly mean discharges, 27 ft^3/s (0.76 m^3/s), 19,600 acre-ft/yr (24 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,220 ft^3/s (34.6 m^3/s) Apr. 14 (gage height, 5.08 ft or 1.548 m); no flow for many days.
Period of record: Maximum discharge, 26,600 ft^3/s (753 m^3/s) Sept. 5, 1970 (gage height, 14.35 ft or 4.374 m), from rating curve extended above 6,000 ft^3/s (170 m^3/s) on basis of computation of peak flow over weir at gage heights 9.07 ft (2.765 m) and 9.69 ft (2.954 m) and slope-area measurement at gage height 14.35 ft (4.374 m); no flow for many days each year.

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

REVISIONS.--WRD Ariz. 1969: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0			0	119	141	17				0
2	0	16			0	142	50	12				0
3	0	.68			0	123	69	8.7				0
4	0	.04			0	103	148	6.3				26
5	0	0			0	81	148	4.7				1.0
6	0	0			0	107	152	3.7				.09
7	0	0			0	94	101	2.8				.02
8	0	0			0	98	60	1.8				0
9	0	0			0	170	47	.91				0
10	0	0			0	176	100	.39				0
11	0	0			0	77	166	.14				0
12	0	0			0	42	201	.07				0
13	0	0			0	65	337	.05				0
14	0	0			0	66	525	.04				0
15	0	0			0	41	439	.02				0
16	0	0			0	98	353	.02				0
17	0	0			0	112	254	.01				0
18	0	0			0	173	110	0				0
19	0	0			0	315	93	0				0
20	0	0			0	272	100	0				0
21	0	0			0	235	175	0				0
22	0	0			0	204	213	0				0
23	0	0			0	105	174	0				0
24	0	0			0	103	141	0				0
25	0	0			0	85	126	.01				0
26	0	0			38	80	116	0				0
27	0	0			88	29	63	0				0
28	.05	0			82	34	39	0				0
29	.04	0			---	36	29	0				0
30	0	0			---	37	24	0				0
31	0	---			---	123	---	0	---			---
TOTAL	.09	16.72	0	0	208	3545	4694	58.66	0	0	0	27.11
MEAN	.003	.56	0	0	7.43	114	156	1.89	0	0	0	.90
MAX	.05	16	0	0	88	315	525	17	0	0	0	26
MIN	0	0	0	0	0	29	24	0	0	0	0	0
AC-FT	.2	33	0	0	413	7030	9310	116	0	0	0	54

CAL YR 1974 TOTAL 1852.60 MEAN 5.08 MAX 138 MIN 0 AC-FT 3670
WTR YR 1975 TOTAL 8549.58 MEAN 23.4 MAX 525 MIN 0 AC-FT 16960

PEAK DISCHARGE (BASE, 600 CFS).--Mar. 19 (2100) 731 cfs (4.60 ft); Apr. 14 (1930) 1,220 cfs (5.08 ft).

NOTE.--No gage-height record June 6 to Aug. 4.

09505550. Verde River below Camp Verde, Ariz.

LOCATION.--Lat 34°33'02", long 111°51'02", in SW¼NW¼ sec.5, T.13 N., R.5 E., Yavapai County, on downstream side of bridge on county highway, 0.5 mi (0.8 km) southeast of Camp Verde, and 2.2 mi (3.5 km) downstream from Beaver Creek.

DRAINAGE AREA.--4,670 mi^2 (12,100 km^2), approximately (includes 373 mi^2 or 966 km^2 in Aubrey Valley Playa, a closed basin).

PERIOD OF RECORD.--November 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,045.10 ft (928.146 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 3,280 ft^3/s (92.9 m^3/s) Apr. 15 (gage height, 7.62 ft or 2.323 m); minimum daily, 15 ft^3/s (0.42 m^3/s) June 21, 22.

Period of record: Maximum discharge, 40,600 ft^3/s (1,150 m^3/s) Oct. 20, 1972 (gage height, 18.51 ft or 5.642 m recorded, 19.0 ft or 5.79 m, top of surge in gage well and from profile past gage); minimum daily, 15 ft^3/s (0.42 m^3/s) Aug. 31, Sept. 1, 1974, June 21, 22, 1975.

Flood of Sept. 5-6, 1970, reached a stage of about 19.0 ft (5.79 m), estimated on basis of stage of 19.5 ft (5.94 m), from profile past gage (discharge, 43,000 ft^3/s or 1,220 m^3/s). A peak discharge of 97,000 ft^3/s (2,750 m^3/s) was recorded at former gaging station at site 8.5 mi (13.7 km) downstream (below West Clear Creek) on Mar. 3, 1938, and is the highest near this site since at least 1924.

REMARKS.--Records good. About 10,000 acres (40 km^2) above station are irrigated by surface water and ground water.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	174	134	150	114	297	506	123	23	18	40	27
2	67	201	136	153	109	449	338	110	24	19	35	31
3	60	339	134	153	109	593	299	104	23	21	34	31
4	58	221	131	153	109	502	422	92	22	20	35	31
5	58	179	136	155	108	406	512	90	21	22	30	30
6	58	168	143	153	106	404	512	86	21	24	30	39
7	64	160	138	153	100	506	458	80	22	26	30	66
8	65	160	141	150	101	450	320	74	23	26	29	90
9	62	153	141	150	100	514	261	65	25	31	30	111
10	63	150	138	150	98	932	287	60	28	36	24	101
11	55	145	141	150	105	638	518	55	33	35	30	80
12	54	143	141	153	112	422	1110	74	35	39	26	63
13	68	136	136	150	116	339	1310	55	28	113	57	70
14	71	131	134	150	116	402	2310	45	21	103	104	246
15	70	123	136	149	124	338	2360	45	20	303	61	121
16	73	119	136	146	143	362	1860	40	20	152	54	87
17	78	115	138	144	139	602	1150	39	17	180	38	64
18	77	115	138	142	130	719	688	40	16	157	38	55
19	71	106	148	141	121	1450	476	41	16	106	38	53
20	72	110	145	143	117	2400	390	40	16	80	38	46
21	78	121	136	138	115	1620	458	42	15	65	34	36
22	80	134	138	135	121	1330	530	39	15	53	29	34
23	92	129	141	131	118	840	458	43	16	41	29	37
24	97	127	141	131	116	604	365	37	19	35	29	34
25	87	127	145	134	115	416	307	41	21	31	26	30
26	78	127	150	129	139	390	275	40	21	31	28	29
27	100	125	153	133	161	346	244	34	17	37	29	30
28	121	121	155	139	240	258	183	33	16	41	28	28
29	141	121	155	142	---	240	152	32	17	34	28	31
30	236	127	155	131	---	226	136	28	18	56	27	34
31	265	---	150	119	---	283	---	28	---	53	27	---
TOTAL	2691	4407	4384	4450	3402	19278	19195	1755	629	1988	1115	1765
MEAN	86.8	147	141	144	122	622	640	56.6	21.0	64.1	36.0	58.8
MAX	265	339	155	155	240	2400	2360	123	35	303	104	246
MIN	54	106	131	119	98	226	136	28	15	18	24	27
AC-FT	5340	8740	8700	8830	6750	38240	38070	3480	1250	3940	2210	3500

CAL YR 1974 TOTAL 37706 MEAN 103 MAX 807 MIN 15 AC-FT 74790
WTR YR 1975 TOTAL 65059 MEAN 178 MAX 2400 MIN 15 AC-FT 129000

PEAK DISCHARGE (BASE, 3,000 CFS).--Mar. 20 (1015) 3,240 cfs (7.45 ft); Apr. 15 (0130) 3,280 cfs (7.62 ft).

09505800. West Clear Creek near Camp Verde, Ariz.

LOCATION.--Lat 34°32'19", long 111°41'36", in NW¼NW¼ sec.11, T.13 N., R.6 E., Yavapai County, in Coconino National Forest, on left bank at Bull Pen Ranch, 9 mi (14 km) upstream from mouth, and 9 mi (14 km) east of Camp Verde.

DRAINAGE AREA.--241 mi^2 (624 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 3,630 ft (1,106 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 58.5 ft^3/s (1.657 m^3/s), 42,380 acre-ft/yr (52.3 hm^3/yr); median of yearly mean discharges, 44 ft^3/s (1.25 m^3/s), 31,800 acre-ft/yr (39 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,730 ft^3/s (77.3 m^3/s) Apr. 15 (gage height, 6.68 ft or 2.036 m); minimum daily, 13 ft^3/s (0.37 m^3/s) June 28 to July 2.
Period of record: Maximum discharge, 11,300 ft^3/s (320 m^3/s) Oct. 19, 1972 (gage height, 9.61 ft or 2.929 m), from rating curve extended above 2,100 ft^3/s (60 m^3/s), on basis of slope-area measurement at gage height 8.3 ft (2.53 m); minimum daily, 12 ft^3/s (0.34 m^3/s) at times during summer months in 1966, 1968-70, 1974.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	19	19	17	17	37	237	44	19	13	17	15
2	16	30	19	17	15	75	145	41	19	13	19	15
3	17	28	19	17	15	70	157	38	19	14	19	15
4	17	25	19	17	15	50	391	36	18	15	17	15
5	17	22	22	17	15	34	332	35	16	14	14	15
6	18	19	21	17	15	32	184	34	16	14	14	16
7	17	19	20	17	14	44	145	31	23	15	14	16
8	17	18	19	17	15	46	105	28	29	15	15	16
9	16	18	19	18	15	41	85	27	23	14	15	16
10	16	17	18	17	15	122	128	26	17	14	14	16
11	16	17	19	17	15	109	435	25	16	14	15	16
12	17	17	19	17	15	73	528	24	15	14	16	15
13	17	17	19	15	15	99	792	22	15	14	15	16
14	17	17	19	16	15	111	922	22	14	14	14	18
15	17	17	19	16	30	111	1240	21	14	14	14	16
16	17	17	18	16	20	203	776	21	15	14	14	16
17	16	17	18	16	15	227	372	22	15	14	14	16
18	16	17	18	16	15	241	223	21	14	14	14	16
19	15	18	18	16	15	341	145	21	14	14	14	15
20	16	18	18	16	15	298	117	21	15	14	14	15
21	16	18	18	16	15	175	109	22	54	14	14	15
22	17	18	18	16	15	122	117	21	18	14	14	15
23	17	19	19	16	15	95	117	21	16	14	14	15
24	17	19	19	16	15	80	105	20	16	14	14	15
25	17	19	17	15	30	73	93	20	15	14	14	15
26	17	18	19	15	37	62	85	19	15	14	15	15
27	17	18	18	16	48	62	76	19	14	14	15	15
28	18	18	18	17	41	52	62	19	13	14	15	15
29	26	18	19	17	---	47	54	19	13	15	15	15
30	27	18	18	17	---	57	48	19	13	15	15	15
31	22	---	18	17	---	135	---	19	---	15	15	---
TOTAL	542	570	581	510	537	3324	8325	778	533	438	462	464
MEAN	17.5	19.0	18.7	16.5	19.2	107	278	25.1	17.8	14.1	14.9	15.5
MAX	27	30	22	18	48	341	1240	44	54	15	19	18
MIN	15	17	17	15	14	32	48	19	13	13	14	15
AC-FT	1080	1130	1150	1010	1070	6590	16510	1540	1060	869	916	920

CAL YR 1974 TOTAL 6688 MEAN 18.3 MAX 147 MIN 12 AC-FT 13270
WTR YR 1975 TOTAL 17064 MEAN 46.8 MAX 1240 MIN 13 AC-FT 33850

PEAK DISCHARGE (BASE, 1,000 CFS).--Apr. 15 (0015) 2,730 cfs (6.68 ft).

NOTE.--No gage-height record Aug. 5 to Sept. 10.

09507500. Fossil Creek diversions to Childs powerplant, near Camp Verde, Ariz.

LOCATION.--Lat 34°22'06", long 111°39'56", in NE¼SW¼ sec. 20, T.11½ N., R.7 E., Yavapai County, at head of Stehr Lake, 2.3 mi (3.7 km) northeast of Childs powerplant, 4.4 mi (7.1 km) by flume downstream from Irving powerplant, and 17 mi (27 km) southeast of Camp Verde.

PERIOD OF RECORD.--January 1952 to current year.

GAGE.--Water-stage recorder and weir in concrete flume. Datum of gage is 3,716.2 ft (1,132.70 m) above mean sea level.

AVERAGE DISCHARGE.--23 years, 42.9 ft^3/s (1.21 m^3/s), 31,080 acre-ft/yr (38.3 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 51 ft^3/s (1.44 m^3/s) Apr. 17-21, 1952, Jan. 17, 18, 1965; no flow at times in most years.

REMARKS.--Records excellent except those for period Feb. 25 to Mar. 21, which are fair. Record is obtained at the head of Stehr Lake, a regulatory basin, and shows the water used by Childs powerplant. Most of the flow originates at Fossil Springs, which are fairly constant. Diversion is made from Fossil Creek 8 mi (13 km) upstream from this station and is first used by Irving powerplant. A second diversion from Fossil Creek enters the flume below Irving powerplant. Based on estimates and records for previous years, the flow through the Irving powerplant is estimated to be about 99 percent of the record published herewith.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	44	42	38	44	43	44	46	9.5	42	45	45
2	47	44	41	38	44	43	44	46	43	42	45	45
3	47	43	41	38	44	43	44	46	43	42	44	44
4	47	44	41	38	44	43	44	46	43	42	43	45
5	47	42	41	38	43	43	43	46	43	42	43	45
6	47	45	41	38	43	43	43	46	43	42	43	45
7	47	45	41	38	43	43	43	46	43	42	39	45
8	47	45	41	38	43	43	43	46	43	42	46	44
9	46	42	41	38	43	43	44	46	43	43	46	44
10	47	43	41	43	43	44	44	45	42	42	46	44
11	47	45	41	43	43	44	43	45	43	42	46	44
12	47	43	40	43	42	44	44	45	43	42	46	44
13	46	44	39	43	43	44	44	45	43	42	47	44
14	46	44	39	43	43	44	44	44	43	42	46	45
15	46	43	39	43	43	44	44	45	44	42	46	44
16	46	43	39	43	43	44	44	44	44	42	46	44
17	41	43	39	43	43	44	44	44	44	42	46	45
18	43	43	39	43	43	44	44	44	44	42	46	44
19	43	43	39	43	43	44	45	44	44	42	46	44
20	43	43	39	43	42	44	45	45	43	42	46	44
21	43	43	39	43	44	44	44	44	43	42	46	44
22	43	42	38	43	44	46	44	44	43	42	46	44
23	43	42	38	43	42	44	45	44	43	42	46	44
24	43	42	39	44	43	45	44	44	43	46	46	44
25	43	42	39	43	43	44	45	43	43	45	45	44
26	43	38	39	44	43	45	45	44	42	45	45	44
27	43	42	39	44	43	45	45	42	42	45	45	44
28	44	41	39	44	43	45	45	3.4	43	44	45	44
29	43	41	39	44	---	44	37	0	43	44	45	44
30	42	42	39	44	---	44	41	0	43	44	45	44
31	45	---	39	44	---	44	---	0	---	45	45	---
TOTAL	1392	1286	1231	1295	1207	1361	1312	1212.4	1258.5	1325	1400	1328
MEAN	44.9	42.9	39.7	41.8	43.1	43.9	43.7	39.1	42.0	42.7	45.2	44.3
MAX	47	45	42	44	44	46	45	46	44	46	47	45
MIN	41	38	38	38	42	43	37	0	9.5	42	39	44
AC-FT	2760	2550	2440	2570	2390	2700	2600	2400	2500	2630	2780	2630

CAL YR 1974 TOTAL 15828.10 MEAN 43.4 MAX 47 MIN .10 AC-FT 31400
WTR YR 1975 TOTAL 15607.90 MEAN 42.8 MAX 47 MIN 0 AC-FT 30960

09507580. East Verde River diversion from East Clear Creek, near Pine, Ariz.

LOCATION.--Lat 34°25'10", long 111°15'50", in NW¼NE¼ sec.23, T.12 N., R.10 E. (unsurveyed), Gila County, at confluence of Mail Creek and East Verde River, 0.9 mi (1.4 km) southeast of Washington Park, and 11 mi (18 km) east of Pine.

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

GAGE.--Water-stage recorder and weir in concrete flume. Altitude of gage is 5,774 ft (1,760.0 m), from Phelps Dodge Corporation reference mark.

EXTREMES.--Period of record: Maximum daily discharge, 34 ft^3/s (0.96 m^3/s) Apr. 19, 29, May 5-7, 10, 12, 15, 18, June 2, 1969; no flow for long periods each year.

REMARKS.--Records good. Diversion is 9.5 mi (15.3 km) northeast, from Blue Ridge Reservoir on East Clear Creek, in the Little Colorado River basin, to the East Verde River in the Gila River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0				0	27	26	24	28	26	28
2	0	0				0	26	27	24	26	28	28
3	0	0				0	27	26	22	29	28	27
4	0	0				0	27	24	23	29	28	28
5	.53	0				0	27	24	23	28	28	28
6	0	0				0	27	24	23	28	28	28
7	0	0				0	28	24	27	29	28	28
8	0	0				0	27	24	17	29	28	27
9	0	0				0	27	24	28	28	28	28
10	0	7.1				6.9	28	24	28	28	28	27
11	0	14				23	27	24	29	28	28	27
12	0	15				29	27	24	29	28	28	28
13	0	14				28	27	24	28	28	28	27
14	0	14				28	28	24	29	28	28	27
15	0	14				28	28	24	29	28	28	27
16	0	14				28	28	24	29	28	28	27
17	0	14				27	28	24	29	27	28	27
18	0	15				28	28	24	29	24	28	27
19	0	12				28	27	24	29	23	28	27
20	0	9.7				28	27	24	29	24	28	27
21	0	10				28	28	22	29	25	28	27
22	0	9.4				28	29	26	29	28	28	27
23	0	9.7				28	28	8.6	29	28	28	27
24	0	9.5				27	28	16	29	28	28	27
25	0	9.5				28	29	29	29	28	28	27
26	0	9.5				28	28	29	27	28	28	25
27	0	5.1				27	26	25	29	28	28	27
28	0	0				27	28	11	29	28	28	27
29	0	0			------	27	28	23	20	28	28	27
30	0	0			------	27	26	24	26	28	28	27
31	0	------			------	27	------	24	------	26	28	------
TOTAL	.53	205.5	0	0	0	583.9	824	724.6	804	851	866	816
MEAN	.017	6.85	0	0	0	18.8	27.5	23.4	26.8	27.5	27.9	27.2
MAX	.53	15	0	0	0	29	29	29	29	29	28	28
MIN	0	0	0	0	0	0	26	8.6	17	23	26	25
AC-FT	1.1	408	0	0	0	1,160	1,630	1,440	1,590	1,690	1,720	1,620

CAL YR 1974 TOTAL 3,565.23 MEAN 9.77 MAX 31 MIN 0 AC-FT 7,070
WTR YR 1975 TOTAL 5,675.53 MEAN 15.5 MAX 29 MIN 0 AC-FT 11,260

09507980. East Verde River near Childs, Ariz.

LOCATION.--Lat 34°17'00", long 111°38'50", in sec.21, T.11 N., R.7 E. (unsurveyed), Gila County, in Tonto National Forest, on left bank 1.3 mi (2.1 km) upstream from mouth and 6 mi (10 km) southeast of Childs.

DRAINAGE AREA.--328 mi^2 (850 km^2).

PERIOD OF RECORD.--September 1961 to December 1965, May 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,500 ft (760 m), from topographic map. Sept. 1, 1961, to Dec. 15, 1965, at site 1 mi (2 km) upstream at altitude 2,600 ft (790 m), datum raised 0.38 ft (0.116 m) Oct. 4, 1963. May 25, 1967, to July 20, 1972, at present site at datum 1.29 ft (0.393 m) higher.

EXTREMES.--Current year: Maximum discharge, 814 ft^3/s (23.1 m^3/s) Apr. 11 (gage height, 4.85 ft or 1.478 m); minimum daily, 1.5 ft^3/s (0.042 m^3/s) Oct. 3.
Period of record: Maximum discharge, 23,500 ft^3/s (666 m^3/s) Sept. 5, 1970 (gage height, 19.2 ft or 5.85 m, from profile past gage), from rating curve extended above 800 ft^3/s (23 m^3/s) on basis of slope-area measurements at gage heights 8.82 and 19.2 ft (2.688 and 5.85 m); minimum daily, 0.20 ft^3/s (0.006 m^3/s) June 19 to July 8, 1963, July 21-28, 1971.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Records include transbasin diversions from East Clear Creek to headwaters of East Verde River. (See sta 09507580.)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	21	9.6	9.0	8.0	40	47	56	28	16	28	26
2	1.6	196	8.7	9.0	8.0	30	50	52	27	19	24	26
3	1.5	185	8.5	9.0	8.0	40	46	49	26	22	24	26
4	1.6	81	8.6	9.0	8.0	40	49	46	26	24	26	26
5	1.6	37	19	9.0	8.0	35	52	44	25	28	26	26
6	1.8	25	21	9.0	8.0	35	56	43	26	27	27	26
7	2.1	19	15	9.0	8.0	30	72	43	25	43	28	30
8	2.6	15	12	9.0	8.0	30	74	40	26	53	27	35
9	2.8	13	10	9.0	8.0	25	95	40	29	46	29	28
10	2.6	11	9.4	9.0	8.0	30	328	38	23	33	31	28
11	2.0	10	9.0	9.0	8.0	110	535	37	28	33	28	28
12	2.2	9.2	9.0	9.0	8.0	100	435	37	28	38	28	29
13	2.8	14	8.8	9.0	8.0	90	440	36	28	38	40	28
14	3.2	13	8.5	9.0	8.0	86	299	36	27	40	30	29
15	2.3	13	8.4	9.0	10	109	222	35	27	35	28	31
16	2.5	14	8.2	9.0	15	177	145	35	27	33	27	27
17	2.5	14	8.0	9.0	20	130	171	36	27	33	26	26
18	2.3	17	8.5	9.0	20	81	140	37	27	31	26	26
19	2.1	16	8.5	9.0	20	70	109	35	26	27	26	24
20	2.0	17	8.3	9.0	20	79	98	35	26	22	26	25
21	2.0	17	8.3	9.0	15	75	96	34	26	23	26	24
22	2.1	14	8.0	9.0	15	68	98	33	26	24	26	24
23	2.8	14	8.0	9.0	15	65	96	32	26	33	26	24
24	3.5	14	8.0	8.0	15	56	90	33	24	26	26	24
25	3.7	14	8.0	8.0	15	49	83	21	24	26	26	24
26	3.2	13	9.0	8.0	15	50	81	25	25	28	26	24
27	3.6	13	9.0	8.0	15	56	77	33	24	33	26	24
28	5.3	14	9.0	8.0	15	52	67	32	22	29	26	22
29	144	14	9.0	8.0	---	47	62	26	22	31	26	24
30	70	12	9.0	8.0	---	49	57	22	22	34	26	24
31	31	---	9.0	10	---	45	---	28	---	31	26	---
TOTAL	315.3	904.2	301.1	273.0	337.0	1959	4320	1129	773	959	841	788
MEAN	10.2	30.1	9.71	8.81	12.0	63.2	144	36.4	25.8	30.9	27.1	26.3
MAX	144	196	21	10	20	177	535	56	29	53	40	35
MIN	1.5	9.2	8.0	8.0	8.0	20	46	21	22	16	24	22
AC-FT	625	1790	597	541	668	3890	8570	2240	1530	1900	1670	1560

CAL YR 1974 TOTAL 7885.07 MEAN 21.6 MAX 274 MIN .69 AC-FT 15640
WTR YR 1975 TOTAL 12899.6 MEAN 35.3 MAX 535 MIN 1.5 AC-FT 25590

PEAK DISCHARGE (BASE, 300 CFS).--Nov. 2 (1300) 748 cfs (4.75 ft); Apr. 11 (2200) 814 cfs (4.85 ft).

NOTE.--No gage-height record Dec. 22 to Mar. 12.

09508300. Wet Bottom Creek near Childs, Ariz.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°09'39", long 111°41'32", in sec.36, T.9½ N., R.6 E. (unsurveyed), Gila County, in Tonto National Forest, on right bank 1.4 mi (2.3 km) upstream from mouth and 13 mi (21 km) south of Childs.

DRAINAGE AREA.--36.4 mi^2 (94.3 km^2).

PERIOD OF RECORD.--June 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,320 ft (707 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 10.0 ft^3/s (0.283 m^3/s), 7,240 acre-ft/yr (8.93 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 684 ft^3/s (19.4 m^3/s) Nov. 2 (gage height, 6.56 ft or 1.999 m), from rating curve extended above 300 ft^3/s (8.5 m^3/s) on basis of slope-area measurements at gage heights 9.77 and 11.00 ft (2.978 and 3.353 m); no flow for many days.
Period of record: Maximum discharge, 5,600 ft^3/s (159 m^3/s) Sept. 5, 1970 (gage height, 14.18 ft or 4.322 m), by slope-area measurement of peak flow; no flow at times.

REMARKS.--Records fair. Records of chemical analyses, suspended-sediment loads, and water temperatures for the current year are published on following pages.

REVISIONS.--WRD Ariz. 1970: 1968(M).

DISCHARGE, IN CUBIC FEET PER SECOND , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	14	.46	.55	2.2	6.3	4.8	1.6	.10	0	.18	
2	.06	184	.41	.60	4.2	5.8	5.0	1.1	.09	0	.13	
3	.05	134	.41	.60	4.2	5.3	4.5	1.1	.09	0	.12	
4	.05	50	.46	.60	4.2	4.8	4.2	.60	.08	0	.10	
5	.05	25	1.4	.55	4.0	4.2	3.7	.55	.07	0	.09	
6	.05	16	7.4	.55	3.5	4.0	3.7	.55	.05	0	.08	
7	.05	11	6.3	.60	3.5	3.5	9.3	.51	.05	0	.07	
8	.06	9.3	4.8	.60	3.2	3.2	16	.46	.04	4.4	.06	
9	.08	7.4	3.7	.86	3.2	2.9	25	.46	.03	.55	.05	
10	.09	6.1	2.9	.60	2.9	5.0	126	.41	.03	.36	.05	
11	.09	5.0	2.4	.86	2.4	8.2	134	.41	.02	.18	.05	
12	.09	4.0	1.9	.86	2.4	13	126	.36	.02	11	.04	
13	.08	3.2	1.4	1.6	2.7	28	112	.36	.01	6.1	.04	
14	.08	2.7	1.1	2.9	2.9	44	81	.32	.01	2.4	.04	
15	.08	1.9	.86	2.7	4.5	59	61	.27	.01	.60	.04	
16	.08	1.4	.86	2.4	8.2	87	37	.27	0	.46	.03	
17	.08	1.1	.60	2.2	13	65	24	.27	0	.46	.03	
18	.07	.86	.55	1.9	15	37	17	.32	0	.41	.03	
19	.06	.60	.55	1.9	13	30	14	.27	0	.32	.02	
20	.06	.55	.55	2.2	12	25	12	.27	0	.27	.02	
21	.05	.55	.55	1.9	11	19	10	.18	0	.25	.02	
22	.05	.55	.51	1.9	9.8	14	8.8	.27	0	.22	.01	
23	.06	.51	.51	1.9	8.2	11	7.4	.27	0	.22	.01	
24	.09	.51	.46	1.6	7.2	9.0	6.6	.18	0	.19	.01	
25	.11	.51	.51	1.6	6.6	8.0	5.5	.17	0	.13	.01	
26	.11	.46	.51	1.1	6.3	6.9	4.8	.15	0	.12	0	
27	.12	.46	.51	1.1	6.6	6.9	4.0	.14	0	.12	0	
28	.27	.46	.51	.86	6.6	5.8	3.5	.13	0	.13	0	
29	69	.46	.60	.86	---	5.5	2.9	.12	0	.15	0	
30	31	.46	.55	1.1	---	5.0	2.2	.13	0	.19	0	
31	29	---	.55	1.4	---	4.8	---	.11	---	.19	0	---
TOTAL	131.24	483.04	44.78	40.95	173.5	537.1	875.9	12.31	.70	29.42	1.33	0
MEAN	4.23	16.1	1.44	1.32	6.20	17.3	29.2	.40	.023	.95	.043	0
MAX	69	184	7.4	2.9	15	87	134	1.6	.10	11	.18	0
MIN	.05	.46	.41	.55	2.2	2.9	2.2	.11	0	0	0	0
AC-FT	260	958	89	81	344	1070	1740	24	1.4	58	2.6	0

CAL YR 1974 TOTAL 1754.54 MEAN 4.81 MAX 328 MIN 0 AC-FT 3480
WTR YR 1975 TOTAL 2330.27 MEAN 6.38 MAX 184 MIN 0 AC-FT 4620

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	0830	5.47	211	4-11	0045	5.40	190
11- 2	1415	6.56	684	7-12	1500	5.14	118
3-15	2400	5.14	118				

09508300. Wet Bottom Creek near Childs, Ariz.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°09'39", long 111°41'32", in sec.36, T.9½ N., R.6 E. (unsurveyed), Gila County in Tonto National Forest, at gaging station, 1.4 mi (2.2 km) upstream from mouth, and 13 mi (21 km) south of town of Childs.

DRAINAGE AREA.--36.4 mi^2 (94.3 km^2).

PERIOD OF RECORD.--Chemical analyses: August 1968 to current year.
Sediment records: August 1968 to current year.

REMARKS.--No flow for extended periods each year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
16...	1100	0.10	39	20	48	14	38	1.4	279	--	7.9	22
NOV.												
14...	1100	2.6	26	20	17	5.1	13	.9	87	--	10	6.4
DEC.												
13...	1200	1.7	29	40	20	5.5	16	.9	105	--	9.4	6.7
JAN.												
13...	1300	1.1	30	10	28	8.9	22	1.0	162	--	11	8.9
FEB.												
13...	1300	2.9	24	10	17	4.8	15	.8	80	--	12	11
MAR.												
13...	1300	29	13	40	9.5	2.4	6.9	1.4	28	0	10	3.0
APR.												
14...	1400	75	12	60	6.8	1.8	3.3	.7	16	--	8.4	2.0
JULY												
24...	1100	0.20	38	10	44	12	22	1.6	216	--	2.5	11
AUG.												
14...	1100	.04	37	20	47	14	27	1.5	238	--	1.6	15

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.												
16...	1.2	.05	.00	303	309	.41	180	0	1.2	473	7.5	18.0
NOV.												
14...	1.1	.01	.00	128	123	.17	63	0	.7	175	7.8	11.0
DEC.												
13...	1.4	.08	.01	134	141	.18	73	0	.8	190	8.7	8.0
JAN.												
13...	1.6	.05	.03	180	192	.24	110	0	.9	300	7.7	14.0
FEB.												
13...	1.5	.10	.03	137	126	.19	62	0	.8	186	--	11.0
MAR.												
13...	.4	.02	.00	59	61	.08	34	11	.5	90	8.1	11.0
APR.												
14...	.2	.05	.01	58	43	.08	24	11	.3	59	--	--
JULY												
24...	1.2	.02	.02	227	239	.31	160	0	.8	--	--	29.0
AUG.												
14...	1.3	.02	.00	289	262	.39	180	0	.9	--	--	26.0

09508300. Wet Bottom Creek near Childs, Ariz.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
NOV.											
14...	0915	--	.0	--	0	--	.0	--	.0	--	.0
14...	1015	.00	--	.0	--	.00	--	.00	--	.00	--

DATE	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)
NOV.											
14...	--	--	.0	--	.0	--	.0	--	.0	--	.0
14...	.00	.00	--	.00	--	.00	--	.00	--	.00	--

DATE	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV.										
14...	--	--	--	--	0	--	0	--	--	--
14...	.00	.00	.00	.0	--	0	--	.00	.00	.00

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	DISSOLVED COBALT (CO) (UG/L)
OCT.								
16...	1100	.18	--	--	70	--	--	--
NOV.								
14...	1100	9.1	--	--	220	--	--	--
DEC.								
13...	1200	173	7	<100	20	1	0	3
JAN.								
13...	1300	1.1	--	--	30	--	--	--
FEB.								
13...	1300	2.9	--	--	40	--	--	--
MAR.								
13...	1300	29	--	--	40	--	--	--
APR.								
14...	1400	75	--	--	40	--	--	--
JULY								
24...	1100	.18	--	--	20	--	--	--
AUG.								
14...	1100	.04	--	--	50	--	--	--

DATE	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED MOLYBDENUM (MO) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED SILVER (AG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.							
16...	--	--	--	--	--	--	--
NOV.							
14...	--	--	--	--	--	--	--
DEC.							
13...	5	100	.1	0	0	0	0
JAN.							
13...	--	--	--	--	--	--	--
FEB.							
13...	--	--	--	--	--	--	--
MAR.							
13...	--	--	--	--	--	--	--
APR.							
14...	--	--	--	--	--	--	--
JULY							
24...	--	--	--	--	--	--	--
AUG.							
14...	--	--	--	--	--	--	--

09508300. Wet Bottom Creek near Childs, Ariz.--Continued

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED URANIUM (U) (UG/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
NOV. 14...	0920	2.3	<.4	2.0	<.4	1.6	<.4	.03	.33	130	<1

PERIODIC DAILY SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT. 16...	1100	.10	18.0	0	.00
NOV. 14...	1100	2.6	11.0	0	.00
DEC. 13...	1200	1.7	8.0	1	.00
JAN. 13...	1300	1.1	7.0	2	.01
FEB. 13...	1330	2.9	11.0	0	.00
MAR. 13...	1300	29	11.0	4	.31
APR. 14...	1400	75	--	3	.61
MAY 13...	1400	.40	23.0	0	.00
JULY 24...	1700	.20	29.0	3	.00

09508500. Verde River below Tangle Creek, above Horseshoe Dam, Ariz.

LOCATION.--Lat 34°04'23", long 111°42'56", in sec.35, T.9 N., R.6 E. (unsurveyed), Yavapai County, in Tonto National Forest, on right bank 1.3 mi (2.1 km) downstream from Tangle Creek and 9 mi (14 km) upstream from Horseshoe Dam.

DRAINAGE AREA.--5,872 mi^2 (15,208 km^2), includes 373 mi^2 (966 km^2) in Aubrey Valley Playa, a closed basin.

PERIOD OF RECORD.--August 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,029.0 ft (618.44 m) above mean sea level.

AVERAGE DISCHARGE.--30 years, 470 ft^3/s (13.31 m^3/s), 340,500 acre-ft/yr (420 hm^3/yr); median of yearly mean discharges, 350 ft^3/s (9.9 m^3/s), 254,000 acre-ft/yr (313 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,420 ft^3/s (153 m^3/s) Apr. 15 (gage height, 10.10 ft or 3.078 m); minimum daily, 105 ft^3/s (2.97 m^3/s) July 2.

Period of record: Maximum discharge, 81,600 ft^3/s (2,310 m^3/s) Dec. 31, 1951 (gage height, 17.62 ft or 5.371 m), from rating curve extended above 42,000 ft^3/s (1,190 m^3/s); maximum gage height, 19.00 ft (5.791 m) Oct. 20, 1972; minimum discharge, 48 ft^3/s (1.36 m^3/s) June 17, 1956, July 18, 19, 1958, caused by power regulation on Fossil Creek; minimum daily, 61 ft^3/s (1.73 m^3/s) July 18, 1958.

Maximum discharge since at least 1924, 100,000 ft^3/s (2,830 m^3/s) Mar. 3, 1938 (gage height, 19.0 ft or 5.79 m, from floodmarks), based on comparison with peak discharge at other stations on Verde River.

REMARKS.--Records good. About 12,500 acres (50.6 km^2) above station are irrigated by surface water and ground water. Low flow slightly regulated by powerplant 32 mi (51 km) above station, using water from Fossil Creek. This station is above all major reservoirs on Verde River.

REVISIONS.--WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	227	423	269	271	261	420	639	385	151	108	150	120
2	197	820	276	271	263	465	858	356	150	105	151	122
3	189	1,420	278	271	267	606	690	326	146	112	136	125
4	178	777	278	269	267	706	686	300	138	116	129	139
5	160	562	302	269	265	643	950	278	131	126	129	146
6	160	432	300	271	252	559	976	271	129	131	131	153
7	164	372	300	273	248	563	927	267	128	126	131	167
8	170	342	291	271	244	632	859	265	128	158	132	196
9	164	324	278	273	238	617	743	254	128	163	135	217
10	164	311	276	265	229	678	953	238	129	158	133	234
11	157	302	273	269	238	1,010	1,640	225	126	146	144	238
12	157	298	271	267	229	828	2,840	221	133	224	164	225
13	157	291	267	265	240	678	2,880	225	139	237	177	214
14	164	284	261	263	254	742	3,700	215	139	210	203	258
15	165	284	252	265	278	829	4,360	201	135	217	194	326
16	167	280	254	265	291	1,030	3,490	192	132	325	182	300
17	167	276	263	265	322	1,160	2,360	192	128	277	170	257
18	168	278	261	261	326	1,120	1,630	192	121	262	157	223
19	175	278	265	263	314	1,230	1,110	194	116	277	151	214
20	170	263	267	259	312	2,200	914	187	112	229	142	199
21	175	259	267	257	337	2,450	803	180	111	199	138	192
22	175	263	259	257	326	1,760	846	167	113	180	133	178
23	184	265	261	250	304	1,440	875	189	111	175	133	168
24	189	265	261	254	293	1,040	801	189	107	164	126	156
25	201	265	261	252	308	877	695	184	110	151	122	152
26	201	265	269	254	322	722	639	175	124	132	125	151
27	199	265	276	259	332	694	598	177	129	133	124	151
28	238	265	273	259	361	643	538	170	128	141	128	150
29	505	267	278	265	------	548	462	159	118	142	124	144
30	458	263	278	265	------	520	408	157	111	150	121	140
31	429	------	276	267	------	520	------	154	------	145	120	------
TOTAL	6,374	11,259	8,441	8,185	7,921	27,930	39,870	6,905	3,801	5,419	4,435	5,655
MEAN	206	375	272	264	283	901	1,329	223	127	175	143	189
MAX	505	1,420	302	273	361	2,450	4,360	385	151	325	203	326
MIN	157	259	252	250	229	420	408	154	107	105	120	120
AC-FT	12,640	22,330	16,740	16,230	15,710	55,400	79,080	13,700	7,540	10,750	8,800	11,220

CAL YR 1974 TOTAL 88,000 MEAN 241 MAX 1,420 MIN 93 AC-FT 174,500
WTR YR 1975 TOTAL 136,195 MEAN 373 MAX 4,360 MIN 105 AC-FT 270,100

PEAK DISCHARGE (BASE, 4,000 CFS).--April 15 (1230) 5,420 cfs (10.10 ft).

09509500. Reservoir system on Verde River at and below Horseshoe Dam, Ariz.

LOCATION.--This system comprises two storage reservoirs created by Horseshoe and Bartlett Dams on Verde River. Gages on Horseshoe Reservoir, formed by Horseshoe Dam, lat 33°59'05", long 111°42'35", in sec.2, T.7 N., R.6 E. (unsurveyed); and Bartlett Reservoir, formed by Bartlett Dam, lat 33°49'05", long 111°37'52", in sec.34, T.6 N., R.7 E. (unsurveyed).

DRAINAGE AREA.--6,185 mi² (16,019 km²), at Bartlett Dam.

PERIOD OF RECORD.--July 1939 to current year. Prior to 1946, published as Bartlett Reservoir at Bartlett Dam.

GAGE.--Water-stage recorders on dam structures. Datum of gage on Horseshoe Reservoir is 1,900.00 ft (579.120 m) and on Bartlett Reservoir 1,599.46 ft (487.515 m) above mean sea level. Prior to Oct. 14, 1964, Bartlett Reservoir gage datum was 10.00 ft (3.048 m) higher.

EXTREMES.--Current year: Maximum contents of system, 128,500 acre-ft (158 hm³) Apr. 19; minimum, 44,590 acre-ft (55.0 hm³) Jan. 23. Period of record: Maximum contents of system, 318,000 acre-ft (392 hm³) May 9, 1973; no storage at times when natural flow of river was passed through reservoir system.

REMARKS.--Horseshoe Reservoir is formed by earthfill and rockfill dam; dam completed and storage began Nov. 15, 1945. Bartlett Reservoir is formed by concrete multiple-arch dam; dam completed May 1939 and storage began Feb. 5, 1939. Total capacity of the two reservoirs (capacity tables dated January 1965, based on survey in 1963) is 317,700 acre-ft (392 hm³) divided as follows: Horseshoe Reservoir, 139,200 acre-ft (172 hm³) between elevations 1,915.0 (583.69 m)—sill of outlet gate—and 2,026.0 ft (617.52 m)—top of spillway gates; Bartlett Reservoir, 178,500 acre-ft (220 hm³) between elevations 1,619.46 ft (493.611 m)—10 ft (3.0 m) above sill of outlet gates--and 1,797.46 ft (547.866 m)—top of spillway gates. No dead storage. Records given herein represent usable contents. Water is used for irrigation of Salt River Valley and for municipal supply.

COOPERATION.--Capacity tables furnished by Salt River Valley Water Users' Association.

REVISIONS.--WSP 1283: Drainage area.

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78,290	68,970	66,160	52,530	48,030	48,020	80,820	110,600	110,700	99,420	84,210	65,580
2	77,740	68,750	66,170	52,610	48,290	48,170	82,200	108,300	110,900	96,330	83,370	65,010
3	76,320	68,540	66,120	52,650	48,610	48,380	83,590	105,900	111,000	97,430	82,710	64,330
4	74,820	68,920	66,120	52,590	48,890	48,380	84,720	103,500	111,100	96,960	82,100	63,700
5	73,330	68,400	66,350	52,570	49,170	48,150	86,580	104,000	111,200	96,650	81,100	63,100
6	72,050	68,510	66,500	52,530	49,420	47,990	89,290	104,500	111,300	96,560	79,870	62,990
7	71,260	68,740	66,290	52,160	49,760	47,930	91,590	104,600	111,400	96,240	78,550	63,330
8	70,640	68,020	65,550	51,700	49,870	48,310	93,600	105,000	111,500	95,640	77,690	63,660
9	70,030	68,390	65,530	51,220	49,990	48,790	95,190	105,300	111,500	94,920	77,020	64,000
10	69,360	68,640	65,090	50,750	49,970	49,380	97,000	105,600	111,600	94,120	76,580	64,370
11	68,600	68,870	64,570	50,320	49,750	51,120	98,830	105,700	111,700	93,310	76,280	64,720
12	67,920	67,610	64,020	49,790	49,450	52,830	100,300	105,800	111,800	92,810	75,880	65,080
13	67,350	67,160	63,320	49,280	49,230	54,160	104,000	106,400	112,000	92,710	75,490	65,620
14	66,690	67,360	62,660	48,720	49,240	55,340	113,800	106,800	112,100	92,540	75,430	66,060
15	65,740	67,400	62,180	48,120	49,740	55,880	120,400	106,600	112,200	92,170	75,280	66,680
16	64,770	67,520	61,730	47,540	50,330	57,280	124,400	107,000	112,300	91,900	75,230	67,180
17	63,710	67,550	61,100	46,940	50,880	58,700	126,800	107,200	112,300	91,690	75,030	67,530
18	62,790	67,520	60,180	46,470	51,320	59,890	128,000	107,500	112,000	91,610	74,700	67,750
19	61,860	67,490	59,210	46,100	51,690	61,230	128,300	107,800	111,600	91,880	74,150	67,760
20	61,180	67,380	58,190	45,730	52,060	64,190	128,000	107,900	111,200	91,970	73,560	66,640
21	60,410	67,210	57,210	45,260	52,470	67,770	127,300	108,100	110,900	91,920	73,050	65,220
22	59,710	67,110	56,420	44,860	52,440	70,050	126,600	108,300	110,600	91,670	72,670	65,000
23	59,150	66,980	55,830	44,610	52,010	71,540	125,300	108,600	109,900	91,120	72,650	65,200
24	58,550	66,890	55,180	44,930	51,540	72,230	123,800	109,000	108,900	90,370	72,640	65,320
25	57,950	66,760	54,680	45,400	50,770	74,050	121,900	109,300	107,000	89,710	72,310	65,490
26	57,420	66,630	54,240	45,860	49,790	75,280	119,900	109,600	105,400	89,050	71,420	65,590
27	56,970	66,460	53,830	46,310	48,580	76,380	118,100	109,800	103,900	88,380	70,190	65,720
28	56,950	66,310	53,380	46,750	47,830	77,520	116,600	110,000	102,600	87,810	68,810	65,800
29	57,790	66,160	52,970	47,110	-------	78,470	114,700	110,100	101,600	86,970	67,560	65,990
30	58,100	66,150	52,590	47,420	------	79,220	112,800	110,300	100,500	86,040	66,750	66,060
31	58,410	------	52,480	47,730	------	79,870	------	110,500	------	85,140	66,270	------
MAX	78,290	67,550	66,500	52,650	52,470	79,870	126,300	110,600	112,300	99,420	84,210	67,760
MIN	56,950	58,970	52,480	44,610	47,830	47,930	80,820	103,500	100,500	85,140	66,270	62,990
(†)	-20,120	+7,740	-13,670	-4,750	+100	+30,040	+32,930	-2,300	-10,000	-15,360	-18,870	-210

CAL YR 1974 MAX 126,400 MIN 52,480 † -50,920
WTR YR 1975 MAX 128,300 MIN 44,610 † -12,470

† Change in contents, in acre-feet.

09510000. Verde River below Bartlett Dam, Ariz.

LOCATION.--Lat 33°49'03", long 111°38'08", in SE¼ sec.33, T.6 N., R.7 E. (unsurveyed), Maricopa County, in Tonto National Forest, on right bank 1,300 ft (400 m) downstream from Bartlett Dam, 5.9 mi (9.5 km) upstream from Camp Creek, and 18 mi (29 km) east of town of Cave Creek.

DRAINAGE AREA.--6,185 mi^2 (16,019 km^2).

PERIOD OF RECORD.--August 1888 to current year. (Monthly discharge only August 1888 to December 1903, and January 1910 to September 1913. For some periods prior to December 1903 gage heights, discharge measurements, and daily discharge hydrograph are published in reports of the Geological Survey.) Prior to October 1941, published under different names as follows: "near Fort McDowell," "at mouth," "above Salt River," "at McDowell," "at McDowell near Lehi," "near McDowell," and "above Camp Creek, near McDowell."

GAGE.--Water-stage recorder at present site and datum since Mar. 4, 1975, at present site and at datum 2.00 ft (0.610 m) higher, Oct. 1, 1973, to Mar. 3, 1975, and 3.00 ft (0.914 m) higher, Oct. 1, 1961, to Dec. 29, 1965, and Mar. 11, 1971, to Sept. 30, 1973. Altitude of gage is 1,600 ft (488 m), from topographic map. Prior to Feb. 17, 1925, nonrecording gages at several sites about 20 mi (32 km) downstream at various datums. Feb. 17, 1925, to Dec. 31, 1941, water-stage recorder at two sites within 0.5 mi (0.8 km) upstream from Camp Creek, at various datums. Dec. 31, 1941, to Sept. 30, 1961, and Dec. 30, 1965, to Mar. 10, 1971, water-stage recorder at site 1.9 mi (3.1 km) downstream at datum 1,572.34 ft (479.249 m) above mean sea level. Since Feb. 18, 1975, supplementary water-stage recorder at site 30 ft upstream from main gage at same datum.

AVERAGE DISCHARGE (adjusted for storage in Bartlett and Horseshoe Reservoirs).--87 years, 658 ft^3/s (18.63 m^3/s), 476,700 acre-ft/yr (588 hm^3/yr); median of yearly mean discharge, 540 ft^3/s (15.3 m^3/s), 391,000 acre-ft/yr (482 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,440 ft^3/s (69.1 m^3/s) May 2 (gage height, 7.17 ft or 2.185 m); no flow Mar. 26-30.
1888-1939: Maximum discharge not determined, probably over 150,000 ft^3/s (4,250 m^3/s) Feb. 24, 1891; minimum daily, 29 ft^3/s (0.82 m^3/s) July 11, 13, 1901. Floods of Nov. 27, 1905, and Mar. 4, 1938, reached maximum discharges of 96,000 ft^3/s (2,720 m^3/s) and 95,000 ft^3/s (2,690 m^3/s), respectively.
1939-75: Maximum discharge, 45,800 ft^3/s (1,300 m^3/s) Mar. 15, 1941; no flow at Bartlett Dam at times when gates in dam were closed.

REMARKS.--Records good. About 12,500 acres (50.6 km^2) above station are irrigated by surface water and ground water. Flow completely regulated by Bartlett Reservoir since Feb. 5, 1939, and Horseshoe Reservoir since Nov. 15, 1945 (see preceding page), except during periods of spill. Water diverted downstream for municipal supply of city of Phoenix, and for irrigation in Fort McDowell Indian Reservation. Remainder (except during infrequent periods of extreme flooding) is diverted at Granite Reef Dam on Salt River 27 mi (43 km) downstream for irrigation in Salt River Valley, and for municipal use by the city of Phoenix. Records of chemical analyses and water temperatures for the current water year are published on following pages.

REVISIONS (WATER YEARS).--WSP 1049: 1893, 1913-14, 1917-18, 1926-27, 1929. WSP 1213: 1915-16. WSP 1283: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	289	194	272	229	125	368	50	1440	58	438	514	416
2	410	164	260	242	125	380	51	1470	57	530	566	416
3	874	144	290	284	126	516	51	1500	57	478	470	430
4	916	186	306	298	125	762	52	1370	54	317	422	500
5	853	230	262	305	125	741	52	3.4	51	223	583	477
6	769	235	252	380	125	650	54	15	51	156	727	214
7	554	239	431	482	152	578	54	59	53	237	746	31
8	512	211	524	500	166	536	54	60	54	463	542	30
9	500	184	470	536	179	446	52	61	61	578	488	30
10	500	211	493	512	245	434	233	61	64	574	341	30
11	530	205	548	500	344	246	824	61	62	590	273	30
12	518	219	572	542	390	35	658	63	58	536	370	30
13	410	246	630	536	380	.2	548	63	58	410	380	30
14	440	248	608	548	273	153	652	63	58	352	266	30
15	614	255	506	560	108	628	871	63	58	461	265	29
16	745	259	476	578	56	603	1110	61	58	542	194	30
17	706	277	592	572	73	590	1090	60	72	443	232	30
18	657	313	699	524	125	638	1070	60	196	269	262	52
19	644	313	755	452	140	653	1040	52	255	186	356	180
20	530	320	797	464	146	762	1050	38	272	176	365	704
21	566	348	782	476	137	732	1160	38	199	202	340	804
22	542	395	664	464	380	699	1220	38	265	242	276	240
23	440	385	560	365	542	751	1450	38	426	385	143	27
24	476	365	584	93	542	778	1540	38	650	476	82	41
25	500	356	536	50	650	2.0	1620	38	704	464	244	49
26	494	320	452	29	804	0	1540	51	696	400	487	49
27	428	307	497	27	1010	0	1450	66	734	395	685	49
28	410	279	530	27	644	0	1290	60	562	356	748	47
29	316	279	536	66	---	0	1270	56	372	489	699	45
30	316	276	548	130	---	0	1390	56	340	584	486	46
31	262	---	306	125	---	26	---	56	---	602	352	---
TOTAL	16721	7965	15718	10896	8237	12701.2	23546	7158.4	6656	12554	13004	5116
MEAN	539	266	507	351	294	410	785	231	222	405	419	171
MAX	916	395	797	578	1010	778	1620	1500	734	602	748	804
MIN	262	144	252	27	56	0	50	3.4	51	156	82	27
AC-FT	33170	15800	31180	21610	16340	25190	46700	14200	13200	24900	25790	10150

CAL YR 1974 TOTAL 116333 MEAN 319 MAX 1740 MIN 13 AC-FT 230700
WTR YR 1975 TOTAL 140272.6 MEAN 384 MAX 1620 MIN 0 AC-FT 278200

09510000. Verde River below Bartlett Dam, Ariz.
(National stream-quality accounting network station)

LOCATION.--Lat 33°49'03", long 111°38'08", in SE¼ sec.33, T.6 N., R.7 E. (unsurveyed), Maricopa County, at gaging station in Tonto National Forest, 1,300 ft (400 m) downstream from Bartlett Dam, 5.9 mi (9.5 km) upstream from Camp Creek, and 18 mi (29 km) east of town of Cave Creek.

DRAINAGE AREA.--6,185 mi^2 (16,019 km^2).

PERIOD OF RECORD.--Chemical analyses: December 1950 to current year.
Water temperatures: December 1950 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 690 micromhos on several days during March; minimum daily, 315 micromhos June 29, 30.
Water temperatures: Maximum, 23.0°C on several days during September; minimum, 7.0°C on many days during January, February, and March.
Period of record:
Specific conductance: Maximum daily, 958 micromhos Nov. 10, 1956; minimum daily, 195 micromhos May 13, 14, 1973.
Water temperatures: Maximum, 32.0°C July 18, Aug. 14, 1951; minimum, 5.0°C Jan. 30, 1952.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.										
30...	0900	375	21	--	--	--	--	41	34	42
DEC.										
04...	0845	324	20	470	190	70	0	42	35	38
JAN.										
06...	1145	306	12	--	--	--	--	48	32	40
FEB.										
05...	0900	125	17	--	--	--	--	47	34	41
MAR.										
05...	0945	751	18	360	10	50	10	49	36	35
APR.										
02...	0830	50	19	--	--	--	--	47	36	35
MAY										
13...	0930	58	15	--	--	--	--	30	18	16
JUNE										
10...	1000	64	16	710	10	60	60	40	10	14
JULY										
29...	0930	455	17	--	--	--	--	36	14	14
SEPT										
08...	1230	32	16	--	--	--	--	41	25	27

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.									
30...	3.6	269	--	80	24	.3	.13	.02	346
DEC.									
04...	3.5	281	0	66	23	.4	.03	.02	373
JAN.									
06...	4.0	286	0	71	25	.2	.15	.02	378
FEB.									
05...	3.1	291	0	68	26	.2	.31	.03	377
MAR.									
05...	2.6	297	0	70	23	.3	--	--	367
APR.									
02...	3.6	291	0	72	30	.5	.10	.03	357
MAY									
13...	2.3	173	0	28	10	.2	.09	.01	213
JUNE									
10...	2.1	168	0	25	8.6	.2	.08	.04	191
JULY									
29...	1.9	170	0	24	8.5	.3	.06	.01	204
SEPT.									
08...	2.9	235	0	40	15	.2	.02	.02	312

09510000. Verde River below Bartlett Dam, Ariz.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
OCT.									
30...	379	.47	240	22	1.2	630	8.3	21.0	6
DEC.									
04...	367	.51	250	18	1.0	590	8.5	13.0	10
JAN.									
06...	374	.51	250	17	1.1	795	8.7	9.0	5
FEB.									
05...	381	.51	260	19	1.1	640	8.7	10.0	10
MAR.									
05...	380	.50	270	27	.9	665	8.4	9.0	10
APR.									
02...	387	.49	270	27	.9	620	8.4	10.0	12
MAY									
13...	205	.29	150	7	.6	360	8.3	22.0	15
JUNE									
10...	199	.26	140	3	.5	360	8.2	16.0	16
JULY									
29...	200	.28	150	8	.5	365	7.7	17.0	5
SEPT.									
08...	283	.42	210	13	.8	515	7.8	23.0	2

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.								
30...	0900	--	.01	.14	.20	.34	1.5	.03
DEC.								
04...	0845	--	.01	.03	.13	.16	.71	.05
JAN.								
06...	1145	--	.01	.18	.60	.78	3.5	.01
FEB.								
05...	0900	--	.01	.29	.34	.63	2.8	.02
MAR.								
05...	0945	--	--	.05	.17	.22	.97	.03
APR.								
02...	0830	.09	.01	.11	.21	.32	1.4	.05
MAY								
13...	0930	.09	.00	.14	.22	.36	1.6	.06
JUNE								
10...	1000	--	.00	.08	.30	.38	1.7	.06
JULY								
29...	0930	--	.01	.06	.30	.36	1.6	.03
SEPT.								
08...	1230	--	.01	.05	.41	.46	2.0	.09

09510000. Verde River below Bartlett Dam, Ariz.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
30...	0900	--	7.7	--	3.2	.9	16	85	--
DEC.									
04...	0845	4300	--	--	--	--	810	82	2.7
JAN.									
06...	1145	2500	--	--	--	--	<1	89	--
FEB.									
05...	0900	5400	--	--	--	--	82	<1	--
MAR.									
05...	0945	2100	--	--	--	--	<1	<1	2.6
APR.									
01...	0830	870	--	--	--	--	--	--	--
02...	0830	--	--	--	--	--	816	44	--
MAY									
13...	--	320	--	--	--	--	--	--	--
13...	0930	--	--	--	--	--	815	87	--
JUNE									
10...	1000	240	4.5	8.5	9.6	2.7	84	816	4.8
JULY									
16...	0900	--	--	--	--	--	85	82	--
29...	0930	310	--	--	--	--	85	51	--
SEP.									
08...	1230	1500	--	--	--	--	--	840	--

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)
OCT.										
30...	0900	--	--	130	--	--	--	--	--	--
DEC.										
04...	0845	18	18	220	<10	1	0	<10	<50	4
JAN.										
06...	1145	--	--	190	--	--	--	--	--	--
FEB.										
05...	0900	--	--	150	--	--	--	--	--	--
MAR.										
05...	0945	11	14	--	<10	0	0	0	<50	0
APR.										
02...	0830	--	--	210	--	--	--	--	--	--
MAY										
13...	0930	--	--	90	--	--	--	--	--	--
JUNE										
10...	1000	9	12	150	<10	0	0	0	<50	0
JULY										
29...	0930	--	--	80	--	--	--	--	--	--

DATE	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.									
30...	--	--	--	--	--	--	--	--	--
DEC.									
04...	<10	2	<100	2	.2	<.1	1	1	<10
JAN.									
06...	--	--	--	--	--	--	--	--	--
FEB.									
05...	--	--	--	--	--	--	--	--	--
MAR.									
05...	10	3	100	3	.0	.0	1	1	0
APR.									
02...	--	--	--	--	--	--	--	--	--
MAY									
13...	--	--	--	--	--	--	--	--	--
JUNE									
10...	20	5	<100	1	.1	.1	1	1	10
JULY									
29...	--	--	--	--	--	--	--	--	--

09510000. Verde River below Bartlett Dam, Ariz.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	625	610	585	600	655	655	670	375	335	320	345	475
2	615	600	590	600	650	650	600	370	330	320	345	480
3	615	595	590	600	650	655	575	365	325	320	345	485
4	625	595	595	600	650	690	580	350	325	320	350	500
5	620	585	595	600	650	690	585	---	340	320	350	510
6	620	540	595	600	650	690	585	---	345	320	355	505
7	615	515	600	600	650	690	540	370	345	320	365	490
8	615	505	590	600	650	690	575	365	340	325	370	500
9	620	505	590	600	650	690	570	370	340	325	365	505
10	615	510	590	595	645	690	560	370	330	325	370	505
11	605	510	590	600	640	690	500	360	340	330	370	505
12	615	510	590	600	645	690	490	365	330	330	375	500
13	615	510	590	600	655	---	490	365	330	330	380	510
14	610	515	590	595	650	---	465	365	330	330	390	505
15	615	525	590	580	650	690	470	350	325	330	385	505
16	615	530	590	600	650	690	460	350	330	330	390	500
17	615	545	590	600	650	685	455	345	330	330	395	500
18	615	545	590	600	650	685	440	340	330	330	400	520
19	615	580	595	600	650	685	440	340	330	330	410	535
20	620	585	595	605	650	685	440	345	320	330	410	530
21	620	600	595	600	650	675	430	340	325	335	420	535
22	620	600	595	600	655	665	430	355	325	335	420	550
23	620	610	590	600	650	655	425	350	320	335	425	530
24	620	610	590	605	655	645	420	355	320	335	430	525
25	625	615	585	605	650	645	415	355	320	335	430	525
26	625	615	585	605	655	635	405	350	320	335	435	540
27	625	615	590	605	655	---	395	340	320	335	435	545
28	625	610	590	605	655	---	390	345	320	340	450	550
29	625	610	590	605	---	---	385	335	315	335	460	550
30	630	610	590	605	---	---	380	330	315	340	470	560
31	615	---	590	605	---	---	---	330	---	340	475	---
MEAN	619	567	591	600	651	---	486	353	328	330	397	516
YEAR	MAX	690	MIN	315	MEAN	506						

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	18.0	13.0	8.0	7.0	8.0	10.0	12.0	14.0	15.0	18.0	21.0
2	20.0	18.0	13.0	8.0	7.0	8.0	10.0	12.0	14.0	15.0	18.0	22.0
3	20.0	17.0	12.0	8.0	7.0	8.0	9.0	13.0	14.0	---	18.0	22.0
4	20.0	16.0	12.0	8.0	8.0	8.0	9.0	13.0	14.0	15.0	18.0	23.0
5	20.0	16.0	12.0	8.0	8.0	8.0	9.0	---	14.0	15.0	19.0	23.0
6	20.0	16.0	12.0	8.0	8.0	9.0	9.0	---	14.0	15.0	19.0	22.0
7	20.0	16.0	12.0	8.0	8.0	9.0	9.0	12.0	14.0	16.0	19.0	21.0
8	20.0	16.0	12.0	8.0	8.0	7.0	9.0	12.0	14.0	16.0	20.0	21.0
9	20.0	16.0	12.0	8.0	8.0	9.0	9.0	12.0	14.0	16.0	20.0	21.0
10	20.0	16.0	12.0	7.0	8.0	9.0	9.0	12.0	15.0	17.0	20.0	21.0
11	20.0	16.0	11.0	7.0	7.0	9.0	11.0	13.0	15.0	17.0	19.0	21.0
12	20.0	16.0	11.0	7.0	7.0	9.0	11.0	14.0	14.0	17.0	19.0	21.0
13	20.0	15.0	11.0	7.0	7.0	---	11.0	14.0	14.0	17.0	20.0	22.0
14	20.0	15.0	11.0	7.0	7.0	---	11.0	14.0	14.0	17.0	20.0	22.0
15	20.0	15.0	10.0	7.0	7.0	10.0	11.0	13.0	14.0	17.0	20.0	22.0
16	20.0	15.0	10.0	7.0	7.0	10.0	11.0	13.0	14.0	17.0	20.0	23.0
17	21.0	15.0	10.0	7.0	7.0	10.0	11.0	13.0	14.0	17.0	20.0	23.0
18	22.0	15.0	10.0	7.0	7.0	10.0	11.0	13.0	14.0	17.0	20.0	22.0
19	22.0	14.0	10.0	7.0	7.0	10.0	11.0	13.0	14.0	17.0	20.0	23.0
20	22.0	14.0	10.0	7.0	7.0	10.0	11.0	13.0	14.0	17.0	20.0	23.0
21	22.0	14.0	10.0	7.0	7.0	10.0	12.0	12.0	14.0	17.0	21.0	23.0
22	22.0	14.0	10.0	---	7.0	10.0	12.0	12.0	14.0	17.0	21.0	23.0
23	21.0	14.0	---	7.0	8.0	10.0	12.0	12.0	14.0	17.0	20.0	21.0
24	21.0	14.0	---	7.0	8.0	10.0	12.0	12.0	14.0	17.0	20.0	20.0
25	21.0	14.0	10.0	7.0	8.0	9.0	12.0	12.0	14.0	17.0	20.0	22.0
26	20.0	14.0	9.0	7.0	8.0	9.0	12.0	12.0	14.0	17.0	20.0	22.0
27	20.0	14.0	9.0	7.0	8.0	---	12.0	13.0	14.0	17.0	21.0	22.0
28	20.0	13.0	9.0	7.0	8.0	---	12.0	13.0	14.0	17.0	21.0	22.0
29	20.0	13.0	9.0	7.0	---	---	12.0	13.0	15.0	17.0	21.0	22.0
30	20.0	13.0	8.0	7.0	---	---	12.0	13.0	15.0	18.0	22.0	22.0
31	19.0	---	8.0	7.0	---	---	---	13.0	---	---	21.0	---
MEAN	20.5	15.0	10.5	7.5	7.5	---	10.5	12.5	14.0	16.5	20.0	22.0
YEAR	MAX	23.0	MIN	7.0	MEAN	14.0						

09510100. East Fork Sycamore Creek near Sunflower, Ariz.

LOCATION.--Lat 33°56'58", long 111°27'39", in NE¼SE¼ sec.18, T.7 N., R.9 E., Maricopa County, in Tonto National Forest, on left bank 1.7 mi (2.7 km) upstream from confluence with West Fork and 6.0 mi (9.7 km) north of Sunflower.

DRAINAGE AREA.--4.49 mi^2 (11.6 km^2).

PERIOD OF RECORD.--July 1961 to current year. Low-flow records not equivalent prior to Nov. 10, 1964, owing to undetermined amount of underflow between sites.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,140 ft (1,262 m), from topographic map. Prior to Nov. 10, 1964, at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--14 years, 0.618 ft^3/s (0.0175 m^3/s), 448 acre-ft/yr (552,000 m^3/yr); median of yearly mean discharges, 0.30 ft^3/s (0.0085 m^3/s), 217 acre-ft/yr (270,000 m^3/yr).

EXTREMES.--Current year: Maximum discharge, 7.6 ft^3/s (0.22 m^3/s) Apr. 10 (gage height, 1.75 ft or 0.533 m); no flow for many days.
Period of record: Maximum discharge, 1,940 ft^3/s (54.9 m^3/s) Sept. 5, 1970 (gage height, 9.50 ft or 2.896 m, from profile past gage), from rating curve extended above 130 ft^3/s (3.7 m^3/s) on basis of slope-area measurements of peak flow; no flow at times each year.

REMARKS.--Records good. No storage or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	.01	.04	.06	.08	.55	.20	.04	0	.01	0
2	0	.05	.01	.04	.06	.08	.51	.20	.04	0	.01	0
3	0	.08	.01	.04	.06	.08	.47	.20	.04	0	.01	0
4	0	.02	.02	.03	.06	.08	.43	.16	.03	0	.01	0
5	0	.02	.03	.03	.06	.08	.39	.16	.03	0	.01	0
6	0	.02	.02	.03	.06	.09	.32	.16	.03	0	0	0
7	0	.02	.02	.03	.05	.08	.60	.15	.03	0	0	.01
8	0	.02	.02	.03	.05	.10	.64	.15	.02	0	0	0
9	0	.02	.02	.04	.05	.20	1.0	.14	.02	0	0	0
10	0	.01	.02	.04	.06	.14	4.1	.14	.02	0	0	0
11	0	.01	.02	.04	.06	.43	5.2	.13	.02	0	0	0
12	0	.01	.02	.04	.06	.60	4.3	.13	.02	0	0	0
13	0	.01	.02	.04	.07	.86	3.0	.12	.02	.02	0	0
14	0	.01	.02	.04	.09	.96	2.0	.12	.01	.01	0	.01
15	0	.01	.02	.04	.16	1.5	1.4	.12	.01	.01	0	0
16	0	.01	.02	.03	.12	2.3	1.0	.12	.01	.09	0	0
17	0	.01	.02	.03	.15	2.3	.86	.12	.01	.02	0	0
18	0	.01	.02	.03	.13	1.5	.78	.12	.01	.01	0	0
19	0	.01	.02	.03	.13	1.2	.68	.12	.01	.01	0	0
20	0	.01	.02	.03	.12	.86	.60	.11	.01	.01	0	0
21	0	.01	.02	.04	.11	.68	.51	.11	.01	.01	0	0
22	0	.01	.02	.04	.10	.60	.47	.09	0	.01	0	0
23	0	.01	.02	.04	.09	.47	.43	.09	0	.01	0	0
24	.01	.01	.02	.04	.09	.39	.39	.07	0	.01	0	0
25	.01	.01	.03	.04	.08	.32	.36	.06	0	.01	0	0
26	.01	.01	.03	.04	.08	.55	.36	.06	0	.01	0	0
27	.01	.01	.03	.04	.08	.51	.32	.06	0	.01	0	0
28	.06	.01	.03	.05	.08	.43	.32	.06	0	.01	0	0
29	.46	.01	.04	.05	------	.36	.28	.06	0	.01	0	0
30	.03	.01	.04	.05	------	.32	.24	.05	0	.01	0	0
31	.02	------	.04	.06	------	.28	------	.05	------	.01	0	------
TOTAL	.61	.48	.70	1.19	2.37	18.43	32.51	3.63	.44	.29	.05	.02
MEAN	.020	.016	.023	.038	.085	.59	1.08	.12	.015	.009	.002	.0007
MAX	.46	.08	.04	.06	.16	2.3	5.2	.20	.04	.09	.01	.01
MIN	0	.01	.01	.03	.05	.08	.24	.05	0	0	0	0
AC-FT	1.2	1.0	1.4	2.4	4.7	37	64	7.2	.9	.6	.10	.04

CAL YR 1974 TOTAL 28.45 MEAN .078 MAX 3.2 MIN 0 AC-FT 56
WTR YR 1975 TOTAL 60.72 MEAN .17 MAX 5.2 MIN 0 AC-FT 120

PEAK DISCHARGE (BASE, 20 CFS).--No peak above base.

09510150. Sycamore Creek near Sunflower, Ariz.

LOCATION.--Lat 33°51'05", long 111°27'09", in NE¼ sec.20, T.6 N., R.9 E., Maricopa County, in Tonto National Forest, on right bank 1.1 mi (1.8 km) upstream from Boulder Creek, 1.2 mi (1.9 km) north of Crabtree Butte, and 1.2 mi (1.9 km) southeast of Sunflower.

DRAINAGE AREA.--52.3 mi^2 (135.5 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 3,309.6 ft (1,008.77 m). Prior to Oct. 1, 1970, at datum 1.66 ft (0.506 m) lower.

AVERAGE DISCHARGE.--14 years, 7.64 ft^3/s (0.216 m^3/s), 5,540 acre-ft/yr (6.83 hm^3/yr); median of yearly mean discharges, 3.6 ft^3/s (0.10 m^3/s), 2,600 acre-ft/yr (3.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 69 ft^3/s (1.95 m^3/s) Mar. 15 (gage height, 2.26 ft or 0.689 m); minimum daily, 0.03 ft^3/s (0.001 m^3/s) Aug. 6.
Period of record: Maximum discharge, 16,100 ft^3/s (456 m^3/s) Sept. 5, 1970 (gage height, 22.0 ft or 6.71 m, from profile past gage), from rating curve extended above 260 ft^3/s (7.4 m^3/s) on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records fair.

REVISIONS.--WRD Ariz. 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.72	.76	.56	.55	.86	3.9	2.1	1.3	.32	.06	.05
2	.19	3.4	.75	.58	.55	.94	2.7	1.9	1.2	.29	.05	.05
3	.21	11	.72	.56	.56	.94	2.3	1.9	1.2	.34	.04	.05
4	.21	3.5	.83	.56	.57	.94	2.1	1.9	1.2	.42	.04	.05
5	.21	1.5	1.1	.56	.56	.94	1.7	1.7	1.1	.35	.04	.06
6	.27	1.0	.86	.56	.56	.94	1.9	1.7	1.1	.31	.03	.07
7	.24	.84	.86	.56	.56	.94	6.5	1.5	1.1	.30	.04	.10
8	.24	.85	.83	.56	.56	1.2	12	1.7	1.0	.28	.06	.10
9	.24	.86	.82	.50	.56	1.5	21	1.7	1.1	.23	.06	.10
10	.24	.86	.85	.49	.64	1.2	45	1.7	1.0	.22	.05	.10
11	.24	.86	.86	.47	.60	4.3	40	1.5	.89	.21	.06	.10
12	.27	.86	.76	.45	.57	10	34	1.5	.90	.24	.08	.10
13	.27	.86	.75	.45	.62	11	27	1.5	.89	.28	.06	.10
14	.27	.86	.72	.45	.78	11	20	1.5	.80	.24	.06	.10
15	.27	.86	.72	.45	.86	30	15	1.5	.79	.19	.06	.10
16	.27	.86	.72	.45	.78	29	12	1.7	.75	.19	.06	.09
17	.28	.86	.68	.44	.78	24	9.6	1.7	.64	.16	.08	.09
18	.28	.86	.63	.44	.78	17	8.0	1.5	.65	.13	.06	.08
19	.28	.86	.63	.43	.78	13	6.5	1.5	.66	.10	.08	.08
20	.28	.78	.63	.43	.78	11	5.1	1.5	.61	.09	.08	.09
21	.29	.79	.63	.43	.78	8.0	3.9	1.7	.58	.09	.08	.09
22	.36	.79	.63	.43	.71	6.5	3.6	1.9	.54	.09	.09	.09
23	.37	.80	.63	.43	.71	5.1	3.3	1.7	.55	.09	.08	.09
24	.34	.79	.63	.44	.78	3.6	3.0	1.6	.52	.08	.06	.10
25	.33	.79	.58	.44	.78	3.3	2.7	1.5	.49	.08	.05	.10
26	.33	.82	.58	.43	.78	7.5	2.7	1.5	.44	.06	.05	.10
27	.35	.83	.56	.44	.86	6.0	2.5	1.4	.41	.06	.05	.10
28	.79	.86	.56	.47	.86	4.3	2.5	1.4	.39	.06	.05	.12
29	16	.84	.64	.47	---	3.6	2.3	1.5	.38	.06	.05	.12
30	.92	.85	.56	.55	---	3.0	2.3	1.3	.35	.06	.05	.12
31	.82	---	.56	.58	---	2.5	---	1.4	---	.06	.03	---
TOTAL	25.87	41.21	22.04	15.06	19.26	224.10	305.1	50.1	23.53	5.68	1.81	2.69
MEAN	.83	1.37	.71	.49	.69	7.23	10.2	1.62	.78	.18	.058	.090
MAX	16	11	1.1	.58	.86	30	45	2.1	1.3	.42	.09	.12
MIN	.19	.72	.56	.43	.55	.86	1.7	1.3	.35	.06	.03	.05
AC-FT	51	82	44	30	38	445	605	99	47	11	3.6	5.3

CAL YR 1974 TOTAL 627.12 MEAN 1.72 MAX 80 MIN .02 AC-FT 1240
WTR YR 1975 TOTAL 736.45 MEAN 2.02 MAX 45 MIN .03 AC-FT 1460

PEAK DISCHARGE (BASE, 200 CFS).--No peak above base.

09510200. Sycamore Creek near Fort McDowell, Ariz.

LOCATION.--Lat 33°41'39", long 111°32'28", in sec.16, T.4 N., R.8 E. (unsurveyed), Maricopa County, in Tonto National Forest, on right bank 0.7 mi (1.1 km) southwest of Sugarloaf Mountain, 9 mi (14 km) northeast of Fort McDowell, 10 mi (16 km) upstream from mouth, and 25 mi (40 km) northeast of Scottsdale.

DRAINAGE AREA.--164 mi^2 (425 km^2).

PERIOD OF RECORD.--December 1960 to current year. Prior to Oct. 1, 1963, published as "near McDowell."

GAGE.--Water-stage recorder. Datum of gage is 1,759.33 ft (536.244 m) above mean sea level. Prior to Oct. 1, 1970, at datum 0.16 ft (0.049 m) lower.

AVERAGE DISCHARGE.--14 years (1961-75), 19.1 ft^3/s (0.541 m^3/s), 13,840 acre-ft/yr (17.1 hm^3/yr); median of yearly mean discharges, 7.8 ft^3/s (0.22 m^3/s), 5,700 acre-ft/yr (7.0 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 188 ft^3/s (5.32 m^3/s) Apr. 11 (gage height, 1.62 ft or 0.494 m); minimum daily, 0.02 ft^3/s (0.001 m^3/s) for many days.
Period of record: Maximum discharge, 24,200 ft^3/s (685 m^3/s) Sept. 5, 1970 (gage height, 19.7 ft or 6.00 m, from profile past gage), from rating curve extended above 3,600 ft^3/s (102 m^3/s) on basis of slope-area measurements at gage heights 15.0 and 19.7 ft (4.57 and 6.00 m); no flow at times in most years.

REMARKS.--Records fair.

REVISIONS.--WRD Ariz. 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.92	.67	.92	.91	2.9	16	4.3	.63	.11	.02	.06
2	.08	3.2	.66	1.1	.84	2.6	17	3.8	.54	.16	.02	.06
3	.08	2.2	.68	.95	.88	2.2	16	3.3	.47	.16	.02	.06
4	.08	1.2	.95	.78	1.2	2.2	12	3.3	.43	.09	.02	.06
5	.09	.89	2.6	.79	.87	2.2	8.8	3.8	.35	.07	.03	.05
6	.12	.80	1.3	.82	.84	1.9	7.6	3.3	.33	.07	.03	.05
7	.11	.71	1.0	.74	.83	1.9	12	2.9	.28	.07	.02	.05
8	.08	.63	.74	.76	.80	2.2	29	2.9	.40	.07	.03	.05
9	.07	.64	.68	.73	.70	2.6	49	2.9	.33	.05	.03	.05
10	.06	.65	.84	.74	.79	2.6	142	2.9	.28	.07	.02	.07
11	.06	.59	.92	.75	.88	10	160	2.9	.24	.07	.02	.09
12	.08	.56	.92	.73	.67	32	132	2.6	.33	.07	.02	.09
13	.09	.53	.95	.86	.69	40	114	2.2	.28	.05	.02	.07
14	.05	.56	.92	1.1	1.3	43	83	1.9	.19	.05	.02	.05
15	.05	.57	.95	.97	2.3	57	60	1.9	.16	.05	.02	.09
16	.05	.56	.96	.92	1.3	92	45	1.9	.16	.05	.02	.05
17	.04	.63	1.1	.91	1.4	69	37	1.9	.19	.05	.02	.09
18	.03	.62	1.0	.87	.97	51	34	1.6	.24	.05	.02	.09
19	.08	.60	1.0	.79	.86	37	31	1.6	.28	.04	.02	.09
20	.05	.62	.97	.80	2.1	21	26	1.4	.28	.04	.03	.05
21	.03	.57	1.1	.74	2.7	14	21	1.4	.28	.03	.02	.09
22	.05	.56	1.0	.63	2.5	12	14	1.9	.28	.03	.04	.11
23	.03	.55	.89	.72	2.6	8.0	12	1.9	.28	.03	.03	.09
24	.03	.57	.94	.73	2.6	8.0	10	1.6	.33	.03	.03	.05
25	.02	.69	1.1	.75	2.5	7.0	8.0	1.4	.33	.03	.03	.05
26	.02	.75	1.2	.77	2.6	14	7.0	1.2	.28	.02	.04	.04
27	.02	.99	1.1	.73	2.7	12	5.5	1.0	.24	.02	.04	.03
28	.06	1.0	.89	.94	2.8	14	5.5	1.0	.05	.03	.05	.02
29	24	1.1	1.4	1.0	---	12	5.5	1.0	.07	.03	.07	.03
30	7.1	1.1	.96	1.1	---	14	4.9	.97	.07	.02	.07	.04
31	1.4	---	.92	1.2	---	14	---	.81	---	.02	.07	---
TOTAL	34.21	25.56	31.31	26.34	42.13	604.3	1124.8	67.48	8.60	1.73	.94	1.87
MEAN	1.10	.85	1.01	.85	1.50	19.5	37.5	2.18	.29	.056	.030	.062
MAX	24	3.2	2.6	1.2	2.8	92	160	4.3	.63	.16	.07	.11
MIN	.02	.53	.66	.63	.67	1.9	4.9	.81	.05	.02	.02	.02
AC-FT	68	51	62	52	84	1200	2230	134	17	3.4	1.9	3.7

CAL YR 1974 TOTAL 1191.88 MEAN 3.27 MAX 189 MIN .02 AC-FT 2360
WTR YR 1975 TOTAL 1969.27 MEAN 5.40 MAX 160 MIN .02 AC-FT 3910

PEAK DISCHARGE (BASE, 400 CFS).--No peak above base.

09511000. Diversions for city of Phoenix from Salt and Verde Rivers, near Fort McDowell, Ariz.

LOCATION.--Lat 33°32'55", long 111°40'05", in NE¼ sec.6, T.2 N., R.7 E., Maricopa County, in filtration plant 0.5 mi (0.8 km) west of confluence of Salt and Verde Rivers, and 6 mi (10 km) south of Fort McDowell.

PERIOD OF RECORD.--February 1922 to current year (monthly diversions only). Prior to October 1950 published as Diversion for city of Phoenix from Verde River, at McDowell, and October 1950 to September 1960 as Diversion for city of Phoenix from Salt and Verde Rivers, near McDowell.

GAGE.--Sparling meter. Prior to January 1929 computed on basis of records of water consumption and pumpage. January 1929 to April 1950 water-stage recorder and weir on aqueduct 2-mi (3 km) upstream.

REMARKS.--Water is diverted from infiltration galleries and shallow wells along the right bank of Verde River, in SE¼ sec.6, T.3 N., R.7 E., 0.8 mi (1.3 km) south of Fort McDowell. Since May 1950 a supplemental diversion is made by pumping from Verde River in SE¼ sec.31, T.3 N., R.7 E. Since May 6, 1954, a supplemental diversion by four pumps is made from Salt River in SE¼ sec.6, T.2 N., R.7 E., just downstream from Verde River. Water from all three sources passes through the filtration plant where total diversions, as published herein, are measured. Water is used for municipal supply of city of Phoenix, and is carried about 25 mi (40 km) by pipeline from the filtration plant. Negligible amount of transmission loss occurs.

COOPERATION.--Records collected by city of Phoenix and furnished by Salt River Valley Water Users' Association.

REVISIONS.--WSP 1926: 1956-60.

MONTHLY DIVERSIONS, IN ACRE-FEET, OCTOBER 1970 TO SEPTEMBER 1975

Month	1970-71	1971-72	1972-73	1973-74	1974-75
October	2,800	3,330	2,670	2,790	4,060
November	3,000	3,280	1,850	1,770	2,360
December	3,540	3,430	3,180	2,480	2,120
CAL YR	40,320	41,310	39,430	40,100	42,130
January	3,750	3,640	3,330	4,090	2,870
February	2,710	2,650	3,100	2,900	3,960
March	2,260	2,280	2,960	2,130	4,130
April	2,270	2,970	3,410	2,330	4,120
May	3,610	3,620	3,890	4,050	4,470
June	4,250	3,910	4,310	4,860	4,340
July	4,650	4,610	4,190	4,380	4,290
August	3,820	4,280	4,380	4,530	4,120
September	3,950	3,770	3,490	4,320	3,360
WTR YR	40,610	41,770	40,760	40,630	44,200

09511300. Verde River near Scottsdale, Ariz.

LOCATION.--Lat 33°34'52", long 111°40'12", in NE¼ sec.30, T.3 N., R.7 E., Maricopa County, on pier near left bank on downstream side of bridge on State Highway 87, in Fort McDowell Indian Reservation, 2.5 mi (4.0 km) upstream from mouth, 3.8 mi (6.1 km) downstream from Fort McDowell, and 16 mi (26 km) northeast of Scottsdale.

DRAINAGE AREA.--6,600 mi^2 (17,090 km^2), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 1,351.35 ft (411.891 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 538 ft^3/s (15.24 m^3/s), 389,800 acre-ft/yr (481 hm^3/yr); median of yearly mean discharges, 420 ft^3/s (11.9 m^3/s), 304,000 acre-ft/yr (370 hm^3/yr). The average discharge for 13 years, published in WRD Ariz. 1974, was 552 ft^3/s, not 5.52 ft^3/s as shown.

EXTREMES.--Current year: Maximum discharge, 1,930 ft^3/s (54.7 m^3/s) Sept. 13 (gage height, 5.12 ft or 1.561 m); minimum daily, 9.7 ft^3/s (0.27 m^3/s) Sept. 30.
Period of record: Maximum discharge, 31,300 ft^3/s (886 m^3/s) Dec. 31, 1965 (gage height, 12.75 ft or 3.886 m); no flow Nov. 8-19, 1961, June 4-22, 1970, Mar. 20-22, 1971, Apr. 2-15, 1974.

REMARKS.--Records good. Flow regulated by Bartlett and Horseshoe Reservoirs (see sta 09509500) except during periods of spill or floodflow below Bartlett Dam. About 12,500 acres (50.6 km^2) above reservoirs are irrigated by surface water and ground water. Below reservoirs water is diverted for municipal supply of city of Phoenix, and for irrigation of an undetermined acreage in Fort McDowell Indian Reservation. Remainder (except during infrequent periods of extreme flooding) is diverted at Granite Reef Dam on Salt River, 6 mi (10 km) downstream, for irrigation in Salt River Valley and for municipal use by the city of Phoenix.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	226	218	249	258	108	407	20	1360	17	303	611	345
2	179	200	250	230	108	348	27	1400	18	404	523	351
3	622	145	245	258	109	461	31	1550	18	409	434	348
4	825	142	298	274	109	672	32	1420	19	317	345	422
5	783	189	253	274	110	764	32	580	19	235	410	440
6	755	206	251	288	110	706	32	122	17	157	629	310
7	573	206	269	399	110	622	35	82	17	154	762	138
8	482	203	503	459	127	566	37	84	16	295	531	71
9	440	166	447	484	127	468	38	76	19	471	422	49
10	440	169	447	546	163	434	39	68	21	507	360	32
11	447	175	517	475	243	428	566	62	24	580	216	25
12	482	175	524	555	314	160	671	60	23	500	282	20
13	386	202	587	541	334	77	510	56	21	433	306	55
14	370	207	587	615	295	42	503	55	22	343	256	143
15	454	210	524	573	197	398	776	55	24	372	206	24
16	685	210	434	624	100	580	970	51	22	508	166	18
17	671	211	503	636	72	545	1060	49	22	475	159	15
18	590	248	643	601	85	608	1050	48	48	318	180	14
19	615	258	706	493	120	615	1010	46	125	226	239	29
20	478	260	769	477	134	714	1020	39	200	172	294	295
21	489	272	755	517	137	728	1110	32	157	180	298	713
22	496	322	699	503	184	680	1160	29	167	176	228	503
23	416	330	566	440	471	681	1320	27	252	265	171	78
24	392	322	552	239	473	804	1450	25	420	393	92	47
25	434	322	566	122	614	306	1550	23	589	417	92	38
26	428	284	422	76	710	76	1550	21	581	390	252	35
27	386	278	454	56	927	45	1510	28	647	389	566	32
28	386	254	482	47	869	30	1350	30	530	352	727	30
29	350	250	489	42	---	24	1300	16	376	380	692	20
30	355	249	503	66	---	21	1320	16	269	542	594	9.7
31	266	---	392	112	---	20	---	16	---	555	298	---
TOTAL	14901	6883	14886	11280	7460	13030	22079	7526	4700	11218	11341	4649.7
MEAN	481	229	480	364	266	420	736	243	157	362	366	155
MAX	825	330	769	636	927	804	1550	1550	647	580	762	713
MIN	179	142	245	42	72	20	20	16	16	154	92	9.7
AC-FT	29560	13650	29530	22370	14800	25850	43790	14930	9320	22250	22490	9220

CAL YR 1974 TOTAL 102805.5 MEAN 282 MAX 1500 MIN 0 AC-FT 203900
WTR YR 1975 TOTAL 129953.7 MEAN 356 MAX 1550 MIN 9.7 AC-FT 257800

09512000. Diversions from Salt River at Granite Reef Dam, Ariz.

LOCATION.--Granite Reef Dam, lat 33°30'57", long 111°41'27", in NW¼SE¼ sec.13, T.2 N., R.6 E., Maricopa County, on Salt River, 3.4 mi (5.5 km) downstream from Verde River, and 8 mi (13 km) south of Fort McDowell.

PERIOD OF RECORD.--January 1913 to current year (monthly discharge only).

GAGE.--Water-stage recorders on Arizona and South Canals, 2,000 ft (610 m) and 1,800 ft (550 m), respectively, downstream from headgates at Granite Reef Dam. In early years staff gages at about the same sites. During period 1930-36 discharge computed using Clausen-Pierce hydraulic weir rule at submerged weirs.

REMARKS.--Arizona Canal diverts at the right end, and South Canal at the left end, of Granite Reef Dam. Records given herein are those of discharge at the two gaging stations less return flow to Salt River by wasteways between stations and irrigated lands. Return flow computed from records of rated gates or weirs in the wasteways. City of Phoenix diverts water for municipal use from Arizona Canal (see sta 09512050), which is included in records published herein. Remainder of water is used for irrigation in Salt River Valley. Flow at Granite Reef Dam is regulated by four dams on Salt River and two on Verde River (see stas 09501000 and 09509500); combined capacity of six reservoirs, 2,073,000 acre-ft.

COOPERATION.--Records furnished by Salt River Valley Water Users' Association.

MONTHLY DIVERSIONS, IN ACRE-FEET, OCTOBER 1970 TO SEPTEMBER 1975

Month	1970-71	1971-72	1972-73	1973-74	1974-75
October	61,500	24,840	24,460	77,120	31,950
November	26,500	22,600	33,950	37,750	14,640
December	22,770	24,800	47,220	52,850	29,810
CAL YR	808,000	681,800	739,000	1,350,000	827,700
January	11,190	8,370	52,400	6,600	21,500
February	31,600	38,940	50,200	60,860	13,000
March	79,500	79,660	95,830	69,720	57,550
April	67,000	74,110	155,800	84,420	63,690
May	77,340	81,130	197,200	94,980	91,580
June	89,380	83,280	165,100	124,200	111,800
July	110,900	105,600	170,800	109,300	129,800
August	63,180	91,360	165,400	118,600	132,000
September	79,480	70,870	129,100	82,620	97,160
WTR YR	720,300	705,600	1,287,000	919,000	794,500

09512050. Diversions for city of Phoenix from Arizona Canal, at Phoenix, Ariz.

LOCATION.--Squaw Peak filtration plant: lat 33°31'52", long 112°01'54", in SE¼ sec.10, T.2 N., R.3 E., Maricopa County, 6 mi (10 km) north of Phoenix city hall, and 24 mi (39 km) downstream from Granite Reef Dam. Deer Valley filtration plant: lat 33°34'10", long 112°07'26", in SE¼ sec.26, T.3 N., R.2 E., Maricopa County, 9 mi (14 km) north of Phoenix city hall, and 31 mi (50 km) downstream from Granite Reef Dam.

PERIOD OF RECORD (monthly diversions only).--Squaw Peak filtration plant: June 1954 to current year. Deer Valley filtration plant: October 1964 to current year.

GAGE.--Sparling meters.

REMARKS.--Records published herein are combined diversions at Squaw Peak filtration plant and at Deer Valley filtration plant. Diversions from Arizona Canal at Squaw Peak filtration plant began June 3, 1954; water is used for municipal supply of city of Phoenix. Diversions from Arizona Canal at Deer Valley filtration plant began Oct. 21, 1964; water is used for municipal supply in Deer Valley. Arizona Canal diverts at right end of Granite Reef Dam on Salt River. See sta 09512000 for diversions at Granite Reef Dam.

COOPERATION.--Records collected by city of Phoenix and furnished by Salt River Valley Water Users' Association.

REVISIONS.--WSP 1926: 1954-60.

CORRECTION.--Diversions for July 1970 and water year 1970, published in WRD Ariz. 1970 and WSP 2126, were in error; correct values are 12,380 and 69,970 acre-ft, respectively.

MONTHLY DIVERSIONS, IN ACRE-FEET, OCTOBER 1970 TO SEPTEMBER 1975

Month	1970-71	1971-72	1972-73	1973-74	1974-75
October	4,790	3,490	3,340	8,440	5,010
November	3,520	2,450	2,290	5,350	3,020
December	1,280	932	1,010	2,890	2,980
CAL YR	66,640	67,460	75,400	86,050	85,770
January	0	0	0	209	1,850
February	1,180	1,970	406	2,760	126
March	4,040	6,320	2,740	5,100	2,930
April	5,800	6,970	5,500	7,600	4,010
May	7,140	9,100	9,700	10,380	8,660
June	9,970	10,480	11,300	13,700	12,630
July	13,230	12,560	14,480	13,990	13,060
August	10,180	11,700	13,810	11,890	12,230
September	9,050	9,660	11,430	9,130	5,330
WTR YR	70,180	75,630	76,010	91,440	71,840

09512100. Indian Bend Wash at Scottsdale, Ariz.

LOCATION.--Lat 33°32'19", long 111°54'57", in SW¼SE¼ sec.2, T.2 N., R.4 E., Maricopa County, on upstream side of ford on Indian Bend Road, in Scottsdale.

DRAINAGE AREA.--142 mi^2 (368 km^2).

PERIOD OF REOCRD.--January 1961 to current year. Prior to October 1972 published as "near Scottsdale."

GAGE.--Water-stage recorder. Datum of gage is 1,280.29 ft (390.232 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 2.67 ft^3/s (0.0756 m^3/s), 1,930 acre-ft/yr (2.38 hm^3/yr); median of yearly mean discharges, 0.30 ft^3/s (0.008 m^3/s) 220 acre-ft/yr (0.27 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 20 ft^3/s (0.57 m^3/s) Nov. 3 (gage height, 1.23 ft or 0.375 m); no flow for most of year.
Period of record: Maximum discharge, 21,000 ft^3/s (595 m^3/s) June 22, 1972 (gage height, 4.90 ft or 1.494 m), from rating curve extended above 7,000 ft^3/s (200 m^3/s) on basis of partial discharge measurement at 4.2 ft (1.28 m) and slope-conveyance method at gage height 4.90 ft (1.494 m); no flow for most of time each year.

REMARKS.--Records poor. Natural flow of wash affected by urbanization. Flows partly regulated by artificial lake upstream.

REVISIONS.--WRD Ariz., 1972: 1968, 1970 (revised figures of daily discharge for water years 1968 and 1970 were inadvertently omitted from WSP 2126).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0									
2	0	1.6	0									
3	0	15	0									
4	0	5.7	0									
5	0	1.3	.30									
6	0	0	0									
7	0	0	0									
8	0	0	0									
9	0	0	0									
10	0	0	0									
11	0	0	0									
12	0	0	0									
13	0	0	0									
14	0	0	0									
15	0	0	0									
16	0	0	0									
17	0	0	0									
18	0	0	0									
19	0	0	0									
20	0	0	0									
21	0	0	0									
22	0	0	0									
23	0	0	0									
24	0	0	0									
25	0	0	0									
26	0	0	0									
27	0	0	0									
28	0	0	0									
29	.10	0	0		------							
30	0	0	0		------							
31	0	------	0		------		------		------			------
TOTAL	.10	23.6	.30	0	0	0	0	0	0	0	0	0
MEAN	.003	.79	.010	0	0	0	0	0	0	0	0	0
MAX	.10	15	.30	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	.2	47	.6	0	0	0	0	0	0	0	0	0

CAL YR 1974 TOTAL 26.00 MEAN .071 MAX 15 MIN 0 AC-FT 52
WTR YR 1975 TOTAL 24.00 MEAN .066 MAX 15 MIN 0 AC-FT 48

PEAK DISCHARGE (BASE, 20 CFS).--No peak above base.

NOTE.--No gage-height record Apr. 30 to June 19.

09512200. Salt River tributary in South Mountain Park, at Phoenix, Ariz.

LOCATION.--Lat 33°20'49", long 112°05'03", in NE¼NE¼ sec.18, T.1 S., R.3 E., Maricopa County, in South Mountain Park, on left bank 6.5 mi (10.5 km) south of Phoenix main post office.

DRAINAGE AREA.--1.75 mi^2 (4.53 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,405.20 ft (428.305 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 0.011 ft^3/s (0.0003 m^3/s), 8.0 acre-ft/yr (9,860 m^3/yr); median of yearly mean discharges, 0.004 ft^3/s (0.0001 m^3/s), 3 acre-ft/yr (3,700 m^3/yr).

EXTREMES.--Current year: Maximum discharge, 3.5 ft^3/s (0.099 m^3/s) Oct. 29 (gage height, 1.86 ft or 0.567 m); no flow for most of year.
Period of record: Maximum discharge, 670 ft^3/s (19.0 m^3/s) Sept. 4, 1965 (gage height, 9.70 ft or 2.957 m, from floodmarks), from rating curve extended above 31 ft^3/s (0.88 m^3/s) on basis of measurements of peak flow through culvert at gage heights 5.80, 9.09, and 9.52 ft (1.768, 2.771, and 2.902 m); no flow for most of time each year.

REMARKS.--Records poor. No storage or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0											
2	0											
3	0											
4	0											
5	0											
6	0											
7	0											
8	0											
9	0											
10	0											
11	0											
12	0											
13	0											
14	0											
15	0											
16	0											
17	0											
18	0											
19	0											
20	0											
21	0											
22	0											
23	0											
24	0											
25	0											
26	0											
27	0											
28	0											
29	.10				------							
30	.10				------							
31	0	------			------		------		------			------
TOTAL	.20	0	0	0	0	0	0	0	0	0	0	0
MEAN	.007	0	0	0	0	0	0	0	0	0	0	0
MAX	.10	0	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	.4	0	0	0	0	0	0	0	0	0	0	0

CAL YR 1974 TOTAL 2.57 MEAN .0070 MAX 2.3 MIN 0 AC-FT 5.1
WTR YR 1975 TOTAL 0.20 MEAN .0005 MAX .10 MIN 0 AC-FT .4

PEAK DISCHARGE (BASE, 20 CFS).--No peak above base.

09512400. Cave Creek at Phoenix, Ariz.

LOCATION.--Lat 33°34'56", long 112°06'43", in SW¼ sec.24, T.3 N., R.2 E., Maricopa County, on downstream side of bridge at Peoria Avenue in Phoenix, 0.7 mi (1.1 km) upstream from Arizona Canal.

DRAINAGE AREA.--252 mi^2 (653 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,236.37 ft (376.846 m) above mean sea level (from Salt River Valley Water Users' Association temporary bench mark). Prior to July 31, 1974, at site 60 ft (18 m) upstream at datum 6.93 ft (2.112 m) higher.

AVERAGE DISCHARGE.--18 years, 3.01 ft^3/s (0.0852 m^3/s), 2,180 acre-ft/yr (2.69 hm^3/yr); median of yearly mean discharges, 1.1 ft^3/s (0.031 m^3/s), 800 acre-ft/yr (0.99 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, about 100 ft^3/s (2.83 m^3/s) Oct. 28 (gage height, 3.4 ft or 1.04 m, from floodmarks); no flow for most of year.
Period of record: Maximum discharge, 4,080 ft^3/s (116 m^3/s)—including 345 ft^3/s (9.77 m^3/s) released from Cave Creek Dam—Dec. 19, 1967 (gage height, 11.23 ft or 3.423 m, present datum); no flow for most of time each year.

REMARKS.--Records poor. Peak flow regulated from 161 mi^2 (417 km^2) by Cave Creek Dam 12 mi (19 km) upstream. Flow probably affected by urbanization.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0		0									0
2	0		0									0
3	0		0									0
4	0		0									0
5	0		1.0									0
6	0		0									0
7	0		0									1.0
8	0		0									0
9	0		0									0
10	0		0									0
11	0		0									0
12	0		0									0
13	0		0									0
14	0		0									0
15	0		0									0
16	0		0									0
17	0		0									0
18	0		0									0
19	0		0									0
20	0		0									0
21	0		0									0
22	0		0									0
23	0		0									0
24	0		0									0
25	0		0									0
26	0		0									0
27	0		0									0
28	5.0		0									0
29	10		0		------							0
30	0		0		------							0
31	0	------	0		------		------		------			------
TOTAL	15.0	0	1.0	0	0	0	0	0	0	0	0	1.0
MEAN	.48	0	.032	0	0	0	0	0	0	0	0	.033
MAX	10	0	1.0	0	0	0	0	0	0	0	0	1.0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	30	0	2.0	0	0	0	0	0	0	0	0	2.0

CAL YR 1974 TOTAL 246.30 MEAN .67 MAX 230 MIN 0 AC-FT 489
WTR YR 1975 TOTAL 17.00 MEAN .047 MAX 10 MIN 0 AC-FT 34

09512500. Agua Fria River near Mayer, Ariz.

LOCATION.--Lat 34°18'55", long 112°03'48", in NW¼SE¼ sec.20, T.11 N., R.3 E., Yavapai County, on left bank at Sycamore damsite, 700 ft (210 m) downstream from Big Bug Creek and 12 mi (19 km) southeast of Mayer.

DRAINAGE AREA.--588 mi^2 (1,523 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 3,434 ft (1,046.7 m), levels by Maricopa County Municipal Water Conservation District No. 1.

AVERAGE DISCHARGE.--35 years (unadjusted for diversions to Perry Canal), 16.6 ft^3/s (0.470 m^3/s), 12,030 acre-ft/yr (14.8 hm^3/yr); median of yearly mean discharges, 11 ft^3/s (0.31 m^3/s), 8,000 acre-ft/yr (9.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,190 ft^3/s (62.0 m^3/s) July 27 (gage height, 5.60 ft or 1.707 m); minimum daily, 0.20 ft^3/s (0.006 m^3/s) May 15, 16, Aug. 25 to Sept. 3 (period Aug. 25 to Sept. 3 had no flow in Perry Canal).
Period of record: Maximum discharge, 19,800 ft^3/s (561 m^3/s) Sept. 5, 1970 (gage height, 14.90 ft or 4.542 m), from rating curve extended above 1,600 ft^3/s (45 m^3/s) on basis of slope-area measurement of peak flow; negligible flow at times during the summer months in most years when entire flow was diverted to Perry Canal above station and flow past gage was seepage only.

REMARKS.--Records fair. Diversions above station for mining and irrigation of about 600 acres (2.4 km^2). Diversion by Perry Canal, which heads 300 ft (90 m) above the gage, was from Apr. 21 to July 8 or 12 and was measured at 0.85 ft^3/s (0.024 m^3/s) May 15, and 0.44 ft^3/s (0.012 m^3/s) June 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.70	1.9	3.0	2.5	2.5	3.0	.60	.40	.50	1.1	.20
2	.30	26	1.7	3.3	2.3	2.5	3.0	.60	.40	.50	.90	.20
3	.50	13	1.5	3.0	2.3	2.5	3.0	.50	.40	.60	.90	.20
4	.50	2.5	1.5	3.0	2.5	2.3	3.0	.40	.40	.70	.90	6.6
5	.60	1.9	1.7	3.0	2.5	2.3	3.0	.40	.40	.70	.90	1.5
6	.60	1.1	1.9	2.8	2.3	2.3	2.8	.40	.40	.70	.90	18
7	.70	1.0	1.9	3.0	2.3	2.5	3.3	.40	.40	.70	.90	4.2
8	.70	.90	2.1	3.0	2.3	2.5	3.6	.40	.40	.80	9.2	1.4
9	.60	.90	1.7	2.8	2.5	2.5	3.3	.30	.40	.80	1.1	.70
10	.50	.90	2.1	2.3	2.5	2.8	3.3	.30	.40	.80	13	.50
11	.50	1.0	2.1	2.1	2.5	3.3	3.3	.30	.50	.80	2.1	.40
12	.50	1.0	2.1	2.3	2.5	3.6	17	.30	.40	73	1.2	.50
13	.50	1.1	2.3	2.8	2.5	3.6	11	.30	.40	112	.90	90
14	.50	1.2	2.1	3.0	2.5	3.9	9.3	.30	.40	40	.70	3.6
15	.40	1.4	2.3	2.8	3.0	3.9	6.8	.20	.40	3.0	.70	1.4
16	.70	1.4	2.5	2.1	3.0	3.9	6.3	.20	.50	1.5	.60	.80
17	.70	1.4	2.8	1.7	3.6	3.9	5.4	.30	.50	1.0	.60	.70
18	.70	1.4	3.0	1.9	3.6	3.9	4.6	.30	.50	.90	.40	.60
19	.70	1.2	3.0	1.9	3.3	3.9	3.9	.30	.50	.80	.40	.60
20	.70	1.1	3.0	1.9	3.0	3.9	3.0	.30	.50	.80	.40	.60
21	.70	1.2	3.0	1.9	2.8	3.9	2.1	.30	.50	.70	.40	.50
22	.70	1.4	3.0	1.9	2.5	3.9	1.1	.30	.50	.70	.40	.50
23	.70	1.4	3.3	2.1	2.5	3.6	1.1	.30	.50	.70	.30	.50
24	.70	1.5	3.3	2.3	2.8	3.6	1.0	.30	.50	.70	.30	.50
25	.60	1.4	3.3	2.1	2.8	3.6	.90	.40	.50	.80	.20	.50
26	.60	1.5	3.3	2.1	2.8	3.6	.90	.40	.50	1.5	.20	.50
27	.60	1.5	3.0	2.3	2.8	3.6	.80	.40	.50	203	.20	.50
28	.60	1.5	2.5	2.3	2.5	3.6	.80	.40	.50	7.0	.20	.40
29	.60	1.7	2.8	2.3	------	3.3	.70	.40	.50	4.8	.20	.40
30	4.1	1.7	3.0	2.3	------	3.3	.70	.40	.50	1.7	.20	.40
31	.70	------	3.0	2.5	------	3.3	------	.40	------	1.1	.20	------
TOTAL	21.80	75.90	76.7	75.8	75.0	101.8	112.00	11.10	13.60	463.30	40.60	137.40
MEAN	.70	2.53	2.47	2.45	2.68	3.28	3.73	.36	.45	14.9	1.31	4.58
MAX	4.1	26	3.3	3.3	3.6	3.9	17	.60	.50	203	13	90
MIN	.30	.70	1.5	1.7	2.3	2.3	.70	.20	.40	.50	.20	.20
AC-FT	43	151	152	150	149	202	222	22	27	919	81	273

CAL YR 1974 TOTAL 1,027.60 MEAN 2.82 MAX 140 MIN .30 AC-FT 2,040
WTR YR 1975 TOTAL 1,205.00 MEAN 3.30 MAX 203 MIN .20 AC-FT 2,390

PEAK DISCHARGE (BASE, 2,300 CFS).--No peak above base.

09512800. Agua Fria River near Rock Springs, Ariz.

LOCATION.--Lat 34°00'56", long 112°10'02", in NW¼NW¼ sec.28, T.8 N., R.2 E., Yavapai County, on right bank 2.5 mi (4.0 km) southwest of Rock Springs and 10 mi (16 km) upstream from Lake Pleasant. Prior to Oct. 1, 1974, at site 600 ft (180 m) upstream.

DRAINAGE AREA.--1,130 mi^2 (2,930 km^2), approximately.

PERIOD OF RECORD.--January 1970 to current year (monthly discharge only, October 1973 to September 1974). Low-flow records not equivalent prior to Oct. 1, 1974, due to spring flow in streambed between sites in use.

GAGE.--Water-stage recorder. Altitude of gage is 1,800 ft (549 m), from topographic map. Prior to Oct. 1, 1974, at site 600 ft (180 m) upstream at datum 10.00 ft (3.048 m) higher. (now used as supplementary gage).

AVERAGE DISCHARGE.--5 years, 44.9 ft^3/s (1.27 m^3/s), 32,530 acre-ft/yr (40.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,490 ft^3/s (70.5 m^3/s) July 8 (gage height, 10.89 ft or 3.319 m), from rating curve extended above 62 ft^3/s (1.8 m^3/s) on basis of step-backwater determinations and slope-area measurement at gage height 25.3 ft (7.71 m); minimum daily, 0.20 ft^3/s (0.006 m^3/s) Sept. 6-13, 16-30.
Period of record: Maximum discharge, 40,100 ft^3/s (1,140 m^3/s) Sept. 5, 1970 (gage height, 20.62 ft or 6.285 m, site and datum then in use; 25.3 ft or 7.71 m, present site and datum, from profile past gage); no flow at times each year prior to October 1974; minimum daily discharge since October 1974, 0.20 ft^3/s (0.006 m^3/s) Sept. 6-13, 16-30, 1975.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	.70	1.4	.86	.86	.86	.86	.68	.37	.22	.50	.30
2	.50	85	1.4	.86	.86	.86	.86	.68	.37	.22	.50	.30
3	.50	2.0	1.4	.86	.77	.86	.86	.61	.37	.25	.50	.30
4	.50	2.0	1.3	.77	.77	.86	.77	.77	.37	.29	.50	.30
5	.50	2.0	1.3	.77	.86	.86	.68	1.3	.33	.29	.50	.30
6	.50	1.8	1.3	.77	.77	.77	.54	.68	.33	.29	.40	.20
7	.50	1.9	1.3	.77	.77	.68	.95	.77	.33	.29	.40	.20
8	.50	1.9	1.3	.68	.77	.77	1.4	.68	.33	139	.40	.20
9	.50	1.9	1.2	.77	.77	.77	1.3	1.5	.33	3.0	.40	.20
10	.50	1.9	1.2	.86	.86	.77	2.2	.77	.29	.33	.40	.20
11	.50	1.8	1.2	.95	.77	1.4	2.0	.77	.29	.29	.30	.20
12	.50	1.8	1.2	.77	.77	1.8	2.2	.61	.29	.25	.30	.20
13	.50	1.8	1.2	.77	.77	1.4	11	.48	.25	27	.30	.20
14	.50	1.8	1.2	.77	.77	1.3	23	.42	.25	89	.30	6.0
15	.50	1.7	1.2	.86	.86	2.2	35	.42	.25	17	.30	.50
16	.70	1.7	1.1	.86	.86	1.1	35	.48	.25	2.4	.30	.20
17	.70	1.7	1.1	.86	.86	.95	28	.48	.25	.95	.30	.20
18	.70	1.7	1.1	.86	.86	.86	19	.48	.25	.54	.30	.20
19	.70	1.6	1.1	.95	.86	.77	12	.48	.25	.37	.30	.20
20	.70	1.6	1.0	.95	.86	.77	8.7	.48	.25	.33	.33	.20
21	.70	1.6	1.0	.95	.86	.68	4.8	.48	.29	.33	.33	.20
22	.70	1.6	1.0	1.0	.86	.68	3.3	.48	.29	.33	.33	.20
23	.70	1.6	.90	1.0	.86	1.6	2.2	.48	.25	.33	.29	.20
24	.70	1.5	.90	1.3	.86	1.6	1.6	.48	.25	.33	.29	.20
25	.70	1.5	.90	1.0	.86	1.5	1.4	.54	.25	.33	.29	.20
26	.70	1.5	.90	.77	.95	1.1	.95	.42	.22	.37	.29	.20
27	.70	1.5	.90	.68	.95	1.1	.77	.42	.22	.42	.29	.20
28	.70	1.5	.86	.68	.86	.95	.68	.42	.22	126	.29	.20
29	.70	1.4	.86	.68	---	1.4	.77	.42	.25	6.0	.29	.20
30	.70	1.4	.95	.77	---	1.4	.86	.42	.22	1.0	.29	.20
31	.70	---	.86	.86	---	1.3	---	.37	---	.50	.30	---
TOTAL	18.70	133.40	34.53	26.26	23.36	33.92	203.65	18.47	8.46	418.25	10.81	12.60
MEAN	.60	4.45	1.11	.85	.83	1.09	6.79	.60	.28	13.5	.35	.42
MAX	.70	85	1.4	1.3	.95	2.2	35	1.5	.37	139	.50	6.0
MIN	.50	.70	.86	.68	.77	.68	.54	.37	.22	.22	.29	.20
AC-FT	37	265	68	52	46	67	404	37	17	830	21	25

WTR YR 1975 TOTAL 942.41 MEAN 2.58 MAX 139 MIN .20 AC-FT 1870

PEAK DISCHARGE (BASE, 1,800 CFS).--July 8 (1800) 2,490 cfs (10.89 ft).

NOTE.--No gage-height record Oct. 1 to Nov. 21, Aug. 31 to Sept. 30.

09513000. Agua Fria River at Waddell Dam, Ariz.

LOCATION.--Lat 33°51'20", long 112°15'58", in SW¼ sec.16, T.6 N., R.1 E., Maricopa County, at left upstream end of Waddell Dam, and 22 mi (35 km) northwest of Glendale.

DRAINAGE AREA.--1,459 mi^2 (3,779 km^2).

PERIOD OF RECORD.--November 1910 to September 1914 (gage heights only), October 1914 to September 1919, October 1919 to September 1924 (gage heights only), October 1933 to current year (monthly discharge only). Published as "near Glendale" prior to 1920, and as "at Lake Pleasant Dam" 1920 to September 1962.

GAGE.--Nonrecording gage on Lake Pleasant read once daily. Datum of gage is 1,431.2 ft (436.23 m) above mean sea level. Prior to Sept. 30, 1924, nonrecording gage or water-stage recorder at several sites in the vicinity of diversion dam 1.5 mi (2.4 km) downstream from Waddell Dam, at different datum.

AVERAGE DISCHARGE.--47 years (1914-19, 1933-75), 80.2 ft^3/s (2.271 m^3/s), 58,100 acre-ft/yr (71.6 hm^3/yr); median of yearly mean discharges, 39 ft^3/s (1.10 m^3/s), 28,300 acre-ft/yr (35 hm^3/yr).

EXTREMES.--Period of record: Maximum discharge, about 105,000 ft^3/s (2,970 m^3/s) Jan. 28, 1916 (gage height, 30 ft or 9.1 m, same datum as in 1919, from floodmarks), Nov. 27, 1919 (gage height, 33 ft or 10.1 m, datum then in use, from floodmarks), from rating curve extended above 13,000 ft^3/s (370 m^3/s) on basis of velocity-area studies (on basis of comparative gage heights, the flood of Nov. 27, 1919, is believed to have been the greater); no flow during spring and summer of several years.

REMARKS.--Records poor. Figures given herein represent flow into Lake Pleasant. Inflow computed on basis of three factors as follows: 1. Change in contents of Lake Pleasant and in contents of small reservoir behind diversion dam 1.5 mi (2.4 km) downstream from Lake Pleasant. 2. (a) Release from Lake Pleasant, computed from twice-daily readings by Clausen-Pierce weir rule in Beardsley Canal, checked by current-meter measurements by U.S. Geological Survey. (b) Spill from Lake Pleasant, measured over diversion dam based on staff-gage readings. See tables of diversions and spill below. 3. Effect of rainfall and evaporation on lake; evaporation assumed as 0.85 of that measured once daily in 3-ft-square (0.9-m-square) land pan buried 1½ ft (½ m) in ground near left end of Waddell Dam. Effect of bank storage and bank release in Lake Pleasant is not taken into account. For months when inflow to lake is small and other factors relatively large, discordant figures of runoff may appear. Such discrepancies that may be attributed to inaccuracies in the capacity table, or to the fact that bank storage and bank release are not taken into account, result in quantities too large for periods of falling stage, but tend to be compensated for by quantities too small for periods of rising stage. Inaccuracies in figures of release and evaporation, which may be within reasonable limits within themselves, may result in disproportionately large inaccuracies in small figures of inflow computed as residuals. Diversions for irrigation above Lake Pleasant of probably not over 1,000 acres (4.0 km^2). Spill occurred in 1941, 1966, and 1968 water years.

COOPERATION.--Records collected and prepared in cooperation with Maricopa County Municipal Water Conservation District No. 1.

REVISIONS (WATER YEARS).--WSP 1213: 1915-16, 1918-19. WSP 1343: Drainage area. WSP 1513: 1956.

MONTHLY INFLOW TO LAKE PLEASANT; SPILL AND DIVERSIONS BELOW LAKE PLEASANT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	Inflow to Lake Pleasant		Diversions in acre-feet	Spill in acre-feet
	Mean (cfs)	Runoff in acre-feet		
October	7.32	450	0	0
November	12.6	750	0	0
December	1.79	110	0	0
CAL YR 1974	20.4	14,760	48,070	0
January	4.80	295	0	0
February	5.02	279	0	0
March	10.9	670	3,060	0
April	14.6	869	5,550	0
May	20.3	1,250	4,760	0
June	12.8	759	4,380	0
July	13.8	847	5,730	0
August	7.04	433	7,020	0
September	4.00	238	3,650	0
WTR YR 1975	9.59	6,950	34,150	0

09513500. Lake Pleasant at Waddell Dam, Ariz.

LOCATION.--Lat 35°51'20", long 112°15'58", in SW¼ sec.16, T.6 N., R.1 E., Maricopa County, at left upstream end of Waddell Dam on Agua Fria River.

DRAINAGE AREA.--1,459 mi^2 (3,779 km^2).

PERIOD OF RECORD.--February 1928 to current year (annual figures only prior to 1939). Prior to October 1963 published as "at Lake Pleasant Dam."

GAGE.--Nonrecording gage read once daily. Datum of gage is 1,431.2 ft (436.23 m) above mean sea level.

EXTREMES.--Current year: Maximum contents, 57,600 acre-ft (71.0 hm^3) Nov. 6 (gage height, 131.79 ft or 40.170 m); minimum, 19,630 acre-ft (24.2 hm^3) Sept. 30 (gage height, 104.32 ft or 31.797 m).
Period of record: Maximum contents, 178,500 acre-ft (220 hm^3) Apr. 19, 1941, of which 500 acre-ft (616,000 m^3) was uncontrolled storage; maximum gage height, 170.28 ft (51.901 m) Feb. 9, 1966; no storage Sept. 5, 1933, July 19 to Aug. 13, 1940.

REMARKS.--Lake is formed by concrete multiple-arch dam; dam completed and storage began in 1927. Capacity, 157,600 acre-ft (194 hm^3), of which 86,870 acre-ft (107 hm^3) is between gage heights 62 ft (18.9 m)—28 ft (8.5 m) above centerline of outlet works—and 146.0 ft (44.50 m), crest of spillway, and 70,730 acre-ft (87.2 hm^3) between 146.0 ft (44.50 m) and 170.0 ft (51.82 m), top of spillway gates. There is no storage below gage height 62 ft (18.9 m) because of accumulated sediment. Water released from reservoir flows down river channel 1.5 mi (2.4 km) to diversion dam where it is diverted for irrigation near Beardsley. Figures given herein represent usable contents in Lake Pleasant (based on 1965 capacity table). Contents of small reservoir formed by diversion dam is not included.

COOPERATION.--Gage-height record furnished by Maricopa County Municipal Water Conservation District No. 1.

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

104	19,310	120	38,590
107	22,360	125	46,140
110	25,670	130	54,440
115	31,770	135	63,540

CONTENTS, IN ACRE-FEET, AT 1700, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57,340	57,000	57,120	56,850	56,620	56,400	53,190	47,560	42,740	37,500	31,190	23,480
2	57,320	57,050	57,080	56,850	56,600	56,390	52,990	47,320	42,620	37,310	30,960	23,220
3	57,280	57,410	57,070	56,850	56,600	56,370	52,780	47,180	42,480	37,180	30,750	22,940
4	57,260	57,550	57,070	56,830	56,580	56,350	52,590	47,040	42,320	37,060	30,490	22,710
5	57,230	57,590	57,260	56,830	56,580	56,330	52,390	46,860	42,150	36,920	30,230	22,460
6	57,210	57,600	57,260	56,820	56,580	56,320	52,200	46,730	42,000	36,730	29,980	22,190
7	57,180	57,590	57,260	56,820	56,580	56,280	52,140	46,560	41,850	36,570	29,730	22,020
8	57,160	57,570	57,250	56,820	56,580	56,210	51,930	46,360	41,710	36,420	29,500	21,780
9	57,140	57,550	57,190	56,820	56,580	56,100	51,760	46,170	41,540	36,280	29,280	21,530
10	57,100	57,530	57,160	56,800	56,570	55,960	51,610	46,060	41,400	36,130	29,030	21,270
11	57,080	57,500	57,140	56,800	56,570	55,960	51,440	45,920	41,230	35,930	28,810	20,990
12	57,070	57,480	57,140	56,760	56,550	55,890	51,310	45,800	41,060	35,710	28,560	20,750
13	57,030	57,440	57,120	56,760	56,550	55,790	51,140	45,650	40,860	35,510	28,300	20,500
14	56,980	57,420	57,100	56,760	56,570	55,700	50,940	45,510	40,670	35,310	28,030	20,240
15	56,940	57,410	57,080	56,740	56,570	55,610	50,770	45,340	40,550	35,190	27,790	19,960
16	56,910	57,410	57,080	56,740	56,570	55,510	50,590	45,200	40,350	34,970	27,520	19,960
17	56,850	57,390	57,080	56,730	56,550	55,400	50,410	45,020	40,170	34,710	27,270	19,960
18	56,830	57,370	57,070	56,710	56,550	55,280	50,210	44,880	39,930	34,460	27,020	19,950
19	56,820	57,350	57,050	56,690	56,530	55,160	50,060	44,760	39,670	34,220	26,750	19,940
20	56,760	57,340	57,050	56,690	56,510	55,050	49,880	44,570	39,470	34,000	26,490	19,930
21	56,740	57,320	57,030	56,670	56,490	54,950	49,680	44,400	39,290	33,760	26,230	19,860
22	56,710	57,320	57,030	56,640	56,480	54,840	49,490	44,220	39,120	33,490	25,970	19,820
23	56,690	57,300	57,000	56,620	56,440	54,740	49,270	44,060	38,930	33,250	25,740	19,780
24	56,670	57,280	56,980	56,620	56,440	54,600	49,040	43,930	38,740	33,030	25,520	19,750
25	56,670	57,250	56,940	56,620	56,420	54,490	48,820	43,800	38,520	32,790	25,280	19,720
26	56,660	57,230	56,920	56,620	56,420	54,370	48,650	43,670	38,360	32,540	24,970	19,710
27	56,620	57,190	56,920	56,600	56,400	54,150	48,420	43,510	38,190	32,330	24,700	19,680
28	56,730	57,180	56,910	56,600	56,400	53,970	48,230	43,380	38,020	32,110	24,440	19,660
29	56,980	57,140	56,910	56,600	------	53,760	48,050	43,210	37,820	31,910	24,170	19,640
30	57,010	57,120	56,890	56,600	------	53,560	47,820	43,060	37,680	31,680	23,940	19,630
31	56,980	------	56,870	56,620	------	53,370	------	42,890	------	31,450	23,720	------
MAX	57,340	57,600	57,260	56,850	56,620	56,400	53,190	47,560	42,740	37,500	31,190	23,480
MIN	56,620	57,000	56,870	56,600	56,400	53,370	47,820	42,890	37,680	31,450	23,720	19,630
(†)	131.44	131.52	131.38	131.24	131.12	129.38	126.05	122.90	119.36	114.75	108.25	104.32
(‡)	-390	+140	-250	-250	-220	-3,030	-5,550	-4,930	-5,210	-6,230	-7,730	-4,090

CAL YR 1974 MAX 106,300 MIN 56,620 ‡ -48,730
WTR YR 1975 MAX 57,600 MIN 19,630 ‡ -37,740

† Gage height, in feet, at 1700 on last day of month.
‡ Change in contents, in acre-feet.

09513780. New River near Rock Springs, Ariz.

LOCATION.--Lat 33°58'27", long 112°05'54", in SW¼SW¼ sec.6, T.7 N., R.3 E., Maricopa County, on right bank 180 ft (55 m) upstream from road crossing and 6 mi (10 km) southeast of Rock Springs.

DRAINAGE AREA.--67.3 mi^2 (174 km^2).

PERIOD OF RECORD.--Water years 1962-65 (annual maximums only), October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,310 ft (704 m), from topographic map. Jan. 2, 1964, to Sept. 30, 1965, crest-stage gage, and Oct. 28, 1965, to Nov. 16, 1967, water-stage recorder, at same site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--10 years, 7.71 ft^3/s (0.218 m^3/s), 5,590 acre-ft/yr (6.89 hm^3/yr); median of yearly mean discharges, 4.4 ft^3/s (0.12 m^3/s), 3,200 acre-ft/yr (3.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,570 ft^3/s (44.5 m^3/s) Nov.1 (gage height, 4.36 ft or 1.329 m); no flow for many days.
Period of record: Maximum discharge, 18,600 ft^3/s (527 m^3/s) Sept. 5, 1970 (gage height, 13.5 ft or 4.11 m, from profile past gage), from rating curve extended above 380 ft^3/s (11 m^3/s) on basis of slope-area measurements at gage heights 3.6, 4.73, 7.3, 10.7, and 13.5 ft (1.10, 1.442, 2.23, 3.26, and 4.11 m); no flow for most of time most years.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	260	.10	.90	.20	.20	.50	.50		0		
2	0	100	.10	1.2	.20	.20	.20	.50		0		
3	0	25	.10	1.0	.20	.20	.20	.50		0		
4	0	8.0	.50	1.0	.30	.20	.20	.50		0		
5	0	3.0	9.9	1.0	.40	.10	.20	.50		0		
6	0	2.0	4.0	1.0	.50	.10	.20	.50		0		
7	0	2.0	2.1	1.0	.50	.10	1.2	.50		0		
8	0	2.0	1.5	.90	.40	.10	2.4	.50		0		
9	0	1.5	1.3	.90	.30	.10	1.8	.50		0		
10	0	1.4	1.2	.90	.20	.10	1.6	.20		0		
11	0	1.3	1.2	.80	.20	.90	2.2	.20		0		
12	0	1.2	1.0	.60	.20	1.6	3.7	.20		0		
13	0	1.2	1.0	.60	.20	.90	3.7	.10		5.4		
14	0	1.0	.80	.60	.50	.90	3.2	.10		0		
15	0	.90	.80	.60	.60	1.4	2.6	.10		0		
16	0	.60	.80	.60	.60	1.3	2.4	.10		0		
17	0	.40	.60	.60	.60	.90	2.1	.10		0		
18	0	.20	.60	.50	.50	.80	1.9	.10		0		
19	0	.20	.60	.50	.20	.60	1.6	.10		0		
20	0	.20	.50	.60	.20	.50	1.5	.10		0		
21	0	.10	.50	.60	.20	.20	1.3	.10		0		
22	0	.10	.60	.50	.20	.20	1.2	.10		0		
23	0	.10	.60	.50	.20	.20	1.0	.10		0		
24	0	.10	.60	.50	.20	.20	.90	.10		0		
25	0	.10	.80	.50	.20	.20	.90	.10		0		
26	0	.10	.90	.20	.20	.50	.80	.10		0		
27	0	.10	.90	.20	.20	.80	.60	.10		0		
28	1.0	.10	.90	.20	.20	.80	.50	.10		0		
29	58	.10	1.2	.20	---	.60	.50	.10		0		
30	2.5	.10	1.2	.20	---	.60	.50	.10		0		
31	.20	---	.90	.20	---	.50	---	.10	---	0		---
TOTAL	61.70	413.10	37.80	19.60	8.60	16.00	41.60	7.00	0	5.4	0	0
MEAN	1.99	13.8	1.22	.63	.31	.52	1.39	.23	0	.17	0	0
MAX	58	260	9.9	1.2	.60	1.6	3.7	.50	0	5.4	0	0
MIN	0	.10	.10	.20	.20	.10	.20	.10	0	0	0	0
AC-FT	122	819	75	39	17	32	83	14	0	11	0	0

CAL YR 1974 TOTAL 593.90 MEAN 1.63 MAX 260 MIN 0 AC-FT 1180
WTR YR 1975 TOTAL 610.80 MEAN 1.67 MAX 260 MIN 0 AC-FT 1210

PEAK DISCHARGE (BASE, 200 CFS).--Oct. 28 (2400) 285 cfs (2.55 ft); Nov. 1 (about 1200) 1,570 cfs (4.36 ft).

09513800. New River at New River, Ariz.

LOCATION.--Lat 33°54'41", long 112°08'26", in NW¼NE¼ sec.34, T.7 N., R.2 E., Maricopa County, near center of downstream side of bridge on State Highway 69, 0.5 mi (0.8 km) southwest of village of New River and 10 mi (16 km) south of Rock Springs.

DRAINAGE AREA.--83.3 mi^2 (215.7 km^2).

PERIOD OF RECORD.--December 1960 to current year. Prior to October 1965, published as "near Black Canyon."

GAGE.--Water-stage recorder. Datum of gage is 1,984.02 ft (604.729 m) above mean sea level. Prior to Feb. 1, 1972, at site 0.3 mi (0.5 km) downstream at datum 10.86 ft (3.310 m) lower (now used as supplementary gage).

AVERAGE DISCHARGE.--14 years (1961-75), 7.19 ft^3/s (0.204 m^3/s), 5,210 acre-ft/yr (6.42 hm^3/yr); median of yearly mean discharges, 3.5 ft^3/s (0.10 m^3/s), 2,500 acre-ft/yr (3.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,280 ft^3/s (64.6 m^3/s) Nov. 2 (gage height, 5.39 ft or 1.643 m); no flow for most of year.
Period of record: Maximum discharge, 19,500 ft^3/s (552 m^3/s) Sept. 5, 1970 (gage height, 9.98 ft or 3.042 m), from rating curve extended above 1,300 ft^3/s (37 m^3/s) on basis of slope-area measurements at gage heights 5.57, 7.33, 9.12, and 9.98 ft (1.698, 2.234, 2.780, and 3.042 m); no flow for many days each year.

REMARKS.--Records fair. No storage or diversion above station.

REVISIONS (WATER YEARS).--WRD Ariz. 1972: Drainage area (former site).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0			0						
2	0	332	0			0						
3	0	120	0			0						
4	0	15	0			0						
5	0	3.2	11			0						
6	0	0	0			0						
7	0	0	0			0						
8	0	0	0			0						
9	0	0	0			0						
10	0	0	0			0						
11	0	0	0			0						
12	0	0	0			.50						
13	0	0	0			0						
14	0	0	0			0						
15	0	0	0			0						
16	0	0	0			0						
17	0	0	0			0						
18	0	0	0			0						
19	0	0	0			0						
20	0	0	0			0						
21	0	0	0			0						
22	0	0	0			0						
23	0	0	0			0						
24	0	0	0			0						
25	0	0	0			0						
26	0	0	0			0						
27	0	0	0			0						
28	11	0	0			0						
29	77	0	0		------	0						
30	.10	0	0		------	0						
31	0	------	0		------	0	------		------			------
TOTAL	88.10	470.2	11	0	0	.50	0	0	0	0	0	0
MEAN	2.84	15.7	.35	0	0	.016	0	0	0	0	0	0
MAX	77	332	11	0	0	.50	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	175	933	22	0	0	1.0	0	0	0	0	0	0

CAL YR 1974 TOTAL 572.70 MEAN 1.57 MAX 332 MIN 0 AC-FT 1,140
WTR YR 1975 TOTAL 569.80 MEAN 1.56 MAX 332 MIN 0 AC-FT 1,130

PEAK DISCHARGE (BASE, 500 CFS).--Oct. 29 (0030) 1,140 cfs (4.72 ft); Nov. 2 (1300) 2,280 cfs (5.39 ft).

09513835. New River at Bell Road, near Peoria, Ariz.

LOCATION.--Lat 33°38'18", long 112°14'22", in NE¼NE¼ sec.3, T.3 N., R.1 E., Maricopa County, on downstream side of bridge at Bell Road, 1.6 mi (2.6 km) upstream from Skunk Creek, 3.1 mi (5.0 km) north of Peoria, and 9 mi (14 km) upstream from mouth.

DRAINAGE AREA.--187 mi^2 (484 km^2).

PERIOD OF RECORD.--Water years 1963, 1965-67 (annual maximums only), October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,190.00 ft (362.712 m) above mean level (Arizona State Highway Department bench mark). Oct. 1, 1965, to Sept. 30, 1967, crest-stage gage at present site and at site 50 ft (15 m) upstream, at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--8 years, 5.87 ft^3/s (0.166 m^3/s), 4,250 acre-ft/yr (5.24 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 257 ft^3/s (7.28 m^3/s) Nov. 3 (gage height, 4.58 ft or 1.396 m); no flow for most of year.
Period of record: Maximum discharge, 14,600 ft^3/s (413 m^3/s) Dec. 19, 1967 (gage height, 13.5 ft or 4.11 m), from rating curve extended above 680 ft^3/s (19.3 m^3/s) on basis of slope-area measurement of peak flow; no flow for most of time each year.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0										
2		0										
3		137										
4		8.0										
5		0										
6		0										
7		0										
8		0										
9		0										
10		0										
11		0										
12		0										
13		0										
14		0										
15		0										
16		0										
17		0										
18		0										
19		0										
20		0										
21		0										
22		0										
23		0										
24		0										
25		0										
26		0										
27		0										
28		0										
29		0			------							
30		0			------							
31		------			------		------		------			------
TOTAL	0	145.0	0	0	0	0	0	0	0	0	0	0
MEAN	0	4.83	0	0	0	0	0	0	0	0	0	0
MAX	0	137	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	288	0	0	0	0	0	0	0	0	0	0

CAL YR 1974 TOTAL 145.00 MEAN .40 MAX 137 MIN 0 AC-FT 288
WTR YR 1975 TOTAL 145.00 MEAN .40 MAX 137 MIN 0 AC-FT 288

PEAK DISCHARGE (BASE, 300 CFS).--No peak above base.

09513860. Skunk Creek near Phoenix, Ariz.

LOCATION.--Lat 33°43'44", long 112°07'12", in SE¼ sec.35, T.5 N., R.2 E., Maricopa County, on downstream side of right end of bridge on east frontage road of Interstate Highway 17, 3 mi (5 km) north of Adobe and 20 mi (32 km) north of city hall in Phoenix.

DRAINAGE AREA.--64.6 mi^2 (167.3 km^2).

PERIOD OF RECORD.--Water years 1960-67 (annual maximums only), October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,459.95 ft (444.993 m) above mean sea level. May 1961 to Sept. 30, 1967, crest-stage gage at site 100 ft (30 m) downstream at datum 5.99 ft (1.826 m) higher.

AVERAGE DISCHARGE.--8 years, 1.39 ft^3/s (0.0394 m^3/s), 1,010 acre-ft/yr (1.25 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 240 ft^3/s (6.80 m^3/s) Oct. 29 (gage height, 7.36 ft or 2.243 m); no flow for most of year.
Period of record: Maximum discharge, 11,500 ft^3/s (326 m^3/s) Aug. 1, 1964 (gage height, 10.48 ft or 3.194 m, present datum), from rating curve extended above 6,200 ft^3/s (180 m^3/s); maximum gage height, 12.24 ft (3.731 m) Sept. 5, 1970; no flow for most of each year.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0									
2	0	5.2	0									
3	0	.20	0									
4	0	0	0									
5	0	0	7.7									
6	0	0	0									
7	0	0	0									
8	0	0	0									
9	0	0	0									
10	0	0	0									
11	0	0	0									
12	0	0	0									
13	0	0	0									
14	0	0	0									
15	0	0	0									
16	0	0	0									
17	0	0	0									
18	0	0	0									
19	0	0	0									
20	0	0	0									
21	0	0	0									
22	0	0	0									
23	0	0	0									
24	0	0	0									
25	0	0	0									
26	0	0	0									
27	0	0	0									
28	.10	0	0									
29	26	0	0		---							
30	0	0	0		---							
31	0	---	0		---		---		---			---
TOTAL	26.10	5.40	7.7	0	0	0	0	0	0	0	0	0
MEAN	.84	.18	.25	0	0	0	0	0	0	0	0	0
MAX	26	5.2	7.7	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	52	11	15	0	0	0	0	0	0	0	0	0

CAL YR 1974 TOTAL 67.90 MEAN .19 MAX 26 MIN 0 AC-FT 135
WTR YR 1975 TOTAL 39.20 MEAN .11 MAX 26 MIN 0 AC-FT 78

PEAK DISCHARGE (BASE, 100 CFS).--Oct. 29 (0100) 240 cfs (7.36 ft).

09513970. Agua Fria River at Avondale, Ariz.

LOCATION.--Lat 33°26'06", long 112°19'59", in NW¼ sec.14, T.1 N., R.1 W., Maricopa County, on downstream side of bridge on U.S. Highway 80, 0.5 mi (0.8 km) east of Avondale, and 3 mi (5 km) upstream from mouth.

DRAINAGE AREA.--2,013 mi^2 (5,214 km^2), of which 1,459 mi^2 (3,779 km^2) above Lake Pleasant is noncontributing except during periods of spill from Waddell Dam. Flood water from drainage area of 247 mi^2 (640 km^2) above McMicken Dam may be diverted into Agua Fria River basin above station.

PERIOD OF RECORD.--Water years 1960-67, 1973 (annual maximums only), October 1967 to September 1972, October 1973 to current year.

GAGE.--Water-stage recorder since Jan. 7, 1974, with supplementary crest-stage gage. Datum of gage is 952.92 ft (290.450 m) above mean sea level (Arizona Highway Department bench mark). Apr. 26, 1961, to Sept. 30, 1967, crest-stage gage; Oct. 1, 1967, to July 21, 1972, water-stage recorder (with supplementary crest-stage gage from Mar. 10 to July 22, 1972) at present site at datum 2.92 ft (0.890 m) lower. July 22, 1972, to Jan. 6, 1974, crest-stage gage only, at railroad bridge upstream at datum 2.92 ft (0.890 m) lower.

AVERAGE DISCHARGE.--7 years (1968-72, 1973-75), 4.91 ft^3/s (0.139 m^3/s), 3,560 acre-ft/yr (4.39 hm^3/yr).

EXTREMES.--Current year: No flow for entire year.
Period of record: Maximum discharge, 20,600 ft^3/s (583 m^3/s) Sept. 6, 1970 (gage height, 11.21 ft or 3.417 m), from rating curve extended above 1,500 ft^3/s (42 m^3/s) on basis of slope-area measurement of peak flow; maximum gage height, 12.70 ft (3.871 m) Dec. 20, 1967; no flow for most of time each year.

REMARKS.--No flow since spring of 1973. Flow partly regulated by Lake Pleasant, 35 mi (56 km) upstream. (See elsewhere in this report.) Records at times may include waste water from the Arizona Canal of the Salt River Project. Excess flood water released from McMicken Dam on Tribly Wash may enter Agua Fria River basin above station; this amount generally is negligible.

XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXX

09515500. Hassayampa River at Box damsite, near Wickenburg, Ariz.

LOCATION.--Lat 34°02'42", long 112°42'33", in SW¼SE¼ sec.7, T.8 N., R.4 W., Yavapai County, on right bank at Box damsite, 5.5 mi (8.8 km) northeast of Wickenburg.

DRAINAGE AREA.--417 mi^2 (1,080 km^2).

PERIOD OF RECORD.--January to June 1938, May 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,236.12 ft (681.569 m) above mean sea level. January to June 1938 at site 1 mi (2 km) downstream at datum 23.76 ft (7.242 m) lower. May 1, 1946, to Nov. 17, 1949, at present site at datum 2.16 ft (0.658 m) higher.

AVERAGE DISCHARGE.--29 years (1946-75), 14.3 ft^3/s (0.405 m^3/s), 10,360 acre-ft/yr (12.8 hm^3/yr); median of yearly mean discharges, 7.5 ft^3/s (0.21 m^3/s), 5,400 acre-ft/yr (6.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 154 ft^3/s (4.36 m^3/s) July 28 (gage height, 6.16 ft or 1.878 m, from high-water marks in gage well and recorded range-in-stage); minimum daily, 0.20 ft^3/s (0.006 m^3/s) Oct 7-14.
Period of record: Maximum discharge, 58,000 ft^3/s (1,640 m^3/s) Sept. 5, 1970 (gage height, 34.6 ft or 10.55 m, from profile past gage), by slope-area measurement of peak flow; no flow for many days in 1964 and 1965.

REMARKS.--Records poor. Small diversions for irrigation and mining above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	2.3	2.1	2.1	1.9	1.6	1.5	1.3	1.1	1.1	1.1	1.1
2	.40	13	2.1	2.1	1.8	1.6	1.5	1.3	1.1	1.1	1.1	1.1
3	.40	19	2.1	2.1	1.8	1.5	1.5	1.5	1.1	1.3	1.1	1.1
4	.50	3.9	2.1	2.1	1.8	1.5	1.5	1.5	1.1	1.3	1.1	1.1
5	.50	2.3	2.3	2.1	1.8	1.5	1.5	1.5	1.1	1.3	1.1	1.1
6	.40	1.9	2.3	2.0	1.8	1.5	1.5	1.3	1.1	1.5	1.3	1.3
7	.20	1.9	2.1	2.0	1.8	1.5	1.5	1.3	1.1	1.5	1.3	1.3
8	.20	1.9	2.1	2.0	1.7	1.5	1.5	1.3	1.1	1.7	1.3	1.1
9	.20	1.9	2.1	2.0	1.7	1.7	1.5	1.3	1.1	1.9	1.3	1.0
10	.20	1.9	2.1	2.0	1.7	1.5	1.5	1.3	1.1	1.9	7.2	1.0
11	.20	1.9	2.1	2.0	1.6	1.7	1.5	1.3	1.0	1.7	50	1.0
12	.20	2.3	2.1	2.0	1.6	1.5	1.5	1.3	1.0	1.5	3.9	1.0
13	.20	3.2	2.1	2.0	1.6	1.5	1.5	1.3	1.0	1.5	5.1	1.0
14	.20	2.6	2.1	2.0	1.6	1.7	1.5	1.3	1.1	35	1.1	1.0
15	.30	2.6	2.1	2.0	1.6	1.5	1.5	1.3	1.1	8.0	1.1	1.0
16	.30	2.6	2.1	2.0	1.8	1.5	1.7	1.3	1.1	1.1	1.1	1.0
17	.40	2.3	2.1	2.0	1.8	1.5	2.6	1.3	1.1	1.1	1.1	1.0
18	.40	2.1	2.1	2.0	1.8	1.5	2.6	1.3	1.3	1.1	1.1	1.0
19	.40	1.9	2.1	2.0	1.8	1.5	1.7	1.3	1.5	1.1	1.1	.90
20	.40	1.9	2.1	2.0	1.7	1.5	1.7	1.5	1.5	1.1	1.1	.90
21	.50	1.9	2.1	1.9	1.7	1.5	1.7	1.5	1.5	1.1	1.1	.90
22	.60	1.9	2.1	1.9	1.7	1.5	1.7	1.5	1.5	1.1	1.1	.90
23	1.1	1.9	2.1	1.9	1.6	1.5	1.7	1.5	1.3	1.1	1.1	.90
24	.50	1.9	2.1	1.9	1.6	1.5	1.7	1.5	1.3	1.1	1.1	.90
25	.40	2.1	2.1	1.9	1.6	1.5	1.5	1.3	1.3	1.1	1.1	.90
26	.30	2.1	2.1	1.9	1.6	1.5	1.5	1.3	1.3	5.0	1.1	.90
27	.30	2.1	2.1	1.9	1.6	1.5	1.5	1.3	1.3	9.0	1.1	.90
28	.40	2.1	2.1	1.9	1.6	1.5	1.3	1.3	1.1	50	1.1	.90
29	1.9	2.1	2.1	1.9	---	1.5	1.3	1.3	1.1	2.0	1.1	.80
30	5.5	2.1	2.1	1.9	---	1.5	1.3	1.3	1.1	1.1	1.1	.70
31	4.3	---	2.1	1.9	---	1.5	---	1.1	---	1.1	1.1	---
TOTAL	22.30	93.6	65.5	61.4	47.7	47.3	48.0	41.7	35.5	141.5	96.7	29.70
MEAN	.72	3.12	2.11	1.98	1.70	1.53	1.60	1.35	1.18	4.56	3.12	.99
MAX	5.5	19	2.3	2.1	1.9	1.7	2.6	1.5	1.5	50	50	1.3
MIN	.20	1.9	2.1	1.9	1.6	1.5	1.3	1.1	1.0	1.1	1.1	.70
AC-FT	44	186	130	122	95	94	95	83	70	281	192	59

CAL YR 1974 TOTAL 2301.00 MEAN 6.30 MAX 700 MIN .20 AC-FT 4560
WTR YR 1975 TOTAL 730.90 MEAN 2.00 MAX 50 MIN .20 AC-FT 1450

PEAK DISCHARGE (BASE, 500 CFS).--No peak above base.

09517500. Centennial Wash near Arlington, Ariz.

LOCATION.--Lat 33°16'12", long 112°47'50", in sec.7, T.2 S., R.5 W., Maricopa County, on upstream side of ford on former U.S. Highway 80, 3.0 mi (4.8 km) upstream from Gillespie Dam and 4.4 mi (7.1 km) southwest of Arlington.

DRAINAGE AREA.--1,810 mi^2 (4,690 km^2), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 773.22 ft (235.677 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 3.30 ft^3/s (0.093 m^3/s), 2,390 acre-ft/yr (2.95 hm^3/yr); median of yearly mean discharges, 1.7 ft^3/s (0.048 m^3/s), 1,200 acre-ft/yr (1.48 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 755 ft^3/s (21.4 m^3/s) Oct. 28 (gage height, 3.55 ft or 1.082 m); no flow most of time.
Period of record: Maximum discharge, 14,500 ft^3/s (411 m^3/s) July 23, 1961 (gage height, 4.70 ft or 1.433 m), from rating curve extended above 5,500 ft^3/s (160 m^3/s); maximum gage height, 4.71 ft (1.436 m) Sept. 5, 1970; no flow for most of time each year.

REMARKS.--Records poor. Flow regulated by several small retention dams in upper end of basin. Records do not include irrigation return flow past station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0										0	
2	0										0	
3	0										0	
4	0										0	
5	0										0	
6	0										2.3	
7	0										2.2	
8	0										0	
9	0										0	
10	0										0	
11	0										0	
12	0										0	
13	0										0	
14	0										0	
15	0										0	
16	0										0	
17	0										0	
18	0										0	
19	0										0	
20	0										0	
21	0										0	
22	0										0	
23	0										0	
24	0										0	
25	0										0	
26	0										0	
27	0										0	
28	55										0	
29	76				------						0	
30	0				------						0	
31	0	------			------		------		------		0	------
TOTAL	131	0	0	0	0	0	0	0	0	0	4.5	0
MEAN	4.23	0	0	0	0	0	0	0	0	0	.15	0
MAX	76	0	0	0	0	0	0	0	0	0	2.3	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	260	0	0	0	0	0	0	0	0	0	8.9	0

CAL YR 1974 TOTAL 184.80 MEAN .51 MAX 76 MIN 0 AC-FT 367
WTR YR 1975 TOTAL 135.50 MEAN .37 MAX 76 MIN 0 AC-FT 269

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

09518000. Gila River above diversions, at Gillespie Dam, Ariz.

LOCATION.--Lat 33°13'45", long 112°46'00", in SE¼NE¼ sec.28, T.2 S., R.5 W., Maricopa County, at Gillespie Dam, 8 mi (13 km) downstream from Hassayampa River. Gila Bend Canal diverts from left end, and Enterprise Canal diverts from right end, of Gillespie Dam.

DRAINAGE AREA.--49,650 mi^2 (128,600 km^2).

PERIOD OF RECORD.--June 1935 to November 1939 (monthly discharge only published in WSP 1313), December 1939 to September 1971 (published with records for sta 09519500, Gila River below Gillespie Dam), 1972 and 1973 (water year estimates only, listed in REMARKS for sta 09519500), October 1973 to September 1975. Low-flow records prior to October 1970 are not equivalent as leakage less than 5 ft^3/s (0.14 m^3/s) is not included.

09518500. Gila Bend Canal: May 1935 to September 1971, October 1973 to September 1975 (since October 1941, monthly discharge only).

09519000. Enterprise Canal: June 1935 to September 1939 (discharge measurements and monthly estimates only), October 1939 to September 1971, April 1974 to September 1975 (since October 1941, monthly discharge only). Published as "Gillespie Canal" prior to 1951.

GAGE.--Gila Bend Canal: Water-stage recorder 200 ft (60.9 m) downstream from headgates.
Enterprise Canal: Water-stage recorder 600 ft (180 m) downstream from intake at dam.

AVERAGE DISCHARGE.--40 years, 180 ft^3/s (5.098 m^3/s), 130,400 acre-ft/yr (161 hm^3/yr); median of yearly mean discharges, 66 ft^3/s (1.87 m^3/s), 47,800 acre-ft/yr (59 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 101 ft^3/s (2.86 m^3/s) Oct 29; minimum daily, 17 ft^3/s (0.48 m^3/s) Aug. 21.
Period of record: Maximum daily discharge, 48,900 ft^3/s (1,380 m^3/s) Jan. 2, 1966; no flow except for possible leakage of less than 5 ft^3/s (0.14 m^3/s) Nov. 24-27, 1966, July 14, 1967.

REMARKS.--Records fair. Record is obtained by combining, on a daily basis, the flows of Gila Bend Canal, Enterprise Canal, and Gila River below Gillespie Dam (see sta 09519500).

Many large diversions above station for irrigation, municipal, and industrial use. Flow of Gila River and tributaries above this station is regulated by San Carlos Reservoir on Gila River—capacity, 948,600 acre-ft (1,170 hm^3); by a series of reservoirs on Salt River—capacity, 1,755,000 acre-ft (2,160 hm^3); by Bartlett and Horseshoe Reservoirs on Verde River—capacity, 317,700 acre-ft (392 hm^3); and by Lake Pleasant on Agua Fria River—capacity, 157,600 acre-ft (194 hm^3). Records of chemical analyses and water temperatures for the current water year are published on following pages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	80	60	81	80	60	65	57	46	24	22	23
2	47	75	55	77	77	60	67	57	47	24	22	24
3	43	76	59	72	82	61	61	58	47	23	22	23
4	41	76	60	64	81	70	69	48	43	39	22	25
5	38	76	80	75	75	65	56	54	43	35	22	26
6	28	73	85	79	66	54	48	56	39	33	23	25
7	23	70	70	81	64	51	45	53	44	33	28	26
8	24	70	62	81	54	53	50	43	43	33	25	28
9	25	76	57	76	57	54	53	44	44	34	26	28
10	30	76	62	77	58	54	57	49	45	31	22	28
11	28	76	71	77	69	63	58	53	44	26	24	32
12	33	76	75	81	65	60	54	59	44	32	27	32
13	38	76	79	79	59	73	53	60	43	26	26	32
14	31	71	79	83	57	73	56	58	46	21	28	26
15	27	71	79	81	68	66	64	48	43	20	27	36
16	27	71	70	83	69	65	62	51	39	20	25	39
17	32	71	79	81	77	73	53	53	47	20	24	37
18	33	70	66	79	77	68	52	56	47	22	25	29
19	33	70	69	78	84	67	60	61	38	30	24	27
20	37	70	78	86	84	62	57	47	40	30	21	27
21	36	69	80	87	85	62	51	49	47	22	17	30
22	34	69	75	76	88	60	53	54	48	21	27	30
23	35	60	77	82	84	70	53	51	41	27	27	28
24	37	60	76	79	78	78	57	51	34	27	27	30
25	38	60	84	77	68	78	58	52	25	25	27	30
26	45	60	85	80	60	69	57	50	29	25	26	30
27	46	60	88	80	58	71	62	51	30	25	26	20
28	66	60	84	78	61	73	72	50	31	25	26	24
29	101	60	85	72	---	66	58	51	30	24	26	19
30	94	60	87	67	---	58	57	49	37	24	25	22
31	96	---	78	74	---	64	---	48	---	24	25	---
TOTAL	1295	2088	2294	2423	1985	2001	1718	1621	1224	825	764	836
MEAN	41.8	69.6	74.0	78.2	70.9	64.5	57.3	52.3	40.8	26.6	24.6	27.9
MAX	101	80	88	87	88	78	72	61	48	39	28	39
MIN	23	60	55	64	54	51	45	43	25	20	17	19
AC-FT	2570	4140	4550	4810	3940	3970	3410	3220	2430	1640	1520	1660
(†)	0	0	0	0	0	0	0	0	0	0	0	0
(‡)	1270	1230	1220	1010	702	881	1630	2190	1170	1060	1480	1760

CAL YR 1974 TOTAL 17185 MEAN 47.1 MAX 101 MIN 10 AC-FT 34090 † 0 ‡ ---
WTR YR 1975 TOTAL 19074 MEAN 52.3 MAX 101 MIN 17 AC-FT 37830 † 0 ‡ 15600

† Diversions, in acre-feet, to Gila Bend Canal (sta 09518500).
‡ Diversions, in acre-feet, to Enterprise Canal (sta 09519000).

09518000. Gila River above diversions, at Gillespie Dam, Ariz.
(National stream-quality accounting network and pesticide station)

LOCATION.--Lat 33°13'45", long 112°46'00", in SE¼NE¼ sec.28, T.2 S., R.5 W., Maricopa County, at Gillespie Dam, 8 mi (13 km) downstream from Hassayampa River.

DRAINAGE AREA.--49,650 mi² (128,600 km²).

PERIOD OF RECORD.--Chemical analyses: December 1950 to September 1971, March 1974 to current year.
Water temperatures: December 1950 to September 1971, April 1974 to current year.
Prior to October 1967, published as 09519500, Gila River below Gillespie Dam, Ariz.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 7,700 micromhos Mar. 7; minimum daily, 1,380 micromhos Oct. 29.
Water temperatures: Maximum, 31.0°C July 10, 11, 23, 24; minimum, 7.0°C on several days in Dec. 24, 27, 28, Jan. 4.
Period of record:
Specific conductance: Maximum daily, 13,200 micromhos July 10, 11, 1966; minimum daily, 236 micromhos Dec. 28, 1967.
Water temperatures: Maximum, 36.5°C July 8, 1958, July 22, 1959, Aug. 5, 8, 1966; minimum, 1.5°C Jan. 1, 1951.

REMARKS.--Samples are believed to be representative of total flow passing Gillespie Dam, including spill into Gila River and flow diverted into enterprise and Gila Bend Canals.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.										
29...	1300	85	28	--	--	--	--	63	21	170
DEC.										
03...	1015	46	29	1500	20	130	42	230	120	900
JAN.										
06...	1215	70	18	--	--	--	--	230	96	780
FEB.										
05...	1045	71	17	--	--	--	--	220	100	750
MAR.										
04...	1030	65	15	1500	220	270	240	270	140	1000
APR.										
01...	1045	50	4.8	--	--	--	--	240	110	800
MAY										
12...	1130	39	13	--	--	--	--	270	93	970
JUNE										
09...	1000	19	21	2300	50	210	40	300	150	1000
JULY										
28...	1100	4.8	14	--	--	--	--	220	100	1000
SEP.										
09...	1300	12	23	--	--	--	--	220	92	800

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.									
29...	14	136	--	170	250	.5	.06	.04	848
DEC.									
03...	12	350	--	850	1300	2.3	10	2.3	3810
JAN.									
06...	12	348	--	760	1100	1.6	11	1.7	3340
FEB.									
05...	12	326	--	670	1200	.2	.28	.03	3320
MAR.									
04...	12	372	0	930	1400	1.7	13	.68	4290
APR.									
01...	11	334	0	830	1200	2.6	12	.00	3540
MAY									
12...	9.1	342	0	910	1400	1.5	5.0	.28	4060
JUNE									
09...	12	343	0	1100	1500	2.4	11	.32	4450
JULY									
28...	11	150	0	950	1400	1.8	4.7	.00	4030
SEP.									
09...	11	255	0	700	1200	2.3	5.9	.38	3310

09518000. Gila River above diversions, at Gillespie Dam, Ariz.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
OCT.									
29...	784	1.15	240	130	4.7	1390	7.9	16.0	900
DEC.									
03...	3660	5.18	1100	780	12	5700	8.2	10.0	20
JAN.									
06...	3220	4.54	970	680	11	6750	8.3	9.0	20
FEB.									
05...	3130	4.52	960	690	11	5500	7.9	10.0	20
MAR.									
04...	4010	5.83	1300	950	12	6900	8.1	15.0	20
APR.									
01...	3420	4.81	1100	780	11	5800	8.2	15.0	18
MAY									
12...	3860	5.52	1100	780	13	6500	8.2	23.0	32
JUNE									
09...	4310	6.05	1400	1100	12	7000	8.4	25.0	35
JULY									
28...	3790	5.48	960	840	14	6900	8.4	30.0	74
SEP.									
09...	3200	4.50	930	720	11	5840	7.8	30.0	56

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.								
29...	1300	.03	.03	2.4	4.4	6.8	30	2.0
DEC.								
03...	1015	--	1.1	11	4.4	15	68	2.4
JAN.								
06...	1215	--	.68	12	6.6	19	82	2.8
FEB.								
05...	1045	.28	.00	10	5.4	15	68	2.5
MAR.								
04...	1030	--	.70	13	3.8	17	74	1.3
APR.								
01...	1045	--	.00	13	1.4	14	64	1.1
MAY								
12...	1130	--	.22	12	1.4	13	59	.89
JUNE								
09...	1000	--	.35	11	3.7	15	65	.60
JULY								
28...	1100	--	.24	5.0	4.4	9.4	42	.50
SEP.								
09...	1300	--	.44	5.9	1.4	7.3	32	.81

09518000. Gila River above diversions, at Gillespie Dam, Ariz.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL A MG/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL B MG/SQ M	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
29...	1250	--	20	--	.7	.3	--	--	--
31...	1120	--	--	--	--	--	2700	1600	--
DEC.									
03...	1015	4000	--	--	--	--	1080	1800	5.5
JAN.									
06...	1215	1400	--	--	--	--	840	880	--
FEB.									
04...	1045	1900	--	--	--	--	2550	560	--
MAR.									
04...	1030	11000	10	15	53	14.	8190	450	17
APR.									
01...	1045	13000	--	--	--	--	490	520	--
MAY									
12...	1130	16000	--	--	--	--	1100	940	--
JUNE									
09...	1000	71000	--	--	--	--	817600	880	18
JULY									
28...	1100	68000	--	--	--	--	3500	1300	--
SEP.									
09...	1300	23000	--	--	--	--	--	5800	--

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)
OCT.										
29...	1300	--	--	620	--	--	--	--	--	--
DEC.										
03...	1015	10	11	3000	20	0	0	<10	100	1
JAN.										
06...	1215	--	--	2600	--	--	--	--	--	--
FEB.										
05...	1045	--	--	2200	--	--	--	--	--	--
MAR.										
04...	1030	11	9	3100	10	0	20	10	<50	0
APR.										
01...	1045	--	--	2400	--	--	--	--	--	--
MAY										
12...	1130	--	--	1300	--	--	--	--	--	--
JUNE										
09...	1000	9	11	3400	<10	0	10	10	<50	1
JULY										
28...	1100	--	--	3100	--	--	--	--	--	--
SEP.										
09...	1300	--	--	2300	--	--	--	--	--	--

DATE	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.									
29...	--	--	--	--	--	--	--	--	--
DEC.									
03...	40	6	<100	5	<.1	<.1	9	8	10
JAN.									
06...	--	--	--	--	--	--	--	--	--
FEB.									
05...	--	--	--	--	--	--	--	--	--
MAR.									
04...	30	5	<100	3	.3	.3	11	9	30
APR.									
01...	--	--	--	--	--	--	--	--	--
MAY									
12...	--	--	--	--	--	--	--	--	--
JUNE									
09...	20	5	<100	0	.1	.1	14	10	10
JULY									
28...	--	--	--	--	--	--	--	--	--
SEP.									
09...	--	--	--	--	--	--	--	--	--

09518000. Gila River above diversions, at Gillespie Dam, Ariz.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4600	3650	---	---	6000	7000	5450	6350	---	7250	6000	---
2	4400	4250	5800	4500	---	---	5900	6350	6700	7100	5750	6800
3	4350	---	5500	4700	5500	7000	6000	6050	6900	6900	---	6600
4	4650	4550	5250	5150	5300	7200	5900	---	6900	6600	5550	6750
5	---	4600	4600	---	5400	7000	6000	6400	6450	---	7200	6800
6	---	4550	4500	4950	5600	7300	---	6550	6800	---	7200	6750
7	5950	4950	5100	4950	5700	7700	6500	6350	6800	6500	6000	---
8	6250	5000	---	5000	6000	7500	6300	6350	---	7200	6200	5140
9	6600	4900	5850	4900	---	---	6100	6100	6800	6400	6300	5350
10	6250	---	5600	5100	6300	7300	5900	6000	7000	6700	---	5650
11	6300	5150	5200	5100	6200	6600	5850	---	7200	6800	6500	6150
12	6400	5100	4600	---	6100	6900	5850	5900	6800	6700	6300	6600
13	---	5350	4550	5300	6800	6700	---	5950	7100	---	6300	6750
14	---	5200	4550	5100	7100	6700	5950	6150	6500	6200	5650	---
15	6350	5050	---	5200	6900	6100	6200	6200	---	6050	6250	6400
16	6700	5250	4800	5350	---	---	6100	6050	6800	6850	5900	6250
17	6500	---	4750	5200	---	6900	6200	6100	6500	6800	---	6400
18	---	4850	4400	5500	5800	6300	6600	---	6750	5450	6200	6400
19	6350	5700	5450	---	5700	6600	6500	6000	6700	6100	5550	6850
20	---	6000	4800	4900	5600	6500	---	6400	6900	---	5600	6800
21	5900	6200	4700	4700	5900	6300	6550	6650	6800	6800	6700	---
22	6400	6200	---	5150	5800	6700	6700	6700	---	6600	5600	6250
23	6500	6400	4500	5900	---	---	6500	5900	6400	6550	5750	6500
24	6700	---	4700	5300	6500	6400	6500	5750	6400	6600	5400	5950
25	5750	5950	---	5350	5900	5900	6500	---	6600	6950	---	---
26	5700	6000	4600	---	6100	6400	6450	---	6900	6800	5600	6300
27	---	6300	4400	5500	6800	6800	---	6100	6900	---	5900	6600
28	---	---	4150	5500	6400	6400	6300	6200	6900	6500	6100	---
29	1380	---	---	5400	---	6400	6500	6100	---	6300	6200	6950
30	3050	6400	4200	5400	---	---	6450	5950	6400	6600	5500	7100
31	3350	---	4600	5500	---	7300	---	6150	---	6800	---	---
MEAN	---	5310	4850	5180	6060	6770	6220	6180	6760	6620	6050	6420
YEAR	MAX	7700	MIN	1380	MEAN	6000						

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	15.0	---	---	12.0	15.0	15.0	19.0	---	25.0	30.0	---
2	24.0	16.0	11.0	8.0	---	---	14.0	19.0	25.0	26.0	30.0	28.0
3	25.0	---	10.0	8.0	10.0	15.0	14.0	20.0	25.0	28.0	---	29.0
4	25.0	15.0	11.0	7.0	10.0	16.0	15.0	---	24.0	30.0	29.0	28.0
5	25.0	15.0	14.0	---	11.0	15.0	16.0	18.0	25.0	---	30.0	28.0
6	---	15.0	13.0	8.0	12.0	15.0	---	17.0	25.0	---	30.0	27.0
7	24.0	15.0	12.0	9.0	12.0	15.0	15.0	17.0	25.0	28.0	30.0	---
8	24.0	16.0	---	10.0	14.0	17.0	14.0	18.0	---	30.0	30.0	27.0
9	26.0	16.0	12.0	11.0	---	---	14.0	20.0	25.0	30.0	30.0	27.0
10	25.0	---	11.0	10.0	14.0	15.0	15.0	22.0	25.0	31.0	---	27.0
11	24.0	15.0	10.0	10.0	13.0	15.0	15.0	---	25.0	31.0	29.0	26.0
12	22.0	15.0	10.0	---	13.0	14.0	16.0	22.0	26.0	30.0	29.0	24.0
13	---	15.0	10.0	9.0	13.0	14.0	---	23.0	27.0	---	28.0	25.0
14	---	15.0	10.0	8.0	15.0	14.0	18.0	23.0	27.0	30.0	27.0	---
15	22.0	15.0	---	9.0	14.0	13.0	18.0	23.0	---	30.0	29.0	26.0
16	22.0	14.0	10.0	9.0	---	---	18.0	22.0	27.0	30.0	22.0	26.0
17	21.0	---	10.0	9.0	---	15.0	17.0	22.0	25.0	30.0	---	27.0
18	20.0	15.0	10.0	9.0	12.0	14.0	17.0	---	23.0	29.0	25.0	28.0
19	21.0	15.0	10.0	---	11.0	16.0	17.0	24.0	23.0	29.0	26.0	26.0
20	---	16.0	10.0	10.0	11.0	16.0	---	22.0	23.0	---	27.0	26.0
21	22.0	16.0	10.0	11.0	13.0	17.0	19.0	20.0	24.0	29.0	27.0	---
22	20.0	15.0	---	10.0	11.0	16.0	19.0	20.0	---	30.0	28.0	23.0
23	20.0	14.0	9.0	11.0	---	---	---	22.0	25.0	31.0	27.0	22.0
24	22.0	---	7.0	10.0	11.0	15.0	20.0	22.0	25.0	31.0	28.0	23.0
25	21.0	14.0	---	12.0	12.0	16.0	20.0	---	24.0	30.0	---	---
26	20.0	13.0	8.0	---	12.0	15.0	19.0	---	24.0	30.0	27.0	22.0
27	---	12.0	7.0	12.0	15.0	14.0	---	24.0	25.0	---	27.0	22.0
28	---	---	7.0	12.0	15.0	13.0	18.0	23.0	25.0	30.0	27.0	---
29	15.0	---	---	12.0	---	13.0	19.0	23.0	---	30.0	30.0	25.0
30	16.0	11.0	9.0	13.0	---	---	17.0	24.0	25.0	28.0	25.0	25.0
31	16.0	---	9.0	13.0	---	15.0	---	25.0	---	28.0	---	---
MEAN	22.0	14.5	10.0	10.0	12.5	15.0	17.0	21.5	25.0	29.5	28.0	25.5
YEAR	MAX	31.0	MIN	7.0	MEAN	19.0						

09519500. Gila River below Gillespie Dam, Ariz.

LOCATION.--Lat 33°13'45", long 112°46'00", in SE¼NE¼ sec.28, T.2 S., R.5 W., Maricopa County, at left end of Gillespie Dam, 8 mi (13 km) downstream from Hassayampa River.

DRAINAGE AREA.--49,650 mi^2 (128,600 km^2).

PERIOD OF RECORD.--August 1921 to current year. Low-flow records prior to October 1970 are not equivalent as leakage of less than 5 ft^3/s (0.14 m^3/s) not included, and from October 1971 to September 1973, when no leakage was included. Annual estimate of leakage was listed in REMARKS for the 1972 water year. Prior to 1939, published as "at Gillespie Dam."

GAGE.--Water-stage recorder since July 28, 1924. Datum of gage is 9.95 ft (3.033 m) below average elevation of crest of dam, which is 753.46 ft (229.655 m) above mean sea level. Prior to Nov. 11, 1924, depth of water read on crest at left end of dam. Nov. 11, 1924, to July 22, 1932, datum of gage was at average elevation of dam crest. July 23, 1932, to Apr. 27, 1955, datum of gage was 5.00 ft (1.524 m) below average elevation of crest of dam. Since Apr. 2, 1974, supplementary water-stage recorder and concrete control 70 ft (21.3 m) downstream from crest of dam at datum 5.64 ft (1.719 m) lower than datum of base gage.

EXTREMES.--Current year: Maximum discharge, 80 ft^3/s (2.27 m^3/s) Oct. 29 (gage height, 1.79 ft or 0.546 m, at supplementary gage), with no flow over dam; minimum daily, 0.91 ft^3/s (0.026 m^3/s) Sept. 27.
Period of record: Maximum discharge observed, 85,000 ft^3/s (2,400 m^3/s) Dec. 28, 1923 (gage height, 16.0 ft or 4.88 m, present datum); maximum gage height, 16.1 ft (4.91 m) Jan. 2, 1966; probably no flow at times—periods of no flow unknown due to not publishing leakage of less than 5 ft^3/s (0.14 m^3/s).
Maximum discharge since at least 1891, 250,000 ft^3/s (7,100 m^3/s), estimated, in February 1891.

REMARKS.--Records good except those for November and May to September, which are poor. Flow consists of water passing over the dam, and through the dam, but does not include water diverted to Gila Bend or Enterprise Canals. No flow passed over the dam this year. See sta 09518000, Gila River above diversions, at Gillespie Dam, for records of flow reaching dam, and of diversions to Gila Bend and Enterprise Canals.
For diversions and regulation above station, see REMARKS for sta 09518000.

REVISIONS (WATER YEARS).--WSP 1213: 1939. WSP 1243: 1924(M). WSP 1926: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	59	40	63	66	45	50	41	22	14	4.0	1.0
2	27	54	35	59	63	45	51	41	22	14	4.0	1.0
3	22	54	39	54	68	46	49	42	22	14	4.0	1.0
4	21	54	39	46	67	55	49	31	17	17	4.0	1.5
5	18	54	57	57	62	51	41	36	18	16	4.0	1.5
6	9.3	51	63	61	51	39	33	38	18	8.8	4.0	2.0
7	5.2	48	48	63	49	36	31	37	18	8.3	4.0	2.0
8	5.4	48	41	62	39	38	36	28	19	8.6	4.0	2.5
9	5.7	54	36	57	42	39	39	28	19	9.0	4.0	2.5
10	9.8	55	41	58	43	39	43	33	20	6.3	4.0	2.5
11	8.1	55	51	58	54	48	43	37	21	5.9	4.0	5.5
12	12	55	55	62	50	45	39	42	23	7.5	3.0	6.3
13	17	55	59	60	44	58	38	42	24	8.7	3.0	6.6
14	11	50	59	64	42	58	41	40	25	6.0	3.0	2.3
15	7.2	50	59	62	53	51	50	30	25	6.0	3.0	11
16	7.4	50	50	64	54	50	48	33	24	6.0	3.0	14
17	11	50	59	62	62	58	38	35	25	6.0	3.0	11
18	12	50	46	60	62	53	37	38	27	6.0	3.0	4.0
19	12	50	49	59	69	51	45	42	24	6.0	2.0	3.3
20	16	50	58	67	69	46	42	26	22	6.0	2.0	3.1
21	15	50	60	68	70	46	36	27	22	6.0	2.0	4.6
22	13	50	55	57	73	44	37	32	22	5.0	2.0	4.5
23	14	40	59	63	69	54	37	30	16	5.0	2.0	3.3
24	16	40	58	60	63	62	41	30	14	5.0	2.0	5.3
25	17	40	66	58	53	62	42	30	14	5.0	2.0	4.6
26	24	40	67	61	45	53	41	28	14	5.0	1.0	5.4
27	25	40	70	61	43	55	46	28	14	5.0	1.0	.91
28	44	40	66	59	46	57	57	26	14	5.0	1.0	1.8
29	77	40	67	53	---	50	42	26	14	4.0	1.0	1.3
30	71	40	69	51	---	42	41	24	14	4.0	1.0	1.5
31	73	---	60	60	---	49	---	24	---	4.0	1.0	---
TOTAL	654.1	1466	1681	1849	1571	1525	1263	1025	593	233.1	85.0	117.81
MEAN	21.1	48.9	54.2	59.6	56.1	49.2	42.1	33.1	19.8	7.52	2.74	3.93
MAX	77	59	70	68	73	62	57	42	27	17	4.0	14
MIN	5.2	40	35	46	39	36	31	24	14	4.0	1.0	.91
AC-FT	1300	2910	3330	3670	3120	3020	2510	2030	1180	462	169	234

CAL YR 1974 TOTAL 11079.9 MEAN 30.4 MAX 77 MIN 2.9 AC-FT 21980
WTR YR 1975 TOTAL 12063.01 MEAN 33.0 MAX 77 MIN .91 AC-FT 23930

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

NOTE.--No gage-height record July 14 to Sept. 10.

09519800. Gila River below Painted Rock Dam, Ariz.

LOCATION.--Lat 33°04'30", long 113°00'50", in SE¼ sec.18, T.4 S., R.7 W., Maricopa County, on left bank 0.3 mi (0.5 km) downstream from Painted Rock Dam and 19 mi (31 km) northeast of Sentinel.

DRAINAGE AREA.--50,910 mi^2 (131,860 km^2), approximately.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 518.69 ft (158.097 m) above mean sea level (levels by Corps of Engineers). Supplementary gage May 5, 1969, to Mar. 30, 1973, at site 0.3 mi (0.5 km) upstream, at datum 2.87 ft (0.874 m) higher.

EXTREMES.--Current year: Maximum discharge, 223 ft^3/s (6.32 m^3/s) Oct. 2 (gage height, 5.80 ft or 1.768 m); minimum daily, 0.50 ft^3/s (0.014 m^3/s) for many days.
Period of record: Maximum discharge, 2,860 ft^3/s (81.0 m^3/s) Apr. 5, 1973 (gage height, 10.29 ft or 3.136 m); no flow for many days in most years.

REMARKS.--Records fair. Many diversions above station for irrigation. Flow above station regulated by reservoirs at and above Painted Rock Dam. (See REMARKS for sta 09518000, Gila River above diversions, at Gillespie Dam.)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	2.0	1.4	1.4	.60	.50	1.5	1.0	2.0	2.0	.50	.50
2	180	2.0	1.4	1.4	.50	.50	1.5	1.0	2.0	2.0	.50	.50
3	160	2.0	1.4	1.4	.50	.50	1.5	1.0	2.0	2.0	.50	.50
4	83	2.0	1.4	1.4	.50	.50	1.5	1.0	2.0	2.0	.50	.50
5	2.0	2.0	1.4	1.4	.50	.50	1.5	1.0	2.0	2.0	.50	.50
6	2.0	2.0	1.4	1.3	.50	.50	1.5	1.0	2.0	2.0	.50	.50
7	2.0	2.0	1.4	1.3	.50	.50	33	1.0	2.0	2.0	.50	.50
8	2.0	1.9	1.4	1.3	.50	.50	1.0	10	2.0	2.0	.50	.50
9	2.0	1.9	1.4	1.2	.50	.50	1.0	46	2.0	2.0	.50	.50
10	2.0	1.9	1.4	1.2	.50	6.0	1.0	2.0	2.0	2.0	.50	.50
11	2.0	1.9	1.4	1.2	.50	8.0	1.0	1.5	2.0	2.0	.50	.50
12	2.0	1.8	1.4	1.2	.50	18	1.0	1.0	2.0	2.0	.50	.50
13	2.0	1.8	1.4	1.1	.50	10	1.0	1.0	2.0	2.0	.50	.50
14	2.0	1.8	1.4	1.1	.50	1.5	1.0	1.0	2.0	2.0	.50	.50
15	2.0	1.8	1.4	1.1	.50	1.5	1.0	1.0	2.0	2.0	.50	8.0
16	2.0	1.8	1.4	1.0	.50	1.5	1.0	1.0	2.0	2.0	.50	8.0
17	2.0	1.8	1.4	1.0	.50	1.5	1.0	1.0	2.0	2.0	.50	.50
18	2.0	1.7	1.4	1.0	.50	1.5	1.0	1.0	2.0	2.0	.50	.50
19	2.0	1.7	1.4	1.0	.50	1.5	1.0	1.0	37	2.0	.50	.50
20	2.0	1.7	1.4	.90	.50	1.5	1.0	1.0	2.0	2.0	.50	.50
21	2.0	1.7	1.4	.90	.50	1.5	1.0	1.0	2.0	2.0	.50	.50
22	2.0	1.6	1.4	.90	.50	1.5	1.0	1.0	2.0	40	.50	.50
23	2.0	1.6	1.4	.80	.50	1.5	1.0	1.0	2.0	40	.50	9.0
24	2.0	1.6	1.4	.80	.50	1.5	1.0	1.0	2.0	.50	.50	9.0
25	2.0	1.6	1.4	.80	.50	1.5	1.0	1.0	2.0	35	.50	6.5
26	2.0	1.6	1.4	.80	.50	1.5	1.0	1.0	2.0	.50	.50	.50
27	2.0	1.5	1.4	.70	.50	1.5	1.0	1.0	41	.50	.50	.50
28	2.2	1.5	1.4	.70	.50	1.5	1.0	1.0	3.0	.50	.50	.50
29	2.1	1.5	1.4	.70	------	1.5	1.0	1.0	2.0	.50	.50	.50
30	2.0	1.5	1.4	.60	------	1.5	1.0	52	2.0	.50	.50	.50
31	2.0	------	1.4	.60	------	1.5	------	3.0	------	.50	.50	------
TOTAL	691.3	53.2	43.4	32.20	14.10	73.50	65.0	139.5	135.0	160.50	15.50	53.00
MEAN	22.3	1.77	1.40	1.04	.50	2.37	2.17	4.50	4.50	5.18	.50	1.77
MAX	214	2.0	1.4	1.4	.60	18	33	52	41	40	.50	9.0
MIN	2.0	1.5	1.4	.60	.50	.50	1.0	1.0	2.0	.50	.50	.50
AC-FT	1,370	106	86	64	28	146	129	277	268	318	31	105

CAL YR 1974 TOTAL 55,681.50 MEAN 153 MAX 465 MIN 1.4 AC-FT 110,400
WTR YR 1975 TOTAL 1,476.20 MEAN 4.0 MAX 214 MIN .50 AC-FT 2,930

09520170. Rio Cornez near Ajo, Ariz.

LOCATION.--Lat 32°29'58", long 112°52'50", in SE¼NE¼ sec.4, T.11 S., R.6 W., Pima County, on downstream side of bridge on State Highway 85, and 8 mi (13 km) north of Ajo.

DRAINAGE AREA.--243 mi^2 (629 km^2).

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,309.45 ft (399.120 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 3.05 ft^3/s (0.0864 m^3/s), 2,210 acre-ft/yr (2.72 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,570 ft^3/s (70.8 m^3/s) Sept. 7 (gage height, 8.18 ft or 2.493 m), from rating curve extended above 520 ft^3/s (15 m^3/s) on basis of slope-area measurement at gage height 9.70 ft (2.957 m); no flow for most of year.
Period of record: Maximum discharge, 6,000 ft^3/s (170 m^3/s) Aug. 2, 1974 (gage height, 9.70 ft or 2.957 m), from rating curve extended above 520 ft^3/s (15 m^3/s) on the basis of slope-area measurement of peak flow; no flow for most of each year.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0		0
2	0									0		0
3	0									0		0
4	0									0		0
5	0									0		0
6	0									0		226
7	0									0		434
8	0									0		146
9	0									0		0
10	0									0		0
11	0									0		0
12	0									0		0
13	0									0		0
14	0									0		0
15	0									0		0
16	0									0		0
17	0									0		0
18	0									0		0
19	0									0		0
20	0									0		0
21	0									0		0
22	25									0		0
23	7.5									0		0
24	0									0		0
25	0									0		0
26	0									0		0
27	0									6.1		0
28	0									0		0
29	72				---					0		0
30	0				---					0		0
31	0	---			---		---		---	0		---
TOTAL	104.5	0	0	0	0	0	0	0	0	6.1	0	806
MEAN	3.37	0	0	0	0	0	0	0	0	.20	0	26.9
MAX	72	0	0	0	0	0	0	0	0	6.1	0	434
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	207	0	0	0	0	0	0	0	0	12	0	1600

CAL YR 1974 TOTAL 2952.80 MEAN 8.09 MAX 1050 MIN 0 AC-FT 5860
WTR YR 1975 TOTAL 916.60 MEAN 2.51 MAX 434 MIN 0 AC-FT 1820

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	0045	6.82	811	9- 7	2100	8.18	2,570
9- 6	1815	7.73	1,920				

09520360. Gila River near Mohawk, Ariz.

LOCATION.--Lat 32°47'20", long 113°45'50", on section line between sec.25 and 26, T.7 S., R.15 W., in center of channel, 70 ft (21 m) upstream from Aveunue 51E, and 4.0 mi (6.4 km) north of Mohawk.

DRAINAGE AREA.--55,430 mi^2 (143,560 km^2), approximately.

PERIOD OF RECORD.--February to April 1966 (published in WSP 1850-C), April 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 310 ft (94.5 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 18 ft^3/s (0.51 m^3/s) Oct. 5 (gage height, 3.57 ft or 1.088 m); no flow for most of year.
Period of record: Maximum discharge, 1,730 ft^3/s (49.0 m^3/s) June 2, 1973 (gage height, 7.44 ft or 2.268 m); no flow for most of each year.

REMARKS.--Records good. Flow regulated by Painted Rock Dam. Nearly all flow for periods 1966, 1973, 1974, and 1975 was release flow from Painted Rock Dam (see sta 09519800).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13											
2	1.2											
3	2.6											
4	2.8											
5	8.7											
6	.39											
7	0											
8	0											
9	0											
10	0											
11	0											
12	0											
13	0											
14	0											
15	0											
16	0											
17	0											
18	0											
19	0											
20	0											
21	0											
22	0											
23	0											
24	0											
25	0											
26	0											
27	0											
28	0											
29	0				---							
30	0				---							
31	0	---			---		---		---			---
TOTAL	15.82	0	0	0	0	0	0	0	0	0	0	0
MEAN	.51	0	0	0	0	0	0	0	0	0	0	0
MAX	8.7	0	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	31	0	0	0	0	0	0	0	0	0	0	0

CAL YR 1974 TOTAL 4155.37 MEAN 11.4 MAX 115 MIN 0 AC-FT 8240
WTR YR 1975 TOTAL 15.82 MEAN .04 MAX 8.7 MIN 0 AC-FT 31

09520500. Gila River near Dome, Ariz.

LOCATION.--Lat 32°45'39", long 114°25'11", in SW¼ sec.4, T.8 S., R.21 W., Yuma County, on right bank 440 ft (134 m) upstream from McPhal bridge on old route of State Highway 95, 3 mi (5 km) west of Dome, and 12 mi (19 km) upstream from mouth.

DRAINAGE AREA.--57,850 mi^2 (149,800 km^2), approximately—includes 373 mi^2 (966 km^2) in Aubrey Valley Playa, a closed basin, but excludes all other closed basins.

PERIOD OF RECORD.--January 1903 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Yuma and Gila City" 1903, as "near Gila City" 1904, and as "at Dome (Gila City)" 1905-6. Records for 1907-29 are published in WSP 918 as "at Yuma and at and near Dome."

GAGE.--Water-stage recorder. Datum of gage is 148.18 ft (45.165 m) above mean sea level. Prior to October 1903 and January 1907 to April 1929, no gage; discharge estimated. October 1903 to December 1906, principal nonrecording gage 4 mi (6 km) upstream at datum 158.37 ft (48.271 m) above mean sea level, supplemented by many nonrecording gages at different datums.

EXTREMES.--Current year: Maximum discharge, 85 ft^3/s (2.41 m^3/s) Mar. 27 (gage height, 6.22 ft or 1.896 m); minimum daily, 0.06 ft^3/s (0.002 m^3/s) Sept. 20.
Period of record: Maximum discharge, 20,700 ft^3/s (586 m^3/s) Feb. 15, 1932 (gage height, 16.75 ft or 5.105 m); no flow for part or all of each year since 1903, except for 1961-62, 1968-73, 1975 water years.
Maximum daily discharge, 200,000 ft^3/s (5,700 m^3/s), roughly estimated, Jan. 22, 1916.

REMARKS.--Records fair. Most flow during this year is waste and drainage return from Wellton-Mohawk Division of Gila Project. Many diversions above station for irrigation. Flow above station regulated by reservoirs at and above Painted Rock Dam (see REMARKS for sta 09518000). Most of flow for 1966 and 1973 water years was release flow from Painted Rock Dam.

REVISIONS (WATER YEARS).--WSP 918: 1905. WSP 1733: July 1942. WSP 1926: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	.29	.33	.51	2.5	.86	2.9	4.9	2.1	1.0	.44	.39
2	.66	.28	.40	.37	3.5	.86	2.8	4.9	2.1	1.0	.49	.39
3	.51	.26	.31	.31	5.0	.86	3.7	4.5	2.0	1.1	.54	.29
4	.44	.26	.31	.33	2.8	.86	4.0	3.9	2.1	1.7	.49	.21
5	.44	.28	.29	.37	1.8	.93	5.2	5.2	1.9	1.5	.54	.11
6	.44	.26	.29	.44	1.4	1.0	6.9	5.0	1.8	1.3	.44	1.6
7	.44	.26	.28	.51	1.1	1.7	8.2	4.6	1.7	1.1	.44	1.7
8	.51	.29	.24	1.2	1.1	1.2	7.7	4.5	1.7	.92	.39	.93
9	.51	.28	.28	.93	1.1	.93	7.7	5.9	1.9	.84	.29	.60
10	.51	.28	.33	.66	.93	.86	7.3	5.0	2.4	.80	.34	.44
11	.55	.28	.51	.60	.79	1.0	7.7	5.0	1.9	.74	.79	.44
12	.55	.29	.66	.49	.72	1.2	7.3	5.3	2.1	.66	.93	.44
13	.51	.29	.66	.44	.66	.93	6.3	4.6	2.0	.66	.60	.49
14	.48	.29	.66	.44	.79	.86	5.2	4.0	1.7	.62	.39	.39
15	.63	.33	.66	.54	.72	.72	13	3.5	1.5	.65	.34	.29
16	.76	.37	.63	.54	.66	.66	22	3.5	1.5	.59	.25	.21
17	.63	.31	.63	.54	.60	.60	5.9	3.5	1.5	.53	.17	.16
18	.59	.29	.66	.60	.54	.60	6.8	3.5	1.3	.49	.34	.12
19	.48	.29	.55	.54	.49	.72	7.9	3.5	1.2	.53	.39	.07
20	.37	.31	.55	.49	.54	.86	7.7	3.3	1.2	.52	.34	.06
21	.33	.31	.55	.49	.54	.66	7.9	2.8	1.3	.48	.29	.07
22	.31	.31	.59	.39	.34	.54	7.6	2.7	1.2	.44	.29	.20
23	.31	.31	.55	.34	.29	.49	7.9	2.5	1.1	.44	.39	.23
24	.44	.33	.55	.34	.39	.44	7.1	2.5	1.2	.43	.34	.24
25	.51	.37	.55	.34	.54	.44	6.6	2.5	1.3	.38	.39	.25
26	.59	.40	.59	.39	.72	.44	7.1	2.4	1.1	.27	.44	.27
27	.48	.40	.63	.39	.79	33	6.9	2.9	1.3	.32	.39	.25
28	.40	.44	.70	.39	.86	5.0	7.7	3.1	1.2	.49	.34	.25
29	.26	.40	.66	.44	---	2.7	6.5	2.6	1.1	.72	.29	.25
30	.24	.33	.66	.54	---	2.5	4.5	2.3	1.0	.72	.25	.23
31	.26	---	.59	.86	---	2.6	---	2.2	---	.54	.25	---
TOTAL	14.96	9.39	15.85	15.76	32.21	67.02	216.0	116.6	47.4	22.48	12.60	11.57
MEAN	.48	.31	.51	.51	1.15	2.16	7.20	3.76	1.58	.73	.41	.39
MAX	.82	.44	.70	1.2	5.0	33	22	5.9	2.4	1.7	.93	1.7
MIN	.24	.26	.24	.31	.29	.44	2.8	2.2	1.0	.27	.17	.06
AC-FT	30	19	31	31	64	133	428	231	94	45	25	23

CAL YR 1974 TOTAL 685.94 MEAN 1.88 MAX 137 MIN 0 AC-FT 1360
WTR YR 1975 TOTAL 581.84 MEAN 1.59 MAX 33 MIN .06 AC-FT 1150

09520700. Gila River near mouth, near Yuma, Ariz.

LOCATION.--Lat 32°42'38", long 114°33'06", in NW¼NE¼ sec.30, T.8 S., R.22 W., Yuma County, on left bank just upstream from South Gila Pump Outlet Channel No. 1, 0.6 mi (1.0 km) upstream from mouth, and 4 mi (6 km) east of Yuma.

DRAINAGE AREA.--57,950 mi^2 (150,090 km^2), approximately.

PERIOD OF RECORD.--April to September 1975.

GAGE.--Water-stage recorder and weir. Altitude of gage is 125 ft (38.1 m), from topographic map.

EXTREMES.--Maximum daily discharge during period, 135 ft^3/s (3.82 m^3/s) Aug. 2; minimum daily, 47 ft^3/s (1.33 m^3/s) Apr. 13.

REMARKS.--Records good. Daily discharge is obtained by combining flow past gage with flow for South Gila Pump Outlet Channel No. 1 (see sta 09529360) so as to give total flow of Gila River at mouth. Records of chemical analyses for the current year are published on following pages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							-	118	100	117	132	99
2							-	108	100	120	135	95
3							-	107	101	117	131	94
4							-	107	105	126	128	94
5							-	107	100	117	128	90
6							-	109	100	116	127	88
7							-	113	95	117	128	90
8							-	113	95	119	129	90
9							-	109	90	116	126	92
10							97	95	85	118	126	90
11							48	86	85	118	127	83
12							48	84	85	116	127	84
13							47	82	85	115	126	86
14							57	81	85	115	119	80
15							124	84	90	112	109	79
16							131	81	85	112	107	80
17							127	83	85	112	109	74
18							123	83	93	114	109	72
19							120	80	92	112	109	73
20							121	80	93	112	109	72
21							123	85	94	115	108	73
22							123	85	90	120	109	71
23							121	85	95	103	106	64
24							122	85	90	118	109	58
25							124	85	91	109	108	63
26							128	90	90	85	109	65
27							128	90	91	65	110	65
28							126	95	92	99	111	68
29							120	95	96	111	114	63
30							124	100	98	121	118	67
31							---	95	---	124	107	---
TOTAL							-	2900	2776	3491	3650	2362
MEAN							-	93.5	92.5	113	118	78.7
MAX							-	118	105	126	135	99
MIN							-	80	85	65	106	58
AC-FT							-	5750	5510	6920	7240	4690

09520700. Gila River near mouth, near Yuma, Ariz.
(National stream-quality accounting network station)

LOCATION (revised).--Lat 32°42'38", long 114°33'06", in NW¼NE¼ sec.30, T.8 S., R.22 W., Yuma County, at gaging station just upstream from South Gila Pump Outlet Channel No. 1, 0.6 mi (1.0 km) upstream from mouth, and 4 mi (6 km) east of Post Office in Yuma.

DRAINAGE AREA.--57,950 mi^2 (150,090 km^2), revised, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished chemical analyses (continuing record) for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.										
07...	0755	60	25	--	30	--	--	150	65	400
09...	1030	47	--	--	--	--	--	--	--	--
21...	1050	60	26	--	20	--	--	130	62	470
NOV.										
05...	1100	75	25	130	10	1000	950	140	46	460
18...	1040	60	25	--	20	--	--	130	48	490
DEC.										
03...	1120	122	23	--	--	--	--	140	55	440
23...	1405	60	25	--	10	--	--	150	57	450
JAN.										
07...	1130	67	25	--	10	--	--	140	59	500
20...	1125	50	24	--	10	--	--	170	65	480
FEB.										
11...	1130	58	25	260	20	1200	1100	170	58	490
18...	1340	70	23	--	10	--	--	150	62	500
MAR.										
11...	0945	136	23	--	20	--	--	160	63	490
17...	1540	100	24	--	10	--	--	170	69	530
APR.										
08...	1130	133	25	--	10	--	--	190	78	590
21...	1520	120	24	--	10	--	--	160	61	480
MAY										
06...	1115	107	24	0	20	940	930	150	59	480
19...	1420	32	24	--	40	--	--	150	62	470
JUNE										
10...	1100	82	25	--	0	--	--	140	59	470
23...	1430	113	24	--	0	--	--	140	54	450
JULY										
08...	1045	113	26	--	150	--	--	190	72	590
21...	1510	110	25	--	60	--	--	180	67	550
AUG.										
05...	1130	128	26	240	20	1000	850	180	74	550
18...	1430	110	25	--	10	--	--	140	61	480
SEP.										
09...	1045	92	23	--	20	--	--	140	58	430
22...	1500	--	--	--	--	--	--	--	--	--

09520700. Gila River near mouth, near Yuma, Ariz.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
07...	7.7	311	--	500	560	1.0	1.3	--	2030	1870
09...	--	--	--	--	--	--	--	--	--	--
21...	7.2	294	--	480	630	.9	.25	--	2050	1950
NOV.										
05...	6.6	296	0	440	560	.9	.75	.07	1970	1830
18...	4.9	308	--	470	580	1.0	1.4	--	1870	1910
DEC.										
03...	6.4	285	--	410	590	.9	.81	.04	1960	1810
23...	6.3	296	--	450	630	.9	.73	--	1970	1920
JAN.										
07...	7.3	305	--	500	680	.9	.89	.06	2100	2070
20...	6.9	319	--	590	630	1.0	1.2	--	2170	2130
FEB.										
11...	6.3	311	0	540	650	.9	1.0	.01	2100	2100
18...	6.7	302	--	510	670	1.2	.81	--	2090	2080
MAR.										
11...	7.6	314	0	430	740	1.2	.67	.06	2160	2070
17...	8.4	310	--	470	770	1.1	.66	--	2200	2200
APR.										
08...	13	336	0	510	860	.9	.88	.05	2490	2440
21...	7.5	300	--	430	680	.9	.71	--	2090	2000
MAY										
06...	6.7	304	0	460	660	.9	.88	.07	2070	2000
19...	7.2	302	0	440	630	.9	.83	--	2000	1940
JUNE										
10...	7.4	305	0	480	640	.9	.83	.06	2050	1980
23...	7.4	284	0	440	590	.9	.78	--	1880	1850
JULY										
08...	8.4	323	0	530	840	.9	.83	.03	2460	2420
21...	8.2	318	0	510	840	.9	.72	--	2370	2340
AUG.										
05...	9.5	332	0	500	840	.9	.73	.05	2410	2350
18...	7.2	308	0	430	680	.8	.64	--	2010	1980
SEP.										
09...	7.9	299	0	440	580	.8	.62	.03	1870	1830
22...	--	--	--	--	--	--	--	--	1930	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT.										
07...	2.76	640	390	6.9	3180	--	22.0	1	--	710
09...	--	--	--	--	2990	8.1	26.0	--	8.4	--
21...	2.79	580	340	8.5	3340	--	22.0	--	--	700
NOV.										
05...	2.68	540	300	8.6	3000	7.9	22.0	1	--	710
18...	2.54	520	270	9.3	3050	--	22.0	--	--	770
DEC.										
03...	2.67	580	340	8.0	2860	7.7	22.0	2	8.4	410
23...	2.68	610	370	7.9	3210	--	21.5	--	--	660
JAN.										
07...	2.86	590	340	8.9	3320	7.9	21.0	2	--	750
20...	2.95	690	430	7.9	3370	--	22.0	--	--	770
FEB.										
11...	2.86	660	410	8.3	3290	7.9	20.0	1	--	700
18...	2.84	630	380	8.7	3330	--	21.0	--	--	720
MAR.										
11...	2.94	660	400	8.3	3430	7.9	21.0	2	--	690
17...	2.99	710	450	8.7	3600	--	24.0	--	--	320
APR.										
08...	3.39	800	520	9.1	4000	7.7	22.0	2	--	900
21...	2.84	650	400	8.2	3360	7.7	25.5	--	--	720
MAY										
06...	2.82	620	370	8.4	3260	8.0	24.0	1	--	730
19...	2.72	630	380	8.2	3250	7.7	24.5	--	--	700
JUNE										
10...	2.79	590	340	8.4	3270	7.8	24.5	2	--	730
23...	2.56	570	340	8.2	3090	8.0	25.5	--	--	640
JULY										
08...	3.35	770	510	9.2	3920	7.7	24.5	2	--	810
21...	3.22	730	470	8.9	3870	7.8	26.0	--	--	810
AUG.										
05...	3.28	750	480	8.7	3870	8.2	26.0	2	--	730
18...	2.73	600	350	8.5	3370	7.9	26.0	--	--	680
SEP.										
09...	2.54	590	340	7.7	2970	7.9	26.0	7	--	630
22...	2.62	--	--	--	--	--	--	--	--	--

09520700. Gila River near mouth, near Yuma, Ariz.--Continued

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.								
09...	1030	--	--	.69	.59	1.3	5.7	.07
NOV.								
05...	1100	.72	.03	.73	.32	1.1	4.6	.04
DEC.								
03...	1120	--	.01	.60	.32	.92	4.1	.04
JAN.								
07...	1130	--	.03	.90	.49	1.4	6.2	.06
FEB.								
11...	1130	--	.01	1.0	.45	1.5	6.4	.04
MAR.								
11...	0945	--	.03	.67	.64	1.3	5.8	.06
APR.								
08...	1130	--	.03	.88	.33	1.2	5.4	.07
MAY								
06...	1115	--	.02	.86	.23	1.1	4.8	.07
JUNE								
10...	1100	--	.03	.83	.48	1.3	5.8	.05
JULY								
08...	1045	--	.03	.90	.43	1.3	5.9	.05
AUG.								
05...	1130	--	.03	.74	.25	.99	4.4	.06
SEP.								
09...	1045	--	.03	.62	.67	1.3	5.7	.08

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	TOTAL SESTON (MG/L)	SESTON ASH WEIGHT (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
09...	1030	1900	--	--	--	--	--	--	B43	B10000	--
NOV.											
05...	1100	760	--	--	4.6	--	12	4.4	30	B450	3.5
DEC.											
03...	1120	670	--	--	--	--	--	--	B13	80	--
JAN.											
07...	1130	1400	--	--	--	--	--	--	22	192	--
FEB.											
11...	1130	2200	--	--	12	16	47	19	B10	210	2.6
MAR.											
11...	0945	600	--	--	--	--	--	--	60	300	--
APR.											
08...	1130	500	--	--	--	--	--	--	20	700	--
MAY											
06...	1115	1900	--	--	6.5	11	60	15	--	--	13
JUNE											
10...	1000	--	--	--	--	--	--	--	25	1400	--
10...	1100	1800	--	--	--	--	--	--	--	--	--
JULY											
08...	1045	--	.0	.0	--	--	--	--	28	3400	--
AUG.											
05...	1130	--	.0	.0	12	17	57	8.9	44	296	4.5
SEP.											
09...	1045	--	.0	.0	--	--	--	--	200	760	--

09520700. Gila River near mouth, near Yuma, Ariz.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)
OCT.										
07...	0755	--	--	710	--	--	--	--	--	--
21...	1050	--	--	700	--	--	--	--	--	--
NOV.										
05...	1100	20	20	710	10	0	0	0	<50	0
18...	1040	--	--	770	--	--	--	--	--	--
DEC.										
03...	1120	--	--	410	--	--	--	--	--	--
23...	1405	--	--	660	--	--	--	--	--	--
JAN.										
07...	1130	--	--	750	--	--	--	--	--	--
20...	1125	--	--	770	--	--	--	--	--	--
FEB.										
11...	1130	10	10	700	20	0	0	0	<50	2
18...	1340	--	--	720	--	--	--	--	--	--
MAR.										
11...	0945	--	--	690	--	--	--	--	--	--
17...	1540	--	--	320	--	--	--	--	--	--
APR.										
08...	1130	--	--	900	--	--	--	--	--	--
21...	1520	--	--	720	--	--	--	--	--	--
MAY										
06...	1115	18	11	730	<10	1	0	10	<50	4
19...	1420	--	--	700	--	--	--	--	--	--
JUNE										
10...	1100	--	--	730	--	--	--	--	--	--
23...	1430	--	--	640	--	--	--	--	--	--
JULY										
08...	1045	--	--	810	--	--	--	--	--	--
21...	1510	--	--	810	--	--	--	--	--	--
AUG.										
05...	1130	12	10	730	<10	1	5	5	0	0
18...	1430	--	--	680	--	--	--	--	--	--
SEP.										
09...	1045	--	--	630	--	--	--	--	--	--

DATE	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.									
07...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
NOV.									
05...	<10	0	<100	7	.0	.0	13	13	50
18...	--	--	--	--	--	--	--	--	--
DEC.									
03...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
JAN.									
07...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
FEB.									
11...	440	1	<100	4	.0	.0	10	10	30
18...	--	--	--	--	--	--	--	--	--
MAR.									
11...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
APR.									
08...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
MAY									
06...	10	2	<100	0	.0	.0	11	10	10
19...	--	--	--	--	--	--	--	--	--
JUNE									
10...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
JULY									
08...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
AUG.									
05...	20	2	100	1	.0	.0	10	9	20
18...	--	--	--	--	--	--	--	--	--
SEP.									
09...	--	--	--	--	--	--	--	--	--

09521100. Colorado River below Yuma Main Canal wasteway, at Yuma, Ariz.

LOCATION.--Lat 32°43'54", long 114°37'55", in SW¼SW¼ sec.26, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, on right bank 1,000 ft (305 m) downstream from Yuma Main Canal wasteway, 0.6 mi (1.0 km) downstream from former gaging station on Colorado River at Yuma, 1.1 mi (1.8 km) northwest of post office in Yuma, 5.2 mi (8.4 km) downstream from Gila River, and 6.4 mi (10.3 km) upstream from northerly international boundary.

DRAINAGE AREA.--242,900 mi² (629,100 km²), approximately, including all closed basins entirely within the drainage boundary.

PERIOD OF RECORD.--October 1963 to current year. If records for Yuma Main Canal wasteway at Yuma (sta 09525000) and Reservation Main Drain No. 4 (sta 09530000) are subtracted from records at this station, records equivalent to those published 1902-64 as "Colorado River at Yuma" (sta 09521000) can be obtained.

GAGE.--Water-stage recorder. Datum of gage is 101.99 ft (31.087 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 843 ft³/s (23.87 m³/s), 610,800 acre-ft/yr (753 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,150 ft³/s (60.9 m³/s) Apr. 13 (gage height, 12.70 ft or 3.871 m); minimum daily, 453 ft³/s (12.8 m³/s) Feb. 19.
Period of record: Maximum discharge, 5,040 ft³/s (143 m³/s) Mar. 3, 1970 (gage height, 15.05 ft or 4.587 m); minimum daily, 260 ft³/s (7.36 m³/s) Jan. 17, 1970.
Maximum gage height since at least 1878, 34.0 ft (10.4 m) Jan. 22, 1916 (discharge, 250,000 ft³/s or 7,080 m³/s), at former gaging station at Yuma.

REMARKS.--Records excellent above 1,000 ft³/s (28.3 m³/s) and good below. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, municipal and industrial uses, and return flows from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	601	616	642	1320	1050	480	630	560	1590	577	584	603
2	612	625	634	1270	1100	496	633	559	1560	594	591	601
3	604	627	957	1270	1070	492	594	566	1550	587	643	600
4	591	615	946	1300	1040	476	588	573	1530	881	1040	615
5	580	615	923	1280	1100	472	879	574	1450	567	857	616
6	574	637	913	1280	1110	484	883	563	626	541	688	779
7	581	628	952	1270	1100	493	790	633	595	552	680	811
8	605	643	920	1280	1100	488	659	692	647	638	664	793
9	592	640	956	1280	1150	484	657	702	1510	888	670	740
10	619	629	1160	1070	1390	556	978	831	1520	879	670	690
11	597	634	1270	987	1170	598	1850	1460	1520	766	649	648
12	601	624	1360	999	1230	599	2070	1350	1520	612	644	637
13	614	636	1270	998	1190	576	2090	1330	1580	609	633	617
14	609	630	1270	1040	1210	593	1320	1340	1510	614	623	552
15	622	630	1260	997	1210	594	753	1330	1460	612	619	540
16	642	610	877	934	1210	604	814	1210	605	611	596	625
17	620	652	571	936	1210	608	1060	1180	602	606	610	1530
18	632	561	556	935	463	588	814	1200	616	611	605	1480
19	649	585	556	915	453	584	675	1430	603	619	610	1510
20	635	614	545	907	458	587	652	1480	551	617	610	1480
21	640	614	566	820	508	596	654	1470	531	617	638	1290
22	673	622	566	814	508	714	636	1570	524	613	822	1310
23	652	635	572	782	508	710	610	1500	522	580	821	1300
24	656	622	557	797	508	630	616	1540	518	577	803	1230
25	654	619	571	803	508	605	614	1540	531	598	738	1250
26	654	621	551	782	486	599	625	1580	542	563	622	1230
27	659	642	533	794	480	578	623	1530	818	543	613	1160
28	670	624	553	802	480	592	607	1500	854	573	623	1150
29	714	612	564	796	---	600	603	1540	593	581	610	1190
30	721	578	566	794	---	600	594	1480	563	619	623	1210
31	694	---	630	754	---	700	---	1600	---	583	628	---
TOTAL	19567	18840	24967	31006	25002	17776	25571	36413	29141	19428	20827	28787
MEAN	631	628	805	1000	893	573	852	1175	971	627	672	960
MAX	721	652	1360	1320	1390	714	2090	1600	1590	888	1040	1530
MIN	574	561	533	754	453	472	588	559	518	541	584	540
AC-FT	38810	36970	49520	61500	49590	35260	50720	72230	57800	38540	41310	57100

CAL YR 1974 TOTAL 281586 MEAN 771 MAX 1830 MIN 299 AC-FT 558500
WTR YR 1975 TOTAL 297125 MEAN 814 MAX 2090 MIN 453 AC-FT 589300

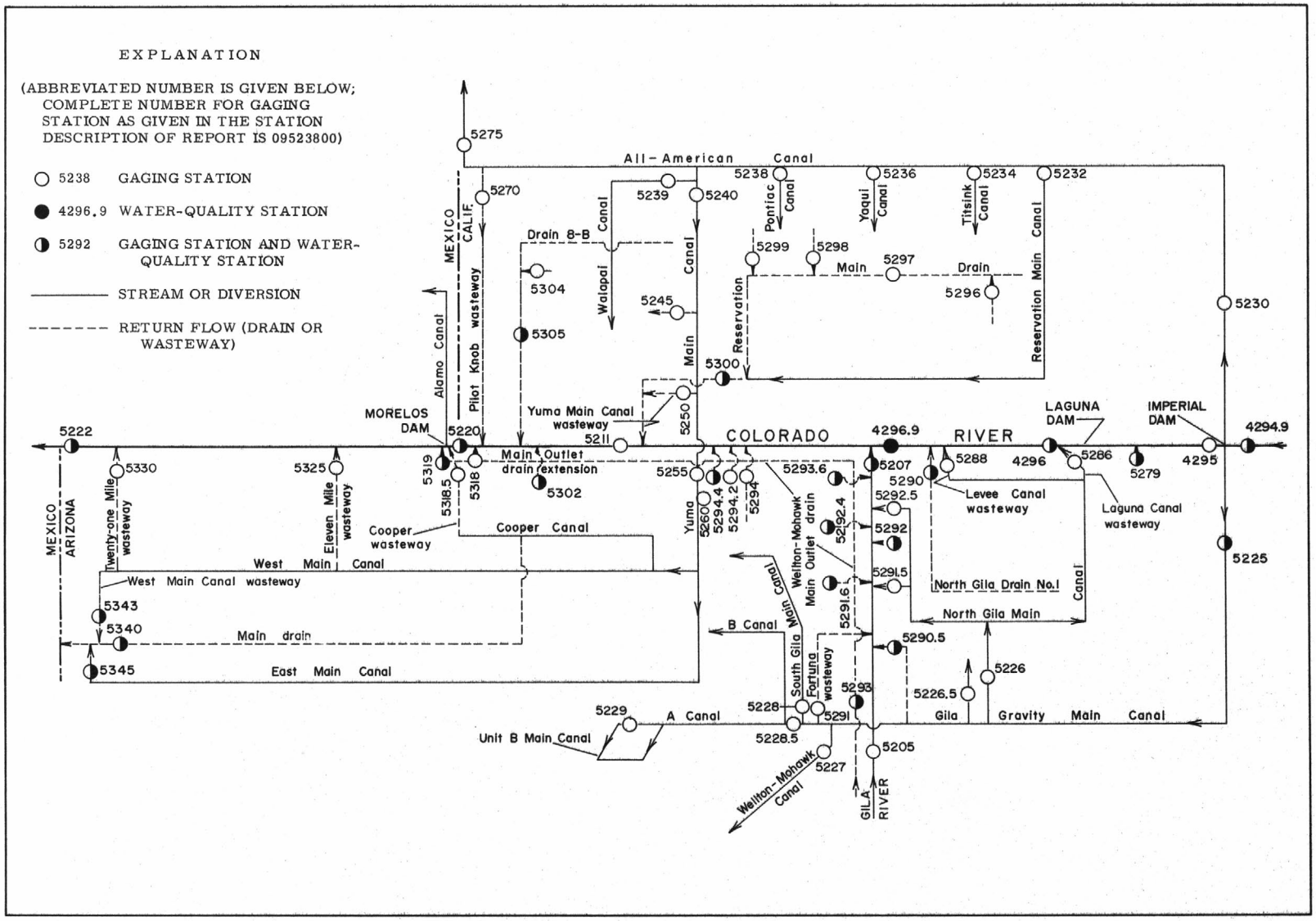


FIGURE 5.--SCHEMATIC DIAGRAM SHOWING GAGING STATIONS AND WATER-QUALITY STATIONS ON STREAMS, DIVERSIONS, AND RETURN FLOWS BETWEEN IMPERIAL DAM AND THE SOUTHERLY INTERNATIONAL BOUNDARY.

09522000. Colorado River at northerly international boundary above Morelos Dam, near Andrade, Calif.

LOCATION.--Lat 32°43'07", long 114°43'05", in NE¼SE¼ sec.21, T.8 S., R.24 W., Gila and Salt River meridian, in Arizona, Yuma County, on left bank at northerly international boundary, 0.5 mi (0.8 km) east of Andrade, 1.1 mi (1.8 km) upstream from Morelos Dam, 1.1 mi (1.8 km) downstream from Rockwood Gate, and 6.4 mi (10.3 km) downstream from gaging station on Colorado River below Yuma Main Canal wasteway.

DRAINAGE AREA.--243,000 mi^2 (629,400 km^2), approximately, including all closed basins entirely within the drainage boundary.

PERIOD OF RECORD.--January 1950 to current year. Prior to October 1958 published as "at international boundary."

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Supplementary water-stage recorder 1,680 ft (510 m) upstream at same datum.

EXTREMES.--Current year: Maximum discharge, 5,760 ft^3/s (163 m^3/s) Apr. 11; maximum elevation, 108.70 ft (33.132 m) Apr. 11; minimum discharge, 674 ft^3/s (19.1 m^3/s) Oct. 1; minimum elevation, 101.98 ft (31.084 m) Oct. 1.
Period of record: Maximum discharge, 25,390 ft^3/s (719 m^3/s) Jan. 1, 1953; maximum elevation, 114.24 ft (34.820 m) Jan. 28, 1958; minimum discharge, 495 ft^3/s (14.0 m^3/s) Sept. 28, 1970; minimum elevation, 101.82 ft (31.035 m) Sept. 18, 1971.

REMARKS.--This record shows water passing northerly international boundary. Minor diversions to the United States below this station by pumping from ground water for irrigation in the floodway between river and Yuma levee. Records of chemical analyses for the current year are published on following pages.

COOPERATION.--Records furnished by International Boundary and Water Commission, U.S. Section (monthly summary figures rounded in accordance with Geological Survey standard practice).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	771	752	752	1,450	1,160	2,000	3,020	2,390	1,710	2,400	2,800	2,020
2	753	752	898	1,450	1,280	1,960	3,330	2,110	1,710	2,400	2,800	2,050
3	753	752	1,040	1,420	1,270	1,780	3,400	2,120	1,710	2,480	2,770	2,020
4	744	752	1,090	1,450	1,210	1,790	3,390	2,120	1,710	2,510	2,790	2,030
5	726	743	1,050	1,450	1,260	1,770	3,400	2,190	1,710	2,490	2,760	2,030
6	717	770	1,030	1,440	1,240	1,800	3,320	2,100	1,810	2,490	2,770	2,020
7	717	752	1,070	1,420	1,260	1,810	3,250	2,080	1,760	2,490	2,770	2,030
8	735	761	1,050	1,440	1,240	1,800	3,250	2,100	1,800	2,600	2,790	1,990
9	735	770	1,060	1,450	1,280	1,860	3,710	2,100	1,640	2,590	2,790	1,970
10	735	761	1,210	1,260	1,520	2,170	4,670	1,890	1,680	2,640	2,790	1,960
11	726	770	1,360	1,120	1,380	2,420	5,450	1,630	1,660	2,640	2,770	1,840
12	726	761	1,450	1,150	1,360	2,490	4,280	1,450	1,640	2,620	2,760	1,860
13	735	761	1,450	1,150	1,370	2,480	3,940	1,450	1,720	2,750	2,790	1,820
14	735	761	1,410	1,180	1,360	2,480	3,210	1,410	1,700	2,840	2,660	1,670
15	726	770	1,400	1,160	1,370	2,490	2,970	1,450	1,700	2,840	2,590	1,670
16	753	761	1,650	1,080	1,360	2,460	2,980	1,330	1,940	2,850	2,610	1,680
17	735	775	1,730	1,080	1,630	2,480	2,950	1,320	1,940	2,860	2,570	1,520
18	735	709	1,720	1,080	1,710	2,450	2,980	1,310	1,930	2,870	2,460	1,600
19	753	725	1,720	1,060	1,710	2,450	2,970	1,510	1,930	2,840	2,480	1,630
20	753	752	1,700	1,070	1,750	2,490	2,970	1,600	1,930	2,840	2,490	1,620
21	744	761	1,710	975	1,790	2,720	2,870	1,590	2,010	2,870	2,370	1,440
22	762	752	1,710	955	1,960	2,720	2,880	1,660	2,030	2,860	2,380	1,450
23	753	770	1,710	935	2,170	2,710	2,860	1,660	2,030	2,830	2,380	1,450
24	753	761	1,710	945	2,140	2,720	2,870	1,640	2,080	2,840	2,380	1,400
25	753	761	1,770	965	2,180	2,720	2,860	1,670	2,080	2,830	2,290	1,410
26	735	752	1,900	955	2,310	2,760	2,770	1,700	2,120	2,800	2,300	1,410
27	744	779	1,860	945	2,290	2,750	2,770	1,670	2,110	2,790	2,320	1,340
28	753	761	1,880	975	2,280	2,720	2,720	1,640	2,100	2,790	2,320	1,320
29	790	756	1,960	975	------	2,710	2,720	1,630	2,110	2,760	2,350	1,360
30	800	709	1,900	975	------	2,710	2,660	1,630	2,220	2,770	2,380	1,410
31	780	------	1,800	902	------	2,700	------	1,690	------	2,840	2,370	------
TOTAL	23,130	22,672	45,750	35,862	44,840	73,370	97,420	53,840	56,220	84,020	79,850	51,020
MEAN	746	756	1,476	1,157	1,601	2,367	3,247	1,737	1,874	2,710	2,576	1,701
MAX	800	779	1,960	1,450	2,310	2,760	5,450	2,390	2,220	2,870	2,800	2,050
MIN	717	709	752	902	1,160	1,770	2,660	1,310	1,640	2,400	2,290	1,320
AC-FT	45,880	44,970	90,750	71,130	88,940	145,500	193,200	106,800	111,500	166,700	158,400	101,200

CAL YR 1974 TOTAL 673,746 MEAN 1,846 MAX 3,370 MIN 709 AC-FT 1,336,000
WTR YR 1975 TOTAL 667,994 MEAN 1,830 MAX 5,450 MIN 709 AC-FT 1,325,000

09522000. Colorado River at northerly international boundary, above Morelos Dam, near Andrade, Calif.
(National stream-quality accounting network and pesticide station)

LOCATION.--Lat 32°43'07", long 114°43'05", in NE¼SE¼ sec.21, T.8 S., R.24 W., Gila and Salt River meridian, in Arizona, Yuma County, at gaging station on left bank, at northerly international boundary, 0.5 mi (0.8 km) east of Andrade, 1.1 mi (1.8 km) upstream from Morelos Dam, 1.1 mi (1.8 km) downstream from Rockwood Gate, 20.7 mi (33.3 km) upstream from southerly international boundary, and 21 mi (34 km) downstream from Laguna Dam.

DRAINAGE AREA.--243,000 mi² (629,400 km²), approximately.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
OCT.												
07...	0810	726	11	--	--	--	--	--	114	--	40	--
09...	0830	735	--	240	--	--	--	--	--	--	--	--
15...	0800	735	13	--	--	--	--	--	116	--	39	--
21...	0800	726	14	--	--	--	--	--	114	--	40	--
22...	0840	800	--	200	--	--	--	--	--	--	--	--
29...	0810	790	12	--	--	--	--	--	121	--	38	--
NOV.												
04...	0815	750	13	--	--	--	--	--	120	--	41	--
05...	0815	743	--	270	20	150	60	770	--	320	--	190
11...	0830	770	14	--	--	--	--	--	118	--	40	--
18...	0820	707	13	--	--	--	--	--	113	--	40	--
19...	0930	725	--	280	--	--	--	--	--	--	--	--
25...	0845	755	11	--	--	--	--	--	119	--	39	--
DEC.												
02...	0840	885	14	--	--	--	--	--	118	--	38	--
03...	0830	1020	--	280	--	--	--	--	--	--	--	--
09...	0850	1050	14	--	--	--	--	--	113	--	38	--
16...	0850	1710	11	--	--	--	--	--	105	--	37	--
17...	0905	1750	--	250	--	--	--	--	--	--	--	--
23...	0900	1710	12	--	--	--	--	--	107	--	36	--
30...	0800	1880	11	--	--	--	--	--	103	--	36	--
JAN.												
06...	0850	1440	11	--	--	--	--	--	102	--	37	--
07...	0855	1435	--	350	--	--	--	--	--	--	--	--
13...	0830	1140	12	--	--	--	--	--	110	--	34	--
20...	0845	1060	10	--	--	--	--	--	103	--	38	--
21...	0845	985	--	510	--	--	--	--	--	--	--	--
27...	0845	935	12	--	--	--	--	--	110	--	35	--
FEB.												
03...	0830	1270	11	--	--	--	--	--	103	--	36	--
10...	0845	1530	10	--	--	--	--	--	106	--	35	--
11...	0900	1380	--	390	10	58	30	96	--	35	--	170
18...	0840	1710	9.0	--	--	--	--	--	106	--	35	--
24...	0800	2140	10	--	--	--	--	--	103	--	37	--
25...	0835	2160	--	830	--	--	--	--	--	--	--	--
MAR.												
03...	0840	1770	11	--	--	--	--	--	106	--	35	--
10...	0830	2200	11	--	--	--	--	--	106	--	35	--
11...	0830	2450	--	670	--	--	--	--	--	--	--	--
17...	0845	2480	10	--	--	--	--	--	106	--	35	--
24...	0830	2720	10	--	--	--	--	--	103	--	35	--
25...	0830	2740	--	850	--	--	--	--	--	--	--	--
31...	0830	2950	10	--	--	--	--	--	104	--	36	--
APR.												
07...	0830	3220	11	--	--	--	--	--	103	--	35	--
08...	0945	3290	--	930	--	--	--	--	--	--	--	--
14...	0830	3780	10	--	--	--	--	--	102	--	35	--
21...	0815	2860	9.0	--	--	--	--	--	102	--	35	--
22...	0850	2880	--	440	--	--	--	--	--	--	--	--
28...	0820	2670	9.0	--	--	--	--	--	102	--	35	--
MAY												
05...	0830	2160	10	--	--	--	--	--	106	--	34	--
06...	0805	2110	--	0	20	80	20	97	--	33	--	160
12...	0845	1440	11	--	--	--	--	--	110	--	33	--
19...	0830	1470	11	--	--	--	--	--	110	--	33	--
20...	0830	1600	--	660	--	--	--	--	--	--	--	--
27...	0830	1700	9.0	--	--	--	--	--	104	--	35	--
JUNE												
02...	0845	1750	9.0	--	--	--	--	--	106	--	34	--
09...	0845	1630	10	--	--	--	--	--	103	--	35	--
10...	0830	1700	--	530	--	--	--	--	--	--	--	--
16...	0830	1890	10	--	--	--	--	--	109	--	32	--
23...	0830	2020	11	--	--	--	--	--	105	--	35	--
24...	0830	2100	--	430	--	--	--	--	--	--	--	--
30...	0830	2100	10	--	--	--	--	--	103	--	35	--
JULY												
07...	0830	2440	10	--	--	--	--	--	106	--	33	--
08...	1000	2590	--	310	--	--	--	--	--	--	--	--
14...	0840	2860	9.0	--	--	--	--	--	99	--	35	--
21...	0830	2830	10	--	--	--	--	--	98	--	35	--
22...	0815	2900	--	320	--	--	--	--	--	--	--	--
28...	0830	2760	11	--	--	--	--	--	101	--	34	--
AUG.												
04...	0830	2810	11	--	--	--	--	--	98	--	38	--
05...	0840	2830	--	170	10	50	10	73	--	33	--	150
11...	0830	2750	11	--	--	--	--	--	100	--	34	--
18...	0900	2444	11	--	--	--	--	--	101	--	34	--
19...	--	2440	--	220	--	--	--	--	--	--	--	--
25...	0815	2250	12	--	--	--	--	--	100	--	35	--
SEP.												
02...	0915	2050	11	--	--	--	--	--	99	--	35	--
08...	0830	1960	13	--	--	--	--	--	99	--	36	--
09...	0900	2020	--	340	--	--	--	--	--	--	--	--
15...	0845	1708	12	--	--	--	--	--	100	--	39	--
22...	0830	1450	12	--	--	--	--	--	106	--	35	--
23...	0830	1460	--	590	--	--	--	--	--	--	--	--
29...	0830	1360	12	--	--	--	--	--	102	--	35	--

09522000. Colorado River at northerly international boundary, above Morelos Dam, near Andrade, Calif.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum, 1,970 micromhos Nov. 5; minimum, 1,300 micromhos Apr. 11.
Period of record:
Specific conductance (1969-74): Maximum, 2,230 micromhos Dec. 9, 1969; minimum, 1,300 micromhos Apr. 11, 1975.

REMARKS.--Unpublished chemical analyses (continuing record) for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.												
07...	215	--	7.2	230	0	415	220	.7	--	--	1160	1140
09...	--	--	--	--	--	--	--	--	.85	.11	--	--
15...	215	--	7.1	234	0	410	222	.7	--	--	1150	1140
21...	220	--	7.1	224	0	410	228	.7	--	--	1160	1150
22...	--	--	--	--	--	--	--	--	.23	.07	--	--
29...	225	--	6.9	234	0	420	235	.7	--	--	1180	1180
NOV.												
04...	240	--	7.3	242	0	430	255	.7	--	--	1230	1230
05...	--	4.1	--	--	--	--	--	--	.34	.11	--	--
11...	230	--	7.5	234	0	420	240	.6	--	--	1210	1190
18...	225	--	6.8	232	0	410	230	.6	--	--	1170	1150
19...	--	--	--	--	--	--	--	--	.31	.07	--	--
25...	230	--	7.0	236	0	420	235	.7	--	--	1190	1180
DEC.												
02...	225	--	6.9	236	0	425	218	.7	--	--	1170	1160
03...	--	--	--	--	--	--	--	--	.21	.06	--	--
09...	210	--	7.2	220	0	405	215	.6	--	--	1120	1110
16...	190	--	6.7	202	0	385	190	.6	--	--	1030	1030
17...	--	--	--	--	--	--	--	--	.29	.02	--	--
23...	190	--	6.2	210	--	385	190	.6	--	--	1040	1030
30...	185	--	6.4	200	--	380	180	.5	--	--	1010	1000
JAN.												
06...	185	--	6.4	200	0	380	178	.6	--	--	1000	999
07...	--	--	--	--	--	--	--	--	.16	.01	--	--
13...	190	--	5.9	212	0	385	185	.5	--	--	1030	1030
20...	185	--	5.6	210	0	385	180	.5	--	--	1010	1010
21...	--	--	--	--	--	--	--	--	.31	.06	--	--
27...	195	--	5.7	212	0	385	195	.5	--	--	1050	1040
FEB.												
03...	180	--	6.4	200	0	380	175	.5	--	--	1000	991
10...	185	--	6.1	204	0	380	180	.5	--	--	1010	1000
11...	--	4.8	--	--	--	--	--	--	.36	.02	--	--
18...	185	--	6.4	204	0	380	178	.5	--	--	1010	1000
24...	175	--	5.6	200	0	375	172	.5	--	--	980	977
25...	--	--	--	--	--	--	--	--	.20	.04	--	--
MAR.												
03...	185	--	6.2	204	0	380	178	.5	--	--	1000	1000
10...	175	--	6.4	204	0	375	170	.5	--	--	990	979
11...	--	--	--	--	--	--	--	--	.24	.03	--	--
17...	180	--	5.6	204	0	375	175	.5	--	--	994	987
24...	165	--	5.5	196	0	360	165	.5	--	--	944	941
25...	--	--	--	--	--	--	--	--	.23	.05	--	--
31...	170	--	5.9	198	0	360	170	.5	--	--	958	954
APR.												
07...	165	--	6.1	196	0	355	165	.6	--	--	954	938
08...	--	--	--	--	--	--	--	--	.26	.01	--	--
14...	155	--	6.1	194	0	370	140	.5	--	--	920	915
21...	165	--	5.6	194	0	355	165	.6	--	--	938	933
22...	--	--	--	--	--	--	--	--	.24	.07	--	--
28...	165	--	5.9	196	0	355	165	.6	--	--	950	935
MAY												
05...	165	--	5.9	202	0	365	162	.7	--	--	954	949
06...	--	4.6	--	--	--	--	--	--	.26	.04	--	--
12...	185	--	6.4	206	0	380	180	.6	--	--	1010	1010
19...	185	--	5.9	206	0	380	180	.6	--	--	1010	1010
20...	--	--	--	--	--	--	--	--	.22	.04	--	--
27...	175	--	6.0	204	0	370	168	.5	--	--	972	968
JUNE												
02...	180	--	6.2	206	0	375	175	.5	--	--	988	987
09...	175	--	6.2	202	0	370	168	.6	--	--	974	967
10...	--	--	--	--	--	--	--	--	.16	.05	--	--
16...	180	--	6.6	206	0	375	170	.6	--	--	992	985
23...	170	--	5.8	204	0	370	165	.6	--	--	982	963
24...	--	--	--	--	--	--	--	--	.18	.03	--	--
30...	165	--	6.3	196	0	360	162	.7	--	--	948	939
JULY												
07...	170	--	6.0	194	0	365	165	.6	--	--	960	952
08...	--	--	--	--	--	--	--	--	.20	.00	--	--
14...	160	--	6.0	188	0	355	155	.5	--	--	914	912
21...	155	--	6.5	188	0	355	150	.5	--	--	912	903
22...	--	--	--	--	--	--	--	--	--	--	--	--
28...	155	--	6.2	188	0	355	150	.5	--	--	910	906
AUG.												
04...	165	--	6.1	196	0	360	162	.6	--	--	944	938
05...	--	5.5	--	--	--	--	--	--	.14	.03	--	--
11...	160	--	6.1	184	0	355	158	.5	--	--	922	916
18...	155	--	5.6	184	0	355	150	.7	--	--	906	903
19...	--	--	--	--	--	--	--	--	--	--	--	--
25...	170	--	5.8	194	0	365	165	.6	--	--	954	949
SEP.												
02...	160	--	6.0	186	0	355	155	.5	--	--	912	914
08...	170	--	6.2	190	0	365	165	.6	--	--	954	949
09...	--	--	--	--	--	--	--	--	.16	.02	--	--
15...	180	--	5.9	204	0	380	175	.5	--	--	1020	992
22...	185	--	6.4	206	0	380	180	.6	--	--	1020	1010
23...	--	--	--	--	--	--	--	--	--	--	--	--
29...	180	--	6.1	196	0	375	175	.6	--	--	986	983

09522000. Colorado River at northerly international boundary, above Morelos Dam, near Andrade, Calif.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)
OCT.											
07...	1.58	450	262	4.4	1790	8.0	24.0	1	--	--	--
09...	--	--	--	--	1700	8.2	25.0	--	--	7.9	15
15...	1.56	450	258	4.4	1800	8.0	--	1	--	--	--
21...	1.58	450	266	4.5	1810	7.9	23.0	1	--	--	--
22...	--	--	--	--	--	--	22.5	--	--	--	13
29...	1.60	460	268	4.6	1860	8.0	--	3	--	--	--
NOV.											
04...	1.67	470	272	4.8	1950	8.0	15.5	1	--	--	--
05...	--	--	--	--	1990	7.8	16.5	--	--	8.2	20
11...	1.65	460	268	4.7	1880	7.9	--	1	--	--	--
18...	1.59	445	255	4.6	1820	8.1	18.0	1	--	--	--
19...	--	--	--	--	--	--	18.5	--	--	--	14
25...	1.62	455	262	4.7	1860	8.0	17.0	1	--	--	--
DEC.											
02...	1.59	450	260	4.6	1820	8.0	16.0	1	--	--	--
03...	--	--	--	--	1820	7.8	14.5	--	--	9.4	21
09...	1.52	440	260	4.4	1760	8.0	14.0	1	--	--	--
16...	1.40	415	250	4.1	1630	8.0	11.0	1	--	--	--
17...	--	--	--	--	--	--	14.0	--	--	--	19
23...	1.41	415	243	4.1	1620	8.0	11.5	3	--	--	--
30...	1.37	405	241	4.0	1580	8.0	12.0	2	--	--	--
JAN.											
06...	1.36	405	240	4.0	1570	8.0	10.5	1	--	--	--
07...	--	--	--	--	1590	7.9	10.0	--	--	9.0	13
13...	1.40	415	240	4.1	1630	8.0	--	2	--	--	--
20...	1.37	415	240	4.0	1600	7.9	11.5	2	--	--	--
21...	--	--	--	--	--	--	13.0	--	--	--	5
27...	1.43	420	250	4.1	1650	8.0	13.0	2	--	--	--
FEB.											
03...	1.36	405	240	3.9	1570	7.9	--	--	1	--	--
10...	1.37	410	240	4.0	1590	8.0	13.0	--	1	--	--
11...	--	--	--	--	1610	--	13.5	--	--	8.6	13
18...	1.37	410	240	4.0	1580	8.0	--	--	2	--	--
24...	1.33	410	250	3.8	1540	8.0	15.0	--	2	--	--
25...	--	--	--	--	1560	--	12.0	--	--	--	16
MAR.											
03...	1.36	410	240	4.0	1580	8.0	--	--	2	--	--
10...	1.35	410	240	3.8	1550	8.0	--	--	1	--	--
11...	--	--	--	--	1570	--	16.0	--	--	8.6	7
17...	1.35	410	240	3.9	1560	8.0	15.0	--	2	--	--
24...	1.28	400	240	3.6	1490	8.0	16.0	--	1	--	--
25...	--	--	--	--	--	--	16.0	--	--	--	6
31...	1.30	405	240	3.7	1510	8.1	--	--	2	--	--
APR.											
07...	1.30	400	240	3.6	1480	8.0	13.5	--	1	--	--
08...	--	--	--	--	1500	7.7	15.5	--	--	8.5	13
14...	1.25	400	240	3.4	1440	8.0	19.0	--	1	--	--
21...	1.28	400	240	3.6	1470	8.1	21.0	--	2	--	--
22...	--	--	--	--	--	--	19.0	--	--	--	10
28...	1.29	400	240	3.6	1470	8.1	20.0	--	1	--	--
MAY											
05...	1.30	405	240	3.6	1500	8.1	--	--	1	--	--
06...	--	--	--	--	1490	--	19.0	--	--	8.1	10
12...	1.37	410	240	4.0	1590	8.0	20.5	--	2	--	--
19...	1.37	410	240	4.0	1590	8.0	--	--	1	--	--
20...	--	--	--	--	--	--	21.0	--	--	--	11
27...	1.32	405	240	3.8	1530	8.0	--	--	2	--	--
JUNE											
02...	1.34	405	240	3.9	1560	8.1	27.0	--	2	--	--
09...	1.32	400	230	3.8	1530	8.1	25.5	--	2	--	--
10...	--	--	--	--	1500	7.7	25.0	--	--	6.6	7
16...	1.35	405	240	3.9	1550	8.0	26.0	--	1	--	--
23...	1.34	405	240	3.7	1520	8.0	25.0	--	1	--	--
24...	--	--	--	--	--	--	24.5	--	--	--	11
30...	1.29	400	240	3.6	1490	8.0	--	--	1	--	--
JULY											
07...	1.31	400	241	3.7	1500	8.1	28.0	--	1	--	--
08...	--	--	--	--	1780	7.9	27.0	--	--	7.3	12
14...	1.24	390	236	3.5	1440	8.0	29.0	--	1	--	--
21...	1.24	390	236	3.4	1430	8.1	--	--	2	--	--
22...	--	--	--	--	--	--	28.0	--	--	--	8
28...	1.24	390	236	3.4	1430	8.0	29.0	--	4	--	--
AUG.											
04...	1.28	400	240	3.6	1480	8.1	29.5	--	8	--	--
05...	--	--	--	--	1430	8.2	--	--	--	6.7	6
11...	1.25	390	239	3.5	1450	8.1	--	--	4	--	--
18...	1.23	390	239	3.4	1430	8.1	--	--	3	--	--
19...	--	--	--	--	--	--	24.0	--	--	--	11
25...	1.30	395	236	3.7	1500	8.0	28.0	--	4	--	--
SEP.											
02...	1.24	390	238	3.5	1440	8.0	26.5	--	3	--	--
08...	1.30	395	239	3.7	1500	8.1	--	--	8	--	--
09...	--	--	--	--	1500	8.0	27.0	--	--	6.7	12
15...	1.39	410	242	3.9	1570	8.1	--	--	4	--	--
22...	1.39	410	241	4.0	1590	8.0	25.0	--	10	--	--
23...	--	--	--	--	--	--	24.5	--	--	--	8
29...	1.34	400	240	3.9	1560	8.1	--	--	6	--	--

09522000. Colorado River at northerly international boundary, above Morelos Dam, near Andrade, Calif.--Continued

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)
OCT.							
09...	0830	.34	--	.01	.01	.35	.31
22...	0840	.24	.22	.08	.01	.32	.27
NOV.							
05...	0815	.30	--	.03	.02	.33	.44
19...	0930	.31	.29	.01	.02	.32	.12
DEC.							
03...	0830	.22	--	.01	.01	.23	.08
17...	0905	.32	.29	.00	.00	.32	.04
JAN.							
07...	0855	.21	--	.01	.00	.22	.09
21...	0845	.27	.30	.10	.01	.37	.16
FEB.							
11...	0900	.37	--	.01	.00	.38	.01
25...	0835	.20	.19	.01	.01	.21	.14
MAR.							
11...	0830	.23	--	.01	.01	.24	.13
25...	0830	.18	.16	.07	.07	.25	.08
APR.							
08...	0945	.27	--	.00	.01	.27	.06
22...	0850	.21	.23	.01	.01	.22	.12
MAY							
06...	0805	.25	--	.01	.00	.26	.08
20...	0830	.21	.21	.01	.01	.22	.05
JUNE							
10...	0830	.15	--	.01	.01	.16	.02
24...	0830	.17	.16	.02	.02	.19	.08
JULY							
08...	1000	.21	--	.01	.00	.22	.05
22...	0815	.15	--	.01	--	.16	.08
AUG.							
05...	0840	.13	--	.01	.01	.14	.03
19...	--	.07	--	.01	--	.08	.00
SEP.							
09...	0900	.15	--	.01	.01	.16	.00
23...	0830	.24	--	.03	--	.27	.04

DATE	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)
OCT.						
09...	.21	.52	.87	3.9	.18	--
22...	.45	.72	1.0	4.6	.11	--
NOV.						
05...	.44	.88	1.2	5.4	.14	.11
19...	.36	.48	.80	3.5	.14	--
DEC.						
03...	.13	.21	.44	1.9	.13	--
17...	.21	.25	.57	2.5	.06	--
JAN.						
07...	.35	.44	.66	2.9	.08	--
21...	.41	.57	.94	4.2	.09	--
FEB.						
11...	.39	.40	.78	3.5	.08	.08
25...	.47	.61	.82	3.6	.07	--
MAR.						
11...	.22	.35	.59	2.6	.06	--
25...	.12	.20	.45	2.0	.08	--
APR.						
08...	.23	.29	.56	2.5	.06	--
22...	.22	.34	.56	2.5	.05	--
MAY						
06...	.09	.17	.43	1.9	.06	.04
20...	.25	.30	.52	2.3	.06	--
JUNE						
10...	.07	.09	.25	1.1	.06	--
24...	.44	.52	.71	3.1	.04	--
JULY						
08...	.57	.62	.84	3.7	.04	--
22...	.22	.30	.46	2.0	.07	--
AUG.						
05...	.27	.30	.44	1.9	.06	.04
19...	.32	.32	.40	1.8	.06	--
SEP.						
09...	.43	.43	.59	2.6	.09	--
23...	.61	.65	.92	4.1	.07	--

09522000. Colorado River at northerly international boundary, above Morelos Dam, near Andrade, Calif.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	TOTAL SESTON (MG/L)	SESTON ASH WEIGHT (MG/L)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL A MG/SQ M
OCT.							
09...	0830	8300	--	--	--	--	--
22...	0840	--	--	--	--	--	--
NOV.							
05...	0815	11000	--	--	3.1	--	7.2
19...	0930	--	--	--	--	--	--
DEC.							
03...	0830	6600	--	--	--	--	--
17...	0905	--	--	--	--	--	--
JAN.							
07...	0855	500	--	--	--	--	--
21...	0845	--	--	--	--	--	--
FEB.							
11...	0900	2600	--	--	8.9	14	34
25...	0835	--	--	--	--	--	--
MAR.							
11...	0830	--	--	--	--	--	--
25...	0830	--	--	--	--	--	--
APR.							
08...	0945	880	--	--	--	--	--
22...	0850	--	--	--	--	--	--
MAY							
06...	0805	1600	--	--	64	74	83
20...	0830	--	--	--	--	--	--
JUNE							
10...	0830	4200	--	--	--	--	--
24...	0830	--	--	--	--	--	--
JULY							
08...	1000	--	.0	.0	--	--	--
22...	0815	--	--	--	--	--	--
AUG.							
05...	0840	--	.0	.0	--	--	--
19...	--	--	--	--	--	--	--
19...	0845	--	--	--	3.3	9.7	10
SEP.							
09...	0900	--	.0	.0	--	--	--
23...	0830	--	--	--	--	--	--

DATE	UNCOR-RECTED PERI-PHYTON CHLORO-PHYLL B MG/SQ M	CHLORO-PHYLL A (UG/L)	CHLORO-PHYLL B (UG/L)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.						
09...	--	1.9	.7	100	110	4.3
22...	--	--	--	--	--	4.4
NOV.						
05...	1.9	4.1	.0	540	6600	3.9
19...	--	--	--	--	--	4.7
DEC.						
03...	--	3.6	2.9	200	100	4.7
17...	--	--	--	--	--	4.1
JAN.						
07...	--	1.1	.0	37	176	3.1
21...	--	--	--	--	--	4.3
FEB.						
11...	8.9	.0	.0	110	140	3.2
25...	--	--	--	--	--	6.1
MAR.						
11...	--	3.0	1.8	61	92	3.3
25...	--	--	--	--	--	2.7
APR.						
08...	--	3.4	3.4	816	48	5.9
22...	--	--	--	--	--	3.1
MAY						
06...	15	2.2	2.4	--	--	3.6
20...	--	--	--	--	--	3.6
JUNE						
10...	--	5.2	4.3	130	400	3.0
24...	--	--	--	--	--	3.2
JULY						
08...	--	2.3	1.4	37	8400	4.4
22...	--	--	--	--	--	4.0
AUG.						
05...	--	1.5	3.5	70	86	4.3
19...	--	--	--	--	--	4.1
19...	1.2	--	--	--	--	--
SEP.						
09...	--	3.5	2.4	460	210	7.8
23...	--	--	--	--	--	10

09522000. Colorado River at northerly international boundary, above Morelos Dam, near Andrade, Calif.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)
OCT. 09...	0830	735	.00	.0	.00	.00	.00	.00
NOV. 05...	0815	743	.00	.0	.00	.00	.00	.00
DEC. 03...	0830	1020	.00	.0	.00	.00	.00	.00
JAN. 07...	0855	1435	.00	.0	.00	.00	.00	.00
FEB. 11...	0900	1380	.00	.0	.00	.00	.00	.00
MAR. 11...	0830	2450	.00	.0	.00	.00	.00	<.01
APR. 08...	0945	3290	.00	.0	.00	.00	.00	.00
MAY 06...	0805	2110	.00	.0	.00	.00	.00	.00
JUNE 10...	0830	1700	.00	.0	.00	.00	.00	.00
JULY 08...	1000	2590	.00	.0	.00	.00	.00	.00
AUG. 05...	0840	2830	.00	.0	.00	.00	.00	.00
SEP. 09...	0900	2020	.00	.0	.00	.00	.00	.00

DATE	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)
OCT. 09...	.00	.00	--	.00	.00	.00	.00	.01	--
NOV. 05...	.00	.00	.00	.00	.00	.00	.00	.00	.00
DEC. 03...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JAN. 07...	.00	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 11...	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR. 11...	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR. 08...	.00	.00	--	.00	.00	.00	.00	.00	--
MAY 06...	.00	.00	--	.00	.00	.00	.00	.00	--
JUNE 10...	.00	.00	--	.00	.00	.00	.00	.00	--
JULY 08...	.00	.00	--	.00	.00	.00	.00	.00	--
AUG. 05...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 09...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRITHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)	TEMPERATURE (DEG C)
OCT. 09...	.03	.0	0	--	.04	.00	.00	25.0
NOV. 05...	.00	.0	0	.00	.07	.00	.00	16.5
DEC. 03...	.00	.0	0	.00	.06	.00	.00	14.5
JAN. 07...	.00	.0	0	.00	.00	.00	.00	10.0
FEB. 11...	.00	.0	0	.00	.00	.00	.00	13.5
MAR. 11...	.00	.0	0	.00	.02	.00	.00	16.0
APR. 08...	.00	.0	0	--	.00	.00	.00	15.5
MAY 06...	.00	.0	0	--	.00	.00	.00	19.0
JUNE 10...	.00	.0	0	--	.00	.00	.00	25.0
JULY 08...	.00	.0	0	--	.00	.00	.00	27.0
AUG. 05...	.00	.0	0	.00	.00	.00	.00	--
SEP. 09...	.00	.0	0	.00	.26	.00	.00	27.0

09522000. Colorado River at northerly international boundary, above Morelos Dam, near Andrade, Calif.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)
OCT.										
09...	0830	--	--	260	--	--	--	--	--	--
22...	0840	--	--	390	--	--	--	--	--	--
NOV.										
05...	0815	6	6	360	<10	0	0	0	<50	0
19...	0930	--	--	340	--	--	--	--	--	--
DEC.										
03...	0830	--	--	360	--	--	--	--	--	--
17...	0905	--	--	290	--	--	--	--	--	--
JAN.										
07...	0855	--	--	240	--	--	--	--	--	--
21...	0845	--	--	260	--	--	--	--	--	--
FEB.										
11...	0900	1	0	230	<10	0	10	0	50	1
25...	0835	--	--	240	--	--	--	--	--	--
MAR.										
11...	0830	--	--	240	--	--	--	--	--	--
25...	0830	--	--	220	--	--	--	--	--	--
APR.										
08...	0945	--	--	220	--	--	--	--	--	--
22...	0850	--	--	210	--	--	--	--	--	--
MAY										
06...	0805	3	3	220	10	0	0	10	50	2
20...	0830	--	--	250	--	--	--	--	--	--
JUNE										
10...	0830	--	--	250	--	--	--	--	--	--
24...	0830	--	--	220	--	--	--	--	--	--
JULY										
08...	1000	--	--	170	--	--	--	--	--	--
AUG.										
05...	0840	1	1	210	<10	0	0	0	0	1
SEP.										
09...	0900	--	--	230	--	--	--	--	--	--

DATE	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.									
09...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
NOV.									
05...	<10	0	<100	9	.0	.0	3	3	60
19...	--	--	--	--	--	--	--	--	--
DEC.									
03...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
JAN.									
07...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
FEB.									
11...	280	1	<100	1	.0	.0	3	3	20
25...	--	--	--	--	--	--	--	--	--
MAR.									
11...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
APR.									
08...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
MAY									
06...	10	1	<100	0	.0	.0	3	2	0
20...	--	--	--	--	--	--	--	--	--
JUNE									
10...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
JULY									
08...	--	--	--	--	--	--	--	--	--
AUG.									
05...	10	1	<100	0	.0	.0	4	4	10
SEP.									
09...	--	--	--	--	--	--	--	--	--

09522000. Colorado River at northerly international boundary, above Morelos Dam, near Andrade, Calif.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1900	1910	1860	1550	1570	1450	1450	1490	1570	1450	1460	1490
2	1760	1930	1820	1590	1530	1570	1480	1500	1560	1500	1510	1440
3	1760	1930	1840	1580	1570	1580	1430	1500	1550	1490	1500	1440
4	1760	1950	1790	1550	1580	1540	1440	1500	1580	1510	1480	1450
5	1750	1970	1790	1550	1610	1530	1480	1500	1560	1530	1480	1430
6	1770	1940	1800	1570	1630	1500	1470	1490	1560	1530	1470	1450
7	1790	1850	1770	1600	1630	1540	1480	1520	1540	1500	1470	1520
8	1780	1860	1780	1580	1640	1540	1480	1500	1580	1460	1460	1500
9	1760	1900	1760	1640	1640	1530	1490	1490	1530	1440	1450	1520
10	1780	1870	1750	1670	1590	1550	1440	1530	1530	1450	1490	1510
11	1780	1880	1810	1650	1620	1530	1300	1540	1510	1470	1450	1540
12	1780	1890	1730	1640	1550	1500	1360	1590	1520	1440	1440	1510
13	1800	1880	1660	1630	1540	1540	1430	1560	1490	1470	1440	1540
14	1810	1850	1660	1590	1560	1570	1440	1610	1500	1440	1450	1560
15	1800	1860	1650	1580	1600	1570	1540	1570	1560	1430	1420	1570
16	1790	1810	1630	1620	1590	1600	1590	1600	1550	1430	1410	1540
17	1780	1870	1640	1600	1560	1560	1570	1610	1540	1430	1420	1570
18	1780	1820	1620	1560	1580	1580	1550	1610	1540	1430	1430	1590
19	1760	1840	1620	1590	1590	1560	1460	1590	1520	1450	1430	1530
20	1780	1830	1610	1600	1580	1520	1480	1550	1510	1440	1420	1520
21	1810	1790	1630	1650	1550	1490	1470	1540	1510	1430	1430	1580
22	1770	1800	1640	1650	1550	1480	1460	1560	1550	1460	1460	1590
23	1780	1840	1620	1640	1560	1520	1450	1560	1520	1410	1480	1550
24	1800	1850	1650	1630	1540	1490	1480	1560	1510	1420	1510	1560
25	1790	1860	---	1620	1560	1480	1480	1560	1520	1440	1500	1530
26	1800	1880	1710	1640	1500	1470	1490	1550	1500	1410	1470	1530
27	1790	1870	1650	1650	1490	1460	1500	1530	1510	1440	1480	1560
28	1840	1840	1610	1640	1490	1490	1470	1520	1500	1430	1470	1570
29	1860	1850	1610	1610	---	1500	1450	1520	1530	1430	1480	1560
30	1860	1880	1580	1580	---	1490	1450	1540	1490	1430	1510	1560
31	1860	---	1560	1600	---	1510	---	1550	---	1420	1500	---
MEAN	1790	1860	1700	1610	1570	1520	1470	1540	1530	1450	1460	1530
YEAR	MAX	1970	MIN	1300	MEAN	1590						

09522200. Colorado River at southerly international boundary, near San Luis, Ariz.

LOCATION.--Lat 32°29'48", long 114°48'48", in Mexico, on right bank about 1,000 ft (300 m) upstream from southerly international boundary, 2 mi (3 km) west of San Luis, Ariz., and 21.9 mi (35.2 km), revised, downstream from Morelos Dam.

DRAINAGE AREA.--243,000 mi^2 (629,400 km^2), approximately, including all closed basins entirely within the drainage boundary.

PERIOD OF RECORD.--January 1950 to current year. Prior to October 1960, monthly discharge only published in WSP 1733.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to June 24, 1954, at site 1,100 ft (340 m) downstream at same datum. August 1956 to September 1966, supplementary water-stage recorders at various sites within 6 mi (10 km) upstream used to compute discharge during periods of backwater from diversion dike downstream.

EXTREMES.--Current year: Maximum discharge, 1,280 ft^3/s (36.2 m^3/s) Apr. 12; maximum elevation, 78.80 ft (24.018 m) Apr. 12; no flow part or all of each day Apr. 4-7; minimum elevation, 73.74 ft (22.476 m) Apr. 4-7.
Period of record: Maximum discharge, 28,610 ft^3/s (810 m^3/s) Dec. 18, 1952; maximum elevation, 84.84 ft (25.859 m) Nov. 29, 1957; no flow at times 1956-58, 1964-69, 1971-72, 1975.

REMARKS.--This record shows water passing southerly international boundary. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for municipal use and irrigation, and return flow from irrigated areas. Records of chemical analyses for the current year are published on following pages.

COOPERATION.--Records furnished by International Boundary and Water Commission, U.S. Section (discharge figures rounded in accordance with Geological Survey standard practice).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	192	207	222	217	209	224	24	226	188	198	202	188
2	192	207	266	222	211	220	18	220	211	196	202	184
3	192	207	232	224	233	246	6.2	222	190	196	196	186
4	194	211	222	226	226	230	.70	220	184	192	204	188
5	194	213	222	224	215	207	0	217	186	198	199	188
6	192	213	224	224	211	204	0	220	190	200	190	188
7	192	217	224	224	215	200	.20	215	200	202	190	192
8	194	222	222	224	217	198	64	211	202	202	190	190
9	194	217	220	224	217	198	104	211	202	204	186	186
10	198	217	220	228	217	198	258	217	202	200	188	184
11	198	222	220	228	215	200	584	222	198	200	184	186
12	200	224	213	230	213	204	1,120	220	198	200	186	192
13	200	222	217	228	209	205	864	215	194	198	194	196
14	200	224	222	226	215	207	320	211	196	198	190	196
15	200	222	226	222	215	209	258	205	198	198	190	192
16	202	224	224	220	211	213	250	202	196	196	190	190
17	202	226	226	215	209	213	243	198	200	204	190	190
18	204	264	224	209	209	217	243	194	200	200	192	190
19	207	230	226	205	211	224	243	186	200	202	194	190
20	215	222	228	200	213	228	234	184	200	202	192	192
21	207	222	226	198	217	217	234	177	196	202	190	194
22	207	220	224	196	211	217	230	180	194	202	190	194
23	209	217	222	202	211	213	230	186	194	196	190	194
24	202	217	222	207	211	215	232	190	200	200	192	194
25	204	213	220	211	213	207	228	192	198	202	194	196
26	205	215	222	215	215	202	226	192	198	204	194	198
27	207	209	222	215	215	205	230	190	200	198	194	200
28	207	211	222	213	220	202	232	188	200	192	194	200
29	209	220	226	209	------	198	224	188	198	188	192	200
30	211	222	222	209	------	184	226	182	198	190	192	200
31	207	------	222	209	------	87	------	186	------	200	192	------
TOTAL	6,237	6,577	6,950	6,704	6,004	6,392	7,126.10	6,267	5,911	6,160	5,963	5,758
MEAN	201	219	224	216	214	206	238	202	197	199	192	192
MAX	215	264	266	230	233	246	1,120	226	211	204	204	200
MIN	192	207	213	196	209	87	0	177	184	188	184	184
AC-FT	12,370	13,050	13,790	13,300	11,910	12,680	14,130	12,430	11,720	12,220	11,830	11,420

CAL YR 1974 TOTAL 74,620.00 MEAN 204 MAX 523 MIN 14 AC-FT 148,000
WTR YR 1975 TOTAL 76,049.10 MEAN 208 MAX 1,120 MIN 0 AC-FT 150,800

09522200. Colorado River at southerly international boundary, near San Luis, Ariz.

LOCATION.--Lat 32°29'48", long 114°48'48", at gaging station on right bank, in Mexico, 0.2 mi (0.3 km) upstream from southerly international boundary, 2 mi (3 km) west of San Luis, Ariz., 19.4 mi (31.2 km) downstream from Morelos Dam and 20.5 mi (33.0 km) downstream from northerly international boundary.

DRAINAGE AREA.--243,000 mi^2 (629,400 km^2), approximately.

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

REMARKS.--No flow Apr. 5, 6. Unpublished chemical analyses (continuing record) for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
08...	1135	193	27	20	210	96	910	10	358	--	900	1200
NOV.												
08...	0930	220	28	20	220	64	960	9.8	362	--	890	1200
DEC.												
03...	1200	227	28	10	210	100	910	7.7	357	--	890	1300
JAN.												
07...	1120	224	30	10	220	88	950	9.6	368	--	960	1300
FEB.												
12...	0910	214	29	10	210	100	880	9.7	356	--	900	1200
MAR.												
12...	1500	194	26	10	210	95	880	9.7	352	--	910	1200
APR.												
08...	1110	65	12	10	200	89	830	11	233	--	920	1100
MAY												
06...	1155	215	26	10	220	100	880	10	348	--	910	1200
JUNE												
10...	1240	202	23	10	200	100	880	9.8	328	0	920	1200
JULY												
15...	1240	196	26	0	220	88	910	10	339	0	960	1200
AUG.												
05...	1350	191	27	30	200	91	880	9.9	324	0	890	1200
SEP.												
09...	1250	190	25	10	220	89	920	10	344	0	880	1200

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.												
08...	2.5	2.7	3530	3550	4.80	920	630	13	5550	--	26.0	2500
NOV.												
08...	2.3	2.4	3730	3560	5.07	810	520	15	5730	--	17.0	190
DEC.												
03...	2.2	2.5	3560	3640	4.95	940	640	13	5500	--	16.0	1700
JAN.												
07...	2.2	2.5	3750	3750	5.10	910	610	14	5720	--	14.5	1700
FEB.												
12...	2.2	2.8	3500	3520	4.76	940	640	13	5380	--	15.5	1700
MAR.												
12...	2.1	2.6	3730	3520	5.07	920	630	13	5730	--	20.0	650
APR.												
08...	.4	.58	3450	3280	4.69	870	670	12	5200	--	15.0	1700
MAY												
06...	2.4	2.8	3640	3530	4.95	960	680	12	5650	--	20.0	1700
JUNE												
10...	2.5	2.2	3560	3510	4.84	910	640	13	5480	8.0	28.0	1700
JULY												
15...	2.2	2.8	3750	3600	5.10	910	630	13	5670	7.9	--	1700
AUG.												
05...	2.1	2.1	3600	3470	4.90	870	600	13	5420	7.9	31.0	1600
SEP.												
09...	2.2	2.3	3590	3530	4.88	920	630	13	5560	8.0	30.0	1500

Diversions at and below Imperial Dam, Ariz.-Calif.

Diversions for irrigation in the Gila Project in Arizona are made at Imperial Dam by the Gila Gravity Main Canal. Diversions for irrigation in the Yuma Project in Arizona and California are made at Imperial Dam by the All-American Canal. Between Imperial Dam and the international boundary secondary diversions from these principal canals are made to divisions of the Gila and Yuma Project.

Return surface flows from irrigated areas enter the Colorado and Gila Rivers through many drains and wasteways in Arizona and California, or are delivered across the international boundary into Mexico. See p. 364 for records of return surface flows below Imperial Dam.

See figure 5 on p. 339 for a schematic diagram showing location of diversions and return flows.

09522500. GILA GRAVITY MAIN CANAL AT IMPERIAL DAM.--See daily table elsewhere in this report.

09522600. NORTH GILA MAIN CANAL.
LOCATION.--Water-stage recorder and sharp-crested weir in SW¼SW¼ sec.23, T.7 S., R.22 W., about 700 ft (200 m) downstream from turnout from Gila Gravity Main Canal and 1.2 mi (1.9 km) south of Laguna Dam.

PERIOD OF RECORD.--Monthly discharge October 1965 to current year.

REMARKS.--Record shows water available for irrigation of 6,037 acres (24.4 km^2) in 1974, in North Gila Valley.

09522650. NORTH GILA MAIN CANAL NO. 2.
LOCATION.--Water-stage recorder in SW¼NW¼ sec.11, T.8 S., R.22 W., at turnout from Gila Gravity Main Canal 3.5 mi (5.6 km) downstream from turnout to North Gila Main Canal.

PERIOD OF RECORD.--Monthly discharge June 1969 to current year.

REMARKS.--Record shows water available for irrigation of land in North Gila Valley. Diversion began June 11, 1969.

09522700. WELLTON-MOHAWK CANAL.
LOCATION.--Two water-stage recorders, one above and one below gates, to record head on gates and recorders on both gates to record gate openings since June 1, 1974, in NW¼NE¼ sec.17, T.8 S., R.21 W., at turnout from Gila Gravity Main Canal.

PERIOD OF RECORD.--Monthly discharge October 1965 to current year.

REMARKS.--Record shows water available for irrigation of 64,884 acres (263 km^2) in 1974, in the Dome, Wellton, and Mohawk areas of the lower Gila Valley.

COOPERATION.--Supplementary record of gate openings furnished by Bureau of Reclamation.

09522800. SOUTH GILA MAIN CANAL.
LOCATION.--Vane meter and water-stage recorder in SE¼SW¼ sec.36, T.8 S., R.22 W., about 200 ft (61 m) downstream from turnout from Gila Gravity Main Canal. Also, Sparling flowmeter 150 ft (46 m) upstream.

PERIOD OF RECORD.--Monthly discharge October 1965 to current year.

REMARKS.--Record shows water available for irrigation of a portion of the 10,159 acres (41.1 km^2) in 1974, in South Gila Valley; additional diversions are made from Gila Gravity Main Canal to supply other portions of this same acreage.

COOPERATION.--Records furnished by Bureau of Reclamation prior to June 4, 1974.

09522850. GILA GRAVITY MAIN CANAL AT PUMPING PLANT.
LOCATION.--Intake consisting of 4 pumps in NE¼NW¼ sec.1, T.9 S., R.22 W., at end of Gila Gravity Main Canal and head of Yuma Mesa canals.

PERIOD OF RECORD.--Monthly discharge October 1965 to current year.

REMARKS.--Record shows water available for irrigation of 18,452 acres (74.7 km^2) in 1974, on the Yuma Mesa. Flow measured by rated pumps.

COOPERATION.--Records furnished by Bureau of Reclamation and Yuma Mesa Irrigation and Drainage District.

09522900. UNIT B MAIN CANAL.
LOCATION.--Two Sparling flowmeters in NW¼SW¼ sec.28, T.9 S., R.23 W., 5 mi (8 km) northeast of Somerton.

PERIOD OF RECORD.--Monthly discharge October 1965 to current year.

REMARKS.--Record shows water available for irrigation of 3,196 acres (12.9 km^2) in 1974, in Yuma Auxiliary Division of the Yuma Project. Sparling meters checked by occasional discharge measurements.

COOPERATION.--Records furnished by Bureau of Reclamation and Unit B Irrigation and Drainage District.

09523000. ALL-AMERICAN CANAL NEAR IMPERIAL DAM.--See daily table elsewhere in this report.

Diversions at and below Imperial Dam, Ariz.-Calif.--Continued

09523200. RESERVATION MAIN CANAL.
LOCATION.--Water-stage recorder and, since Sept. 5, 1975, gate-opening recorder, in NE¼NE¼ sec.35, T.15 S., R.23 E., San Bernardino meridian, at turnout from All-American Canal and 5.8 mi (9.3 km) downstream from Imperial Dam.

PERIOD OF RECORD.--Monthly discharge August 1950 to current year. Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record computed from rated gate on turnout from All-American Canal and shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

COOPERATION.--Record of gate openings furnished by Bureau of Reclamation.

09523400. TITSINK CANAL.
LOCATION.--Water-stage recorder and Parshall flume in NE¼SW¼ sec.27, T.15 S., R.23 E., San Bernardino meridian, 0.6 mi (1.0 km) downstream from turnout from All-American Canal and 7.2 mi (11.6 km) downstream from Imperial Dam.

PERIOD OF RECORD.--Monthly discharge August 1950 to current year. Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09523600. YAQUI CANAL.
LOCATION.--Water-stage recorder and Parshall flume in NW¼SE¼ sec.31, T.15 S., R.23 E., San Bernardino meridian, 700 ft (200 m) downstream from turnout from All-American Canal and 11.1 mi (17.9 km) downstream from Imperial Dam.

PERIOD OF RECORD.--Monthly discharge June 1950 to current year. Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09523800. PONTIAC CANAL.
LOCATION.--Water-stage recorder and Parshall flume in NW¼SW¼ sec.1, T.16 S., R.22 E., San Bernardino meridian, 500 ft (150 m) downstream from turnout from All-American Canal and 13.1 mi (21.1 km) downstream from Imperial Dam.

PERIOD OF RECORD.--Monthly discharge August 1950 to current year. Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09523900. WALAPAI CANAL.
LOCATION.--Water-stage recorder and sharp-crested weir in SE¼SE¼ sec.10, T.16 S., R.22 E., San Bernardino meridian, 100 ft (30 m) downstream from siphon-drop powerplant forebay and 4 mi (6 km) north of Yuma.

PERIOD OF RECORD.--Monthly discharge October 1946 to current year. Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09524000. YUMA MAIN CANAL AT SIPHON-DROP POWERPLANT.--See daily table elsewhere in this report.

09524500. DIVERSIONS FROM YUMA MAIN CANAL BETWEEN SIPHON-DROP POWERPLANT AND YUMA MAIN CANAL WASTEWAY.
LOCATION.--Turnouts for several canals diverting from Yuma Main Canal between siphon-drop powerplant, 4 mi (6 km) north of Yuma, and Yuma Main Canal wasteway, 1,600 ft (500 m) upstream from Colorado River siphon.

PERIOD OF RECORD.--Monthly discharge October 1940 to current year. Prior to October 1947 published in WSP 1313. October 1947 to September 1965 published as supplemental table with records for Yuma Main Canal at siphon-drop powerplant.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California. Records estimated on basis of discharge measurements by Clausen-Pierce weir rule and occasional current-meter measurements.

COOPERATION.--Record furnished by Bureau of Reclamation.

09525500. YUMA MAIN CANAL BELOW COLORADO RIVER SIPHON.--See daily table elsewhere in this report.

09526000. DIVERSION FROM YUMA MAIN CANAL FOR MUNICIPAL SUPPLY FOR YUMA.
LOCATION.--Sparling flowmeters, in NW¼NE¼ sec.35, T.16 S., R.22 E., San Bernardino meridian, on pipeline about 1,000 ft (300 m) downstream from intake, which is at outlet of Colorado River siphon of Yuma Main Canal, on Arizona side of Colorado River at Yuma.

PERIOD OF RECORD.--Monthly discharge June 1945 to current year. Prior to October 1973 published as a supplemental table with records for Yuma Main Canal below Colorado River siphon.

REMARKS.--Record shows supplementary water for Yuma municipal supply; total municipal supply is much greater. Figures shown in table herewith are also included in record for Yuma Main Canal below Colorado River siphon. Capacity of pump used prior to August 1960 was about 12 ft^3/s (0.34 m^3/s); combined capacity of three pumps used since August 1960 is about 25 ft^3/s (0.71 m^3/s). A fourth pump with a capacity of about 14 ft^3/s (0.40 m^3/s) was added in February 1975 for emergency or standby use.

COOPERATION.--Records furnished by Yuma County Water Users' Association (prior to April 1955, by Arizona Public Service Co., and April 1955 to September 1965, by Arizona Water Co.).

09527500. ALL-AMERICAN CANAL BELOW PILOT KNOB WASTEWAY.--See daily table elsewhere in this report.

Diversions at and below Imperial Dam, Ariz.-Calif.--Continued

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	North Gila Main Canal 09522600	North Gila Main Canal No. 2 09522650	Wellton-Mohawk Canal 09522700	South Gila Main Canal 09522800	Gila Gravity Main Canal at pumping plant 09522850
October	3,100	768	33,950	2,500	20,690
November	3,470	413	24,600	1,630	14,460
December	2,280	275	20,780	917	12,120
CAL YR 1974	50,470	8,050	533,500	32,170	266,300
January	2,460	314	25,980	2,050	11,180
February	3,960	580	30,890	2,390	11,450
March	3,960	647	41,290	2,520	14,120
April	4,280	969	56,150	3,650	19,020
May	5,390	1,200	59,780	4,360	26,940
June	4,130	751	52,490	2,890	32,150
July	4,230	1,020	60,290	2,460	35,440
August	4,160	1,020	64,310	3,680	34,240
September	5,090	936	52,240	4,950	28,500
WTR YR 1975	46,500	8,900	522,800	34,010	260,300

Month	Unit B Main Canal 09522900	Reservation Main Canal 09523200	Titsink Canal 09523400	Yaqui Canal 09523600	Pontiac Canal 09523800
October	3,260	2,980	11	864	657
November	1,930	2,790	0	875	529
December	1,720	1,730	12	466	195
CAL YR 1974	38,490	49,920	117	10,680	7,400
January	1,720	2,660	4.7	333	345
February	1,600	3,450	9.6	677	406
March	1,730	4,650	14	774	791
April	2,650	6,050	13	898	666
May	3,810	5,680	0	1,230	937
June	4,400	3,250	0	775	682
July	5,020	5,030	0	864	752
August	4,850	5,080	0	1,200	906
September	4,350	4,870	0	901	374
WTR YR 1975	37,040	48,220	64	9,860	7,240

Month	Walapai Canal 09523900	Diversions from Yuma Main Canal 09524500	Diversions from Yuma Main Canal for Yuma supply 09526000
October	1,300	770	1,089
November	969	91	864
December	370	93	725
CAL YR 1974	13,090	4,660	12,655
January	1,110	280	715
February	989	290	714
March	1,480	465	837
April	1,620	531	852
May	1,420	458	1,119
June	648	77	1,511
July	1,010	292	1,591
August	1,560	740	1,634
September	2,120	843	1,293
WTR YR 1975	14,580	4,930	12,944

NOTE.--Yearly totals given above have been computed from total cfs-days and may differ slightly from the summation of monthly total acre-feet on occasion.

09522500. Gila Gravity Main Canal at Imperial Dam, Ariz.-Calif.

LOCATION.--Lat 32°52'34", long 114°27'18", in SE¼SW¼ sec.30, T.6 S., R.21 W., Gila and Salt River meridian, Yuma County, on right bank 3,200 ft (975 m) downstream from intake at east end of Imperial Dam.

PERIOD OF RECORD.--August 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 160.00 ft (48.768 m) above mean sea level.

AVERAGE DISCHARGE.--16 years (1959-75), 1,215 ft^3/s (34.41 m^3/s), 880,300 acre-ft/yr (1,090 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 2,240 ft^3/s (63.4 m^3/s) May 25, 1965; no flow at canal intake at times in several years when intake gates were closed.

REMARKS.--Records excellent except those below 100 ft^3/s (2.8 m^3/s), which are fair. Gila Gravity Main Canal diverts water from Colorado River at left end of Imperial Dam for irrigation of lands in the Gila Project area in Arizona. Diversions to this canal began Aug. 17, 1943. Diversions to North Gila Valley from this canal began Dec. 16, 1954. During the 1974 calendar year, water was used for irrigation of 102,728 acres (416 km^2) divided as follows: North and South Gila Valleys, 16,196 acres (65.5 km^2): Yuma Mesa Division, 18,452 acres (74.7 km^2); Wellton-Mohawk Division, 64,884 acres (263 km^2); Yuma Mesa Auxiliary Division, 3,196 acres (12.9 km^2). Records of chemical analyses and water temperatures for the current water year are published on following pages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1380	567	0	368	617	1030	1730	1920	937	1870	1850	1540
2	1650	508	0	530	590	927	1800	1850	1710	2020	1360	1890
3	1460	479	0	589	652	1420	1700	1340	1770	1980	1270	1950
4	1450	831	0	477	948	1660	1610	1420	1910	1750	1870	1970
5	1160	672	0	426	1020	1540	1590	1560	1830	1540	2000	1950
6	921	944	0	482	916	1450	1260	1880	1770	1190	2030	1890
7	1240	890	142	555	714	1130	1750	1910	1680	1910	2060	1550
8	1480	824	768	738	709	872	1750	1840	1430	1950	2060	1800
9	1700	571	986	856	430	686	1500	1510	1640	2020	1960	1560
10	1170	404	1460	735	857	843	1310	1390	1780	1970	1470	1660
11	1260	892	1130	472	1070	1060	947	1070	1790	1980	1910	1350
12	879	872	993	544	995	887	699	1800	1430	1730	2010	1510
13	653	1100	854	681	1130	853	596	1870	1550	1250	2030	1230
14	1010	1090	763	914	788	753	1190	1990	1430	1540	2030	702
15	1360	814	652	755	629	480	1530	1850	1040	1720	2010	1510
16	1370	764	1030	573	592	493	1640	1890	1630	1830	1820	1870
17	1350	888	1160	468	959	1060	1610	1630	1680	1920	1610	2000
18	1000	893	1340	514	1020	1310	1390	1420	1720	1950	1980	2020
19	802	1090	1070	464	1220	1240	1390	1730	1760	1770	2040	1770
20	695	1170	1050	850	1150	1410	1050	1630	1620	1420	2030	1320
21	1150	1250	623	1010	1240	1260	1520	1940	1620	1720	1930	975
22	1160	1020	727	1170	909	940	1690	1810	1220	1880	1700	1540
23	1020	847	744	1010	895	915	1770	1680	1600	2020	1670	1620
24	733	1000	565	964	1410	1370	1810	1380	1950	2010	1570	1900
25	421	1270	187	846	1270	1610	1770	942	1800	1710	1890	1730
26	438	1310	632	636	1200	1770	1530	1480	1800	1300	1920	1640
27	392	867	592	919	1510	1410	1520	1580	1710	1120	1870	1150
28	711	49	659	966	1280	1240	1760	1580	1360	1670	1910	1060
29	1000	10	517	1090	---	976	1930	1580	1220	1760	1910	1460
30	806	4.9	800	991	---	717	2040	1340	1570	1820	1830	1350
31	846	---	634	966	---	1540	---	1170	---	1810	1420	---
TOTAL	32667	23890.9	20078	22559	26720	34852	45382	49982	47957	54130	57020	47467
MEAN	1054	796	648	728	954	1124	1513	1612	1599	1746	1839	1582
MAX	1700	1310	1460	1170	1510	1770	2040	1990	1950	2020	2060	2020
MIN	392	4.9	0	368	430	480	596	942	937	1120	1270	702
AC-FT	64790	47390	39820	44750	53000	69130	90020	99140	95120	107400	113100	94150

CAL YR 1974 TOTAL 473271.9 MEAN 1297 MAX 2180 MIN 0 AC-FT 938700
WTR YR 1975 TOTAL 462704.9 MEAN 1268 MAX 2060 MIN 0 AC-FT 917800

09522500. Gila Gravity Main Canal at Imperial Dam, Ariz.-Calif.

LOCATION.--Lat 32°52'34", long 114°27'18", in SE¼SW¼ sec.30, T.6 S., R.21 W., Gila and Salt River meridian, in Arizona, Yuma County, at gaging station on right bank, 0.6 mi (1.0 km) downstream from intake at east end of Imperial Dam.

PERIOD OF RECORD.--Chemical analyses: October 1967 to current year (partial-record station).
Water temperatures: January 1956 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 30.5°C July 11, 12; minimum, 9.0°C on several days during December and January.
Period of record:
Water temperatures: Maximum, 33.0°C Aug. 29-31, 1970; minimum, 7.0°C Jan. 13-17, 1964, Jan. 4-7, 1971.

REMARKS.--Temperature probe above water surface Nov. 28 to Dec. 7. Unpublished chemical analyses (partial record) for water years 1965-67 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
09...	1220	1730	11	20	93	32	120	5.7	171	--	310	110
JAN.												
08...	1330	747	11	10	97	32	160	5.6	190	--	330	150
APR.												
02...	1405	1918	8.8	10	95	32	130	6.6	176	--	350	110
JULY												
01...	1040	1850	8.3	10	92	33	130	5.6	174	0	330	110

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.												
09...	.4	.18	849	767	1.15	360	220	2.7	1290	--	25.0	160
JAN.												
08...	.4	.27	947	881	1.29	370	220	3.6	1390	--	10.0	200
APR.												
02...	.3	.19	835	821	1.14	370	220	2.9	1270	--	14.5	220
JULY												
01...	.4	.15	843	796	1.15	370	230	3.0	1280	8.2	26.0	180

09522500. Gila Gravity Main Canal at Imperial Dam, Ariz.-Calif.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	27.0	26.5	18.0	18.0	---	---	9.0	9.0	11.0	11.0	14.5	14.0
2	26.5	26.0	18.0	18.0	---	---	9.0	9.0	11.0	11.0	15.5	14.5
3	26.5	26.0	18.0	18.0	---	---	9.0	9.0	11.0	11.0	15.5	15.5
4	26.0	26.0	18.0	18.0	---	---	9.0	9.0	11.0	11.0	15.5	15.5
5	26.0	25.0	18.0	18.0	---	---	9.5	9.5	11.0	11.0	15.5	15.5
6	25.5	25.0	18.0	18.0	---	---	9.5	9.5	11.0	11.0	15.5	14.5
7	24.5	23.5	18.0	18.0	---	---	10.0	9.5	11.0	11.0	15.0	14.5
8	24.5	24.0	18.0	18.0	13.0	13.0	10.0	10.0	11.0	11.5	15.0	14.5
9	25.5	24.5	18.0	18.0	13.0	13.0	10.0	10.0	12.0	11.5	15.0	15.0
10	25.5	25.0	18.0	18.0	13.0	13.0	10.0	10.0	13.0	12.0	14.5	14.0
11	25.0	24.5	18.0	18.0	13.0	12.5	10.0	10.0	13.5	13.0	14.0	14.0
12	24.5	24.0	18.0	18.0	12.5	12.5	10.0	10.0	13.5	13.5	14.0	14.0
13	24.5	23.5	18.0	18.0	13.0	12.5	10.0	10.0	13.5	13.5	14.5	14.0
14	23.5	23.5	18.0	18.0	13.0	12.5	10.0	10.0	13.5	13.5	14.5	14.5
15	23.5	23.5	18.0	18.0	13.0	12.5	10.0	10.0	13.5	13.5	14.5	14.0
16	23.5	23.5	18.0	18.0	13.0	13.0	10.0	10.0	13.5	13.5	14.5	14.5
17	23.5	23.5	18.5	18.0	13.0	13.0	10.0	10.0	13.5	13.5	14.5	14.5
18	23.5	23.5	18.5	18.5	13.0	12.5	10.0	10.0	13.5	13.5	14.5	14.5
19	23.5	23.5	18.5	18.5	13.0	13.0	11.0	10.5	14.0	13.5	15.0	14.5
20	23.5	23.5	18.5	18.5	13.0	13.0	11.0	11.0	13.5	13.5	15.5	15.0
21	23.5	23.5	18.5	18.5	13.0	13.0	11.0	11.0	13.5	13.5	15.5	15.5
22	23.5	23.5	18.5	18.5	13.0	13.0	11.0	11.0	13.5	13.0	15.5	15.5
23	23.5	23.0	18.5	18.5	13.0	12.5	11.0	11.0	13.0	13.0	15.0	15.0
24	23.0	23.0	18.0	17.0	12.0	11.5	11.0	11.0	13.0	13.0	15.0	15.0
25	23.0	23.0	18.0	16.5	11.0	10.0	11.0	11.0	13.5	13.0	15.5	15.0
26	23.0	22.0	16.5	16.5	9.0	9.0	11.0	11.0	14.5	13.5	15.0	14.5
27	22.0	21.5	16.5	16.5	9.0	9.0	11.0	11.0	15.0	14.0	14.5	14.5
28	21.5	21.0	---	---	9.0	9.0	11.0	11.0	13.5	13.5	15.0	14.0
29	21.0	19.5	---	---	9.0	9.0	11.0	11.0	---	---	14.0	13.5
30	19.5	18.5	---	---	9.0	9.0	11.0	11.0	---	---	14.0	13.5
31	18.5	18.5	---	---	9.0	9.0	11.0	11.0	---	---	14.0	13.5
MEAN	27.0	18.5	18.5	16.5	---	---	11.0	9.0	15.0	11.0	15.5	13.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	13.5	20.0	19.5	26.0	25.5	26.5	26.0	29.0	28.5	27.0	26.5
2	14.5	14.0	20.5	20.0	26.0	26.0	26.5	26.0	29.0	29.0	28.5	27.0
3	15.0	14.5	21.5	20.5	26.0	25.5	27.5	26.5	29.5	29.0	28.5	28.0
4	15.5	15.0	21.5	21.0	26.0	25.5	28.0	27.0	29.5	29.0	28.5	28.0
5	16.0	15.5	21.0	19.5	26.0	25.5	29.0	28.0	30.0	29.5	29.0	28.0
6	16.0	16.0	19.5	19.5	25.5	25.5	29.0	29.0	30.0	30.0	28.5	28.0
7	16.0	15.5	19.5	19.5	26.0	25.5	29.0	28.5	30.0	29.5	28.0	28.0
8	15.5	15.0	20.5	19.5	26.0	25.5	29.0	28.5	30.0	30.0	28.0	28.0
9	15.0	14.5	21.5	20.5	26.0	25.5	29.5	28.5	30.0	30.0	28.5	28.0
10	14.5	14.0	22.0	21.0	26.0	25.5	30.0	29.5	30.0	29.5	28.5	28.0
11	15.0	14.5	23.5	22.0	27.0	26.0	30.5	30.0	30.0	29.5	28.5	28.0
12	16.0	15.0	24.0	23.5	27.0	26.5	30.5	29.5	29.5	28.5	28.0	28.0
13	18.0	16.5	24.0	23.5	27.0	27.0	29.5	29.0	29.0	28.5	28.0	28.0
14	18.0	17.0	24.0	23.5	28.0	27.0	29.5	28.5	28.5	28.0	28.0	28.0
15	18.0	17.0	24.0	24.0	28.0	28.0	29.5	29.0	28.5	28.0	28.0	28.0
16	18.0	17.0	24.0	23.5	28.0	27.0	29.5	29.0	28.0	28.0	28.5	28.0
17	18.5	18.0	24.0	24.0	27.0	26.5	29.0	28.5	28.0	27.5	28.5	28.0
18	18.5	18.0	24.0	23.5	26.5	24.5	29.0	28.0	28.0	26.5	28.5	28.0
19	18.5	18.0	23.5	23.5	24.5	24.0	29.0	28.5	27.0	26.5	28.0	28.0
20	19.0	18.5	23.5	22.0	24.0	23.0	29.0	28.5	27.0	27.0	28.0	28.0
21	19.0	18.5	22.0	20.5	24.5	23.0	29.0	28.5	28.0	27.0	28.0	28.0
22	19.0	19.0	20.5	20.5	25.0	24.5	29.0	29.0	28.0	27.5	28.0	26.0
23	19.0	19.0	21.5	20.5	26.0	25.0	29.0	29.0	28.5	28.0	26.0	25.5
24	19.0	19.0	23.5	21.5	26.0	25.5	29.5	29.0	28.5	28.0	25.5	25.0
25	19.0	19.0	24.0	23.5	26.0	25.5	30.0	29.0	28.0	28.0	25.5	25.0
26	19.0	18.5	24.5	24.0	26.0	25.5	30.0	29.5	28.0	28.0	25.5	25.5
27	18.5	18.5	24.5	24.5	26.5	25.5	30.0	29.5	28.0	27.0	25.5	25.5
28	19.0	18.5	24.5	24.5	26.5	26.0	29.5	29.0	27.0	26.5	25.5	25.5
29	19.0	19.0	24.5	24.0	26.5	26.5	29.0	29.0	27.0	26.0	25.5	25.5
30	19.5	19.0	24.5	24.0	26.5	26.5	29.5	29.0	26.5	26.0	25.5	25.5
31	---	---	25.5	24.5	---	---	29.5	29.0	26.5	26.0	---	---
MEAN	19.5	13.5	25.5	19.5	28.0	23.0	30.5	26.0	30.0	26.0	29.0	25.0
YEAR	30.5	9.0										

09523000. All-American Canal near Imperial Dam, Ariz.-Calif.

LOCATION.--Lat 32°52'17", long 114°28'47", in SE¼NW¼ sec.17, T.15 S., R.24 E., San Bernardino meridian, in California, Imperial County, on left bank 6,000 ft (1,829 m) downstream from intake at west end of Imperial Dam and 13.7 mi (22.0 km) upstream from turnout to Yuma Main Canal.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1939 monthly discharge only, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 150.00 ft (45.720 m) above mean sea level (subject to undetermined changes caused by earthquake of May 18, 1940). Since Aug. 21, 1952, auxiliary water-stage recorder 18.5 mi (29.8 km) downstream from base gage.

AVERAGE DISCHARGE.--34 years (1941-75), 6,945 ft^3/s (196.7 m^3/s), 5,032,000 acre-ft/yr (6,200 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 13,500 ft^3/s (382 m^3/s), Apr. 16, 1938; no flow at times.

REMARKS.--Records excellent. All-American Canal diverts water from Colorado River at Imperial Dam. Water is used for power development and for irrigation in Yuma, Coachella, and Imperial Valleys. Water can be released back to the river through Pilot Knob powerplant and wasteway for power, regulatory purposes, or for downstream use in Mexico. First diversion to All-American Canal began October 1938, but prior to October 1940 was used only for priming canal.

COOPERATION.--Gage-height record furnished by Imperial Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6070	3530	2850	4210	4590	6800	9230	9820	6770	7910	8720	8300
2	6200	3660	3460	4760	3580	6230	9820	9490	7000	8090	8690	8410
3	6420	3560	3730	4620	4040	6730	9940	9510	7230	8170	7850	8680
4	6600	3810	3530	4400	3890	6790	9920	9230	7750	7250	7680	8840
5	6310	3980	2770	3590	3930	6720	9510	9170	7900	7600	8070	9000
6	6210	4100	2900	2790	3750	7030	9290	9090	8140	7670	8570	8670
7	6170	4190	2360	3100	3850	6950	9420	9120	7820	7790	8800	7500
8	6050	4330	2310	3210	3970	6940	9860	8930	7360	8470	9160	7130
9	6170	4320	2350	3320	4230	6730	8490	8840	6290	8290	9120	6880
10	6190	4140	2740	3360	4700	6980	7680	8760	6470	8490	9000	7120
11	5810	3930	2990	4050	4480	6750	7660	7800	6770	8300	8970	6590
12	5700	4010	3140	3770	4880	6460	5660	8110	6910	8530	9320	6990
13	5350	4580	3330	4070	5040	6710	5390	8340	6810	8650	9230	6830
14	5220	4640	3470	4230	5170	6060	6230	8770	6610	8670	9190	6630
15	5210	4420	3440	4400	5180	6100	7120	8560	6550	8790	9100	7120
16	5370	4020	3850	4630	5180	6220	8050	8390	6950	8860	9220	7480
17	5620	3610	3940	4440	5380	6570	8540	8220	7130	8920	8910	7210
18	5510	3510	4060	4320	6000	6780	9110	7760	7410	8770	8560	7250
19	5360	3470	4460	3920	5880	7360	9510	7650	7440	8700	8730	7150
20	4890	3780	4510	3900	6310	8300	9690	7920	7520	8520	8990	6900
21	4970	3760	4370	4090	6290	8810	9750	7990	7480	8510	8470	6620
22	4980	4050	4620	4200	6870	9140	9930	8020	7130	8800	8290	6880
23	4930	3640	4490	4400	6810	8780	9980	7450	6900	9110	8010	7030
24	4690	3440	4230	4400	6650	9250	10200	7390	7420	9170	7490	7340
25	4220	3290	3550	4580	7220	9580	10100	6680	7660	8660	7270	7280
26	3770	3500	4200	4420	7310	9590	10000	6690	7690	8670	7770	7240
27	3640	3570	5130	4880	7390	9740	9910	6910	7510	8660	8310	7160
28	3920	3170	5280	4990	6970	9650	9860	7080	7430	8910	8500	6750
29	4000	2880	5270	5270	---	9000	10100	7240	7450	8970	8280	6770
30	4200	2940	5230	5300	---	8300	10100	7180	7800	8750	8010	6930
31	4110	---	5330	4880	---	8960	---	7150	---	8970	8250	---
TOTAL	163860	113830	117890	130500	149540	236010	270050	253260	217300	263620	264530	220680
MEAN	5286	3794	3803	4210	5341	7613	9002	8170	7243	8504	8533	7356
MAX	6600	4640	5330	5300	7390	9740	10200	9820	8140	9170	9320	9000
MIN	3640	2880	2310	2790	3580	6060	5390	6680	6290	7250	7270	6590
AC-FT	325000	225800	233800	258800	296600	468100	535600	502300	431000	522900	524700	437700

CAL YR 1974 TOTAL 2495060 MEAN 6836 MAX 10500 MIN 1290 AC-FT 4949000
WTR YR 1975 TOTAL 2401070 MEAN 6578 MAX 10200 MIN 2310 AC-FT 4763000

09524000. Yuma Main Canal at siphon-drop powerplant, near Yuma, Ariz.

LOCATION.--Lat 32°46'36", long 114°38'05", in SE¼SE¼ sec.10, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, on right bank at downstream end of powerplant, 500 ft (150 m) from turnout from All-American Canal to Yuma Main Canal, 4.0 mi (6.4 km) north of Yuma, and 14.9 mi (24.0 km) downstream from intake of All-American Canal at Imperial Dam.

PERIOD OF RECORD.--July 1926 to current year. Prior to October 1938, monthly discharge only published in WSP 1313. Diversions from All-American Canal and Yuma Main Canal previously published with this record are listed separately in this report.

GAGE.--Water-stage recorder on forebay to determine head on rated bypass gates since Sept. 15, 1952. Recorders on gates to record gate opening since Nov. 8, 1973. Normal operating level of forebay of powerplant is 151.0 ft (46.02 m) above mean sea level, datum of 1929, or 150.3 ft (45.81 m) above mean sea level, Yuma Project datum. Prior to Oct. 30, 1938, floating nonrecording gages on forebay and tailrace. Oct. 30, 1938, to Mar. 1, 1945, floating nonrecording gage on forebay and water-stage recorder on tailrace. Mar. 2, 1945, to Jan. 11, 1951, water-stage recorders on forebay and tailrace. Jan. 12, 1951, to Dec. 7, 1972, differential recorder to record head between forebay and tailrace prior to discontinuing powerplant operation.

EXTREMES.--1930 to current year: Maximum daily discharge, 2,040 ft^3/s (57.8 m^3/s) Nov. 11, 1943; no flow for several days in 1937-39, 1945.

REMARKS.--Records excellent except those below 200 ft^3/s (5.7 m^3/s), which are good. Discharge through bypass gates determined from relationship of forebay elevation and gate openings. Flow to Yuma Main Canal regulated by opening and closing bypass gates. Gates on All-American Canal open and close automatically to maintain a contant forebay elevation. Records of daily discharge show quantity of water diverted from All-American Canal to Yuma Main Canal, except that diverted from forebay of powerplant to Walapai Canal. (See sta 09523900.) Flow through turbines of powerplant was discontinued Dec. 8, 1972.

COOPERATION.--Supplementary record of gate openings furnished by Yuma County Water Users' Association.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	679	232	191	408	380	481	561	743	668	686	876	484
2	761	212	365	310	250	228	715	688	704	773	761	664
3	708	218	413	402	182	255	796	605	998	767	352	830
4	691	377	361	461	236	279	790	519	1330	726	301	852
5	685	482	330	392	368	338	673	701	1520	595	283	791
6	629	480	524	383	561	674	249	731	854	496	450	667
7	597	428	541	472	550	705	269	769	738	614	839	603
8	633	446	404	522	504	640	342	717	646	734	883	615
9	668	393	475	488	426	522	372	732	1070	700	807	703
10	714	344	594	366	495	532	606	718	1120	746	651	757
11	672	327	623	246	568	554	639	805	1220	773	611	708
12	609	408	575	207	794	490	493	989	1270	720	718	654
13	535	430	439	299	843	449	432	1080	1220	634	817	543
14	635	456	406	472	1030	482	541	1170	1200	585	882	449
15	686	456	245	517	949	424	685	1130	1120	746	876	605
16	683	262	286	468	770	198	763	979	284	779	797	817
17	687	26	268	338	833	247	790	840	355	779	519	1320
18	622	26	288	274	294	274	757	807	457	768	354	1390
19	435	26	290	247	392	320	721	1060	698	696	428	1320
20	341	26	473	279	631	707	400	1240	671	593	580	1260
21	506	125	493	408	562	783	351	1280	567	538	830	1130
22	578	499	429	506	446	730	434	1380	518	736	817	1200
23	491	563	379	555	335	551	518	1250	529	861	659	1210
24	468	517	267	565	483	575	835	1080	668	853	489	1140
25	410	465	127	492	691	733	856	860	728	767	515	1090
26	378	502	183	406	704	773	794	753	750	726	611	1020
27	330	439	362	525	633	693	608	830	715	685	688	884
28	451	397	375	624	580	554	582	831	636	608	670	748
29	562	287	260	594	---	375	689	866	523	623	596	786
30	492	247	318	522	---	247	753	819	580	760	493	897
31	383	---	294	446	---	348	---	892	---	864	419	---
TOTAL	17719	10096	11578	13194	15490	15161	18014	27864	24357	21931	19572	26137
MEAN	572	337	373	426	553	489	600	899	812	707	631	871
MAX	761	563	623	624	1030	783	856	1380	1520	864	883	1390
MIN	330	26	127	207	182	198	249	519	284	496	283	449
AC-FT	35150	20030	22960	26170	30720	30070	35730	55270	48310	43500	38820	51840

CAL YR 1974 TOTAL 224296 MEAN 615 MAX 1610 MIN 26 AC-FT 444900
WTR YR 1975 TOTAL 221113 MEAN 606 MAX 1520 MIN 26 AC-FT 438600

09525000. Yuma Main Canal wasteway at Yuma, Ariz.

LOCATION.--Lat 32°44'00", long 114°37'20", in SW¼SE¼ sec.26, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, 50 ft (15 m) downstream from wasteway gates from Yuma Main Canal which are 1,645 ft (501 m) upstream from intake of Colorado River siphon on Yuma Main Canal, 0.5 mi (0.8 km) north of Yuma, and 3.2 mi (5.1 km) downstream from siphon-drop powerplant on Yuma Main Canal.

PERIOD OF RECORD.--April 1913 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder for low flows only, with supplementary recorder on wasteway gate. Datum of gage is 122.51 ft (37.341 m) above mean sea level. Prior to Apr. 1, 1968, gate-opening record used for low flows only.

EXTREMES.--1930 to current year: Maximum daily discharge, 2,020 ft^3/s (57.2 m^3/s) Dec. 24, 25, 1948; no flow for several days in 1937-39, 1945, 1950, 1971.

REMARKS.--Records good except those below 125 ft^3/s (3.5 m^3/s), which are fair. The wasteway discharges into Colorado River in SW¼ sec.26, T.16 S., R.22 E., 1,000 ft (300 m) upstream from station on Colorado River below Yuma Main Canal wasteway at Yuma. Discharges above 125 ft^3/s (3.5 m^3/s) are generally computed as difference between discharge of Yuma Main Canal at siphon-drop powerplant and Yuma Main Canal below Colorado River siphon, with deductions for small irrigation diversions from canal between these stations. Discharges below 125 ft^3/s (3.5 m^3/s) are generally computed from stage-discharge relation. Records do not include flow of Reservation Main Drain No. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	3[illegible]	104	255	52	19	1[illegible]	26	518	16	15	17
2	202	3[illegible]	2[illegible]	145	63	2[illegible]	17	2[illegible]	561	16	15	17
3	166	41	[illegible]	152	3[illegible]	2[illegible]	2[illegible]	26	757	15	15	17
4	151	41	132	173	196	20	22	23	959	15	15	17
5	134	41	150	142	121	1[illegible]	22	21	714	15	15	16
6	113	4[illegible]	219	127	130	16	22	20	17	15	15	16
7	143	5[illegible]	251	110	90	14	23	20	20	14	15	16
8	171	5[illegible]	214	111	78	14	24	19	126	14	15	16
9	159	57	256	41	87	16	23	19	522	14	14	16
10	160	70	322	46	132	14	2[illegible]	109	805	14	14	16
11	120	74	274	53	44	13	22	295	592	16	14	16
12	153	77	260	112	243	13	24	329	634	17	22	16
13	175	77	154	124	266	13	24	295	641	17	16	24
14	168	95	129	128	479	13	24	381	713	17	16	18
15	180	105	120	117	526	12	25	397	838	17	16	18
16	110	101	131	155	587	12	26	341	19	17	16	25
17	85	71	18	119	662	13	27	303	19	16	16	567
18	134	7.3	18	53	15	13	26	408	19	16	16	614
19	122	4.5	16	53	17	14	27	466	19	16	15	577
20	126	12	18	60	16	14	29	625	18	16	16	542
21	136	11	18	53	19	14	30	596	18	16	16	458
22	122	7[illegible]	18	67	19	15	30	719	18	16	16	505
23	105	123	14	91	19	16	30	662	17	17	16	483
24	100	18[illegible]	14	121	20	15	30	590	16	17	19	452
25	91	184	15	108	23	15	26	516	16	34	17	461
26	108	192	15	90	23	16	2[illegible]	350	16	16	17	407
27	126	177	16	140	21	15	26	323	16	16	17	348
28	128	17[illegible]	14	134	19	15	26	284	15	16	17	321
29	143	81	14	131	---	15	2[illegible]	303	15	16	17	371
30	138	9[illegible]	18	139	---	15	2[illegible]	274	16	16	17	395
31	113	---	14	90	---	15	---	465	---	16	17	---
TOTAL	4261	2394.8	4515	4304	3847	457	743	9401	8578	509	498	6782
MEAN	137	79.8	113	139	133	15.1	24.8	303	286	16.4	16.1	226
MAX	202	192	322	255	662	20	30	719	959	34	22	614
MIN	85	7.3	18	39	15	12	16	19	16	14	14	16
AC-FT	8450	4750	8970	8710	7730	926	1470	18650	17010	1010	988	13450

CAL YR 1974 TOTAL 45,222.2 MEAN 124 MAX 1060 MIN 7.3 AC-FT 89740
WTR YR 1975 TOTAL 44,825.6 MEAN 122 MAX 959 MIN 7.3 AC-FT 88920

09525500. Yuma Main Canal below Colorado River siphon, at Yuma, Ariz.

LOCATION.--Two gages, one at each end of canal siphon passing under Colorado River. At intake, lat 32°43'49", long 114°37'09", in NE¼NE¼ sec.35, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, on left bank 1,645 ft (501 m) downstream from center of Yuma Main Canal wasteway gates and 3.5 mi (5.6 km) downstream from siphon-drop powerplant. At outlet, in NW¼NE¼ sec.35, T.16 S., R.22 E., San Bernardino meridian, in Arizona, Yuma County, on right bank. Siphon crossing is 1,500 ft (457 m) downstream from upper highway bridge over Colorado River at Yuma.

PERIOD OF RECORD.--January 1924 to current year. Prior to October 1938, monthly discharge only published in WSP 1313. Diversion from Yuma Main Canal for municipal supply for Yuma (sta 09526000), published with this record prior to October 1973, is listed separately in this report.

GAGE.--Water-stage recorder at each end of siphon. Datum of each gage is 100.62 ft (30.669 m) above mean sea level, datum of 1929, or 100.08 ft (30.504 m) above mean sea level, Yuma Project datum. Prior to Oct. 1, 1963, at datum 0.05 ft (0.015 m) lower. Elevation of sill of inlet is 125.5 ft (38.25 m) above mean sea level. Prior to Oct. 29, 1938, nonrecording gages at approximately same sites, read simultaneously.

AVERAGE DISCHARGE.--51 years, 468 ft^3/s (13.25 m^3/s), 339,100 acre-ft/yr (418 hm^3/yr).

EXTREMES.--1930 to current year: Maximum daily discharge, 948 ft^3/s (26.8 m^3/s) Aug. 16, 1962; no flow at times.

REMARKS.--Records excellent except those between 100 and 200 ft^3/s (2.83 and 5.66 m^3/s), which are good, and those below 100 ft^3/s (2.83 m^3/s), which are poor. Daily discharge computed from relation between discharge and head on siphon, which is the difference between intake and outlet gages. Records show quantity of water delivered through Colorado River siphon for irrigation of 43,527 acres (176 km^2) in 1974, in the Valley Division of the Yuma Project and for supplementary municipal supply for city of Yuma (see sta 09526000).

REVISIONS (WATER YEARS).--WSP 1713: 1958, 1959 (Yuma municipal supply).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	499	213	90	153	331	465	504	674	150	635	824	453
2	544	166	125	162	218	217	642	622	143	700	711	630
3	527	165	182	250	188	233	757	552	241	698	320	785
4	515	321	164	288	188	245	745	460	371	660	266	812
5	536	396	170	250	246	322	639	613	806	549	243	743
6	504	392	305	256	422	632	271	656	818	469	406	624
7	455	333	291	358	407	652	269	691	679	565	792	568
8	452	329	190	407	392	584	313	660	520	684	862	579
9	499	292	221	400	312	491	358	656	446	644	778	661
10	524	242	272	284	326	504	552	609	515	685	609	710
11	542	242	343	149	481	524	586	499	628	721	566	671
12	446	305	315	95	550	468	466	639	636	670	657	616
13	346	329	285	156	566	431	418	765	579	591	771	513
14	452	329	282	338	541	455	495	776	487	528	845	422
15	483	341	125	400	426	399	624	733	282	673	842	572
16	552	239	155	302	183	167	730	638	238	721	774	705
17	582	17	227	211	160	199	765	537	295	719	494	749
18	505	17	233	196	292	226	728	399	380	712	337	771
19	308	17	271	171	384	307	670	452	628	645	399	727
20	202	17	459	204	597	679	379	612	623	552	530	698
21	358	17	469	326	533	745	311	684	587	506	779	652
22	446	416	419	403	438	701	388	651	496	689	760	686
23	376	440	362	450	324	536	474	573	497	816	597	712
24	358	329	247	433	438	536	779	490	632	799	451	673
25	309	278	90	380	639	665	799	344	695	707	463	614
26	260	301	177	312	654	747	760	361	710	686	561	598
27	194	259	347	384	600	672	588	488	681	645	645	512
28	314	227	348	488	539	519	541	540	610	568	631	405
29	384	213	233	450	---	347	623	563	498	581	555	401
30	337	182	310	388	---	207	683	543	558	725	459	492
31	260	---	238	392	---	309	---	427	---	829	387	---
TOTAL	13069	7365	7945	9436	11375	14184	16857	17907	15429	20372	18314	18754
MEAN	422	246	256	304	406	458	562	578	514	657	591	625
MAX	582	440	469	488	654	747	799	776	818	829	862	812
MIN	194	17	90	95	160	167	269	344	143	469	243	401
AC-FT	25920	14610	15760	18720	22560	28130	33440	35520	30600	40410	36330	37200

CAL YR 1974 TOTAL 169340 MEAN 464 MAX 845 MIN 17 AC-FT 335900
WTR YR 1975 TOTAL 171007 MEAN 469 MAX 862 MIN 17 AC-FT 339200

09527000. Pilot Knob powerplant and wasteway near Pilot Knob, Calif.

LOCATION.--Lat 32°44'15", long 114°42'56", in NW¼SW¼ sec.25, T.16 S., R.21 E., San Bernardino meridian, Imperial County, 2 mi (3 km) east of summit of Pilot Knob, 6 mi (10 km) west of Yuma, Ariz., and 20.8 mi (33.5 km) downstream from intake of All-American Canal at Imperial Dam.

PERIOD OF RECORD.--February 1939 to current year. Prior to October 1943 monthly discharge only, published in WSP 1313. Prior to October 1956, published as Pilot Knob wasteway near Pilot Knob.

GAGE.--Totalizing flowmeter on each turbine. In addition, water-stage recorder in forebay on right bank of All-American Canal (also used as auxiliary gage for sta 09527500); tailrace gage with remote recorder logged hourly in control house; calibrated wicket gates for turbine flow and calibrated bypass gates for wasteway flow which are logged for each change. Datum of forebay staff gage is 150.00 ft (45.720 m); that of tailrace staff gage is 0.00 ft (0.000 m); elevation of sill of bypass gates is 147.88 ft (45.074 m) above mean sea level.

EXTREMES.--Period of record: Maximum daily discharge, 8,350 ft^3/s (236 m^3/s) Jan. 26, 1958; no flow for long periods.

REMARKS.--Records excellent above 1,200 ft^3/s (34.0 m^3/s) and good below. Daily discharge computed from flowmeter equipment or from head and gate openings on wicket gates. Records show water released through Pilot Knob powerplant and wasteway from All-American Canal and returned to Colorado River through Rockwood gates. Pilot Knob wasteway completed in summer of 1938 and first flow occurred Feb. 5, 1939. Pilot Knob powerplant was completed in January 1957 and first flow occurred Jan. 14, 1957. See table below for monthly return flow by Pilot Knob wasteway only.

COOPERATION.--Midnight readings of flowmeter, recorder graph of forebay, and record of tailrace elevation and gate openings furnished by Imperial Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0		0	1260	2200	1670	0	1630	2090	1280
2			0		0	1230	2410	1380	0	1650	2090	1300
3			0		0	1030	2530	1390	0	1720	2040	1260
4			0		0	1080	2550	1420	0	1480	1700	1250
5			0		0	1080	2320	1440	0	1750	1780	1250
6			0		0	1080	2230	1360	1040	1780	1950	1140
7			0		0	1080	2250	1290	1080	1810	1950	1110
8			0		0	1080	2370	1260	1130	1830	1960	1080
9			0		0	1150	2990	1260	0	1560	1980	1100
10			0		0	1390	3720	994	0	1640	1980	1050
11			0		0	1610	3560	41	0	1720	1970	996
12			0		0	1690	1880	0	0	1860	1990	1030
13			0		0	1680	1760	0	0	2020	2010	1030
14			0		0	1680	1570	0	0	2090	1900	986
15			0		0	1670	2060	0	0	2090	1870	966
16			623		0	1680	2060	0	1160	2120	1870	950
17			1000		206	1670	1740	0	1180	2100	1820	0
18			1020		998	1650	1980	0	1160	2100	1730	0
19			1010		1000	1660	2120	0	1150	2100	1760	0
20			1000		1050	1700	2160	0	1230	2120	1750	0
21			1000		1060	1960	2060	0	1350	2100	1630	0
22			1000		1250	1840	2140	0	1380	2070	1480	0
23			998		1430	1820	2120	0	1380	2090	1440	0
24			1000		1390	1890	2110	0	1410	2120	1430	0
25			1080		1430	1970	2130	0	1440	2080	1410	0
26			1200		1590	2000	2030	0	1460	2100	1500	0
27			1180		1560	2000	2010	0	1150	2090	1550	0
28			1180		1550	2000	1970	0	1120	2070	1540	0
29			1250		---	1990	1980	0	1340	2040	1560	0
30			1190		---	1960	1910	0	1510	2040	1580	0
31		---	1060		---	1840	---	0	---	2140	1560	---
TOTAL	0	0	16791	0	14514	49420	66920	13505	22670	60110	54870	17778
MEAN	0	0	542	0	518	1594	2231	436	756	1939	1770	593
MAX	0	0	1250	0	1590	2000	3720	1670	1510	2140	2090	1300
MIN	0	0	0	0	0	1030	1570	0	0	1480	1410	0
AC-FT	0	0	33300	0	28790	98020	132700	26790	44970	119200	108800	35260
(*)	0	0	371	0	0	0	0	0	0	0	0	0

CAL YR 1974	TOTAL	336369	MEAN 922	MAX 2640	MIN 0	AC-FT	667200	* 371
WTR YR 1975	TOTAL	316578	MEAN 867	MAX 3720	MIN 0	AC-FT	627900	* 371

* Return flow, in acre-feet, by Pilot Knob wasteway (included in daily discharge table).

09527500. All-American Canal below Pilot Knob wasteway, Calif.

LOCATION.--Lat 32°44'07", long 114°43'23", in NW¼SE¼ sec.26, T.16 S., R.21 E., San Bernardino meridian, Imperial County, on left bank 0.4 mi (0.6 km) downstream from Pilot Knob wasteway, 6 mi (10 km) west of Yuma, Ariz., 15 mi (24 km) upstream from turnout to Coachella Canal, and 21.2 mi (34.1 km) downstream from intake at Imperial Dam.

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

GAGE.--Water-stage recorder. Datum of gage is 150.00 ft (45.720 m) above mean sea level. Auxiliary water-stage recorder on right bank 0.4 mi (0.6 km) upstream used to determine head on Pilot Knob check gates (also used as forebay gage for sta 09527000, Pilot Knob powerplant and wasteway). Datum of auxiliary gage is 150.00 ft (45.720 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 4,723 ft^3/s (133.8 m^3/s), 3,422,000 acre-ft/yr (4,220 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 7,380 ft^3/s (209 m^3/s) May 14, 1975; no flow Jan. 4, 1967.

REMARKS.--Records excellent. Water is used for power development at three sites below station, and for irrigation in Coachella and Imperial Valleys.

COOPERATION.--Gage-height record and log of gate operation furnished by Imperial Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5280	3140	2550	3610	4040	4900	6220	7080	5900	5400	5620	6170
2	5310	3200	3020	4160	3210	4610	6440	7150	6020	5480	5740	6070
3	5530	3200	3290	4000	3640	5100	6400	7290	6040	5480	5370	6240
4	5710	3270	3200	3760	3420	5130	6360	7070	6190	4990	5500	6430
5	5530	3380	2400	3140	3390	5050	6350	6850	6050	5110	5660	6620
6	5490	3470	2390	2330	3060	5080	6500	6810	5990	5190	5800	6610
7	5480	3580	1850	2520	3180	5050	6510	6870	5860	5200	5720	5740
8	5310	3650	1900	2530	3300	5060	6820	6740	5560	5670	5920	5320
9	5360	3680	1860	2620	3590	4880	5270	6650	5170	5790	6010	5020
10	5320	3550	2140	2850	3840	4910	3210	6830	5250	5880	6030	5090
11	5030	3350	2350	3540	3650	4490	3450	6880	5450	5600	6020	4790
12	4960	3340	2560	3410	3890	4250	3360	6910	5500	5700	6210	5090
13	4710	3840	2860	3560	4050	4430	3110	7080	5460	5830	6100	5080
14	4450	3900	2980	3590	4010	3790	3970	7380	5300	5780	6140	5060
15	4420	3730	3120	3700	4150	3950	4310	7290	5320	5760	6080	5320
16	4530	3590	2880	3960	4240	4130	4990	7260	5240	5780	6250	5510
17	4790	3400	2520	3900	4180	4470	5680	7270	5180	5840	6260	5730
18	4780	3250	2610	3830	4400	4660	6130	6800	5270	5710	6130	5660
19	4770	3260	2970	3520	4270	5100	6450	6360	5320	5690	6230	5700
20	4370	3500	2920	3460	4400	5600	6880	6340	5370	5620	6330	5540
21	4300	3380	2800	3530	4490	5760	6970	6510	5340	5610	5850	5460
22	4310	3310	3120	3500	4940	6100	7000	6490	5110	5710	5850	5570
23	4330	2950	2940	3650	4850	6190	7040	6100	4840	5840	5720	5720
24	4150	2820	2800	3620	4530	6460	6920	6170	5100	5910	5450	6030
25	3760	2680	2140	3840	4830	6450	6750	5760	5270	5620	5200	5990
26	3220	2920	2580	3800	4850	6510	6850	5740	5290	5680	5380	5990
27	3120	3010	3260	4000	4990	6760	6990	5790	5430	5760	5700	6060
28	3230	2710	3480	4110	4720	6830	6980	5990	5470	6000	5890	5840
29	3220	2500	3470	4450	---	6400	7110	6070	5330	5990	5790	5860
30	3530	2570	3380	4560	---	5910	7080	6100	5400	5760	5700	5860
31	3590	---	3730	4240	---	6420	---	6000	---	5760	5940	---
TOTAL	141890	98130	86070	111290	114110	164430	178100	205630	164020	175140	181590	171170
MEAN	4577	3271	2776	3590	4075	5304	5937	6633	5467	5650	5858	5706
MAX	5710	3900	3730	4560	4990	6830	7110	7380	6190	6000	6330	6620
MIN	3120	2500	1850	2330	3060	3790	3110	5740	4840	4990	5200	4790
AC-FT	281400	194600	170700	220700	226300	326100	353300	407900	325300	347400	360200	339500

CAL YR 1974 TOTAL 1865000 MEAN 5110 MAX 7290 MIN 810 AC-FT 3699000
WTR YR 1975 TOTAL 1791570 MEAN 4908 MAX 7380 MIN 1850 AC-FT 3554000

Return surface flows below Imperial Dam, Ariz.-Calif.

Between Imperial Dam and the international boundary return surface flows from irrigated areas enter the Colorado River through many drains and wasteways in Arizona and California. Other return flows enter the Gila River below the gaging station near Dome (09520500). In addition, return flows collected by the Main Drain and East Main Canal are delivered across the international boundary for use in Mexico.

Diversions for irrigation in the Gila Project in Arizona are made at Imperial Dam by the Gila Gravity Main Canal. (See sta 09522500.) Diversions for the Yuma Project in Arizona and California are made at Imperial Dam by the All-American Canal (see sta 09523000) and by the Yuma Main Canal. (See stas 09524000 and 09525500.) See p. 352 for records of diversions.

See figure 5 on p. 339 for a schematic diagram showing location of diversions and return flows.

09525000. YUMA MAIN CANAL WASTEWAY.--See daily table elsewhere in this report.

09527000. PILOT KNOB POWERPLANT AND WASTEWAY.--See daily table elsewhere in this report.

09527900. MITTRY LAKE OUTLET CHANNEL
LOCATION.--Water-stage recorder and sharp-crested weir, in NW¼SE¼ sec.14, T.7 S., R.22 W., 1,000 ft (300 m) upstream from outlet to Colorado River and Laguna Dam.

PERIOD OF RECORD.--Monthly discharge October 1974 to September 1975.

REMARKS.--Record shows return flow to Colorado River from Mittry Lake. Record prior to Nov. 6, 1974, records furnished by Bureau of Reclamation.

09528600. LAGUNA CANAL WASTEWAY.
LOCATION.--Water-stage recorder and sharp-crested weir, in SE¼SW¼ sec.14, T.7 S., R.22 W., 1,000 ft (300 m) downstream from Laguna Dam and 0.7 mi (1.1 km) upstream from outlet to Colorado River.

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

REMARKS.--Record shows waste water from North Gila Valley Irrigation District returned to Colorado River. Flow record computed from standard weir rating.

09528800. LEVEE CANAL WASTEWAY.
LOCATION.--Water-stage recorder and sharp-crested weir, in SE¼SW¼ sec.4, T.8 S., R.22 W., 1,000 ft (300 m) upstream from outlet to Colorado River.

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

REMARKS.--Record shows waste water from North Gila Valley Irrigation District returned to Colorado River.

09529000. NORTH GILA DRAIN NO. 1.
LOCATION.--Water-stage recorder, in SE¼SW¼ sec.4, T.8 S., R.22 W., 0.25 mi (0.40 km) upstream from outlet to Colorado River and 5.5 mi (8.8 km) downstream from Laguna Dam.

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

REMARKS.--Record shows waste water from North Gila Valley Irrigation District returned to Colorado River. There is no gage, but, due to fairly constant drainage, flow record is computed by interpolation between discharge measurements made monthly.

09529050. NORTH GILA DRAIN NO. 3.
LOCATION.--Drain enters wasteway to Gila River in NE¼NE¼ sec.18, T.8 S., R.21 W., 1,000 ft (300 m) upstream from Gila River.

PERIOD OF RECORD.--Monthly discharge April 1962 to current year.

REMARKS.--Record shows seepage from Gila Gravity Main Canal. There is no gage; records are computed by interpolation between discharge measurements made monthly.

09529100. FORTUNA WASTEWAY.
LOCATION.--Water-stage recorder and sharp-crested weir, in NE¼ sec.30, T.8 S., R.21 W., 1.3 mi (2.1 km) upstream from Gila River.

PERIOD OF RECORD.--Monthly discharge October 1960 to September 1963, October 1964 to current year.

REMARKS.--Record shows waste water spilled from Gila Gravity Main Canal; flow rarely reaches Gila River.

09529150. NORTH GILA MAIN CANAL WASTEWAY.
LOCATION.--Water-stage recorder in NE¼NW¼ sec.22, T.8 S., R.22 W., 1,000 ft (300 m) upstream from outlet to Gila River. Prior to July 1966 water-stage recorder and sharp-crested weir, 1 mi (1.6 km) upstream from outlet to Gila River.

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

REMARKS.--Record shows waste water from North Gila Valley Irrigation District. Prior to July 1966 record shows waste water less flow diverted for irrigation between gage and Gila River.

09529160. SOUTH GILA PUMP OUTLET CHANNEL NO. 3.
LOCATION.--Water-stage recorder in NW¼SE¼ sec.22, T.8 S., R.22 W., 0.5 mi (0.8 km) upstream from outlet to Gila River. Prior to Aug. 1, 1965, record obtained by Badger total-flow meter about 500 ft (150 m) downstream.

PERIOD OF RECORD.--Monthly discharge January 1965 to current year.

REMARKS.--Record shows water pumped from wells in South Gila Valley Unit.

Return surface flows below Imperial Dam, Ariz.-Calif.--Continued

09529200. BRUCE CHURCH DRAIN.
LOCATION.--At culvert in NW¼NE¼ sec.21, T.8 S., R.22 W., 0.2 mi (0.3 km) upstream from outlet to Gila River.

PERIOD OF RECORD.--Monthly discharge April 1962 to current year.

REMARKS.--Record shows seepage water from parts of secs.15, 16, and 21 (Bruce Church Ranch). Flow computed by interpolation between discharge measurements; prior to Nov. 30, 1970, flow determined from pump rating.

09529240. SOUTH GILA PUMP OUTLET CHANNEL NO. 2.
LOCATION.--Water-stage recorder in SW¼NW¼ sec.28, T.8 S., R.22 W., 0.6 mi (1.0 km) upstream from outlet to Gila River; prior to Oct. 18, 1965, outlet was to Wellton-Mohawk Main Outlet Drain. Prior to Aug. 1, 1965, Sparling meter at outlet to Wellton-Mohawk Main Outlet Drain.

PERIOD OF RECORD.--Monthly discharge January 1962 to current year.

REMARKS.--Record shows water pumped from wells in South Gila Valley Unit and conveyed by concrete channel to the Gila River.

09529250. BRUCE CHURCH WASTEWAY.
LOCATION.--Water-stage recorder and sharp-crested weir, in SE¼SE¼ sec.20, T.8 S., R.22 W., 500 ft (150 m) upstream from outlet to Gila River.

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

REMARKS.--Record shows waste water from North Gila Valley Irrigation District returned to Gila River.

09529300. WELLTON-MOHAWK MAIN OUTLET DRAIN (CONVEYANCE CHANNEL).
LOCATION.--Water-stage recorder and Parshall flume in NE¼NW¼ sec.17, T.8 S., R.21 W., 7.8 mi (12.6 km) upstream from outlet to Gila River (M.O.D.E. 1), which is 0.6 mi (1.0 km) upstream from mouth of Gila River. Prior to Feb. 20, 1962, gage heights measured from reference point on measuring bridge. Prior to Oct. 1, 1974, gage located 1,000 ft (300 m) upstream without Parshall flume.

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

REMARKS.--Record shows water pumped from numerous wells in Wellton-Mohawk Irrigation and Drainage District to lower the water table. Flow can be discharged to the Gila River or Colorado River by any one of or combination of three outlets. These outlets are known as: M.O.D.E. 1 (release to Gila River about 8.0 mi (13 km) below station); M.O.D.E. 2 (see sta 09531800), release to Colorado River above Morelos Dam; and M.O.D.E. 3 (see sta 09531900), release to Colorado River below Morelos Dam. No water was released through M.O.D.E. 1 during the year.

09529360. SOUTH GILA PUMP OUTLET CHANNEL NO. 1.
LOCATION.--Water-stage recorder in SW¼NE¼ sec.30, T.8 S., R.22 W., 0.2 mi (0.3 km) upstream from outlet to Gila River, which is 0.6 mi (1.0 km) upstream from mouth of Gila River. Prior to Aug. 1, 1965, Sparling flowmeter 300 feet (90 m) upstream.

PERIOD OF RECORD.--Monthly discharge August 1961 to current year.

REMARKS.--Record shows water pumped from wells in South Gila Valley Unit and conveyed by concrete channel to Gila River.

09529400. SOUTH GILA DRAIN NO. 2.
LOCATION.--Near center of sec.24, T.8 S., R.23 W., at outlet to Colorado River. Prior to Oct. 1, 1969, Sparling flowmeter at same site.

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

REMARKS.--Record shows ground-water drainage and occasional waste water from South Gila Valley Unit returned to Colorado River. There is no gage; flow record computed by interpolation between discharge measurements made monthly.

09529420. SOUTH GILA TERMINAL WASTEWAY.
LOCATION.--Water-stage recorder and Parshall flume in SW¼NW¼ sec.36, T.8 S., R.23 W., 2.0 mi (3.2 km) upstream from outlet to Colorado River. Prior to Aug. 1, 1965, total-flow meter at same site.

PERIOD OF RECORD.--Monthly discharge March 1965 to current year.

REMARKS.--Record shows waste water from South Gila Canal of South Gila Valley Unit returned to Colorado River.

09529440. SOUTH GILA PUMP OUTLET CHANNEL NO. 4.
LOCATION.--Water-stage recorder and broad-crested weir, in NW¼NW¼ sec.26, T.8 S., R.23 W., 1.5 mi (2.4 km) upstream from outlet to Colorado River.

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

REMARKS.--Record shows water pumped from wells in South Gila Valley Unit and conveyed by concrete-lined channel to Colorado River.

09529600. RESERVATION DRAIN NO. 7.
LOCATION.--At downstream end of culvert on State Road 24 (formerly Avenue C), in NE¼NE¼ sec.33, T.15 S., R.23 E., San Bernardino meridian, 0.5 mi (0.8 km) upstream from outlet to Reservation Main Drain. Prior to Oct. 1, 1969, nonrecording gage at same site.

PERIOD OF RECORD.--Monthly discharge March 1966 to current year.

REMARKS.--Record shows drainage water from sec.34, T.15 S., R.23 E., and is used with sta 09529700 to determine seepage from All-American Canal. There is no gage; flow record computed by interpolation between discharge measurements made monthly. Beginning June 20, 1967, Imperial Irrigation District makes discharge measurements weekly.

Return surface flows below Imperial Dam, Ariz.-Calif.--Continued

09529700. RESERVATION MAIN DRAIN NO. 6.
LOCATION.--Nonrecording gage on upstream right piling of Stallnacker Road Bridge (formerly 9th Street Bridge), in SE¼SW¼ sec.32, T.15 S., R.23 E., San Bernardino meridian.

PERIOD OF RECORD.--Monthly discharge March 1966 to current year.

REMARKS.--Record shows waste and drainage water from the Reservation Division, and is used with sta 09529600 to determine seepage from All-American Canal, which parallels drain for 4 mi (6.4 km). Flow record computed by interpolation between discharge measurements made monthly. The Imperial Irrigation District makes discharge measurements weekly.

09529800. RESERVATION DRAIN NO. 2.
LOCATION.--At upstream side of bridge on White Road (formerly 8th Street), in SW¼NW¼ sec.6, T.16 S., R.23 E., San Bernardino meridian, 0.9 mi (1.4 km) upstream from outlet to Reservation Main Drain.

PERIOD OF RECORD.--Monthly discharge March 1966 to current year.

REMARKS.--Record used to compute seepage from All-American Canal in sec.31, T.15 S., R.22 E. There is no gage; flow record computed by interpolation between discharge measurements made monthly. The Imperial Irrigation District makes discharge measurements weekly.

09529900. RESERVATION DRAIN NO. 3.
LOCATION.--Nonrecording gage on pier on right side of Jackson Road Bridge (formerly 5th Street Bridge), in SE¼SE¼ sec.10, T.16 S., R.22 E., San Bernardino meridian, 1.0 mi (1.6 km) upstream from outlet to Reservation Main Drain.

PERIOD OF RECORD.--Monthly discharge March 1966 to current year.

REMARKS.--Record used to compute seepage from All-American Canal upstream from Yuma Main Canal. Flow record computed by interpolation between discharge measurements made monthly. Imperial Irrigation District makes discharge measurements weekly.

09530000. RESERVATION MAIN DRAIN NO. 4.
LOCATION.--Water-stage recorder and vane meter in NW¼SE¼ sec.26, T.16 S., R.22 E., San Bernardino meridian, 1,000 ft (300 m) upstream from railroad culvert. Prior to May 29, 1974, water-stage recorder only. Prior to Dec. 16, 1971, at culvert 1,000 ft (300 m) downstream. Flow enters Yuma Main Canal wasteway channel 200 ft (60 m) downstream from spillway structure. Prior to May 1955, it entered 500 ft (150 m) upstream from outlet of Yuma Main Canal wasteway in SE¼SW¼ sec.26, T.16 S., R.22 E., San Bernardino meridian.

PERIOD OF RECORD.--Monthly discharge January 1913 to April 1920, October 1921 to March 1925, January 1934 to current year (calendar year discharge only 1934-36). Prior to October 1955, published as California drainage canal. Prior to January 1937, no gage; 1937 to Apr. 16, 1941, nonrecording gages at same site at different datums.

REMARKS.--Record shows waste and drainage water from area east of Yuma Main Canal on Reservation Division. Since 1939, seepage from All-American Canal has caused large increase. Flow is not included in the record of Yuma Main Canal wasteway.

09530200. YUMA MESA OUTLET DRAIN.
LOCATION.--Venturi meter with recorder in SE¼SW¼ sec.28, T.16 S., R.22 E., San Bernardino meridian, in Arizona, Yuma County, 0.3 mi (0.5 km) from outlet to Colorado River.

PERIOD OF RECORD.--Monthly discharge July 1970 to current year.

REMARKS.--Record shows water pumped from wells on the Yuma Mesa and conveyed by underground conduit to Colorado River.

COOPERATION.--Records furnished by Bureau of Reclamation prior to July 21, 1972.

09530400. RESERVATION DRAIN NO. 11.
LOCATION.--At outlet to Drain 8-B (Araz drain), in NE¼NE¼ sec.19, T.16 S., R.22 E., San Bernardino meridian.

PERIOD OF RECORD.--Monthly discharge March 1966 to current year.

REMARKS.--Record shows drainage from sec.20, T.16 S., R.22 E. Flow at this station, with that at sta 09530500, is used to determine seepage from All-American Canal. There is no gage; flow record computed by interpolation between discharge measurements made monthly. Beginning June 20, 1967, Imperial Irrigation District makes discharge measurements weekly.

09530500. DRAIN 8-B.
LOCATION.--Enters Colorado River in NE¼NW¼ sec.30, T.16 S., R.22 E., San Bernardino meridian, 4 mi (6.4 km) downstream from outlet of Yuma Main Canal wasteway.

PERIOD OF RECORD.--Monthly discharge March 1948 to current year. Prior to October 1955, published as Araz drain.

REMARKS.--Record shows seepage from All-American Canal, and waste and drainage water west of Yuma Main Canal on the Reservation Division. Flow at this station, with that at sta 09530400, is used to determine seepage from All-American Canal. There is no gage, but due to fairly constant drainage, flow record is computed by interpolation between discharge measurements made monthly. Imperial Irrigation District makes discharge measurements weekly at site 1,000 ft (300 m) upstream.

09531800. MAIN OUTLET DRAIN EXTENSION ABOVE MORELOS DAM (M.O.D.E. 2).
LOCATION.--Water-stage recorder and Parshall flume in NW¼NW¼ sec.36, T.16 S., R.21 E., San Bernardino meridian, at outlet to Colorado River, 1.7 mi (2.7 km) upstream from Morelos Dam.

PERIOD OF RECORD.--Monthly discharge November 1965 to current year.

REMARKS.--Record shows water conveyed to Colorado River 1.7 mi (2.7 km) above Morelos Dam, from numerous drainage wells in Wellton-Mohawk Irrigation and Drainage District. (See also stas 09529300 and 09531900.)

Return surface flows below Imperial Dam, Ariz.-Calif.--Continued

09531850. COOPER WASTEWAY.
LOCATION.--Water-stage recorder and weir, in NE¼NE¼ sec.28, T.8 S., R.24 W., 0.6 mi (1.0 km) upstream from Morelos Dam. Prior to July 14, 1971, at site 1 mi (1.6 km) downstream.

PERIOD OF RECORD.--Monthly discharge January 1934 to current year.

REMARKS.--Record shows waste water from Valley Division returned to Colorado River.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09531900. MAIN OUTLET DRAIN EXTENSION BELOW MORELOS DAM (M.O.D.E 3).
LOCATION.--Water-stage recorder and Parshall flume in NW¼SE¼ sec.28, T.8 S., R.24 W., at outlet to Colorado River just downstream from Morelos Dam.

PERIOD OF RECORD.--Monthly discharge November 1965 to current year.

REMARKS.--Record shows water conveyed to Colorado River below Morelos Dam, from numerous drainage wells in Wellton-Mohawk Irrigation and Drainage District. (See also stas 09529300, 09531800.)

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09532500. ELEVEN MILE WASTEWAY.
LOCATION.--Water-stage recorder and regulating gate in SE¼NW¼ sec.8, T.9 S., R.24 W., 3.2 mi (5.1 km) downstream from Morelos Dam.

PERIOD OF RECORD.--Monthly discharge January 1924 to current year.

REMARKS.--Record shows waste water from Valley Division returned to Colorado River.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09533000. TWENTY-ONE MILE WASTEWAY.
LOCATION.--Water-stage recorder and weir in NE¼NW¼ sec.35, T.10 S., R.25 W., 0.6 mi (1.0 km) upstream from outlet to Colorado River, which is 2.4 mi (3.9 km) upstream from southerly international boundary and 2.6 mi (4.2 km) northwest of San Luis, Ariz. Prior to May 1, 1971, water-stage recorder and Parshall flume at site 200 ft (60 m) upstream.

PERIOD OF RECORD.--Monthly discharge March 1939 to current year.

REMARKS.--Record shows waste water from Valley Division returned to Colorado River.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09534000. MAIN DRAIN.
LOCATION.--Flowmeters in discharge pipes at pumping plant in SE¼NE¼ sec.11, T.11 S., R.25 W., 0.4 mi (0.6 km) west of San Luis, Ariz. Prior to Apr. 1, 1969, rated pumps with forebay and afterbay gages to measure head.

PERIOD OF RECORD.--Monthly discharge January 1919 to current year.

REMARKS.--Record shows flow which consists mostly of drainage water from the Valley Division which is pumped across the Arizona-Sonora boundary for use in Mexico. Flowmeters checked by discharge measurements made by International Boundary and Water Commission (U.S. Section).

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09534300. WEST MAIN CANAL WASTEWAY.
LOCATION.--Water-stage recorder and weir, in NW¼NE¼ sec.11, T.11 S., R.25 W., 0.3 mi (0.5 km) upstream from outlet to Main drain, and 0.4 mi (0.6 km) west of San Luis, Ariz. Prior to Aug. 1, 1975, at site 150 ft (46 m) upstream from outlet to Main drain.

PERIOD OF RECORD.--Monthly discharge February 1971 to current year.

REMARKS.--Record shows waste water from Valley Division which is discharged across the Arizona-Sonora boundary for use in Mexico.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09534500. EAST MAIN CANAL WASTEWAY.
LOCATION.--Water-stage recorder and weir, in NW¼SW¼ sec.12, T.11 S., R.25 W., 0.3 mi (0.5 km) upstream from outlet to Main drain, and 0.2 mi (0.3 km) west of San Luis, Ariz.

PERIOD OF RECORD.--Monthly discharge January 1924 to June 1928, January 1932 to December 1933, April 1935 to current year. Calendar year estimates 1934 and 1935, published in WSP 1313.

REMARKS.--Record shows amount of unused water at the extreme end of the Valley Division which is discharged across the Arizona-Sonora boundary for use in Mexico.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

Return surface flows below Imperial Dam, Ariz.-Calif.--Continued

MONTHLY RETURN FLOWS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	Mittry Lake Outlet Channel 09527900	Laguna Canal wasteway 09528600	Levee Canal wasteway 09528800	North Gila Drain No. 1 09529000	North Gila Drain No. 3 09529050	Fortuna wasteway 09529100
October	736	0	116	462	0	41
November	509	8.5	173	378	0	40
December	645	5.1	102	303	0	37
CAL YR 1974	-	14	1,710	4,480	24	515
January	586	3.4	104	323	5.8	47
February	571	1.2	136	429	5.6	37
March	587	0	91	324	1.4	40
April	682	0	175	241	0	40
May	819	.2	146	380	0	36
June	606	0	89	383	0	30
July	711	0	143	433	0	24
August	1,440	0	172	498	0	21
September	1,540	1.8	110	437	0	22
WTR YR 1975	9,440	20	1,550	4,590	13	416

Month	North Gila Main Canal wasteway 09529150	South Gila Pump Outlet Channel No. 3 09529160	Bruce Church Drain 09529200	South Gila Pump Outlet Channel No. 2 09529240	Bruce Church wasteway 09529250
October	34	4.4	104	952	67
November	44	7.6	99	1,410	22
December	9.6	150	76	1,940	7.6
CAL YR 1974	348	4,000	995	12,640	390
January	4.6	1.8	46	636	13
February	43	3.1	44	715	10
March	24	1,580	52	2,210	4.1
April	57	1,680	53	1,950	12
May	71	199	65	1,910	6.0
June	66	11	82	2,040	17
July	105	1,490	97	2,160	.8
August	99	1,980	91	2,200	2.8
September	42	183	89	1,540	0
WTR YR 1975	598	7,300	898	19,650	161

Month	Wellton-Mohawk Main Outlet Drain 09529300	South Gila Pump Outlet Channel No. 1 09529360	South Gila Drain No. 2 09529400	South Gila Terminal wasteway 09529420	South Gila Pump Outlet Channel No. 4 09529440
October	18,400	1,590	23	66	0
November	17,410	1,450	48	44	1.0
December	18,320	2,710	37	20	0
CAL YR 1974	206,400	29,370	210	481	4,400
January	18,150	1,370	28	3.3	0
February	16,420	1,950	28	12	0
March	16,770	2,720	28	17	0
April	13,370	2,390	12	38	482
May	17,530	2,700	0	34	0
June	17,870	2,660	0	37	.3
July	18,770	2,670	14	43	343
August	18,110	2,650	32	19	234
September	17,770	2,540	14	42	17
WTR YR 1975	208,900	27,380	264	375	1,080

NOTE.--Yearly totals given above have been computed from total cfs-days and may differ slightly from the summation of monthly total acre-feet on occasion.

Return surface flows below Imperial Dam, Ariz.-Calif.--Continued

MONTHLY RETURN FLOWS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Month	Reservation Drain No. 7 09529600	Reservation Main Drain No. 6 09529700	Reservation Drain No. 2 09529800	Reservation Drain No. 3 09529900	Reservation Main Drain No. 4 09530000	Yuma Mesa Outlet Drain 09530200
October	84	1,110	35	260	3,830	5,360
November	60	1,010	45	250	3,630	5,140
December	57	928	17	230	3,680	5,260
CAL YR 1974	940	11,860	204	3,100	39,750	58,070
January	56	847	12	172	3,040	5,110
February	66	795	6.0	144	2,700	4,670
March	118	952	11	172	3,300	5,090
April	116	1,050	12	221	3,680	4,060
May	125	1,110	16	262	3,800	4,930
June	96	1,010	10	249	3,210	4,830
July	111	984	6.9	259	3,130	4,900
August	108	1,060	12	290	3,500	4,750
September	95	1,070	10	269	3,480	4,500
WTR YR 1975	1,090	11,930	193	2,780	40,980	58,590

Month	Reservation Drain No. 11 09530400	Drain 8-B 09530500	M.O.D.E. 2 (above Morelos Dam) 09531800	Cooper wasteway 09531850	M.O.D.E. 3 (below Morelos Dam) 09531900
October	37	195	0	39	19,000
November	36	202	0	40	17,900
December	31	171	0	64	18,500
CAL YR 1974	294	1,610	0	681	210,700
January	22	128	0	48	18,630
February	17	106	0	96	16,990
March	19	128	0	81	17,510
April	18	131	0	39	13,120
May	25	144	0	47	17,580
June	28	126	0	66	17,950
July	29	166	0	72	18,950
August	34	204	0	51	18,870
September	42	225	0	35	18,470
WTR YR 1975	329	1,930	0	678	213,500

Month	Eleven Mile wasteway 09532500	Twenty-one Mile wasteway 09533000	Main Drain 09534000	West Main Canal wasteway 09534300	East Main Canal wasteway 09534500
October	60	0	8,850	270	552
November	160	0	7,890	390	460
December	197	0	7,330	375	607
CAL YR 1974	942	4.8	96,520	4,840	5,590
January	21	0.4	7,140	422	650
February	145	0	6,480	429	454
March	159	0	7,500	939	481
April	73	1.0	7,430	664	455
May	21	5.2	8,520	422	872
June	153	0.8	8,020	407	458
July	14	1.6	8,130	382	656
August	181	0	8,090	392	820
September	20	0	8,430	429	848
WTR YR 1975	1,200	9.0	93,810	5,520	7,310

NOTE.--Yearly totals given above have been computed from total cfs-days and may differ slightly from the summation of monthly total acre-feet on occasion.

09527900. Mittry Lake Outlet Channel near Yuma, Ariz.

LOCATION.--Lat 32°48'09", long 114°28'05', in NW¼SE¼ sec.14, T.7 S., R.22 W., Yuma County, at water-stage recorder and sharp-crested weir, 1,000 ft (305 m) upstream from outlet into Colorado River above Laguna Dam, and 12 mi (19 km) northeast of Yuma.

PERIOD OF RECORD.--Chemical analyses: September 1974 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
SEP. 09...	0155	31	26	0	110	39	260	9.5	256	460	210

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
SEP. 09...	2.5	.13	1300	1240	1.77	440	230	5.4	1980	28.5	720

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT. 07...	0200	21	26	20	110	39	260	8.8	244	--	480	210
NOV. 04...	0225	18	22	0	100	35	250	8.3	227	--	460	200
DEC. 02...	0200	31	18	50	86	38	250	8.0	227	--	440	210
JAN. 06...	0240	9.2	17	10	110	39	240	7.6	243	--	470	210
FEB. 03...	0210	12	16	10	110	38	250	7.6	258	--	480	220
MAR. 03...	0210	12	11	10	120	40	260	7.7	264	--	480	210
APR. 08...	0140	10	11	10	110	43	260	9.4	265	--	490	230
MAY 05...	0055	16	11	10	120	44	260	7.8	274	0	470	220
JUNE 02...	0215	14	13	10	110	46	260	8.9	258	0	490	220
JULY 07...	0300	12	18	0	110	42	260	9.1	226	0	510	220
AUG. 04...	0140	9.2	22	20	100	43	250	6.1	223	0	490	220
SEP. 03...	0225	21	24	20	110	47	250	10	236	0	490	200

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT. 07...	2.4	.01	1250	1260	1.70	440	240	5.4	1960	--	25.0	330
NOV. 04...	2.1	.03	1240	1190	1.69	390	210	5.5	1910	--	18.0	400
DEC. 02...	2.0	.03	1210	1160	1.65	370	190	5.6	1860	--	14.5	340
JAN. 06...	1.8	.05	1220	1220	1.66	440	240	5.0	1860	--	8.0	340
FEB. 03...	1.8	.05	1260	1250	1.71	430	220	5.2	1930	--	15.0	350
MAR. 03...	1.9	.02	1300	1260	1.77	460	250	5.3	1980	--	15.0	370
APR. 08...	1.9	.02	--	1290	1.75	450	230	5.3	2010	--	15.5	370
MAY 05...	1.9	.59	1300	1270	1.77	480	260	5.2	2020	8.0	23.5	390
JUNE 02...	2.0	.00	1290	1280	1.75	460	250	5.3	2000	8.0	27.0	370
JULY 07...	2.0	.06	1300	1280	1.77	450	260	5.3	1980	7.9	--	380
AUG. 04...	2.0	.32	1240	1240	1.69	430	250	5.3	1930	8.0	29.0	380
SEP. 03...	2.0	.02	1250	1250	1.70	470	270	5.0	1890	8.0	29.0	360

09529000. North Gila drain No. 1 near Yuma, Ariz.

LOCATION.--Lat 32°45'29", long 114°27'18", in NE¼NW¼ sec.9, T.8 S., R.22 W., Yuma County, 0.1 mi (0.2 km) upstream from outlet to Colorado River, and 6 mi (10 km) northeast of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1973 (partial-record station), October 1973 to current year.

REMARKS.--Unpublished chemical analyses (partial record) for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
21...	1235	6.5	23	0	110	37	260	6.3	251	--	460	240
NOV.												
18...	1115	6.4	21	40	120	42	280	4.4	256	--	490	250
DEC.												
16...	0950	5.0	20	30	120	43	260	5.1	258	--	440	240
JAN.												
20...	1130	4.7	20	30	110	38	240	5.1	247	--	440	230
FEB.												
18...	1120	6.3	20	10	110	43	260	5.1	256	--	500	230
MAR.												
24...	1030	5.6	19	10	120	48	260	5.2	268	--	510	230
APR.												
21...	0935	2.7	19	10	120	48	260	5.1	272	--	490	240
MAY												
19...	0945	6.9	20	20	110	48	280	4.8	275	0	470	230
JUNE												
23...	1225	6.0	20	40	100	43	230	5.0	209	0	430	200
JULY												
22...	1015	7.0	22	200	110	40	230	5.3	233	0	450	220
AUG.												
26...	1305	8.3	23	0	100	36	250	4.8	231	0	460	200

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.												
21...	.7	.32	1320	1260	1.80	430	220	5.5	1980	--	24.0	60
NOV.												
18...	.6	.34	1370	1340	1.86	470	260	5.6	2040	--	19.5	340
DEC.												
16...	.5	.23	1310	1260	1.78	480	270	5.2	2020	--	13.0	320
JAN.												
20...	.6	.34	1280	1210	1.74	430	230	5.0	1930	--	15.0	300
FEB.												
18...	.7	.50	1320	1300	1.80	450	240	5.3	1980	--	14.5	320
MAR.												
24...	.6	.27	1360	1330	1.85	500	280	5.1	2020	--	17.0	370
APR.												
21...	.6	.24	1380	1320	1.88	500	270	5.1	2070	--	19.5	350
MAY												
19...	.6	.21	1380	1300	1.88	470	250	5.6	2130	8.0	22.0	330
JUNE												
23...	.6	.08	1190	1130	1.62	430	260	4.8	1790	8.2	28.0	270
JULY												
22...	.6	.13	1210	1190	1.65	440	250	4.8	1780	8.1	27.0	280
AUG.												
26...	.6	.60	1230	1190	1.67	400	210	5.5	1830	8.0	28.5	300

09529050. North Gila drain No. 3 near Yuma, Ariz.

LOCATION.--Lat 32°44'28", long 114°26'39", in NE¼NE¼ sec.18, T.8 S., R.21 W., Yuma County, 0.2 mi (0.3 km) upstream from outlet to Gila River, and 10 mi (16 km) east of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1973 (partial-record station), October 1973 to current year.

REMARKS.--No flow for many days of most months. Unpublished chemical analyses (partial record) for water years 1965-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
JAN. 20...	0930	.10	22	10	100	32	160	5.5	214	360	150
FEB. 18...	1000	.07	20	10	96	36	160	5.3	212	370	150
APR. 21...	1015	.00	9.2	10	94	37	170	5.6	202	350	150

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
JAN. 20...	.7	.01	967	936	1.32	380	210	3.6	1440	12.0	210
FEB. 18...	.7	.01	975	943	1.33	390	210	3.5	1460	8.5	230
APR. 21...	.7	.02	970	916	1.32	390	220	3.8	1500	22.0	230

09529160. South Gila Pump Outlet Channel No. 3 near Yuma, Ariz.

LOCATION.--Lat 32°43'04", long 114°30'12", in NW¼SE¼ sec.22, T.8 S., R.22 W., Yuma County, at gaging station 0.5 mi (0.8 km) upstream from outlet to Gila River, and 6 mi (10 km) east of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--No flow for many days of most months. Unpublished miscellaneous chemical analyses for water years 1965-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
DEC.												
23...	1100	53	22	--	210	84	500	8.6	246	--	320	1010
30...	0210	9.5	24	--	200	78	465	8.6	254	--	270	950
MAR.												
17...	0310	36	23	--	252	107	660	9.3	368	--	470	1220
24...	0315	37	22	--	252	107	665	9.6	370	--	480	1220
31...	0325	35	23	--	254	106	670	9.7	370	--	480	1220
APR.												
07...	0135	44	26	10	250	120	710	12	402	--	580	1300
21...	0320	29	24	--	220	98	590	8.3	386	--	440	1050
28...	0300	29	24	--	216	102	595	8.2	384	--	450	1060
MAY												
05...	0525	11	27	10	200	77	400	8.1	395	0	350	710
JULY												
07...	0400	23	28	40	320	130	1000	14	454	0	810	1600
14...	0435	23	23	--	300	154	1000	12	460	0	790	1700
21...	0330	23	25	--	306	148	1000	12	462	0	790	1680
28...	0555	23	24	--	308	149	1010	12	468	0	810	1690
AUG.												
04...	0250	41	28	0	260	110	730	11	410	0	570	1300
11...	0150	40	23	--	262	113	760	10	412	0	590	1300
18...	0440	25	21	--	236	90	610	8.5	382	0	455	1080
25...	0305	15	22	--	250	101	750	9.4	376	0	530	1300
SEP.												
01...	0320	13	27	10	200	87	400	8.9	393	0	370	730
08...	0430	9.6	23	--	198	83	400	9.6	392	0	360	720

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
DEC.												
23...	.5	--	2360	2280	3.21	870	668	7.4	3930	--	--	--
30...	.7	--	2280	2120	3.10	820	612	7.1	3780	--	20.0	--
MAR.												
17...	.7	--	3030	2920	4.12	1070	768	8.8	4980	--	21.0	--
24...	.7	--	3130	2940	4.26	1070	766	8.8	5020	--	20.0	--
31...	.7	--	3140	2950	4.27	1070	766	8.9	5030	--	20.5	--
APR.												
07...	.8	.89	3290	3200	4.47	1100	790	9.2	5290	--	21.5	860
21...	1.0	--	2730	2620	3.71	950	634	8.3	4400	--	21.5	--
28...	.9	--	2830	2650	3.85	960	645	8.4	4460	--	21.5	--
MAY												
05...	.6	.44	2060	1970	2.80	820	490	6.1	3400	7.6	--	460
JULY												
07...	.7	1.4	4290	4130	5.83	1300	930	12	6750	7.6	--	1300
14...	.5	--	4520	4210	6.15	1380	1000	12	6850	7.6	--	--
21...	1.0	--	4460	4190	6.07	1370	991	12	6800	7.7	24.5	--
28...	.8	--	4560	4230	6.20	1380	996	12	6860	7.7	--	--
AUG.												
04...	.8	.59	3430	3220	4.66	1100	760	9.6	5400	7.6	29.0	940
11...	.9	--	3480	3260	4.73	1120	782	9.9	5420	7.8	23.0	--
18...	.9	--	2860	2690	3.89	960	647	8.6	4550	7.6	24.0	--
25...	1.0	--	3360	3150	4.57	1040	732	10	5280	7.7	27.0	--
SEP.												
01...	.7	.37	1980	2020	2.69	860	540	5.9	3390	7.6	24.0	380
08...	.5	--	2140	1990	2.91	835	514	6.0	3360	7.8	25.0	--

09529160. South Gila Pump Outlet Channel No. 3 near Yuma, Ariz.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---			---	5000	3520		6260	5530	3370
2			---			---	5350	3430		6710	5460	3360
3			---			---	5300	3420		6770	5530	3380
4			---			---	5330	3410		6900	5410	3340
5			---			---	5350	3410		6760	5400	3340
6			---			---	5390	3400		6760	5370	3360
7			---			---	5290	3660		6800	5410	3360
8			---			---	5280	3650		6860	5410	3340
9			---			---	5300	3630		6730	5380	3360
10			---			---	5310	---		6840	5340	3360
11			---			4200	---	---		6830	5410	---
12			---			4970	---	---		6970	5390	---
13			---			4890	---	---		6880	5400	---
14			---			5100	---	---		6870	5450	---
15			---			4910	4600	---		6800	4560	---
16			---			4910	4620	---		6900	4540	---
17			4230			4910	4600	---		6890	4540	---
18			4040			5500	4550	---		6890	4540	---
19			4040			4850	4320	---		7040	4530	---
20			3910			4900	4400	---		6440	4550	---
21			3920			5450	4460	---		6910	4560	---
22			3980			5000	4500	---		6810	4560	---
23			3960			5000	4440	---		6890	4540	---
24			3860			5000	4490	---		6890	5210	---
25			3900			5000	4380	---		6930	5190	---
26			3880			5000	4460	---		6960	4570	---
27			3860			5000	4490	---		6900	4540	---
28			3800			4990	4470	---		6940	4530	---
29			3800			5000	3520	---		6240	4590	---
30			3800			5000	3570	---		5530	4550	---
31			---			5000	---	---		5470	4530	---
MEAN			---			---	4720	---		6720	4980	---

YEAR MAX 7040 MIN 3340 MEAN 5000

09529200. Bruce Church drain near Yuma, Ariz.

LOCATION.--Lat 32°43'26", long 114°31'07", in NW¼NE¼ sec.21, T.8 S., R.22 W., Yuma County, 0.2 mi (0.3 km) upstream from outlet to Gila River and 5 mi (8 km) east of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1973 (partial-record station), October 1973 to current year.

REMARKS.--Unpublished chemical analyses (partial record) for water years 1965-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
21...	1400	1.6	32	0	190	63	270	9.5	373	--	640	260
NOV.												
18...	1220	1.7	30	10	180	65	270	4.4	370	--	590	260
DEC.												
16...	1340	1.1	28	20	190	71	220	8.2	365	--	570	260
JAN.												
20...	1235	.56	24	20	180	68	290	8.5	339	--	660	310
FEB.												
18...	0935	.89	25	10	190	61	290	7.8	397	--	660	270
MAR.												
24...	1120	.83	24	40	180	70	270	9.4	357	--	660	260
APR.												
21...	1140	.94	25	10	190	73	280	8.1	360	--	660	290
MAY												
19...	1050	1.1	28	20	190	63	290	7.3	381	0	700	260
JUNE												
23...	1100	1.5	28	70	180	71	270	8.7	368	0	660	270
JULY												
22...	0910	1.6	31	530	190	68	260	8.3	380	0	640	260
AUG.												
22...	1120	1.5	29	10	180	51	280	7.9	385	0	590	270
SEP.												
17...	0805	1.5	29	100	170	63	280	8.1	391	0	570	250

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.												
21...	.7	.65	1730	1650	2.35	730	430	4.3	2430	--	25.0	360
NOV.												
18...	.8	.61	1690	1590	2.30	720	410	4.4	2370	--	21.0	360
DEC.												
16...	.4	.46	1770	1530	2.41	770	470	3.5	2470	--	18.0	380
JAN.												
20...	.7	.34	1780	1710	2.42	730	450	4.7	2530	--	17.0	360
FEB.												
18...	.8	.50	1800	1700	2.45	730	400	4.7	2550	--	9.5	360
MAR.												
24...	.8	.49	1750	1650	2.38	740	440	4.3	2420	--	20.0	380
APR.												
21...	.7	.28	1780	1710	2.42	780	480	4.4	2560	--	22.5	390
MAY												
19...	.7	.56	1760	1730	2.39	750	440	4.6	2540	7.8	24.0	370
JUNE												
23...	.8	.62	1750	1670	2.38	740	440	4.3	2420	7.8	24.0	340
JULY												
22...	.7	.59	1720	1650	2.34	750	440	4.1	2400	7.8	25.5	360
AUG.												
22...	.7	.58	1730	1600	2.35	660	340	4.7	2400	7.9	26.0	390
SEP.												
17...	.8	.70	1690	1570	2.30	680	360	4.7	2360	7.8	22.5	90

09529240. South Gila Pump Outlet Channel No. 2 near Yuma, Ariz.

LOCATION.--Lat 32°42'31", long 114°31'45", in NW¼SW¼ sec.28, T.8 S., R.22 W., Yuma County, at gaging station 0.6 mi (1.0 km) upstream from outlet to Gila River, and 4 mi (6 km) east of Yuma.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
07...	0215	6.4	19	--	81	29	335	7.5	284	0	430	270
14...	0405	14	18	--	90	33	340	6.8	288	0	440	290
21...	0300	20	20	--	133	55	520	8.0	308	0	450	690
29...	0215	20	17	--	134	55	530	8.4	302	0	450	710
NOV.												
04...	0345	30	21	--	119	52	470	8.3	300	0	440	590
11...	0445	30	21	--	120	51	470	8.3	296	0	440	590
18...	0215	29	24	--	111	52	445	7.5	296	0	440	545
25...	0340	14	23	--	121	58	510	8.2	302	0	410	695
DEC.												
02...	0355	13	23	--	119	59	520	8.2	306	0	400	720
09...	0225	20	24	--	130	60	520	8.4	306	0	445	710
16...	0345	38	20	--	117	51	440	8.0	296	0	440	545
23...	0405	39	22	--	119	47	435	6.9	288	0	430	535
30...	0215	38	20	--	117	51	440	7.3	290	0	440	540
JAN.												
06...	0335	20	28	10	110	45	460	6.2	295	--	430	530
13...	0345	13	22	--	90	33	345	5.9	284	0	450	295
20...	0220	4.3	22	--	73	34	335	5.4	7	0	430	260
27...	0325	4.6	20	--	80	29	335	5.4	286	0	430	262
FEB.												
03...	0440	4.6	18	--	80	29	335	6.0	286	0	425	265
10...	0230	4.5	20	--	79	30	335	5.7	286	0	430	265
17...	0340	12	21	--	127	57	520	7.8	312	0	390	720
24...	0300	20	24	--	131	59	520	7.1	310	0	445	710
MAR.												
03...	0430	30	22	60	130	48	470	6.2	299	--	420	600
10...	0335	29	22	--	108	58	470	7.2	300	0	440	590
17...	0320	38	20	--	119	49	440	6.3	292	0	435	545
24...	0330	38	18	--	118	50	440	6.3	292	0	435	545
31...	0345	38	18	--	115	51	440	6.7	288	0	430	545
APR.												
07...	0145	44	25	10	120	50	430	7.5	291	--	440	570
14...	0350	14	21	--	89	34	345	5.8	286	0	445	295
21...	0340	38	22	--	125	46	440	6.4	292	0	430	550
28...	0315	39	17	--	123	48	440	6.5	290	7	430	555
MAY												
05...	0535	45	25	20	130	50	440	5.8	287	0	410	560
12...	0345	33	22	--	122	50	470	7.7	300	0	440	600
19...	0335	32	24	--	118	51	470	6.9	298	0	430	595
26...	0340	32	19	--	124	49	475	6.8	300	0	440	600
JUNE												
02...	0410	30	25	10	110	47	480	6.5	294	0	430	600
09...	0350	32	22	--	121	49	465	7.1	296	0	430	595
16...	0320	34	23	--	119	49	410	7.4	278	0	420	520
23...	0310	41	23	--	122	51	440	6.5	288	0	435	560
30...	0325	41	22	--	125	51	440	6.8	282	0	430	565
JULY												
07...	0425	41	26	0	120	48	460	6.7	278	0	430	580
14...	0425	39	21	--	121	53	435	7.0	282	0	430	565
21...	0350	42	24	--	122	52	440	7.1	282	0	440	565
28...	0530	32	22	--	118	52	465	7.0	296	0	440	585
AUG.												
04...	0350	42	27	0	120	49	450	6.7	287	0	430	590
11...	0235	38	23	--	120	49	435	6.8	290	0	430	550
18...	0425	38	20	--	126	50	440	6.5	280	0	435	565
25...	0415	39	22	--	125	51	440	6.8	282	0	435	570
SEP.												
01...	0335	39	25	80	130	53	450	6.2	284	0	430	570
08...	0420	34	22	--	119	54	445	7.8	288	0	440	575
15...	0315	22	20	--	117	49	435	6.8	284	0	420	550
22...	0335	18	22	--	114	48	450	7.1	294	0	425	550
29...	0405	27	23	--	120	48	425	6.9	278	0	410	545

09529240. South Gila Pump Outlet Channel No. 2 near Yuma, Ariz.--Continued

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

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1965-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
07...	.9	--	1320	1310	1.80	320	87	8.1	2140	7.7	23.5	--
14...	1.2	--	1370	1360	1.86	360	124	7.8	2220	7.9	22.0	--
21...	.8	--	2050	2030	2.79	560	308	9.6	3360	7.7	23.5	--
29...	1.0	--	2070	2060	2.82	560	312	9.7	3420	7.8	22.0	--
NOV.												
04...	.9	--	1880	1850	2.56	510	264	9.0	3090	7.8	22.0	--
11...	1.0	--	1900	1850	2.58	510	268	9.1	3090	7.7	18.5	--
18...	.9	--	1790	1770	2.43	490	248	8.7	2940	7.8	22.0	--
25...	.8	--	2000	1980	2.72	540	292	9.5	3340	7.9	21.0	--
DEC.												
02...	1.1	--	2070	2000	2.82	540	290	9.7	3380	7.8	--	--
09...	.8	--	2090	2050	2.84	570	320	9.5	3430	7.8	21.5	--
16...	1.0	--	1800	1770	2.45	500	260	8.5	2950	7.8	21.0	--
23...	.7	--	1770	1740	2.41	490	250	8.5	2900	7.8	16.0	--
30...	.9	--	1790	1760	2.43	500	260	8.5	2950	7.8	22.0	--
JAN.												
06...	1.0	2.1	1770	1770	2.41	460	220	9.3	2910	--	21.0	820
13...	1.2	--	1400	1380	1.90	360	130	7.9	2250	7.8	18.5	--
20...	1.3	--	1300	1170	1.77	320	310	8.1	2120	--	21.0	--
27...	1.2	--	1290	1300	1.75	320	85	8.2	2120	7.9	21.0	--
FEB.												
03...	1.0	--	1300	1300	1.77	320	85	8.2	2130	7.8	16.5	--
10...	1.0	--	1310	1310	1.78	320	85	8.1	2130	7.9	24.0	--
17...	.9	--	2030	2000	2.76	550	290	9.6	3390	7.8	20.5	--
24...	.9	--	2060	2050	2.80	570	320	9.5	3450	7.8	19.5	--
MAR.												
03...	.9	1.6	1930	1850	2.62	520	280	9.0	3090	--	21.0	840
10...	.9	--	1860	1840	2.53	510	260	9.1	3100	7.7	21.5	--
17...	1.0	--	1780	1760	2.42	500	260	8.6	2950	7.9	21.0	--
24...	.9	--	1810	1760	2.46	500	260	8.6	2960	7.8	21.0	--
31...	.9	--	1810	1750	2.46	495	260	8.6	2930	7.8	21.5	--
APR.												
07...	1.0	1.4	1830	1790	2.49	510	270	8.3	2990	--	23.0	800
14...	1.2	--	1380	1380	1.88	360	130	7.9	2230	7.8	23.0	--
21...	1.2	--	1810	1760	2.46	500	260	8.6	2970	7.8	23.0	--
28...	1.2	--	1830	1770	2.49	505	250	8.5	2980	7.7	21.5	--
MAY												
05...	1.0	1.5	1830	1770	2.49	530	300	8.3	2980	7.7	--	460
12...	.9	--	1910	1860	2.60	510	260	9.1	3110	7.7	23.0	--
19...	1.0	--	1900	1840	2.58	505	260	9.1	3110	7.7	23.0	--
26...	.9	--	1900	1860	2.58	510	260	9.1	3120	7.8	--	--
JUNE												
02...	1.0	1.6	1900	1850	2.58	470	230	9.7	3110	7.6	28.0	790
09...	.9	--	1900	1840	2.58	505	262	9.0	3110	8.0	23.5	--
16...	.9	--	1740	1690	2.37	500	272	8.0	2850	7.7	--	--
23...	1.1	--	1810	1780	2.46	515	279	8.4	2990	7.7	--	--
30...	.9	--	1830	1780	2.49	520	289	8.4	2990	7.7	23.5	--
JULY												
07...	1.0	1.4	1850	1820	2.52	500	270	9.0	2990	7.8	--	740
14...	1.0	--	1840	1770	2.50	520	289	8.3	2990	7.7	--	--
21...	1.0	--	1820	1790	2.48	520	289	8.4	3000	7.8	25.0	--
28...	1.0	--	1890	1840	2.57	510	268	9.0	3090	7.7	--	--
AUG.												
04...	1.0	.98	1790	1820	2.43	500	270	8.7	2940	7.7	29.5	760
11...	.9	--	1790	1760	2.43	500	262	8.5	2970	8.0	24.0	--
18...	1.0	--	1830	1780	2.49	520	290	8.4	2990	7.8	24.5	--
25...	1.0	--	1820	1790	2.48	520	289	8.4	3000	7.7	27.0	--
SEP.												
01...	.9	1.3	1890	1810	2.57	540	310	8.4	3000	7.7	24.5	780
08...	.7	--	1840	1810	2.50	520	284	8.5	3040	7.7	24.5	--
15...	.7	--	1810	1740	2.46	495	262	8.5	2910	7.8	26.0	--
22...	.8	--	1820	1760	2.48	480	239	8.9	2970	7.7	23.0	--
29...	.7	--	1750	1720	2.38	495	267	8.3	2880	7.9	21.0	--

09529300. Wellton-Mohawk Main Outlet drain near Yuma, Ariz.

LOCATION.--Lat 32°44'35", long 114°26'02", in NW¼NE¼ sec.17, T.8 S., R.21 W., Yuma County, at gaging station, 8 mi (13 km) upstream from outlet to Gila River, and 11 mi (18 km) east of Yuma.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
07...	0300	291	20	226	91	930	9.8	418	0	940	1180
14...	0325	296	21	226	96	920	9.0	420	0	940	1170
21...	0235	302	22	234	89	900	9.5	420	0	930	1140
28...	0255	304	21	234	96	940	9.7	416	0	940	1210
NOV.											
04...	0255	302	23	230	99	940	9.7	428	0	950	1210
11...	0910	294	23	224	95	940	9.2	422	0	940	1180
18...	0155	296	25	230	96	950	9.7	432	0	950	1210
25...	0255	296	24	218	94	930	9.4	424	0	940	1150
DEC.											
02...	0230	292	25	230	94	930	9.4	430	0	950	1170
09...	0300	292	25	232	100	950	10	438	0	970	1210
16...	0255	294	22	238	99	950	9.8	436	0	970	1210
23...	0115	298	25	238	96	950	9.2	432	0	960	1210
30...	0155	298	25	214	113	940	9.3	434	0	960	1210
JAN.											
06...	0300	296	24	242	99	950	9.4	432	0	960	1220
13...	0520	302	24	232	98	925	9.3	430	0	940	1190
20...	0200	280	25	230	101	920	9.3	436	0	950	1180
27...	0245	303	23	240	93	920	9.2	436	0	940	1170
FEB.											
03...	0240	303	24	222	99	915	9.4	432	0	920	1160
10...	0310	308	25	222	99	895	9.0	434	0	930	1130
17...	0255	298	25	236	93	900	9.3	436	0	940	1140
24...	0020	298	25	216	110	940	9.1	440	0	960	1200
MAR.											
03...	0320	298	24	238	99	960	9.3	430	0	970	1230
10...	0250	291	25	230	104	960	9.6	434	0	965	1220
17...	0230	288	24	240	105	960	9.3	434	0	970	1260
24...	0715	284	25	252	90	960	9.4	434	0	970	1230
31...	0245	.10	25	252	105	1160	10	384	0	1110	1510
APR.											
07...	0255	115	22	226	100	885	9.8	456	0	915	1250
14...	0445	294	25	226	101	935	9.4	428	0	960	1190
21...	0250	303	24	230	101	950	9.4	428	0	960	1220
28...	0230	303	23	226	106	950	9.6	434	0	960	1230
MAY											
05...	0030	306	24	234	96	940	9.3	436	0	960	1200
12...	0255	294	24	250	91	925	8.9	436	0	950	1200
19...	0255	282	25	236	104	935	9.1	420	0	950	1220
26...	0315	290	24	228	105	915	9.2	414	0	940	1190
JUNE											
02...	0245	267	22	236	95	905	9.3	410	0	930	1180
09...	0315	298	22	216	100	905	9.2	410	0	930	1150
16...	0250	302	23	242	96	960	9.2	424	0	970	1230
23...	0215	314	23	226	104	935	9.1	432	0	955	1200
30...	0245	297	25	232	98	930	9.1	424	0	955	1190
JULY											
07...	0325	312	22	238	96	935	9.0	422	0	955	1200
14...	0240	308	23	246	96	950	9.3	424	0	960	1220
21...	0255	309	25	222	106	940	9.2	428	0	955	1210
28...	0120	280	25	226	96	925	9.0	428	0	940	1180
AUG.											
04...	0220	282	21	234	91	920	8.8	432	0	940	1170
11...	0255	291	25	230	89	870	8.8	424	0	920	1100
18...	0620	306	22	230	91	900	8.8	428	0	930	1140
25...	0245	303	24	242	89	910	9.1	432	0	940	1160
SEP.											
01...	0200	290	22	222	104	935	9.1	424	0	955	1200
08...	0130	290	25	238	94	930	9.1	428	0	945	1190
15...	0235	297	21	216	102	900	9.0	434	0	930	1140
22...	0245	303	22	230	91	900	9.0	428	0	925	1120
29...	0600	300	25	232	95	920	9.2	434	0	940	1180

09529300. Wellton-Mohawk Main Outlet drain near Yuma, Ariz.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--No flow Apr. 2-5. Unpublished chemical analyses (continuing record) for water years 1961-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.										
07...	2.0	3660	3610	4.98	940	597	13	5710	8.0	23.0
14...	2.5	3740	3590	5.09	960	616	13	5640	8.0	23.0
21...	2.0	3690	3540	5.02	950	606	13	5570	8.0	22.0
28...	1.8	3750	3660	5.10	980	639	13	5780	79.0	21.5
NOV.										
04...	2.5	3790	3680	5.15	980	629	13	5810	8.0	20.5
11...	2.5	3720	3620	5.06	950	604	13	5710	7.9	20.5
18...	2.0	3830	3690	5.21	970	616	13	5820	8.0	21.0
25...	2.3	3690	3580	5.02	930	582	13	5620	8.0	19.5
DEC.										
02...	2.3	3700	3620	5.03	960	610	13	5670	8.0	13.5
09...	2.3	3800	3720	5.17	990	630	13	5880	8.0	19.5
16...	2.2	3900	3720	5.30	1000	640	13	5880	8.0	19.0
23...	2.2	3810	3700	5.18	990	640	13	5840	7.9	14.5
30...	2.4	3830	3690	5.21	1000	640	13	5830	8.0	18.5
JAN.										
06...	2.2	3820	3720	5.20	1010	660	13	5860	8.0	18.5
13...	2.6	3670	3630	4.99	980	628	13	5740	8.0	18.0
20...	2.5	3730	3630	5.07	990	630	13	5730	7.9	15.5
27...	2.2	3770	3610	5.13	980	620	13	5680	8.0	20.5
FEB.										
03...	2.1	3600	3560	4.90	960	610	13	5600	7.9	16.0
10...	2.1	3570	3530	4.86	960	600	13	5570	8.0	--
17...	2.3	3650	3560	4.96	970	610	13	5590	8.0	19.0
24...	2.4	3790	3680	5.15	990	630	13	5800	8.0	18.5
MAR.										
03...	2.5	3790	3750	5.15	1000	650	13	5910	7.9	22.0
10...	2.5	3780	3730	5.14	1000	640	13	5900	7.9	20.5
17...	2.5	3810	3790	5.18	1030	670	13	5950	8.0	20.5
24...	2.4	3840	3750	5.22	1000	640	13	5900	8.0	19.5
31...	2.6	4580	4360	6.23	1060	750	15	6890	8.0	18.0
APR.										
07...	2.2	3790	3640	5.15	1100	810	12	5760	7.7	20.0
14...	2.4	3720	3660	5.06	980	630	13	5790	8.0	22.0
21...	2.5	3830	3710	5.21	990	640	13	5820	8.1	24.0
28...	2.3	3850	3720	5.24	1000	640	13	5840	7.9	20.5
MAY										
05...	2.0	3710	3680	5.05	980	620	13	5780	8.0	22.0
12...	2.3	3750	3670	5.10	1000	640	13	5750	8.0	24.5
19...	2.3	3760	3680	5.11	1000	660	13	5780	7.9	24.0
26...	2.3	3710	3620	5.05	1000	660	13	5680	7.9	24.5
JUNE										
02...	2.4	3630	3580	4.94	980	644	13	5630	7.8	28.0
09...	2.5	3640	3540	4.95	950	614	13	5590	8.0	25.0
16...	2.5	3820	3740	5.20	1000	652	13	5920	7.9	25.5
23...	2.5	3720	3670	5.06	990	636	13	5770	7.9	26.5
30...	2.5	3730	3650	5.07	980	632	13	5740	7.9	25.5
JULY										
07...	2.4	3780	3670	5.14	990	644	13	5760	7.9	26.0
14...	2.5	3830	3720	5.21	1010	662	13	5860	7.9	--
21...	2.5	3770	3680	5.13	990	639	13	5790	8.0	27.0
28...	2.5	3780	3610	5.14	960	609	13	5690	8.0	26.5
AUG.										
04...	2.5	3690	3600	5.02	960	606	13	5660	8.1	28.0
11...	2.3	3500	3450	4.76	940	592	12	5430	8.1	29.0
18...	2.5	3630	3540	4.94	950	599	13	5560	8.0	25.5
25...	2.4	3730	3590	5.07	970	616	13	5630	7.9	26.5
SEP.										
01...	2.5	3730	3660	5.07	980	632	13	5760	7.9	27.0
08...	2.4	3710	3640	5.05	980	629	13	5710	8.0	26.5
15...	2.4	3640	3530	4.95	960	604	13	5540	7.9	25.0
22...	2.2	3560	3510	4.84	950	599	13	5510	8.0	23.5
29...	2.2	3710	3620	5.05	970	614	13	5680	8.1	23.5

09529360. South Gila Pump Outlet Channel No. 1 near Yuma, Ariz.

LOCATION.--Lat 32°42'24", long 114°33'19", in SW¼NE¼ sec.30, T.8 S., R.22 W., Yuma County, at gaging station, 0.2 mi (0.3 km) upstream from outlet to Gila River, and 4 mi (6 km) east of Yuma.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
07...	0225	28	17	--	126	46	435	8.3	292	0	470	520
14...	0435	38	16	--	125	55	450	7.6	292	0	500	545
21...	0315	20	21	--	149	53	450	7.8	276	0	480	600
28...	0225	18	18	--	151	52	450	7.8	278	0	480	600
NOV.												
04...	0420	30	18	--	133	49	435	7.8	280	0	500	525
11...	0430	26	20	--	124	54	435	8.5	282	0	490	525
18...	0225	23	21	--	109	51	430	7.8	296	0	480	480
25...	0405	24	19	--	111	48	440	7.5	296	0	490	485
DEC.												
02...	0345	23	21	--	113	46	435	7.4	296	0	490	475
09...	0235	38	21	--	143	59	460	8.2	300	0	480	620
16...	0415	44	20	--	141	60	455	8.3	296	0	480	610
23...	0405	43	23	--	143	59	450	7.2	292	0	470	605
30...	0225	45	20	--	145	57	445	7.7	296	--	470	590
JAN.												
06...	0400	40	26	10	140	55	460	6.7	295	--	430	620
13...	0330	27	20	--	118	45	415	7.2	292	0	490	450
20...	0230	14	20	--	117	48	395	6.2	284	0	530	410
27...	0345	8.9	18	--	91	42	395	5.7	300	0	495	355
FEB.												
03...	0430	30	19	--	122	48	430	7.2	288	0	490	490
10...	0240	30	20	--	111	54	430	7.0	288	0	490	495
17...	0410	36	17	--	128	51	430	7.2	288	0	510	500
24...	0310	42	20	--	126	54	435	6.4	292	0	510	510
MAR.												
03...	0445	41	20	40	130	46	440	6.0	286	--	480	530
10...	0355	40	20	--	128	51	430	7.1	288	0	500	510
17...	0330	45	21	--	145	57	445	6.8	296	0	475	595
24...	0345	47	21	--	139	60	440	6.8	296	0	475	590
31...	0415	46	21	--	145	55	440	7.0	294	0	470	585
APR.												
07...	0155	4.6	24	10	130	60	450	8.1	295	0	440	600
14...	0405	22	24	--	113	46	405	6.4	288	0	515	410
21...	0400	38	21	--	126	50	430	6.1	288	0	490	500
28...	0325	47	21	--	141	59	460	7.0	298	0	480	610
MAY												
05...	0550	51	24	10	150	53	460	6.1	291	0	490	600
12...	0410	41	20	--	145	53	460	7.1	302	0	475	600
19...	0400	40	22	--	142	57	440	7.5	298	0	465	585
26...	0330	46	20	--	142	57	440	7.1	294	0	470	585
JUNE												
02...	0400	46	24	10	140	54	450	6.8	289	0	460	600
09...	0415	46	22	--	146	56	445	7.8	294	0	470	590
16...	0320	41	19	--	145	57	445	7.6	300	0	460	595
23...	0325	47	22	--	145	57	445	7.2	300	0	475	590
30...	0340	47	22	--	147	54	440	7.1	292	0	470	590
JULY												
07...	0415	47	25	10	130	49	450	6.9	287	0	470	590
14...	0415	47	20	--	142	57	445	7.0	292	0	470	590
21...	0405	43	24	--	145	55	440	7.4	294	0	470	590
28...	0535	42	22	--	145	58	450	7.3	292	0	475	600
AUG.												
04...	0350	45	25	0	140	56	430	7.0	295	0	450	610
11...	0225	42	22	--	144	56	440	7.3	292	0	470	585
18...	0415	42	20	--	141	57	440	6.8	292	0	470	580
25...	0400	42	21	--	141	58	440	7.1	292	0	465	580
SEP.												
01...	0355	44	24	10	120	69	450	6.7	293	0	460	590
08...	0410	45	21	--	142	56	440	7.8	294	0	470	580
15...	0325	47	20	--	130	56	425	6.9	282	0	465	540
22...	0350	44	20	--	145	54	440	7.4	294	0	480	580
29...	0345	34	22	--	123	47	405	6.7	272	0	490	460

09529360. South Gila Pump Outlet Channel No. 1 near Yuma, Ariz.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1966-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
07...	1.3	--	1800	1770	2.45	505	266	8.4	2920	7.9	22.0	--
14...	1.2	--	1910	1840	2.60	540	300	8.4	3030	7.8	22.0	--
21...	.8	--	1940	1900	2.64	590	360	8.1	3110	7.8	23.5	--
28...	.9	--	1950	1900	2.65	590	360	8.1	3120	7.8	23.0	--
NOV.												
04...	1.0	--	1850	1810	2.52	535	310	8.2	2990	7.8	22.0	--
11...	1.1	--	1850	1800	2.52	530	300	8.2	2960	7.8	18.5	--
18...	1.0	--	1800	1730	2.45	480	240	8.5	2870	7.8	23.0	--
25...	1.0	--	1800	1750	2.45	475	230	8.8	2880	7.9	20.5	--
DEC.												
02...	.8	--	1790	1730	2.43	470	230	8.7	2860	7.9	14.0	--
09...	.9	--	2010	1940	2.73	600	350	8.2	3230	7.8	22.0	--
16...	.9	--	1990	1920	2.71	600	360	8.1	3190	7.9	21.0	--
23...	.8	--	1960	1900	2.67	600	360	8.0	3170	7.7	15.5	--
30...	.8	--	1960	1880	2.67	595	352	7.9	3150	--	22.0	--
JAN.												
06...	1.0	.71	1940	1890	2.64	580	330	8.3	3140	--	21.5	610
13...	1.1	--	1830	1690	2.49	480	240	8.2	2770	7.8	18.0	--
20...	1.2	--	1730	1670	2.35	490	260	7.8	2740	7.8	21.5	--
27...	1.1	--	1570	1550	2.14	400	150	8.6	2550	7.9	20.5	--
FEB.												
03...	1.1	--	1800	1750	2.45	500	260	8.3	2880	7.7	15.5	--
10...	1.1	--	1800	1750	2.45	500	260	8.4	2880	8.0	23.0	--
17...	1.4	--	1850	1790	2.52	530	290	8.1	2960	7.8	21.0	--
24...	1.1	--	1850	1810	2.52	535	300	8.2	2980	7.8	19.0	--
MAR.												
03...	1.0	.93	1860	1800	2.53	510	280	8.4	2960	--	23.5	710
10...	1.0	--	1850	1790	2.52	530	290	8.1	2960	7.8	21.5	--
17...	1.1	--	1940	1890	2.64	595	350	7.9	3150	7.8	20.5	--
24...	1.0	--	1940	1880	2.64	595	350	7.9	3130	7.8	20.5	--
31...	1.0	--	1880	1870	2.56	590	350	7.9	3120	7.8	21.0	--
APR.												
07...	1.0	.62	1960	1860	2.67	570	330	8.2	3130	7.8	23.0	660
14...	1.2	--	1700	1660	2.31	470	230	8.1	2700	7.9	23.0	--
21...	1.0	--	1800	1770	2.45	520	280	8.2	2900	7.9	23.0	--
28...	1.2	--	2030	1930	2.76	595	350	8.2	3210	7.8	21.0	--
MAY												
05...	1.0	.88	1940	1930	2.64	590	350	8.2	3180	7.8	--	690
12...	.9	--	1990	1910	2.71	580	330	8.3	3170	7.8	23.0	--
19...	1.0	--	1940	1870	2.64	590	350	7.9	3110	7.8	23.0	--
26...	1.0	--	1920	1870	2.61	590	350	7.9	3110	7.8	--	--
JUNE												
02...	1.0	.65	1940	1880	2.64	570	330	8.2	3110	7.6	28.5	640
09...	.9	--	1940	1880	2.64	595	354	7.9	3130	7.8	23.5	--
16...	1.0	--	1930	1880	2.62	595	349	7.9	3130	7.8	--	--
23...	.7	--	1910	1890	2.60	595	349	7.9	3130	7.7	26.5	--
30...	.9	--	1930	1880	2.62	590	350	7.9	3120	7.7	23.5	--
JULY												
07...	1.0	.63	1960	1870	2.67	530	300	8.5	3120	7.8	--	640
14...	1.0	--	1950	1880	2.65	590	350	8.0	3130	7.7	--	--
21...	1.0	--	1930	1880	2.62	590	349	7.9	3120	7.8	22.0	--
28...	.9	--	1970	1900	2.68	600	360	8.0	3160	7.8	--	--
AUG.												
04...	1.1	.53	1980	1870	2.69	580	340	7.8	3100	7.8	29.5	640
11...	.8	--	1910	1870	2.60	590	350	7.9	3110	7.9	24.0	--
18...	1.1	--	1930	1860	2.62	585	346	7.9	3100	7.8	24.5	--
25...	1.2	--	1920	1860	2.61	590	350	7.9	3100	7.7	26.5	--
SEP.												
01...	1.0	.65	1880	1870	2.56	580	340	8.1	3100	7.7	25.0	670
08...	.7	--	1900	1860	2.58	585	344	7.9	3100	7.8	25.0	--
15...	.8	--	1800	1780	2.45	555	324	7.8	2950	7.7	26.5	--
22...	.8	--	1940	1870	2.64	585	344	7.9	3100	7.7	23.5	--
29...	.7	--	1730	1690	2.35	500	277	7.9	2750	7.9	20.5	--

09529360. South Gila Pump Outlet Channel No. 1 near Yuma, Ariz.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2930	2950	2900	3170	2920	2980	3110	3190	3130	3140	3130	3090
2	2940	2950	2900	3160	2910	2940	3110	3200	3130	3160	3190	3090
3	2940	3010	3280	3170	2910	2970	3110	3210	3120	3150	3210	3070
4	2930	3000	3270	3180	2920	3000	3110	3190	3140	3170	3160	3100
5	2930	2950	3270	3160	2900	3010	3100	3200	3130	3160	3110	3100
6	2920	3000	3270	3150	2930	3030	3110	3180	3150	3110	3130	3100
7	2920	2950	3250	3150	2930	2910	3110	3180	3160	3100	3130	3090
8	2940	2970	3250	3150	2930	2920	3110	3180	3150	3150	2810	3090
9	2950	3010	3240	3170	2920	2920	3110	3180	3140	3120	3140	3100
10	2940	2950	3010	3160	2910	2910	3110	3190	3150	3120	3150	3100
11	3030	2980	3010	2800	2940	3120	2650	3190	3150	3070	3120	3100
12	3110	3000	3020	2790	2920	2900	2690	3190	3130	3150	3110	3100
13	3100	3000	3010	2790	2960	2900	2690	3120	3130	3110	3060	3020
14	3100	3000	3220	2760	2940	2900	2690	3120	3120	3120	3090	3020
15	3090	3010	3220	2770	3000	3120	3110	3150	3140	3150	3110	2940
16	3190	2850	3220	2760	2960	3110	3190	3130	3120	3150	3100	2960
17	3190	2880	3220	2760	2960	3110	2910	3160	3140	3120	3120	3070
18	3190	2890	3230	2760	2990	3120	2900	3150	3270	3140	3100	3090
19	3150	2910	3230	2760	2990	3120	2910	3170	3130	3130	3090	3070
20	3150	2890	3220	2770	2980	3110	2910	3140	3170	3120	3100	3070
21	3160	2910	3190	2750	2960	3110	2890	3110	3170	3120	3120	3100
22	3160	2910	3190	2770	2980	3110	2900	3150	3130	3140	3110	3110
23	3140	2900	3190	2570	2970	3110	2890	3150	3140	3130	3090	2900
24	3140	2900	3180	2570	3010	3110	2900	3130	3130	3140	3100	2910
25	3150	2900	3190	2630	3000	3110	3210	3120	3150	3140	3110	2920
26	3150	2920	3200	2580	2980	3110	3280	3130	3160	3180	3100	2900
27	3150	2920	3180	2560	2980	3110	3220	3170	3130	4140	3110	2850
28	3160	2920	3180	2580	3010	3100	3210	3170	3140	3170	3100	2760
29	3150	2920	3170	2600	---	3110	3220	3140	3130	3140	3100	2770
30	3140	2920	3190	2590	---	3110	3220	3120	3130	3160	3090	2910
31	2970	---	3150	2560	---	3110	---	3140	---	3160	3050	---
MEAN	3070	2950	3170	2840	2950	3040	3020	3160	3140	3170	3100	3020

YEAR MAX 4140 MIN 2560 MEAN 3050

09529440. South Gila Pump Outlet Channel No. 4 near Yuma, Ariz.

LOCATION.--Lat 32°42'46", long 114°35'50", in NW¼NW¼ sec.26, T.8 S., R.23 W., Yuma County, at gaging station, 1.5 mi (2.4 km) upstream from outlet to Colorado River, and 1.5 mi (2.4 km) east of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--No flow for many days of most months. Unpublished miscellaneous chemical analyses for water years 1966-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
APR.												
07...	0205	12	25	10	330	140	730	11	314	0	760	1400
21...	0420	11	22	--	320	137	770	8.8	324	0	750	1410
28...	0325	7.6	23	--	244	88	655	7.6	292	0	810	930
JULY												
07...	0500	4.1	28	10	540	200	1000	12	379	0	630	2300
14...	0405	7.6	23	--	504	193	1010	11	388	0	590	2350
21...	0425	7.6	24	--	242	87	650	7.7	290	0	810	930
28...	0510	7.6	24	--	244	90	650	7.8	294	0	820	940
AUG.												
04...	0330	9.2	26	0	300	120	870	10	382	0	500	1600
11...	0215	9.0	23	--	288	120	810	9.1	380	0	500	1520

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
APR.												
07...	.6	.05	3760	3550	5.11	1400	1100	8.5	5760	7.7	25.5	620
21...	.8	--	3770	3580	5.13	1360	1100	9.1	5760	7.7	25.0	--
28...	.8	--	3030	2900	4.12	970	730	9.1	4570	7.7	21.5	--
JULY												
07...	.4	.10	5250	4900	7.14	2200	1900	9.3	8200	7.6	--	680
14...	.4	--	4980	4870	6.77	2050	1730	9.7	8130	7.6	--	--
21...	.4	--	3000	2890	4.08	960	722	9.1	4550	7.7	26.5	--
28...	.8	--	3050	2920	4.15	980	739	9.0	4610	7.7	--	--
AUG.												
04...	.6	.17	3720	3620	5.06	1200	930	11	6090	7.6	30.0	850
11...	.7	--	3520	3460	4.79	1210	898	10	5840	7.8	24.0	--

09530000. Reservation Main drain No. 4 at Yuma, Ariz.

LOCATION.--Lat 32°44'09", long 114°37'16", in NW¼SE¼ sec.26, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, at gaging station, at railroad culvert, 0.2 mi (0.3 km) upstream from crossing of U.S. Highway 80, and 0.7 mi (1.1 km) north of Yuma.

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

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
21...	1130	74	21	10	130	50	220	7.0	261	--	490	230
NOV.												
18...	0930	58	22	10	160	48	220	3.1	274	--	450	230
DEC.												
16...	1530	61	20	10	150	45	220	5.6	268	--	460	240
JAN.												
20...	0955	59	18	10	140	40	200	5.9	247	--	450	220
FEB.												
18...	1220	47	20	20	160	58	220	5.3	276	--	510	250
MAR.												
24...	1040	50	21	20	150	52	230	5.6	286	--	540	250
APR.												
21...	1030	66	17	10	140	46	210	5.6	265	--	460	230
MAY												
19...	1030	58	21	20	160	50	230	5.4	278	0	510	240
JUNE												
23...	1120	57	20	70	150	50	220	5.9	263	0	470	220
JULY												
23...	1155	49	23	0	160	52	230	5.9	271	0	500	250
AUG.												
26...	0910	63	22	0	150	49	230	5.5	281	0	510	230
SEP.												
23...	0930	54	21	40	150	50	230	5.9	280	0	520	250

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.												
21...	.4	.29	1300	1280	1.77	530	320	4.2	1970	--	22.5	250
NOV.												
18...	.5	.24	1340	1270	1.82	600	370	3.9	1990	--	19.0	240
DEC.												
16...	.7	.36	1300	1280	1.77	560	340	4.0	1950	--	19.0	270
JAN.												
20...	.4	.34	1210	1200	1.65	510	310	3.8	1880	--	14.5	220
FEB.												
18...	.4	1.6	1350	1370	1.84	640	410	3.8	2070	--	17.5	250
MAR.												
24...	.4	.16	1390	1390	1.89	590	350	4.1	2100	--	18.0	270
APR.												
21...	.4	.18	1270	1240	1.73	540	320	3.9	1940	--	20.5	240
MAY												
19...	.4	.26	1360	1360	1.85	610	380	4.1	2080	7.8	22.5	270
JUNE												
23...	.4	.14	1310	1270	1.78	580	360	4.0	1960	7.8	24.5	230
JULY												
23...	.5	.13	1370	1360	1.86	610	390	4.0	2030	7.9	27.0	250
AUG.												
26...	.4	.23	1350	1340	1.84	580	350	4.2	2000	7.7	27.0	260
SEP.												
23...	.4	.17	1390	1370	1.89	580	350	4.2	--	7.7	21.0	250

09530000. Reservation Main drain No. 4 at Yuma, Ariz.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							5000			---	4670	
2							5350			8560	5410	
3							5300			8330	7100	
4							5330			8340	6950	
5							5350			8260	6130	
6							5390			8220	6140	
7							5290			8210	5990	
8							5280			8220	5940	
9							5300			8250	5920	
10							5310			6300	5750	
11							---			8220	6040	
12							---			8180	5850	
13							---			8180	5840	
14							---			8300	5900	
15							4600			4410	---	
16							4620			4480	---	
17							4600			4500	---	
18							4550			4540	---	
19							4320			4490	---	
20							4400			4520	---	
21							4460			4560	---	
22							4500			4600	---	
23							4400			4590	---	
24							4490			4690	---	
25							4380			4650	---	
26							4460			4670	---	
27							4490			4670	---	
28							4470			4680	---	
29							3520			4670	---	
30							3570			4680	---	
31							---			4680	---	
MEAN							4720			6120	---	
YEAR	MAX	8560	MIN	3520	MEAN	5570						

09530200. Yuma Mesa Outlet drain at Yuma, Ariz.

LOCATION.--Lat 32°43'48", long 114°39'27", in SE¼SW¼ sec.28, T.16 S., R.22 E., San Bernardino meridian, in Arizona, Yuma County, at gaging station, 0.3 mi (0.5 km) from outlet to Colorado River, and 0.5 mi (0.8 km) west of Joe Henry Memorial Park in Yuma, Ariz.

PERIOD OF RECORD.--Chemical analyses: July 1972 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
07...	0750	80	26	70	97	33	330	6.6	242	--	360	340
NOV.												
04...	1105	87	26	10	120	39	320	5.0	243	--	370	360
DEC.												
02...	1005	87	26	20	98	32	330	5.3	242	--	380	360
JAN.												
06...	1000	85	26	0	100	34	340	5.5	241	--	400	350
FEB.												
03...	1030	85	26	20	100	31	330	5.2	243	--	400	350
MAR.												
03...	0950	85	21	10	100	33	330	4.7	242	--	400	360
APR.												
07...	0900	83	24	10	100	35	320	6.6	244	--	410	350
MAY												
05...	0940	83	24	10	100	33	310	4.9	244	0	380	340
JUNE												
09...	0930	81	24	0	100	34	310	5.5	246	0	400	350
JULY												
07...	0930	81	25	0	100	34	320	5.3	238	0	420	350
AUG.												
04...	0900	69	27	0	110	34	310	5.6	235	0	390	370
SEP.												
08...	0945	76	25	20	97	32	320	5.5	242	0	400	340

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.												
07...	.7	.82	1380	1320	1.88	380	180	7.4	2220	7.8	25.5	440
NOV.												
04...	.7	.83	1350	--	1.84	460	--	6.5	2220	--	26.0	440
DEC.												
02...	.7	1.2	1380	1360	1.88	380	180	7.4	2220	--	25.5	480
JAN.												
06...	.7	.84	1350	1380	1.84	390	190	7.5	2220	--	25.0	490
FEB.												
03...	.7	.89	1350	1370	1.84	380	180	7.4	2220	--	--	510
MAR.												
03...	.8	1.5	1360	1380	1.85	390	190	7.3	2220	--	26.0	500
APR.												
07...	.7	.86	1410	1370	1.92	390	190	7.0	2230	--	--	510
MAY												
05...	.7	.89	1390	1320	1.89	390	190	6.9	2230	7.8	25.5	510
JUNE												
09...	.8	.79	1360	1350	1.85	390	190	6.8	2230	7.6	25.5	450
JULY												
07...	.8	.87	1350	1380	1.84	390	200	7.1	2220	7.6	26.0	490
AUG.												
04...	.7	.67	1360	1370	1.85	410	220	6.6	2210	7.7	25.0	460
SEP.												
08...	.6	.83	1320	1340	1.80	370	180	7.2	2170	7.7	26.0	490

09530500. Drain 8-B near Yuma, Ariz.

LOCATION.--Lat 32°44'39", long 114°41'45", in NE¼NW¼ sec.30, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, 0.5 mi (0.8 km) upstream from outlet to Colorado River, and 4 mi (6 km) west of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1973 (partial-record station), October 1973 to current year.

REMARKS.--Unpublished chemical analyses (partial record) for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
21...	0850	3.2	24	20	110	36	210	5.9	236	--	430	170
NOV.												
18...	0905	3.2	23	40	100	40	220	3.0	239	--	440	170
DEC.												
17...	0915	2.5	21	10	100	36	200	4.7	232	--	410	170
JAN.												
20...	0845	1.9	22	50	100	34	200	4.7	228	--	410	170
FEB.												
18...	0920	1.9	21	20	97	37	190	4.9	225	--	410	160
MAR.												
24...	1155	2.2	21	30	98	38	200	4.5	223	--	410	170
APR.												
21...	1130	2.2	21	10	100	38	190	4.6	225	--	410	170
MAY												
19...	1200	2.4	22	30	100	38	200	2.7	221	0	400	160
JUNE												
23...	0945	1.8	22	60	100	38	190	4.9	215	0	390	150
JULY												
22...	0900	3.0	25	10	100	37	200	4.9	215	0	410	160
AUG.												
26...	1030	6.8	23	40	96	28	200	4.4	222	0	450	100
SEP.												
23...	0950	3.9	22	30	100	36	200	4.8	223	0	420	160

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.												
21...	.5	.21	1150	1100	1.56	420	230	4.4	1710	--	20.5	250
NOV.												
18...	.6	.30	1180	1120	1.60	410	220	4.7	1760	--	18.0	250
DEC.												
17...	.7	.23	1120	1060	1.52	400	210	4.4	1630	--	14.0	230
JAN.												
20...	.4	.13	1090	1050	1.48	390	200	4.4	1650	--	14.0	180
FEB.												
18...	.4	.12	1080	1030	1.47	390	210	4.2	1630	--	12.5	260
MAR.												
24...	.3	.08	1110	1050	1.51	400	220	4.3	1660	--	21.5	250
APR.												
21...	.5	.08	1090	1050	1.48	410	220	4.1	1650	--	25.0	250
MAY												
19...	.5	.06	1080	1030	1.47	410	230	4.3	1660	8.1	27.0	360
JUNE												
23...	.4	.04	1050	1000	1.43	410	230	4.1	1570	8.0	23.0	210
JULY												
22...	.5	.02	1060	1040	1.44	400	220	4.3	1560	7.8	25.5	230
AUG.												
26...	.5	.17	1050	1010	1.43	360	170	4.6	1570	8.0	27.0	220
SEP.												
23...	.4	.11	1070	1050	1.46	400	220	4.4	1580	7.8	22.0	230

09534000. Main drain at southerly international boundary, near San Luis, Ariz.

LOCATION.--Lat 32°29'17", long 114°47'16", in SE¼NE¼ sec.11, T.11 S., R.25 W., Yuma County, at gaging station at pumping plant, 0.1 mi (0.2 km) upstream from international boundary, and 0.4 mi (0.6 km) west of San Luis.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
08...	0930	135	23	10	160	55	310	7.2	292	--	510	390
22...	0910	140	24	10	150	45	340	7.2	293	--	500	370
NOV.												
05...	0900	145	23	10	150	46	340	6.8	294	--	490	370
19...	0920	140	24	10	160	49	330	6.1	292	--	490	390
DEC.												
03...	0955	140	22	0	160	54	340	6.6	294	--	530	400
17...	1035	143	23	50	140	48	340	5.7	284	--	490	390
JAN.												
07...	0905	136	23	10	140	48	310	6.1	270	--	500	380
21...	1315	140	20	20	140	43	290	5.6	259	--	470	350
FEB.												
12...	0930	140	21	0	120	52	300	5.5	263	--	450	360
18...	1010	140	22	10	140	50	340	5.9	275	--	490	380
MAR.												
12...	1345	86	20	10	140	50	310	6.2	280	--	500	350
25...	1010	136	20	10	140	51	310	6.0	269	--	490	360
APR.												
08...	0945	84	21	10	150	54	320	6.3	284	--	510	390
22...	0905	140	21	10	150	52	340	6.3	298	--	510	390
MAY												
06...	1020	160	22	20	160	53	350	6.6	291	0	550	400
20...	0940	160	21	30	150	54	330	5.9	288	0	490	380
JUNE												
10...	1130	140	21	20	150	50	330	6.9	280	0	530	380
24...	0955	140	20	10	140	52	300	6.5	265	0	500	350
JULY												
08...	1025	135	23	0	150	50	330	6.2	279	0	540	370
22...	1030	160	22	0	140	51	310	7.8	261	0	470	350
AUG.												
05...	1530	140	22	10	150	52	330	6.5	274	0	500	380
19...	1030	138	23	0	150	62	360	6.5	295	0	560	400
SEP.												
09...	1030	140	22	0	160	54	340	6.8	298	0	490	400
23...	0915	160	22	0	150	53	340	6.8	297	0	580	390

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)
NOV.								
05...	0900	145	.00	.0	.00	.00	.00	.00
FEB.								
12...	0930	140	.00	.0	.00	<.01	.00	.00
MAY								
06...	1330	--	.00	.0	.00	.00	.00	.00
AUG.								
05...	1530	140	.00	.0	.00	.00	.00	.00

09534000. Main drain at southerly international boundary near San Luis, Ariz.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished chemical analyses (continuing record) from October 1961 to September 1968 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
08...	.5	.76	1750	1600	2.38	630	390	5.4	2620	--	26.0	340
22...	.5	.69	1670	1580	2.27	560	320	6.3	2590	--	21.5	460
NOV.												
05...	.5	.67	1720	1570	2.34	560	320	6.2	2590	--	21.0	430
19...	.4	.65	1700	1600	2.31	600	360	5.9	2530	--	20.0	400
DEC.												
03...	.5	1.6	1800	1670	2.45	620	380	5.9	2660	--	17.0	450
17...	.5	.67	1610	1580	2.19	550	310	6.3	2480	--	11.0	410
JAN.												
07...	.5	.54	1570	1540	2.14	550	330	5.8	2410	--	13.5	380
21...	.5	.65	1470	1450	2.00	530	310	5.5	2290	--	13.5	390
FEB.												
12...	.5	.64	1510	1440	2.05	510	300	5.8	2300	--	16.5	360
18...	.7	.66	1610	1570	2.19	560	330	6.3	2470	--	15.5	410
MAR.												
12...	.6	.80	1610	1520	2.19	560	330	5.7	2420	--	20.0	400
25...	.4	.61	1540	1510	2.09	560	340	5.7	2390	--	19.0	390
APR.												
08...	.5	.62	1690	1600	2.30	600	360	5.7	2560	--	16.0	440
22...	.6	.61	1700	1620	2.31	590	340	6.1	2550	--	20.0	440
MAY												
06...	.5	.99	1690	1690	2.30	620	380	6.1	2650	7.9	20.0	450
20...	.5	.60	1670	1580	2.27	600	360	5.9	2560	8.0	22.0	380
JUNE												
10...	.6	.50	1730	1610	2.35	580	350	6.0	2540	7.9	26.0	420
24...	.5	.46	1500	1500	2.04	560	340	5.5	2340	8.0	14.0	390
JULY												
08...	.5	.48	1620	1610	2.20	580	350	6.0	2540	8.0	26.3	420
22...	.6	.37	1550	1480	2.11	560	350	5.7	2370	7.8	28.0	360
AUG.												
05...	.5	.40	1660	1580	2.26	590	370	5.9	2500	8.1	31.5	400
19...	.5	.60	1770	1710	2.41	630	390	6.2	2650	7.9	--	430
SEP.												
09...	.5	.83	1700	1620	2.31	620	380	5.9	2610	7.9	28.5	370
23...	.5	.73	1750	1690	2.38	590	350	6.1	2570	7.9	26.5	420

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL DI-ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	TOTAL HEPTA-CHLOR (UG/L)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALA-THION (UG/L)	TOTAL METHYL PARA-THION (UG/L)	TOTAL METHYL TRI-THION (UG/L)
NOV.									
05...	.00	.00	.00	.00	.00	.00	.00	.02	.00
FEB.									
12...	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAY									
06...	.00	.00	--	.00	.00	.00	.00	.00	--
AUG.									
05...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL PARA-THION (UG/L)	TOTAL PCB (UG/L)	TOTAL TOX-APHENE (UG/L)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)	TEMPER-ATURE (DEG C)
NOV.								
05...	.12	.0	0	.00	.00	.00	.00	21.0
FEB.								
12...	.00	.0	0	.00	.07	.00	.00	16.5
MAY								
06...	.00	.0	0	--	.05	.00	.00	--
AUG.								
05...	.00	.0	0	.00	.00	.00	.00	31.5

09534300. West Main Canal wasteway at Arizona-Sonora boundary

LOCATION.--Lat 32°29'29", long 114°47'39", in SE¼NE¼ sec.11, T.11 S., R.25 W., Yuma County, at gaging station, 150 ft (50 m) upstream from outlet into Main drain, 300 ft (100 m) north of international boundary, 0.2 mi (0.3 km) west of San Luis, Ariz., and 19 mi (30 km) south of Yuma.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
08...	0900	2.8	10	20	92	34	130	5.9	166	--	330	120
25...	1030	22	10	20	90	35	150	5.8	169	--	340	140
NOV.												
05...	0850	11	10	20	97	30	160	6.0	176	--	330	150
26...	0855	3.0	7.6	10	95	34	160	6.0	176	--	340	140
DEC.												
03...	0925	2.8	8.9	10	94	34	160	4.8	178	--	360	150
17...	1120	9.4	10	10	100	36	190	5.4	190	--	390	180
JAN.												
07...	0855	11	9.2	10	95	33	160	5.6	176	--	370	150
21...	1315	6.8	7.1	50	90	32	140	5.0	155	--	350	130
FEB.												
04...	1035	1.7	6.2	10	88	35	140	5.8	160	--	340	130
18...	1150	.70	6.6	20	87	36	140	5.1	159	--	370	130
MAR.												
11...	0835	29	8.5	10	94	33	130	5.7	176	--	340	120
25...	0950	25	7.9	20	94	34	120	6.1	169	--	330	110
APR.												
11...	1145	25	8.2	10	90	33	130	5.4	176	--	330	120
22...	0855	22	4.0	20	93	34	140	5.1	177	--	330	120
MAY												
06...	1010	14	7.8	10	93	34	140	5.5	179	0	340	120
20...	0925	32	6.9	10	97	33	130	5.4	174	0	360	110
JUNE												
13...	1010	7.0	6.9	30	90	32	130	5.4	161	0	350	110
25...	1250	3.5	7.9	60	88	35	140	5.8	151	0	360	120
JULY												
11...	1145	5.0	10	20	89	29	120	5.3	163	0	330	110
22...	1030	15	9.0	0	89	33	120	6.6	165	0	310	110
AUG.												
05...	0945	2.6	9.8	0	82	33	130	5.8	141	0	320	130
22...	0950	11	9.0	10	88	35	120	5.2	162	0	330	110
SEP.												
09...	0940	14	9.3	10	88	33	140	5.5	173	0	320	130
23...	0900	3.1	9.6	0	90	31	140	5.6	170	0	340	130

09534300. West Main Canal wasteway at Arizona-Sonora boundary--Continued

PERIOD OF RECORD.--Chemical analyses: March 1971 to current year.

REMARKS.--No flow Nov. 22, Feb. 27.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
08...	.4	.06	838	805	1.14	370	230	2.9	1320	--	23.0	190
25...	.4	.08	920	855	1.25	370	230	3.4	1350	--	23.0	210
NOV.												
05...	.5	.14	936	871	1.27	370	220	3.6	1430	--	19.5	220
26...	.4	.02	914	870	1.24	380	230	3.6	1430	--	18.0	190
DEC.												
03...	.5	.08	926	901	1.26	370	230	3.6	1460	--	15.5	220
17...	.5	.13	982	1010	1.34	400	240	4.1	1570	--	10.5	220
JAN.												
07...	.4	.17	896	911	1.22	370	230	3.6	1410	--	7.0	210
21...	.4	.13	832	832	1.13	360	230	3.2	1310	--	12.0	180
FEB.												
04...	.4	.06	830	825	1.13	360	230	3.2	1300	--	11.0	170
18...	.4	.06	842	854	1.15	370	240	3.2	1330	--	13.5	210
MAR.												
11...	.4	.15	880	819	1.20	370	230	2.9	1280	--	13.5	170
25...	.2	.14	822	786	1.12	370	240	2.7	1230	--	15.5	150
APR.												
11...	.4	.61	832	807	1.13	360	220	3.0	1270	--	18.0	180
22...	.4	.02	828	814	1.13	370	230	3.2	1290	--	14.0	180
MAY												
06...	.4	.14	850	830	1.16	370	220	3.2	1300	8.1	18.0	170
20...	.5	.16	842	830	1.15	380	240	2.9	1290	8.0	21.5	230
JUNE												
13...	.4	.03	826	804	1.12	360	230	3.0	1250	8.3	28.5	170
25...	.5	.01	830	832	1.13	360	240	3.2	1280	8.3	32.0	180
JULY												
11...	.4	.53	830	776	1.13	340	210	2.8	1250	8.2	27.0	160
22...	.4	.14	816	760	1.11	360	230	2.8	1230	8.2	28.0	150
AUG.												
05...	.4	.03	818	781	1.11	340	220	3.1	1260	8.2	28.0	190
22...	.4	.06	782	778	1.06	360	230	2.7	1220	8.1	28.0	180
SEP.												
09...	.4	.19	838	813	1.14	360	210	3.2	1280	8.2	29.5	190
23...	.4	.08	858	831	1.17	350	210	3.2	1310	8.2	26.0	190

09534500. East Main Canal wasteway at Arizona-Sonora boundary

LOCATION.--Lat 32°29'13", long 114°47'01", in NW¼SW¼, sec.12, T.11 S., R.25 W., Yuma County, at gaging station, 0.2 mi (0.3 km) east of Main drain pumping plant, and 0.2 mi (0.3 km) west of San Luis.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
08...	0930	1.5	9.4	20	76	34	140	5.2	98	--	340	150
22...	0855	2.5	10	0	92	33	180	6.3	144	--	380	180
NOV.												
05...	0855	15	13	20	100	43	200	6.1	164	--	390	220
19...	0910	3.9	8.0	10	85	32	150	5.4	142	--	350	140
DEC.												
03...	1000	3.9	8.2	10	110	41	210	5.4	148	--	400	270
17...	1030	2.8	7.9	20	92	32	150	4.8	165	0	350	140
JAN.												
07...	0920	9.3	8.4	10	99	35	150	5.6	163	--	360	170
21...	1320	10	8.3	10	110	36	180	5.3	170	--	360	200
FEB.												
04...	1040	17	8.3	40	99	38	160	6.0	172	--	390	160
18...	1020	.70	5.5	40	87	37	140	4.8	157	--	360	130
MAR.												
11...	0850	1.0	2.0	10	82	32	130	5.8	145	--	340	120
25...	1000	15	7.7	10	96	36	140	5.5	168	--	350	150
APR.												
08...	0930	10	7.1	10	96	35	150	5.8	156	--	350	160
22...	0920	1.4	5.1	10	78	34	150	5.2	136	--	330	130
MAY												
06...	1025	17	7.5	20	95	36	150	5.6	166	0	350	150
23...	1000	26	8.2	10	100	35	160	5.9	188	0	350	160
JUNE												
13...	1015	14	8.3	20	92	34	140	5.4	165	0	360	130
24...	1005	9.3	8.1	0	98	37	150	6.0	163	0	360	150
JULY												
08...	1030	8.0	9.4	0	93	31	150	6.1	155	0	360	150
22...	1020	--	--	--	--	--	--	--	--	0	--	--
AUG.												
08...	0900	18	11	0	94	36	140	5.8	175	0	350	140
18...	1000	11	9.1	0	86	32	140	5.6	157	0	340	120
SEP.												
09...	1020	34	9.5	10	70	34	140	5.6	156	0	310	120
23...	0930	8.4	9.8	0	92	34	150	5.6	158	0	360	150

09534500. East Main Canal wasteway at Arizona-Sonora boundary--Continued

REMARKS.--No flow Nov. 21, 22; Dec. 19, 26, 27; Feb. 20; Mar. 6, 31; Apr. 23, 24; June 18; Aug. 5, 6. Unpublished miscellaneous chemical analyses for water years 1962-65, and continuing-record analyses for water years 1966-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED BORON (B) (UG/L)
OCT.												
08...	.4	.06	868	804	1.18	330	250	3.4	1370	--	25.0	120
22...	.5	.02	1000	953	1.36	370	250	4.1	1550	--	20.0	280
NOV.												
05...	.5	.55	1110	1060	1.51	430	290	4.2	1710	--	19.5	270
19...	.4	.03	872	841	1.19	340	230	3.5	1350	--	15.5	200
DEC.												
03...	.5	.02	1150	1120	1.56	440	320	4.3	1830	--	15.5	280
17...	.4	.10	856	859	1.16	360	230	3.4	1360	--	11.0	210
JAN.												
07...	.4	.22	914	910	1.24	390	260	3.3	1450	--	8.0	200
21...	.4	.07	1010	984	1.37	420	280	3.8	1580	--	12.0	220
FEB.												
04...	.4	.13	916	947	1.25	400	260	3.5	1450	--	10.5	210
18...	.4	.02	848	842	1.15	370	240	3.2	1320	--	9.0	200
MAR.												
11...	.4	.02	798	784	1.09	340	220	3.1	1250	--	11.0	150
25...	.4	.05	908	869	1.23	390	250	3.1	1350	--	16.0	180
APR.												
08...	1.6	.23	926	884	1.26	380	260	3.3	1430	--	12.0	200
22...	.5	.09	834	800	1.13	330	220	3.6	1310	--	15.0	210
MAY												
06...	.4	.43	914	878	1.24	390	250	3.3	1380	8.2	18.0	190
23...	.5	.05	918	913	1.25	390	240	3.5	1460	8.0	--	190
JUNE												
13...	.4	.13	902	852	1.23	370	240	3.2	1360	8.2	27.0	190
24...	.4	.04	884	890	1.20	400	270	3.3	1390	8.3	14.5	190
JULY												
08...	.4	.01	918	876	1.25	360	230	3.4	1380	8.1	26.0	190
22...	--	--	908	--	1.23	--	--	--	--	8.1	--	--
AUG.												
08...	.4	.13	870	864	1.18	380	240	3.1	1340	8.0	--	180
18...	.4	.09	848	811	1.15	350	220	3.3	1280	8.1	28.0	160
SEP.												
09...	.5	.15	828	767	1.13	310	190	3.4	1300	8.2	30.0	200
23...	.4	.05	890	880	1.21	370	240	3.4	1400	8.2	26.0	180

SAN SIMON WASH BASIN

09535100. San Simon Wash near Pisinimo, Ariz.

LOCATION.--Lat 32°02'42", long 112°22'12", in SE¼ sec.9, T.16 S., R.1 W. (unsurveyed), Pima County, in Papago Indian Reservation, in center of channel between two culverts at upstream side of road, just upstream from Gu Vo Wash, and 3.2 mi (5.1 km) west of Pisinimo.

DRAINAGE AREA.--About 600 mi^2 (about 1,600 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,830 ft (558 m), from topographic map. Auxiliary crest-stage gage 40 ft (12 m) downstream at datum 2.97 ft (0.905 m) lower, to measure head through culverts.

EXTREMES.--Current year: Maximum discharge, 1,950 ft^3/s (55.2 m^3/s) Sept. 7 (gage height, 8.84 ft or 2.694 m); no flow for most of year.
Period of record: Maximum discharge, 1,950 ft^3/s (55.2 m^3/s) Sept. 7, 1975 (gage height,8.84 ft or 2.694 m); no flow for most of each year.

REMARKS.--Records fair except those for Sept. 6, 7, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.0				0				0	0	0
2	0	0				0				0	0	0
3	0	0				0				0	0	0
4	0	0				0				0	0	0
5	0	0				0				0	0	0
6	3.2	0				0				0	0	65
7	0	0				0				0	0	394
8	0	0				0				0	0	0
9	0	0				0				0	0	0
10	0	0				0				1.8	0	0
11	0	0				16				0	.19	0
12	0	0				43				0	0	0
13	0	0				2.1				1.4	0	0
14	0	0				0				0	0	0
15	0	0				0				0	0	0
16	0	0				0				0	0	0
17	0	0				0				0	0	0
18	0	0				0				0	0	0
19	0	0				0				0	0	0
20	0	0				0				0	0	0
21	0	0				0				0	0	0
22	5.7	0				0				0	0	0
23	162	0				0				0	0	0
24	78	0				0				0	0	0
25	.55	0				0				0	0	0
26	0	0				0				0	0	0
27	0	0				0				0	0	0
28	0	0				0				.59	0	0
29	4.4	0			---	0				0	0	0
30	116	0			---	0				0	0	0
31	36	---			---	0	---		---	0	0	---
TOTAL	405.85	1.0	0	0	0	61.1	0	0	0	3.79	.19	459
MEAN	13.1	.033	0	0	0	1.97	0	0	0	.12	.006	15.3
MAX	162	1.0	0	0	0	43	0	0	0	1.8	.19	394
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	805	2.0	0	0	0	121	0	0	0	7.5	.4	910

CAL YR 1974 TOTAL 1173.62 MEAN 3.22 MAX 191 MIN 0 AC-FT 2330
WTR YR 1975 TOTAL 930.93 MEAN 2.55 MAX 394 MIN 0 AC-FT 1850

PEAK DISCHARGE (BASE, 500 CFS).--Sept. 7 (0200) 1,950 cfs (8.84 ft).

SAN SIMON WASH BASIN

09535300. Vamori Wash at Kom Vo, Ariz.

LOCATION.--Lat 31°57'04", long 112°20'50", in NW¼ sec.14, T.17 S., R.1 W. (unsurveyed), Pima County, in Papago Indian Reservation, on right bank 200 ft (61 m) downstream from road crossing, 0.6 mi (1.0 km) south of Kom Vo and 5 mi (8 km) upstream from mouth.

DRAINAGE AREA.--1,250 mi^2 (3,240 km^2), approximately, of which about 250 mi^2 (650 km^2) is in Mexico.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,770 ft (539 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 751 ft^3/s (21.3 m^3/s), occurred during period Sept. 5-8 (gage height, 7.94 ft or 2.420 m, from high-water mark in gage well), from rating curve extended above 390 ft^3/s (11 m^3/s); no flow for most of year.
Period of record: Maximum discharge, 1,880 ft^3/s (53.2 m^3/s) Oct. 20, 1972 (gage height, 9.44 ft or 2.877 m), from rating curve extended above 390 ft^3/s (11 m^3/s); no flow for most of each year.

REMARKS.--Records fair except those for periods of doubtful or no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	0	0
2	0									0	0	0
3	0									0	0	0
4	0									0	0	50
5	0									0	0	350
6	0									0	0	100
7	0									0	0	250
8	0									0	0	40
9	0									0	9.5	10
10	0									0	242	10
11	0									0	6.1	5.0
12	0									0	1.0	.80
13	0									1.2	0	0
14	0									13	3.9	0
15	0									4.3	.10	0
16	0									1.0	0	0
17	0									0	0	0
18	0									216	0	0
19	0									374	.10	0
20	0									46	36	0
21	79									3.4	109	0
22	350									.30	242	0
23	39									0	13	0
24	22									0	2.4	0
25	1.9									0	0	0
26	0									0	0	0
27	0									2.4	0	0
28	0									19	0	0
29	0				---					42	0	0
30	0				---					6.5	0	0
31	0	---			---		---		---	.80	0	---
TOTAL	491.9	0	0	0	0	0	0	0	0	729.90	665.10	815.80
MEAN	15.9	0	0	0	0	0	0	0	0	23.5	21.5	27.2
MAX	350	0	0	0	0	0	0	0	0	374	242	350
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	976	0	0	0	0	0	0	0	0	1450	1320	1620

CAL YR 1974 TOTAL 2199.10 MEAN 6.02 MAX 350 MIN 0 AC-FT 4360
WTR YR 1975 TOTAL 2702.70 MEAN 7.40 MAX 374 MIN 0 AC-FT 5360

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-22	*0300	†7.91	742	8-20	2000	6.08	283
7-19	0400	7.13	521	8-22	0330	6.66	403
8-10	0530	6.98	482	(‡)	unknown	†7.94	751

* About.
† From high-water mark in gage well.
‡ Occurred during period Sept. 5-8.
NOTE.--Doubtful or no gage-height record Oct. 1 to Nov. 7, Feb. 2 to June 10, Sept. 4-12.

09537200. Leslie Creek near McNeal, Ariz.

LOCATION.--Lat 31°35'24", long 109°30'30", in SE¼NE¼ sec.20, T.21 S., R.28 E., Cochise County, on right bank 10 mi (16 km) east of McNeal.

DRAINAGE AREA.--79.1 mi^2 (204.9 km^2).

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

GAGE.--Water-stage recorder and concrete control with shallow sharp-crested V-notch weir. Altitude of gage is 4,620 ft (1,408 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 0.91 ft^3/s (0.0258 m^3/s) 659 acre-ft/yr (813,000 m^3/yr).

EXTREMES.--Current year: Maximum discharge, 132 ft^3/s (3.74 m^3/s) July 23 (gage height, 4.17 ft or 1.271 m), from rating curve extended above 5.7 ft^3/s (0.16 m^3/s) on basis of slope-area measurement at gage height 5.78 ft (1.762 m); minimum daily, 0.01 ft^3/s (0.0003 m^3/s) June 27 to July 1.
Period of record: Maximum discharge, 1,760 ft^3/s (49.8 m^3/s) Aug. 12, 1971 (gage height, 5.78 ft or 1.762 m), from rating curve extended above 5.7 ft^3/s (0.16 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 0.01 ft^3/s (0.0003 m^3/s) June 27 to July 1, 1975.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.19	.16	.20	.18	.14	.12	.09	.08	.01	.21	.07
2	.13	.20	.16	.20	.18	.14	.12	.09	.08	.03	.25	.06
3	.14	.20	.16	.20	.18	.14	.12	.09	.08	.05	.10	.07
4	.14	.20	.16	.18	.18	.14	.11	.07	.08	.05	.08	.09
5	.14	.20	.16	.18	.18	.14	.11	.07	.08	.06	.07	.11
6	.15	.18	.16	.20	.18	.13	.11	.07	.08	.04	.09	.11
7	.15	.18	.14	.16	.18	.14	.12	.07	.08	.06	.09	.13
8	.15	.18	.14	.16	.18	.14	.11	.06	.08	.07	.10	.16
9	.15	.18	.18	.18	.18	.14	.11	.06	.09	.07	.11	.18
10	.15	.18	.18	.18	.16	.14	.13	.06	.09	.08	.12	.20
11	.17	.18	.18	.18	.16	.14	.12	.06	.05	.09	.12	.42
12	.18	.18	.22	.16	.16	.15	.12	.06	.04	.12	.12	.11
13	.20	.18	.22	.16	.16	.14	.12	.06	.04	.06	.13	.11
14	.19	.18	.22	.16	.16	.14	.12	.06	.03	.05	.17	.13
15	.19	.18	.22	.16	.16	.14	.12	.06	.03	.05	.10	.12
16	.18	.18	.22	.16	.16	.14	.13	.06	.03	.05	.07	.11
17	.17	.17	.22	.16	.16	.13	.12	.06	.03	.06	.07	.11
18	.17	.17	.22	.16	.14	.13	.11	.06	.04	.06	.07	.11
19	.18	.17	.22	.16	.14	.12	.11	.06	.04	.06	.08	.13
20	.19	.17	.22	.16	.14	.12	.11	.06	.04	.05	.09	.13
21	.20	.18	.20	.16	.14	.12	.11	.06	.04	.07	.09	.13
22	.19	.19	.20	.16	.14	.12	.11	.06	.04	2.9	.12	.17
23	.19	.18	.20	.15	.14	.12	.11	.06	.04	16	.10	.10
24	.19	.18	.20	.16	.15	.12	.11	.06	.02	.18	.07	.07
25	.19	.18	.20	.16	.14	.12	.11	.06	.02	.15	.06	.07
26	.19	.18	.20	.16	.14	.11	.11	.06	.02	.14	.05	.07
27	.17	.16	.20	.15	.14	.13	.10	.07	.01	.16	.06	.07
28	.18	.16	.20	.18	.14	.14	.10	.08	.01	.12	.06	.07
29	.18	.16	.20	.19	---	.12	.10	.09	.01	.12	.06	.08
30	.18	.16	.20	.18	---	.12	.10	.09	.01	.15	.06	.08
31	.19	---	.18	.18	---	.12	---	.09	---	.15	.07	---
TOTAL	5.30	5.38	5.94	5.29	4.45	4.08	3.40	2.11	1.41	21.31	3.04	3.57
MEAN	.17	.18	.19	.17	.16	.13	.11	.06	.04	.69	.09	.12
MAX	.20	.20	.22	.20	.18	.15	.13	.09	.09	16	.25	.42
MIN	.13	.16	.14	.15	.14	.11	.10	.06	.01	.01	.05	.06
AC-FT	11	11	12	10	8.8	8.1	6.7	4.2	2.8	42	6.0	7.1

CAL YR 1974 TOTAL 99.88 MEAN .27 MAX 5.3 MIN .04 AC-FT 198
WTR YR 1975 TOTAL 65.28 MEAN .18 MAX 16 MIN .01 AC-FT 129

PEAK DISCHARGE (BASE, 100 CFS).--July 23 (0045) 132 cfs (4.17 ft).

09537500. Whitewater Draw near Douglas, Ariz.

LOCATION.--Lat 31°21'08", long 109°35'04", in SW¼SE¼ sec.10, T.24 S., R.27 E., Cochise County, on downstream side of pier of bridge on U.S. Highway 80, 1.5 mi (2.4 km) upstream from international boundary and 2 mi (3 km) west of Douglas. Location during period 1972-74 was 200 ft (61 m) upstream from bridge (listing in WRD Ariz. 1972, 1973 was in error).

DRAINAGE AREA.--1,023 mi^2 (2,650 km^2).

PERIOD OF RECORD.--August to October 1911 (gage heights and discharge measurements only), July to October 1912, January to June 1913, October 1913, December 1913 to June 1914, February to June 1915, October 1915 to September 1919, October 1919 to April 1922 (gage heights and discharge measurements only), June 1930 to December 1933, May 1935 to July 1947, October 1947 to current year. (July 1954 to March 1955 monthly discharge only.) Monthly discharge only for some periods, published in WSP 1313. Records for July to September, November 1913, July 1914 to January 1915, July to September 1915, published in WSP 359, 389, 409, and 1049 have been found to be unreliable and should not be used. Published as White River near Douglas 1911 and as White Water River near Douglas 1912.

GAGE.--Water-stage recorder. Datum of gage is 3,909.14 ft (1,191.506 m) above mean sea level. Prior to Apr. 30, 1922, nonrecording gages at various sites between 0.3 mi (0.5 km) upstream and 0.8 mi (1.3 km) downstream, at different datums. June 1, 1930, to Apr. 25, 1972, water-stage recorder at present site, at datum 2.17 ft (0.661 m) lower prior to May 14, 1938, and at datum 2.20 ft (0.671 m) lower May 14, 1938, to Apr. 25, 1972. Apr. 26, 1972, to Apr. 10, 1974, water-stage recorder at site 200 ft (61 m) upstream at datum 4.40 ft (1.341 m) higher.

AVERAGE DISCHARGE.--46 years (1915-19, 1930-33, 1935-46, 1947-75), 10.2 ft^3/s (0.289 m^3/s), 7,390 acre-ft/yr (9.11 hm^3/yr); median of yearly mean discharges, 8.4 ft^3/s (0.238 m^3/s), 6,100 acre-ft/yr (7.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,020 ft^3/s (28.9 m^3/s) July 23 (gage height, 8.04 ft or 2.451 m); no flow for most of year.
Period of record: Maximum discharge, 5,060 ft^3/s (143 m^3/s) Aug. 7, 1955; maximum gage height, 16.55 ft (5.044 m) July 29, 1966; no flow at times in most years.

REMARKS.--Records poor. Irrigation of about 40,000 acres (162 km^2)—in 1967—above station, by pumping from ground water. Whitewater Draw discharges into Gulf of California through Rio Yaqui in Mexico. Records show flow at international boundary except for smelter waste water which enters stream below station.

REVISIONS.--See PERIOD OF RECORD.

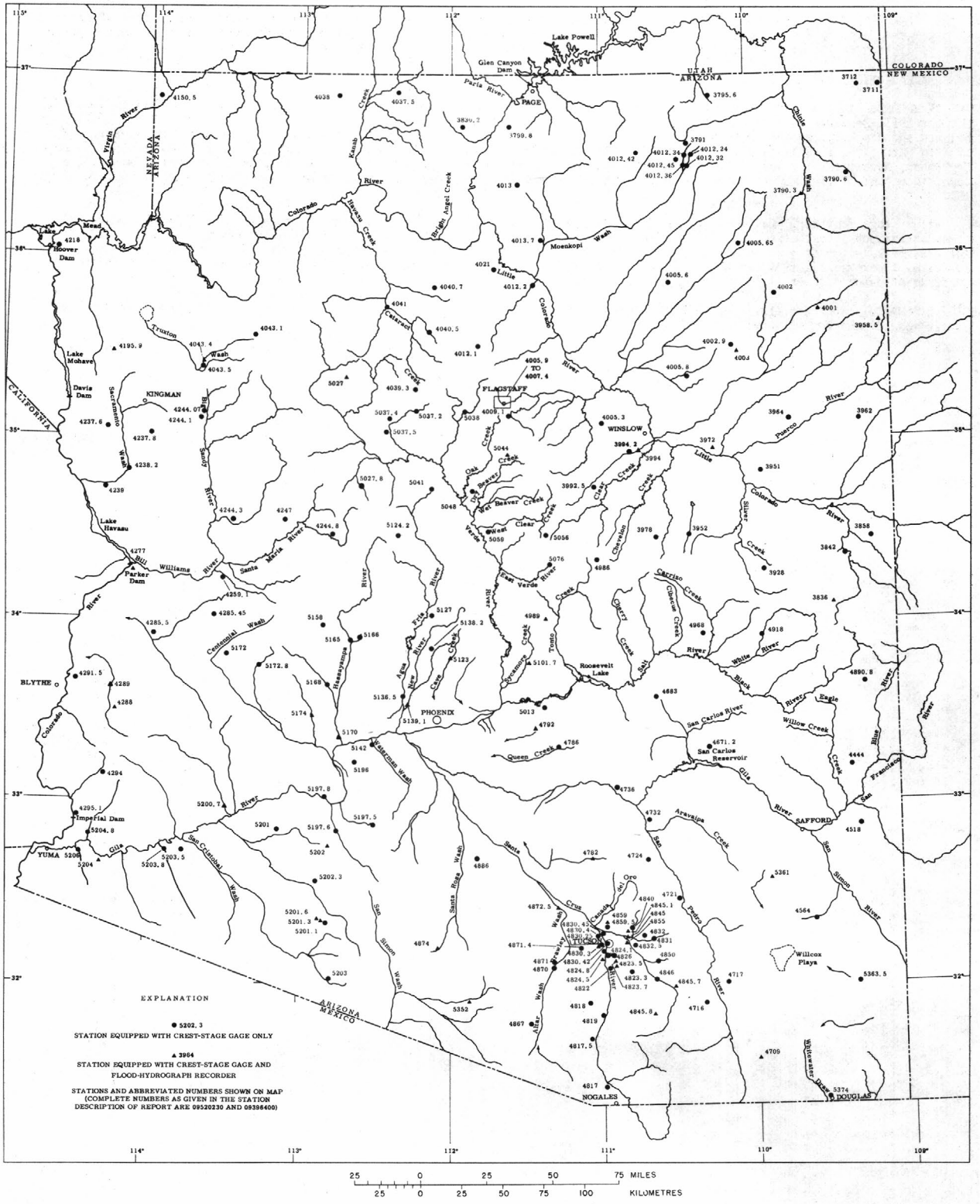
DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	0	0							0	20	0
2	.31	0	0							4.4	12	.70
3	.25	0	.60							2.3	4.8	9.4
4	.19	0	.30							.30	2.6	12
5	.10	0	0							0	2.0	2.1
6	.01	0	0							19	1.4	59
7	3.5	0	0							33	.60	15
8	22	0	0							22	.10	10
9	1.3	0	0							12	0	2.1
10	.67	0	0							1.1	0	28
11	.40	0	0							.35	2.2	65
12	36	0	0							30	.70	82
13	81	0	0							246	.10	135
14	2.4	0	0							15	0	206
15	.70	0	0							5.0	0	6.7
16	.30	0	0							1.0	0	1.5
17	0	0	0							.50	0	1.0
18	0	0	0							0	0	.70
19	0	0	0							0	0	.50
20	0	.80	0							0	0	.30
21	0	2.0	0							0	0	.20
22	44	2.2	0							15	4.0	0
23	1.4	.70	0							585	3.2	0
24	.50	.20	0							385	.70	0
25	.30	0	0							261	.10	0
26	0	0	0							93	0	0
27	0	0	0							69	0	0
28	0	0	0							47	0	0
29	0	0	0		---					35	0	0
30	0	0	0		---					21	0	0
31	0	---	0		---		---		---	21	0	---
TOTAL	195.77	5.90	.90	0	0	0	0	0	0	1923.95	54.50	637.20
MEAN	6.32	.20	.02	0	0	0	0	0	0	62.1	1.76	21.2
MAX	81	2.2	.60	0	0	0	0	0	0	585	20	206
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	388	12	1.8	0	0	0	0	0	0	3820	108	1260

CAL YR 1974 TOTAL 1960.39 MEAN 5.37 MAX 587 MIN 0 AC-FT 3890
WTR YR 1975 TOTAL 2818.22 MEAN 7.72 MAX 585 MIN 0 AC-FT 5590

PEAK DISCHARGE (BASE, 1,000 CFS).--July 23 (*1000) 1,020 cfs (†8.04 ft).

* About.
† From high-water mark in gage well.
NOTE.--No gage-height record July 13-23.


EXPLANATION
5202.3
STATION EQUIPPED WITH CREST-STAGE GAGE ONLY
3964
STATION EQUIPPED WITH CREST-STAGE GAGE AND FLOOD-HYDROGRAPH RECORDER
STATIONS AND ABBREVIATED NUMBERS SHOWN ON MAP (COMPLETE NUMBERS AS GIVEN IN THE STATION DESCRIPTION OF REPORT ARE 09520230 AND 09398400)
25 0 25 50 75 MILES
25 0 25 50 75 100 KILOMETRES
Lake Powell
Glen Canyon Dam
PAGE
UTAH
ARIZONA
COLORADO
NEW MEXICO
NEVADA
CALIFORNIA
Lake Mead
Hoover Dam
Lake Mohave
Davis Dam
KINGMAN
Lake Havasu
Parker Dam
BLYTHE
Imperial Dam
YUMA
FLAGSTAFF
WINSLOW
PHOENIX
Roosevelt Lake
San Carlos Reservoir
SAFFORD
Willcox Playa
DOUGLAS
NOGALES
Colorado River
Virgin River
Kanab Creek
Paria River
Little Colorado River
Moenkopi Wash
Truxton Wash
Sacramento Wash
Bill Williams River
Santa Maria River
Centennial Wash
Gila River
San Cristobal Wash
Agua Fria River
Hassayampa River
Verde River
Oak Creek
West Clear Creek
Beaver Creek
Chevelon Creek
Clear Creek
Silver Creek
Cibecue Creek
Carrizo Creek
Canyon Creek
Tonto Creek
Salt River
White River
Black River
Eagle Creek
Willow Creek
San Carlos River
Pinal Creek
Queen Creek
Santa Cruz River
Rillito Creek
Pantano Wash
Aravaipa Creek
San Pedro River
San Simon River
San Simon Wash
Santa Rosa Wash
Tres Alamos Wash
Cienega Creek
Sonoita Creek
Santa Cruz Wash
Black Canyon
Bright Angel Creek
Cataract Creek
Havasu Creek
Truxton Wash
Sandy Wash
Centennial

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

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, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1975

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		San Juan River basin					
09371100	Teec Nos Pos Wash near Teec Nos Pos, Ariz.	Lat 36°55'58", long 109°06'35", in NE¼ sec.27, T.41 N., R.30 E., Apache County, at U.S. Highway 160, 1.5 miles northwest of Teec Nos Pos Trading Post.	16.0	1967-75	9- -75	5.77	450
09371200	Tsitah Wash near Teec Nos Pos, Ariz.	Lat 36°56'40", long 109°15'51", in NE¼SE¼ sec.19, T.41 N., R.29 E., Apache County, on U.S. Highway 160, 19.2 miles east of Mexican Water Trading Post, and 10.4 miles west of Teec Nos Pos Trading Post.	24.5	1968-75	10- -74	----	40
09379030	Black Mountain Wash near Chinle, Ariz.	Lat 36°20'00", long 109°37'25", Apache County, at State Highway 63, 1 mile south of Many Farms, and 13 miles north of Chinle.	80.7	1963-75	7- -74 8-20-75	3.32 3.14	a140 110
09379060	Lukachukai Creek tributary near Lukachukai, Ariz.	Lat 36°28'10", long 109°24'20", Apache County, at Navajo Highway 12, 6.8 miles southeast of Round Rock, and 10 miles northwest of Lukachukai.	1.37	1963-75	b1975	2.86	c1
09379100	Long House Wash near Kayenta, Ariz.	Lat 36°34'02", long 110°29'17", Navajo County, at U.S. Highway 160, 17 miles southwest of Kayenta.	1.38	1963-75	9- 8-75	10.36	960
09379560	El Capitan Wash near Kayenta, Ariz.	Lat 36°51'32", long 110°15'55", Navajo County, at U.S. Highway 163, 12 miles north of Kayenta.	5.88	1963-75	7- -75	6.46	530
		Jack Bench Wash basin					
09379980	Jack Bench Wash tributary near Page, Ariz.	Lat 36°42'50", long 111°35'30", Coconino County, at U.S. Highway 89, 17 miles south of Page.	.98	1962-75	all- -73 1975	8.18 ----	125 <1
		House Rock Wash basin					
09383020	House Rock Wash tributary near Marble Canyon, Ariz.	Lat 36°42'05", long 111°55'45", in SE¼SE¼ sec.11, T.38 N., R.4 E., Coconino County, at U.S. Highway 89 Alt., 21 miles southwest of Marble Canyon Post Office.	3.54	1963-75	all- 4-73 1975	---- ----	<5 <5
		Little Colorado River basin					
09383600	Fish Creek near Eagar, Ariz.	Lat 34°04'35", long 109°27'45", in SW¼NE¼ sec.23, T.8 N., R.27 E., Apache County, at State Highway 73, 10.5 miles west of Eagar.	d17.2 (1.3)	1963-75	9- 7-75	3.88	81
09384200	Lyman Reservoir tributary near St. Johns, Ariz.	Lat 34°23'30", long 109°22'48", in SE¼NE¼ sec.9, T.11 N., R.28 E., Apache County, at Lyman Reservoir Road, 10 miles south of St. Johns.	.24	1963-75	9- 6-75	4.40	c3
09385800	Little Colorado River tributary near St. Johns, Ariz.	Lat 34°27'04", long 109°15'23", in NE¼SE¼ sec.10, T.12 N., R.29 E., Apache County, at county road, 7 miles southeast of St. Johns.	.35	1963-75	7-29-75	3.61	29
09392800	Long Lake tributary near Show Low, Ariz.	Lat 34°15'40", long 109°59'41", in NW¼SE¼ sec.15, T.10 N., R.22 E., Navajo County, at U.S. Highway 60, 1 mile east of Show Low.	5.18	1965-75	1975	----	(e)
09395100	Carr Lake Draw tributary near Holbrook, Ariz.	Lat 34°50'05", long 109°56'00", in NW¼NW¼ sec.32, T.17 N., R.23 E., Navajo County, at (former) U.S. Highway 180, 14 miles southeast of Holbrook.	1.19	1964-75	10-29-74	1.31	c4
09395200	Decker Wash near Snowflake, Ariz.	Lat 34°27'40", long 110°24'15", in SW¼ sec.2, T.12 N., R.18 E., Navajo County, at State Highway 277, 19 miles west of Snowflake.	16.8	1964-75	9- -75	----	c1.5
09395850	Black Creek tributary near Window Rock, Ariz.	Lat 35°39'15", long 109°05'20", in SE¼ sec.13, T.26 N., R.30 E., Apache County, at Navajo Highway 21, 0.2 mile south of State Highway 264, and 2.75 miles southwest of Window Rock.	.28	1963-75	7-11-75	8.13	156

Explanation of symbols used with partial-record crest-stage station listings is given at end of the table.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Little Colorado River basin--continued					
09396200	Parker Draw tributary near Sanders, Ariz.	Lat 35°04'18", long 109°17'07", in SW¼ sec.5, T.19 N., R.29 E., Apache County, on U.S. Highway 666, 10 miles south of Sanders.	0.05	1971-75	9- 7-75	6.08	15
09396400	Dead Wash tributary near Holbrook, Ariz.	Lat 35°04'30", long 109°45'00", in S½ sec.1, T.19 N., R.24 E., Apache County, at U.S. Highway 66, near east edge of Petrified Forest National Monument, and 26 miles northeast of Holbrook.	1.0	1963-75	10-29-74	4.99	138
09397200	Penzance Wash near Joseph City, Ariz.	Lat 34°55'08", long 110°15'13", in NE¼ sec.31, T.18 N., R.20 E., Navajo County, at U.S. Highway 66, 5.6 miles southeast of Joseph City.	.17	1963-75	9- -75	5.02	35
09397800	Brookbank Canyon near Heber, Ariz.	Lat 34°28'20", long 110°38'50", in SE¼ sec.33, T.13 N., R.16 E., Navajo County, at Heber-Winslow Road, 4 miles northwest of Heber.	27.6	1964-75	8-11-75	----	c2
09399250	Jacks Canyon tributary No. 2 near Winslow, Ariz.	Lat 34°45'56", long 111°00'44", in NE¼NW¼ sec.19, T.16 N., R.13 E., Coconino County, at State Highway 87, 27 miles southwest of Winslow.	31.6	1963-75	1975	----	(e)
09399400	Jacks Canyon Creek near Winslow, Ariz.	Lat 34°55'17", long 110°47'49", in NW¼NW¼ sec.31, T.18 N., R.15 E., Coconino County, on left bank 9 miles northeast of Sunset Pass and 9.5 miles southwest of Winslow.	280	1969-72#, 1973-75	9- 7-75	9.59	1,080
09399420	Jacks Canyon tributary No. 3 near Winslow, Ariz.	Lat 34°56'08", long 110°47'18", in NW¼NE¼ sec.30, T.18 N., R.15 E., Coconino County, at State Highway 87, 8.3 miles southwest of Winslow.	f.25	1970-75	9- 7-75	5.08	75
09400100	Ganado Wash tributary near Ganado, Ariz.	Lat 35°42'40", long 109°29'50", Apache County, at State Highway 264, 2.4 miles east of Ganado.	11.1	1963-75	7-12-75	5.09	418
09400200	Steamboat Wash tributary near Ganado, Ariz.	Lat 35°45'50", long 109°48'00", Apache County, at State Highway 264, 15 miles west of Ganado.	.32	1963-75	9- 7-75	4.18	28
09400290	Teshbito Wash tributary near Holbrook, Ariz.	Lat 35°28'50", long 110°05'15", in SW¼ sec.14, T.24 N., R.21 E., Navajo County, at State Highway 77, 7 miles north of Bita Hochee Trading Post, and 37 miles north of Holbrook.	16.4	1963-75	7-15-75	8.27	330
09400300	Teshbito Wash near Holbrook, Ariz.	Lat 35°26'55", long 110°04'05", in NW¼ sec.36, T.24 N., R.21 E., Navajo County, at State Highway 77, 4.0 miles north of Bita Hochee Trading Post, 35 miles north of Holbrook.	57.4	1963-75	7-15-75	9.55	700
09400530	Cow Canyon near Winslow, Ariz.	Lat 35°06'00", long 110°59'15", in SW¼ sec.29, T.20 N., R.13 E., Coconino County, at U.S. Highway 66, 17 miles west of Winslow.	d7.49 (3.96)	1962-75	9-18-75	1.53	8
09400560	Oraibi Wash tributary near Oraibi, Ariz.	Lat 35°52'20", long 110°33'20", in SW¼ sec.31, T.29 N., R.17 E., Navajo County, at State Highway 264, 3.5 miles east of Oraibi.	1.76	1963-75	9- 7-75	6.17	100
09400565	Polacca Wash tributary near Chinle, Ariz.	Lat 36°02'50", long 110°04'50", Navajo County, at Navajo Highway No. 4, 9 miles east of Pinon, and 31 miles southwest of Chinle.	d6.45 (.28)	1964-75	9- 7-75	11.60	1,130
09400580	Castle Butte Wash near Winslow, Ariz.	Lat 35°19'30", long 110°25'20", in SW¼ sec.10, T.22 N., R.18 E., Navajo County, at State Highway 87, 26 miles northeast of Winslow.	5.53	1964-75	7-15-75	10.01	860
09400590	Rio de Flag at Hidden Hollow Road, at Flagstaff, Ariz.	Lat 35°14'31", long 111°41'02", in SW¼SW¼ sec.32, T.22 N., R.7 E., Coconino County, at Hidden Hollow Road, 1.4 miles northwest of the Museum of Northern Arizona, and 3.4 miles northwest of downtown Flagstaff.	31.6	1970-75	1975	----	(e)
09400595	Schultz Canyon at Flagstaff, Ariz.	Lat 35°13'37", long 111°39'29", in SE¼SW¼ sec.4, T.21 N., R.7 E., Coconino County, at U.S. Highway 180, 0.6 mile south of the Museum of Northern Arizona in Flagstaff.	6.09	1970-75	1975	----	(e)
09400600	Rio de Flag at Flagstaff, Ariz.	Lat 35°13'18", long 111°39'24", in NW¼NE¼ sec.9, T.21 N., R.7 E., Coconino County, at west side of Crescent Drive in Flagstaff.	51.0	1970-75	4- -75	----	c <10
09400650	Sinclair Wash at Flagstaff, Ariz.	Lat 35°09'50", long 111°40'48", in NW¼NW¼ sec.32, T.21 N., R.7 E., Coconino County, at Holmes Avenue in the community of Palmerville at Flagstaff.	8.16	1970-75	10-30-74	6.48	74
09400660	Bow and Arrow Wash at Flagstaff, Ariz.	Lat 35°09'58", long 111°39'10", in NW¼NE¼ sec.33, T.21 N., R.7 E., Coconino County, at Zuni Road in Flagstaff.	2.14	1969-75	g1974	4.82	13
09400680	Switzer Canyon at Flagstaff, Ariz.	Lat 35°12'44", long 111°38'21", in SW¼SE¼ sec.10, T.21 N., R.7 E., Coconino County, at Turquoise and Oak Streets in Flagstaff.	1.87	1969-75	9- -75	2.51	10
09400700	Switzer Canyon tributary at Flagstaff, Ariz.	Lat 35°12'03", long 111°36'46", in NE¼SE¼ sec.14, T.21 N., R.7 E., Coconino County, at gravel road 500 ft upstream from I-40, and one-fourth mile downstream from U.S. Highway 66 in Flagstaff.	h7.31	1968-75	7-16-75	4.13	65

Annual maximum discharge at crest-stage partial-record stations during water year 1975--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Little Colorado River basin--continued					
09400730	Lockett Fanning Diversion at Flagstaff, Ariz.	Lat 35°13'19", long 111°35'58", in NW¼NE¼ sec.12, T.21 N., R.7 E., Coconino County, at Linda Vista Drive in Flagstaff.	1.05	1969-75	1975	----	(e)
09400740	Harenberg Wash at Flagstaff, Ariz.	Lat 35°13'09", long 111°35'16", in SE¼NW¼ sec.7, T.21 N., R.8 E., Coconino County, at AT&SF railroad tracks at the east edge of Flagstaff.	2.41	1969-75	9- -75	4.03	24
09400910	Fay Canyon near Flagstaff, Ariz.	Lat 35°08'06", long 111°37'48", in NW¼NW¼ sec.11, T.20 N., R.7 E., Coconino County, at Lake Mary Road within corporate limits of Flagstaff.	d3.32 (.56)	1964-75	9- -75	2.78	<1
09401210	Slate Mountain Wash near Flagstaff, Ariz.	Lat 35°30'55", long 111°50'05", in SW¼ sec.26, T.25 N., R.5 E., Coconino County, at U.S. Highway 180, 24 miles northwest of Flagstaff.	5.49	1963-75	1975	----	(e)
09401220	Cedar Wash near Cameron, Ariz.	Lat 35°51'31", long 111°26'32", in NW¼NW¼ sec.33, T.29 N., R.9 E., Coconino County, downstream from State Highway 64 at the Tappan Spring, and 1 mile west of the intersection of State Highway 64 and U.S. Highway 89.	556	1967-75	9- -75	13.96	1,490
09401224	Coal Mine Wash near Kayenta, Ariz.	Lat 36°32'52", long 110°22'11", on the Navajo Indian Reservation 14 miles southwest of Kayenta in Navajo County.	34.1	1974-75	3- 2-74 7-10-75	3.61 8.3	10 2,560
09401234	Yellow Water Canyon near Kayenta, Ariz.	Lat 36°34'39", long 110°22'49", on the Navajo Indian Reservation 11 miles southwest of Kayenta in Navajo County.	18.6	1974-75	7-21-74 7-11-75	5.69 9.3	90 1,500
09401236	Yellow Water Canyon near Shonto, Ariz.	Lat 36°30'33", long 110°26'20" on the Navajo Indian Reservation 1.9 miles above mouth, 13 miles southeast of Shonto, and 18 miles southwest of Kayenta in Navajo County.	49	1975	7-11-75	10.6	1,420
09401242	Begashibito Wash near Shonto, Ariz.	Lat 36°33'45", long 110°44'39" (unsurveyed), Navajo County, on Navajo Highway 22, 6 miles southwest of Shonto.	82.4	1968-75	7-12-75	12.3	1,250
09401245	Klethla Valley tributary near Kayenta, Ariz.	Lat 36°29'53", long 110°37'15", Navajo County, at State Highway 64, 15.5 miles southwest of Tsegi Trading Post, and 26 miles southwest of Kayenta.	.77	1963-75	7-11-75	4.45	57
09401300	Hamblin Wash tributary near Cedar Ridge, Ariz.	Lat 36°20'55", long 111°30'15", Coconino County, at U.S. Highway 89, 3.3 miles south of Cedar Ridge.	.10	1963-75	9- 8-75	8.39	12
09401370	Hamblin Wash tributary No. 2 near Tuba City, Ariz.	Lat 36°03'20", long 111°23'35", Coconino County, at U.S. Highway 89, 10 miles west of Tuba City.	1.99	1963-75	9- -75	1.66	c7
09402100	Forest Boundary Wash near Cameron, Ariz.	Lat 35°55'25", long 111°44'15", in NE¼SW¼ sec.3, T.29 N., R.6 E., Coconino County, at State Highway 64, 0.6 mile inside eastern boundary of Kaibab National Forest, and 18 miles west of Cameron.	.72	1963-75	1975	----	(e)
		Kanab Creek basin					
09403750	Sagebrush Draw near Fredonia, Ariz.	Lat 36°54'05", long 112°22'35", in NE¼NE¼ sec.3, T.40 N., R.1 W. (unsurveyed), Coconino County, at U.S. Highway 89 Alt., 9.5 miles east of Fredonia.	.68	1963-75	8-21-75	.90	c <10
09403800	Bitter Seeps Wash tributary near Fredonia, Ariz.	Lat 36°51'25", long 112°45'30", in NE¼ sec.19, T.40 N., R.4 W., Mohave County, at State Highway 389, 1 mile west of Pipe Spring National Monument, and 14 miles southwest of Fredonia.	2.85	1963-75	7- 8-75	7.22	1,050
		Havasu Creek basin					
09403930	West Cataract Creek near Williams, Ariz.	Lat 35°14'52", long 112°13'28", in NW¼ sec.31, T.22 N., R.2 E., Coconino County, at Country Club Road, 0.25 mile above Cataract Lake, and 1 mile west of Williams city limits.	3.18	1964-75	4- -75	2.50	2
09404050	Spring Valley Wash tributary near Williams, Ariz.	Lat 35°34'28", long 112°09'12", in SW¼ sec.2, T.25 N., R.2 E., Coconino County, at State Highway 64, 6 miles southeast of Valle, and 22.5 miles north of Williams.	d5.00 (1.07)	1963-75	1975	----	(e)
09404070	Little Red Horse Wash near Grand Canyon, Ariz.	Lat 35°50'45", long 112°07'55", in NW¼ sec.1, T.28 N., R.2 E., Coconino County, at State Highway 64, 0.1 mile south of road to Old Grand Canyon airport, and 15 miles south of Grand Canyon Village.	21.8	1963-75	1975	----	(e)

Annual maximum discharge at crest-stage partial-record stations during water year 1975--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Havasu Creek basin--continued					
09404100	Cataract Creek near Grand Canyon, Ariz.	Lat 35°43'24", long 112°26'33", in NE¼SE¼ sec.13, T.27 N., R.2 W., Coconino County, 12 miles west of Willaha, and 20.4 miles west of Highway 64.	1,200	1968-75	1975	----	(e)
		Hualapai Wash basin					
09404310	Yampai Canyon tributary near Peach Springs, Ariz.	Lat 35°33'07", long 113°23'17", in SE¼NW¼ sec.18, T.25 N., R.10 W., Mohave County, at U.S. Highway 66, 2.8 miles northeast of the Peach Springs Post Office.	.20	1964-75	7- 6-75	3.76	25
09404340	Truxton Wash at Valentine, Ariz.	Lat 35°23'10", long 113°39'20", in SE¼ sec.10, T.23 N., R.13 W., Mohave County, in Hualapai Indian Reservation, at Valentine.	370	1965-75	g1974	5.8	1,400
09404350	Valentine Wash at Valentine, Ariz.	Lat 35°23'00", long 113°39'45", in NW¼ sec.15, T.23 N., R.13 W., Mohave County, at U.S. Highway 66, 0.3 mile southwest of Valentine.	3.15	1964-75	g1974	----	c1
		Virgin River basin					
09415050	Big Bend Wash tributary near Littlefield, Ariz.	Lat 36°51'45", long 113°58'05", in SE¼ sec.13, T.40 N., R.16 W., Mohave County, at U.S. Highway 91, 2.7 miles southwest of Littlefield.	7.27	1964-75	11- -74	----	c<1
		Detrital Wash basin					
09419590	Detrital Wash tributary near Chloride, Ariz.	Lat 35°25'55", long 114°17'05", in NW¼ sec.35, T.24 N., R.19 W., Mohave County, at U.S. Highway 93, 5.5 miles northwest of Chloride.	1.23	1963-75	1975	----	(e)
		Ringbolt Wash basin					
09421800	Ringbolt Wash near Hoover Dam, Ariz.	Lat 35°58'05", long 114°41'00", in SW¼ sec.19, T.30 N., R.22 W., Mohave County, at U.S. Highway 93, 5.9 miles southeast of Hoover Dam.	1.21	1964-75	8-19-75	6.2	c250
		Sacramento Wash basin					
09423760	Little Meadow Creek near Oatman, Ariz.	Lat 35°01'50", long 114°18'30", in NE¼SW¼ sec.16, T.19 N., R.19 W., Mohave County, at Eds Camp, 4 miles east of Oatman, and 19 miles southwest of Kingman.	8.47	1965-75	1975	----	(e)
09423780	Walnut Creek near Kingman, Ariz.	Lat 35°02'00", long 114°01'05", in SE¼NW¼ sec.18, T.19 N., R.16 W., Mohave County, 11 miles south of Kingman.	31.3	1965-75	1975	----	(e)
09423820	Sacramento Wash near Yucca, Ariz.	Lat 34°48'40", long 114°09'40", in SE¼SE¼ sec.35, T.17 N., R.18 W., Mohave County, at Santa Fe Railroad bridge, 5 miles south of Yucca.	787	1965-75	1975	----	(e)
09423900	Sacramento Wash tributary near Topock, Ariz.	Lat 34°43'47", long 114°18'45", in SW¼NW¼ sec.13, T.16 N., R.20 W., Mohave County, at U.S. Highway 66, 9.7 miles east of Topock.	14.7	1963-75	1975	----	(e)
		Bill Williams River basin					
09424407	McGarrys Wash near Kingman, Ariz.	Lat 35°07'00", long 113°39'00", in sec.16, T.20 N., R.13 W., Mohave County, on U.S. Highway 93, 1.2 miles north of junction of U.S. Highway 93 and Hackberry Road, and 23 miles southeast of Kingman.	13.5	1968-75	10-29-74	----	c2
09424410	Big Sandy River tributary near Kingman, Ariz.	Lat 35°05'30", long 113°39'30", in NE¼ sec.28, T.20 N., R.13 W., Mohave County, at U.S. Highway 93, 21 miles southeast of Kingman.	1.99	1963-75	11- 2-74	----	c10
09424430	Kaiser Spring Canyon tributary near Wikieup, Ariz.	Lat 34°34'20", long 113°28'40", in NW¼ sec.12, T.14 N., R.12 W., Mohave County, at U.S. Highway 93, 13 miles southeast of Wikieup.	1.7	1963-75	1975	----	(e)
09424480	Ash Creek near Kirkland, Ariz.	Lat 34°27'12", long 112°47'45", in NW¼ sec.21, T.13 N., R.5 W., Yavapai County, at State Highway 96, 5.5 miles west of Kirkland.	6.95	1963-75	11- 2-74	3.28	c20
09424700	Iron Spring Wash tributary near Bagdad, Ariz.	Lat 34°31'20", long 113°06'43", in NE¼SE¼ sec.29, T.14 N., R.8 W., Yavapai County, at State Highway 96, 6.6 miles southeast of Bagdad.	.64	1964-75	11- 2-74	----	c1
09425910	Bullard Wash tributary No. 2 near Alamo, Ariz.	Lat 34°13'15", long 113°31'45", in NE¼SW¼ sec.8, T.10 N., R.12 W., Yuma County, at Alamo Dam access road, 4 miles east of Alamo Dam, and 28 miles north of Wenden.	1.40	1968-75	7-25-75	9.48	240

Annual maximum discharge at crest-stage partial-record stations during water year 1975--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Tributaries between Parker Dam and Gila River					
09427700	Monkeys Head Wash near Parker, Ariz.	Lat 34°16'40", long 114°07'46", in SW¼SW¼ sec.22, T.11 N., R.18 W., Yuma County, at State Highway 172, 1.5 miles south of Parker Dam, and 13 miles northeast of Parker.	1.84	1963-75	i1975	----	c <.5
09428545	Cunningham Wash tributary near Wenden, Ariz.	Lat 34°00'35", long 113°34'40", in SE¼NE¼ sec.26, T.8 N., R.13 W., Yuma County, Alamo Dam access road, 13 miles north of Wenden.	.77	1964-75	7-25-75	----	c.4
09428550	Bouse Wash tributary near Bouse, Ariz.	Lat 33°54'05", long 113°58'25", in SW¼SW¼ sec.31, T.7 N., R.16 W., Yuma County, at State Highway 72, 3 miles southeast of Bouse.	14.6	1963-75	7-29-75	2.96	828
09428800	Tyson Wash tributary near Quartzsite, Ariz.	Lat 33°30'45", long 114°13'00", in SW¼ sec.15, T.2 N., R.19 W., Yuma County, at U.S. Highway 95, 10.7 miles south of Quartzsite.	13.7	1963-75	9- 7-75	1.50	80
09428900	Tyson Wash at Quartzsite, Ariz.	Lat 33°39'57", long 114°13'12", in NE¼NE¼, sec.28, T.4 N., R.19 W., G. & S.R. Meridian. On the downstream side of old highway bridge in the town of Quartzsite.	421	j1963, 1968, j1970-72, 1972-75	1963 1968 1970 1971 1972 10- 6-72 8- 3-74 7-27-75	---- ---- 5.7 ---- ---- 4.85 5.17 4.29	k10,000 5,000 2,000 <1,000 <1,000 1,820 2,920 1,400
09429150	Creosote Wash near Ehrenberg, Ariz.	Lat 33°37'15", long 114°29'41", in NE¼ sec.2; T.3 N., R.22 W., Yuma County, at Parker Valley Road, 2.5 miles northeast of Ehrenberg, and 6 miles northeast of Blythe, California.	1.98	1965-75	i1974 9-16-75	---- 2.10	c <5 28
09429400	Indian Wash tributary near Yuma, Ariz.	Lat 33°05'33", long 114°17'41", in NW¼ sec.2, T.4 S., R.20 W. (unsurveyed), Yuma County, at U.S. Highway 95, 33 miles northeast of Dome.	2.56	1963-75	7-21-74 1975	a4.06 3.57	57 40
09429510	Mittry Lake tributary near Yuma, Ariz.	Lat 32°51'35", long 114°26'05", in SW¼SE¼ sec.32, T.6 S., R.21 W., Yuma County, at Yuma Test Station, 14.5 miles northeast of Yuma.	.30	1965-75	1975	----	(e)
		Gila River basin					
09444400	Chase Creek near Clifton, Ariz.	Lat 33°10'20", long 109°22'10", in NW¼ sec.16, T.3 S., R.29 E., Greenlee County, at U.S. Highway 666, 9 miles northwest of Clifton.	1.37	1963-75	9- 9-75	5.44	22
09451800	Tollgate Wash tributary near Clifton, Ariz.	Lat 32°51'00", long 109°20'15", in SW¼ sec.1, T.7 S., R.29 E., Graham County, at U.S. Highway 666, at Graham-Greenlee County line 14 miles south of Clifton.	.12	1963-75	7-24-75	6.13	22
09456400	Gold Gulch near Bowie, Ariz.	Lat 32°20'52", long 109°36'10", in SW¼NW¼ sec.33, T.12 S., R.27 E., Cochise County, 100 ft upstream from State Highway 86, 7 miles west of Bowie.	15.0	1963-75	7-22-75	4.44	630
09467120	Salt Creek near Peridot, Ariz.	Lat 33°16'15", long 110°18'15", Graham County, at U.S. Highway 70, 4 miles above mouth, and 9.5 miles southeast of Peridot.	d35.2 (4.92)	1964-75	7-20-75	14.02	880
09468300	Sevenmile Wash tributary near Globe, Ariz.	Lat 33°35'10", long 110°39'00", Gila County, at U.S. Highway 60, 0.2 mile south of Sevenmile Wash, and 15 miles northeast of Globe.	.83	1962-75	9- 8-75	----	c.1
09470900	San Pedro River tributary near Bisbee, Ariz.	Lat 31°34'12", long 110°01'36", in SW¼SE¼ sec.29, T.21 S., R.23 E., Cochise County, at U.S. Highway 80, 11 miles northwest of Bisbee.	d7.12 (1.87)	1963-75	7-24-75	9.96	320
09471600	Canary Wash near Benson, Ariz.	Lat 31°52'35", long 110°20'30", in NW¼ sec.18, T.18 S., R.20 E., Cochise County, at State Highway 90, 6.5 miles southwest of Benson.	.79	1963-75	10- -74	3.11	c2
09471700	Fenner Wash near Benson, Ariz.	Lat 31°59'49", long 110°12'57", in SE¼SE¼ sec.5, T.17 S., R.21 E., Cochise County, at Interstate 10, 4.3 miles east of Benson.	2.71	1963-75	7-22-75	6.27	50
09472100	Peck Canyon tributary near Redington, Ariz.	Lat 32°29'12", long 110°30'00", in SW¼SW¼ sec.10, T.11 S., R.18 E., Pima County, on left bank 0.2 mile upstream from mouth and 4 miles north of Redington.	8.02	1967-72‡, 1973-75	10- -74	7.22	70
09472400	Mammoth Wash near Mammoth, Ariz.	Lat 32°40'35", long 110°41'05", in SW¼ sec.2, T.9 S., R.16 E., Pinal County, at State Highway 76, 3 miles southwest of Mammoth.	2.40	1963-75	8-13-75	5.61	c40
09473200	Green Lantern Wash near Winkelman, Ariz.	Lat 32°55'30", long 110°43'35", in NE¼SE¼ sec.8, T.6 S., R.16 E., Pinal County, at State Highway 77, 5 miles southeast of Winkelman.	3.63	1964-75	9- -75	6.58	1,200
09473600	Tam O'Shanter Wash near Hayden, Ariz.	Lat 33°01'46", long 110°52'22", in SE¼NW¼ sec.1, T.5 S., R.14 E., Pinal County, at State Highway 177, 6 miles west of Hayden.	4.37	1963-75	9-13-75	8.83	360

Annual maximum discharge at crest-stage partial-record stations during water year 1975--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Gila River basin--continued					
09478200	Durham Wash near Florence, Ariz.	Lat 32°43'20", long 111°06'30", in NE¼ sec.21, T.8 S., R.12 E., Pinal County, at U.S. Highway 80, 27 miles southeast of Florence.	15.6	1945, 1954-57, 1963-75	9-13-75	2.70	570
09478600	Queen Creek tributary No. 3 at Whitlow Dam, Ariz.	Lat 33°17'30", long 111°16'50", in N½ sec.1, T.2 S., R.10 E., Pinal County, 0.5 mile south of Whitlow Dam, and 4.5 miles northeast of Florence Junction.	.37	1966-75	9- 5-75	3.71	35
09479200	Queen Creek tributary at Apache Junction, Ariz.	Lat 33°24'13", long 111°32'27", in NE¼SW¼ sec.21, T.1 N., R.8 E., Pinal County, at eastbound lane of U.S. Highway 60, 0.6 mile southeast of Apache Junction.	.51	1961-68, 1969-75	9- 5-75	2.56	54
09481700	Calabasas Canyon near Nogales, Ariz.	Lat 31°27'25", long 110°59'09", in SE¼NW¼ sec.2, T.23 S., R.13 E., Santa Cruz County, at U.S. Highway 89, 8.5 miles north of Nogales.	10.3	1963-75	7- -75	4.74	600
09481750	Sopori Wash at Amado, Ariz.	Lat 31°43'25", long 111°03'40", in NE¼NE¼ sec.1, T.20 S., R.12 E., Santa Cruz County, 200 ft below bridge on State Highway 89, 1.1 miles north of Amado.	176	k1948-69, 1970-75	7-23-74 8-23-75	a5.93 5.63	3,900 2,700
09481800	Demetrie Wash tributary near Continental, Ariz.	Lat 31°52'15", long 111°05'15", in SW¼SE¼ sec.11, T.18 S., R.12 E., Pima County, at Duval Mine Road, 6.5 miles west of Continental.	.15	1963-75	9- 7-75	7.13	110
09482200	Flato Wash near Sahuarita, Ariz.	Lat 32°02'43", long 110°57'00", in SW¼SE¼ sec.7, T.16 S., R.14 E., Pima County, at U.S. Highway 89, 6 miles north of Sahuarita.	8.25	1965-75	9- 7-75	4.81	960
09482330	Pumping Wash near Vail, Ariz.	Lat 32°04'10", long 110°48'23", in SW¼NW¼ sec.3, T.16 S., R.15 E., Pima County, at road to pumping station 1.1 miles south of Interstate 10, and 5.7 miles west of Vail.	.54	1966-75	7- -75	2.20	43
09482350	South Fork Airport Wash near Tucson, Ariz.	Lat 32°06'00", long 110°54'30", in SE¼NE¼ sec.28, T.15 S., R.14 E., Pima County, at Hughes Access Road, 3.25 miles south of U.S. Highway 80, and 1.5 miles southeast of Tucson city limits.	d9.78 (5.40)	1966-75	7- -75	----	c <10
09482370	North Fork Airport Wash near Tucson, Ariz.	Lat 32°06'40", long 110°54'30", in NE¼SE¼ sec.21, T.15 S., R.14 E., Pima County, at Hughes Access Road, 2.5 miles south of U.S. Highway 80, and 1 mile east of Tucson city limits.	d6.65 (1.37)	1961, 1965-75	7-12-75	----	<10
09482410	Rodeo Wash at Tucson, Ariz.	Lat 32°10'20", long 110°58'35", in SW¼NW¼ sec.36, T.14 S., R.13 E., Pima County, at South 12th Avenue, 0.8 mile above mouth in Tucson city limits.	5.92	1970-75	7-12-75	3.63	212
09482420[m/]	Julian Wash at Tucson, Ariz.	Lat 32°10'15", long 110°56'25", in SW¼NW¼ sec.32, T.14 S., R.14 E., Pima County, 1,600 ft above confluence with Tucson Diversion channel, and 0.5 mile south of Ajo Road in Tucson.	26.5	1970-75	7-12-75	1.83	112
09482450	West Branch Santa Cruz River at Tucson, Ariz.	Lat 32°08'00", long 111°00'30", in NE¼NE¼ sec.16, T.15 S., R.13 E., Pima County, at Valencia Road, 0.4 mile east of Mission Road, and 0.8 mile west of Tucson city limits.	23.6	1966-75	9- 9-75	3.00	190
09482480	Big Wash at Tucson, Ariz.	Lat 32°11'10", long 111°00'07", in SW¼NE¼ sec.27, T.14 S., R.13 E., Pima County, at Mission Road, 0.6 mile north of State Highway 86, in Tucson.	2.75	1966-75	1975	----	(e)
09483025	Silvercroft Wash at Tucson, Ariz.	Lat 32°13'53", long 111°00'10", in NW¼ sec.10, T.14 S., R.13 E., 0.1 mile west of Silverbell Road, 0.3 mile northwest of St. Mary's Hospital, and 0.4 mile north of Anklam Road at Tucson.	2.74	1969-75	10-30-74	2.45	<10
09483030	Anklam Wash at Tucson, Ariz.	Lat 32°13'30", long 111°01'50", in SE¼ sec.8, T.14 S., R.13 E., Pima County, at Anklam Road, 1 mile west of Tucson city limits, and 2 miles west of St. Mary's Hospital.	2.11	1965-75	10-30-74	3.89	160
09483040	West Speedway Wash near Tucson, Ariz.	Lat 32°14'20", long 111°02'43", in SE¼SE¼ sec.6, T.14 S., R.13 E., Pima County, at driveway to power substation off West Speedway Road, 2 miles west of Tucson city limits, and 3 miles northwest of St. Mary's Hospital.	.46	1965-75	9- 7-75	6.44	160
09483042	Cemetery Wash at Tucson, Ariz.	Lat 32°15'50", long 110°58'38", in NW¼NW¼ sec.36, T.13 S., R.13 E., Pima County, at U.S. Highway 89, 0.25 mile north of junction with State Highway 84 in Tucson.	1.3	1966-75	7-17-75	3.48	290

Annual maximum discharge at crest-stage partial-record stations during water year 1975--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Gila River basin--continued					
09483045	Flowing Wells Wash at Tucson, Ariz.	Lat 32°15'55", long 110°59'40", in SW¼SW¼ sec.26, T.13 E., R.13 S., at intersection of Ft. Lowell Road and Flowing Wells Road in Tucson city limits.	(n)	1971-75	7-12-75	5.49	620
09483100	Tanque Verde Creek near Tucson, Ariz.	Lat 32°14'48", long 110°40'46", in NE¼NW¼ sec.2, T.14 S., R.16 E., Pima County, 4.4 miles east of Tanque Verde School, 7.4 miles upstream from Agua Caliente Wash, and 17.5 miles east of Tucson city hall.	43.0	1959-74‡, 1975	p1975	2.19	210
09483200	Agua Caliente Wash tributary near Tucson, Ariz.	Lat 32°16'07", long 110°44'15", in SW¼SW¼ sec.29, T.13 S., R.16 E., Pima County, at Soldier Trail, 1.4 miles north of Tanque Verde Road, and 5 miles northeast of Tucson city limits.	2.04	1965-75	7-25-75	4.73	25
09483250	Rob Wash at Tucson, Ariz.	Lat 32°14'08", long 110°48'58", in NE¼NW¼ sec.9, T.14 S., R.15 E., at Speedway Blvd, 0.4 mile west of Pantano Road, and 1 mile north of East Broadway in Tucson city limits.	2.08	1971-75	7-12-75	2.47	400
09484000	Sabino Creek near Tucson, Ariz.	Lat 32°19'01", long 110°48'36", in SE¼NE¼ sec.9, T.13 S., R.15 E., Pima County, 0.5 mile north of Coronado National Forest boundary and 12 miles northeast of Tucson city hall.	35.5	1932-74‡, 1975	q1975	3.84	>70
09484500	Tanque Verde Creek at Tucson, Ariz.	Lat 32°15'57", long 110°50'27", in SE¼SE¼ sec.30, T.13 S., R.15 E., Pima County, at Sabino Canyon Road, 1 mile downstream from Sabino Creek, and 1.25 miles northeast of Tucson city limits.	219	1940-45‡, 1966-75	4-24-75	1.6	f10
09484510	Ventana Canyon Wash near Tucson, Ariz.	Lat 32°18'35", long 110°50'20", in SW¼SW¼ sec.8, T.13 S., R.15 E., Pima County, at Sunrise Drive (Sabino Canyon West Road), 0.5 mile above Esperero Wash, and 4 miles northeast of Tucson city limits.	6.46	1965-75	8- 2-74 7-25-75	a11.22 10.64	131 120
09484570	Mescal Arroyo near Pantano, Ariz.	Lat 31°59'23", long 110°33'52", in NE¼NW¼ sec.1, T.17 S., R.17 E., Pima County, at county road, 0.25 mile above mouth, and 1.1 miles southeast of Pantano.	38.4	1965-75	9- 6-75	4.84	510
09484580	Barrel Canyon near Sonoita, Ariz.	Lat 31°51'42", long 110°41'25", in SE¼SE¼ sec.15, T.18 S., R.16 E., Pima County, at State Highway 83, 13 miles north of Sonoita.	14.1	1962-75	9-13-75	4.60	980
09484600	Pantano Wash near Vail, Ariz.	Lat 32°02'09", long 110°40'37", in SW¼SE¼ sec.14, T.16 S., R.16 E., Pima County, 60 ft upstream from dam, 2.2 miles southeast of Vail, and 20 miles southeast of Tucson city hall.	457	1959-74‡, 1975	9- 2-75	6.70	1,700
09485000	Rincon Creek near Tucson, Ariz.	Lat 32°07'46", long 110°37'32", in NW¼NE¼ sec.17, T.15 S., R.17 E., Pima County, 9 miles upstream from mouth and 22 miles southeast of Tucson city hall.	44.8	1952-74‡, 1975	9- 2-75	4.63	340
09485500	Pantano Wash at Tucson, Ariz.	Lat 32°14'57", long 110°50'53", in NW¼NE¼ sec.6, T.14 S., R.15 E., Pima County, at Tanque Verde Road 0.7 mile northeast of Tucson city limits, and 1.75 miles above mouth.	602	1940‡, 1958, 1965-75	7-16-75	.44	3,490
09485900	Pima Wash near Tucson, Ariz.	Lat 32°20'15", long 110°57'35", in SW¼SW¼ sec.31, T.12 S., R.14 E., Pima County, at Ina Road, and 4 miles north of Tucson city limits.	4.93	1964-75	10-30-74	8.33	<10
09485950	Geronimo Wash near Tucson, Ariz.	Lat 32°19'56", long 110°56'37", in SE¼NE¼ sec.6, T.13 S., R.14 E., Pima County, at Skyline Drive, 0.4 mile southeast of Ina Road, and 3.5 miles north of Tucson city limits.	2.08	1964-75	10-29-74	4.20	35
09486700	Chiltepines Wash near Sasabe, Ariz.	Lat 31°49'08", long 111°26'16", in NE¼SE¼ sec.32, T.18 S., R.9 E., Pima County, at State Highway 286, 24 miles north of Sasabe.	7.13	1963-75	9- 4-75	7.57	182
09487000	Brawley Wash near Three Points, Ariz.	Lat 32°04'32", long 111°20'15", in NE¼SE¼ sec.32, T.15 S., R.10 E., Pima County, at State Highway 86, 1.5 miles west of Three Points (Robles Junction), and 23 miles west of Tucson.	776	1962, 1966-75	8- -75	9.72	5,750
09487100	Little Brawley Wash near Three Points, Ariz.	Lat 32°07'25", long 111°19'45", in SE¼NW¼ sec.16, T.15 S., R.10 E., Pima County, 3.4 miles north of Three Points.	11.9	1968-75	8- -75	11.63	1,150
09487140	San Joaquin Wash near Tucson, Ariz.	Lat 32°10'07", long 111°07'58", in NE¼SE¼ sec.32, T.14 S., R.12 E., Pima County, 1.1 miles northwest of the intersection of San Joaquin Road and the Tucson-Ajo Highway.	.45	1969-75	8-20-75	5.19	60

Annual maximum discharge at crest-stage partial-record stations during water year 1975--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Gila River basin--continued					
09487250	Los Robles Wash near Marana, Ariz.	Lat 32°26'16", long 111°18'13", in SE¼SE¼ sec.27, T.11 S., R.10 E., Pima County, at Trico Road, 0.75 mile downstream from confluence of Brawley Wash and China Draw, 3 miles upstream from Blanco Wash, and 5 miles southwest of Marana.	1,170	1962, 1966-75	8- 9-75	5.19	260
09487400	Quijotoa Wash tributary near Quijotoa, Ariz.	Lat 32°10'25", long 112°06'30", Pima County, on the Papago Indian Reservation, at the Quijotoa-Casa Grande Road, and 1.1 miles north of Quijotoa.	2.44	1963-75	9-26-74 8-26-75	5.14 6.27	a340 470
09488600	Silver Reef Wash near Casa Grande, Ariz.	Lat 32°40'56", long 111°50'03", in SW¼SE¼ sec.34, T.8 S., R.5 E., Pinal County, at Quijotoa-Casa Grande Road, 14 miles southwest of Casa Grande.	12.8	1963-75	10-28-74	4.58	160
09489080	Hannagan Creek near Hannagan Meadow, Ariz.	Lat 33°38'58", long 109°17'04", Greenlee County, at U.S. Highway 666, 2.7 miles northeast of Hannagan Meadow. f/	1.61	1965-75	4-24-74 9- -75	8.63 10.57	a1 48
09491800	North Fork White River tributary near Whiteriver, Ariz.	Lat 33°55'44", long 109°56'19", in SE¼ sec.8, T.6 N., R.23 E. (unsurveyed), Navajo County, at State Highway 73, 6.5 miles north of Whiteriver.	2.27	1965-75	7- -75	6.44	56
09496800	Carrizo Creek tributary near Show Low, Ariz.	Lat 33°57'16", long 110°19'53", Gila County, at U.S. Highway 60, 28 miles southwest of Show Low.	d4.63 (2.08)	1963-75	10-29-74	11.77	130
09498600	Christopher Creek tributary near Kohl's Ranch, Ariz.	Lat 34°19'20", long 111°04'00", in NE¼SE¼ sec.22, T.11 N., R.12 E., Gila County, at State Highway 160, 1.8 miles east of Kohl's Ranch, and 15.5 miles northeast of Payson.	.66	1966-75	7- -75	2.13	16
09498900	Gold Creek near Payson, Ariz.	Lat 34°00'10", long 111°21'30", in SW¼ sec.29, T.8 N., R.10 E., Gila County, at State Highway 87, 16 miles south of Payson.	6.44	1963-75	10-29-74	1.78	12
09501300	Tortilla Creek at Tortilla Flat, Ariz.	Lat 33°31'38", long 111°23'13", in NW¼ sec.13, T.2 N., R.9 E. (unsurveyed), Maricopa County, 600 ft upstream from State Highway 88 and Tortilla Flat Store, and 3.7 miles southeast of Mormon Flat Dam.	24.3	1966-75	10-29-74	6.39	775
09502700	Crookton Wash near Seligman, Ariz.	Lat 35°17'15", long 112°43'55", in SE¼ sec.17, T.22 N., R.4 W., Yavapai County, at U.S. Highway 66, 9 miles east of Seligman, and 15 miles west of Ashfork.	f6	1963-75	1975	----	(e)
09502780	Mint Wash near Paulden, Ariz.	Lat 34°49'00", long 112°37'46", in NW¼ sec.31, T.17 N., R.3 W., in Yavapai County, at private road about 100 yards east of Williamson Valley Road, and 24 miles northwest of Prescott.	d57.0 (4.5)	1972-75	7-28-75	8.01	304
09503720	Hell Canyon near Williams, Ariz.	Lat 35°09'37", long 112°12'35", in NW¼NW¼ sec.32, T.21 N., R.2 E., Coconino County, in Kaibab National Forest, on right bank 6 miles south of Williams.	14.9	1965-72‡, 1973-75	q1975	2.14	108
09503740	Hell Canyon tributary near Ashfork, Ariz.	Lat 35°05'02", long 112°24'28", in SW¼ sec.30, T.20 N., R.1 W., Yavapai County, 0.5 mile upstream from mouth, and 11 miles southeast of Ashfork.	.75	1969-75	1975	----	(e)
09503750	Limestone Canyon near Paulden, Ariz.	Lat 34°58'48", long 112°24'05", in S½ sec.31, T.19 N., R.1 W., Yavapai County, 1.3 miles upstream from mouth, 1.5 miles west of Drake, and 7.5 miles northeast of Paulden.	14.5	1969-75	11- 2-75	3.28	125
09503800	Volunteer Wash near Bellemont, Ariz.	Lat 35°09'02", long 111°53'54", in SE¼SE¼ sec.31, T.21 N., R.5 E., Coconino County, in Kaibab National Forest, in Navajo Army Depot military reservation, on right bank 7 miles southwest of Bellemont, and 14 miles west of Flagstaff.	131	1965-72‡, 1973-75	q1975	2.54	49
09504100	Hull Canyon near Jerome, Ariz	Lat 34°44'20", long 112°08'35", in NW¼ sec.28, T.16 N., R.2 E., Yavapai County, at U.S. Highway Alt. 89, 2 miles west of Jerome.	.91	1963-75	1975	----	(e)
09504400	Munds Canyon tributary near Sedona, Ariz	Lat 34°55'20", long 111°38'40", in SW¼ sec.22, T.18 N., R.7 E., Coconino County, at State Highway 79, 7 miles northeast of Sedona.	1.19	1964-75	4- -75	4.03	19
09504800	Oak Creek tributary near Cornville, Ariz.	Lat 34°42'45", long 111°52'50", in NW¼ sec.12, T.15 N., R.4 E., Yavapai County, at county road, 2.5 miles east of Cornville.	.048	1963-75	11- 2-74	2.83	c1
09505600	Dirty Neck Canyon near Clints Well, Ariz.	Lat 34°30'45", long 111°21'30", in N½ sec.23, T.13 N., R.9 E., Coconino County, at State Highway 87, 4 miles southwest of Clints Well, and 18 miles north of Payson.	3.42	1965-75	q1975	2.98	20

Annual maximum discharge at crest-stage partial-record stations during water year 1975--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Gila River basin--continued					
09505900	Cottonwood Wash near Camp Verde, Ariz.	Lat 34°30'20", long 111°45'10", in NE¼ sec.19, T.13 N., R.6 E., Yavapai County, at Camp Verde-Pine road, 7 miles southeast of Camp Verde.	0.64	1964-75	11- 2-74	3.38	c5
09507600	East Verde River near Pine, Ariz.	Lat 34°23'30", long 111°16'05", in SE¼SW¼ sec.26, T.12 N., R.10 E. (unsurveyed), Gila County, on right bank 0.8 mile upstream from Dude Creek, 2.7 miles south of Washington Park, and 10 miles east of Pine.	6.65	1961-71‡, 1972-75	1975	----	(n)
09510170	Camp Creek near Sunflower, Ariz.	Lat 33°45'35", long 111°29'44", in SW¼ sec.24, T.5 N., R.8 E., Maricopa County, on right bank at upstream side of culvert on State Highway 87, half a mile upstream from mouth, and 7 miles south of Sunflower.	2.6	1963-66‡, 1967-75	10-29-74	1.25	31
09512300	Cave Creek near Cave Creek, Ariz.	Lat 33°47'00", long 112°00'24", in SW¼ sec.12, T.5 N., R.3 E., Maricopa County, on left bank 200 ft upstream from Prescott-to-Mesa transmission line, 5 miles southwest of town of Cave Creek, and 5.0 miles upstream from Cave Creek Dam.	121	1958-67‡, 1968-75	11-2-74	3.36	856
09512420	Lynx Creek tributary near Prescott, Ariz.	Lat 34°32'51", long 112°23'58", in SE¼ sec.31, T.14 N., R.1 W., Yavapai County, on Walker Road, 400 ft south of State Highway 69, and 4 miles east of Prescott.	.95	1969-75	1975	----	(e)
09512700	Agua Fria River tributary No. 2 near Rock Springs, Ariz.	Lat 34°02'00", long 112°08'42", in SW¼ sec.15, T.8 N., R.2 E., Maricopa County, at State Highway 69, 1 mile south of Rock Springs.	1.11	1963-75	7- 8-75	4.21	175
09513650	Agua Fria River at El Mirage, Ariz.	Lat 33°36'24", long 112°18'14", in NW¼NW¼ sec.18, T.3 N., R.1 E., Maricopa County, at Grand Avenue, 0.75 mile southeast of El Mirage.	s1,637	1963-75	11- 2-74	----	c 50
09513820	Deadman Wash near New River, Ariz.	Lat 33°50'30", long 112°08'40", in NW¼ sec.27, T.6 N., R.2 E., Maricopa County, at State Highway 69, 4.5 miles south of New River.	11.1	1960-75	10-28-74	3.53	c250
09513910	New River near Glendale, Ariz.	Lat 33°32'12", long 112°16'52", in NE¼NW¼ sec.8, T.2 N., R.1 E., Maricopa County, at Glendale Avenue, 2 miles upstream from mouth, and 6 miles west of Glendale.	323	1961-63, 1964-70‡, 1971-75	10-29-74	6.70	490
09514200	Waterman Wash near Buckeye, Ariz.	Lat 33°19'49", long 112°30'33", in SW¼NE¼ sec.24, T.1 S., R.3 W., Maricopa County, 2.4 miles above mouth, 5.2 miles southeast of Buckeye.	403	1964-75	10-28-74	4.77	1,200
09515800	Hartman Wash near Wickenburg, Ariz.	Lat 33°57'46", long 112°49'40", in SE¼ sec.12, T.7 N., R.6 W., Maricopa County, at U.S. Highway 60, 5.7 miles west of Wickenburg.	5.57	1964-75	7-13-75	3.26	100
09516500	Hassayampa River near Morristown, Ariz.	Lat 33°53'06", long 112°39'41", in SW¼SE¼ sec.3, T.6 N., R.4 W., Maricopa County, 3.0 miles northwest of Morristown, 7 miles southeast of Wickenburg.	774	1939-47‡, 1954, 1956, 1964-75	7-29-75	7.27	<50
09516600	Ox Wash near Morristown, Ariz.	Lat 33°53'00", long 112°39'00", in NW¼ sec.11, T.6 N., R.4 W., Maricopa County, at U.S. Highway 60, 2.4 miles northwest of Morristown.	6.31	1963-75	1975	----	(e)
09516800	Jack Rabbit Wash near Tonopah, Ariz.	Lat 33°39'32", long 112°49'40", in NE¼NW¼ sec.25, T.4 N., R.6 W., Maricopa County, 100 ft upstream from the Wickenburg-Hassayampa Road, 4.5 miles upstream from Star Wash, and 14 miles northeast of Tonopah.	137	1964-75	3-11-75	----	c6
09517000	Hassayampa River near Arlington, Ariz.	Lat 33°20'50", long 112°43'30", in NW¼ sec.13, T.1 S., R.5 W., Maricopa County, at former U.S. Highway 80, 1.8 miles upstream from mouth, and 2.8 miles northeast of Arlington.	1,470	1961-75	a9- -74 1975	a2.54 ----	a250 (t)
09517200	Centennial Wash tributary near Wenden, Ariz.	Lat 33°50'40", long 113°27'00", in SW¼SW¼ sec.24, T.6 N., R.12 W., Yuma County, at U.S. Highway 60, 5 miles northeast of Wenden.	2.79	1963-75	7-29-75	3.43	275
09517280	Tiger Wash near Aguila, Ariz.	Lat 33°44'30", long 113°16'43", in SW¼SW¼ sec.26, T.5 N., R.10 W., Maricopa County, 17 miles south of Aguila.	85.2	1963-75	7-30-75	5.66	c100
09517400	Winters Wash near Tonopah, Ariz.	Lat 33°29'22", long 112°55'05", in SW¼NW¼ sec.30, T.2 N., R.6 W., Maricopa County, 0.3 mile downstream from Airline Road, and 1 mile east of Tonopah.	47.8	1962-75	10-28-74	4.20	560
09519600	Rainbow Wash tributary near Buckeye, Ariz.	Lat 33°14'35", long 112°38'15", in NE¼ sec.23, T.2 S., R.4 W., Maricopa County, at U.S. Highway 80, 9.5 miles southwest of Buckeye.	d3.45 (1.02)	1963-75	10-28-74	4.34	470

Annual maximum discharge at crest-stage partial-record stations during water year 1975--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Gila River basin--continued					
09519750	Bender Wash near Gila Bend, Ariz.	Lat 32°54'25", long 112°33'05", in NW¼ sec.15, T.6 S., R.3 W., Maricopa County, along side of Interstate Highway 8, 10 miles southeast of Gila Bend. Prior to Oct. 1, 1966, at site 0.65 mile downstream.	68.8	1963-75	8- -75	6.92	2,290
09519760	Sauceda Wash near Gila Bend, Ariz.	Lat 32°52'14", long 112°45'30", in SE¼SW¼ sec.27, T.6 S., R.5 W., Maricopa County, at State Highway 85, 5.3 miles south of Gila Bend.	u126	1963-75	9- 8-75	4.55	2,500
09519780	Windmill Wash near Gila Bend, Ariz.	Lat 33°02'54", long 112°50'17", in SE¼ sec.25, T.4 S., R.6 W., Maricopa County, at county road, 10.5 miles northwest of Gila Bend.	12.9	1964-75	10-29-74	9.93	1,900
09520070	Baragan Wash near Hyder, Ariz.	Lat 32°58'52", long 113°25'25", in SW¼NW¼ sec.20, T.5 S., R.11 W., Yuma County, on left bank 250 ft downstream from road crossing, and 5 miles southwest of Hyder.	v248	1971-75	12- 5-74	3.31	570
09520100	Military Wash near Sentinel, Ariz.	Lat 32°50'43", long 113°16'44", in SW¼ sec.3, T.7 S., R.10 W., Maricopa County, at U.S. Highway 80, 4.1 miles west of Sentinel.	8.70	1963-75	7-27-75	1.62	30
09520110	Hot Shot Arroyo near Ajo, Ariz.	Lat 32°20'49", long 112°48'31", in SW¼ sec.29, T.12 S., R.5 W., Pima County, at State Highway 85, 3 miles southeast of Ajo.	.44	1966-75	10-29-74	5.17	110
09520130	Darby Arroyo near Ajo, Ariz.	Lat 32°21'19", long 112°49'31", in NW¼ sec.30, T.12 S., R.5 W., Pima County, at State Highway 85, 2 miles southeast of Ajo.	4.72	1966-75	10-29-74	6.71	270
09520160	Gibson Arroyo at Ajo, Ariz.	Lat 32°22'48", long 112°51'40", in NW¼SW¼ sec.14, T.12 S., R.6 W., Pima County, at 2nd Avenue next to railroad tracks in Ajo.	2.18	1967-75	10-29-74	5.87	320
09520200	Black Gap Wash near Ajo, Ariz.	Lat 32°42'23", long 112°50'43", in NW¼NE¼ sec.26, T.8 S., R.6 W., Maricopa County, at State Highway 85, 5.7 miles north of Midway, and 23 miles north of Ajo.	12.1	1963-75	9- 8-75	4.35	200
09520230	Crater Range Wash near Ajo, Ariz.	Lat 32°33'44", long 112°52'37", in NW¼NW¼ sec.15, T.10 S., R.6 W., Maricopa County, at State Highway 85, 4.1 miles north of Maricopa-Pima County line, and 13.5 miles north of Ajo.	1.49	1963-75	10- -74	2.01	175
09520300	Alamo Wash tributary near Ajo, Ariz.	Lat 32°06'00", long 112°46'15", in SW¼ sec.22, T.15 S., R.5 W. (unsurveyed), Pima County, at State Highway 85, 20 miles southeast of Ajo.	.90	1963-75	9- 8-75	3.25	380
09520350	Mohawk Pass Wash at Mohawk, Ariz.	Lat 32°43'44", long 113°44'30", in SE¼SW¼ sec.17, T.8 S., R.14 S., Yuma County, at Southern Pacific Railroad crossing, 0.6 mile east of Mohawk.	.09	1963-75	9- -75	----	c <10
09520380	Mohawk Wash near Tacna, Ariz.	Lat 32°42'32", long 113°52'52", in SW¼SW¼ sec.23, T.8 S., R.16 W., Yuma County, over inverted siphon on Mohawk Canal, 4.4 miles east of Tacna.	503	1971-75	1975	----	(e)
09520400	Ligurta Wash at Ligurta, Ariz.	Lat 32°40'33", long 114°17'38", in NW¼NW¼ sec.2, T.9 S., R.20 W., Yuma County, at U.S. Highway 80 at Ligurta, and 9.0 miles west of Wellton.	1.99	1963-75	1975	----	(e)
09520600	Fortuna Wash near Blaisdell, Ariz.	Lat 32°42'46", long 114°26'55", in NW¼NE¼ sec.30, T.8 S., R.21 W., Yuma County, 0.3 mile downstream from Gila Gravity Main Canal, 2.5 miles southeast of Blaisdell, and 11.5 miles east of Yuma.	39.3	1971-75	9- 6-75	5.47	707
		Rio Sonoyta basin					
09535200	Sells Wash tributary at Sells, Ariz.	Lat 31°54'55", long 111°52'42", in SE¼ sec.25, T.17 S., R.4 E., Pima County, at Sells.	26.8	1962-75	9- 5-75	5.96	2,040
		Willcox Playa basin					
09536100	Pitchfork Canyon tributary near Fort Grant, Ariz.	Lat 32°35'20", long 109°54'40", in SE¼ sec.5, T.10 S., R.24 E., Graham County, at State Highway 266, 3 miles southeast of Fort Grant.	.81	1963-75	1975	----	(e)
09536350	Surprise Canyon near Dos Cabezas, Ariz.	Lat 32°00'40", long 109°21'12", in SW¼ sec.25, T.16 S., R.29 E., Cochise County, at main road through Chiricahua National Monument, 0.4 mile north of ranger station, and 19 miles southeast of Dos Cabezas.	.65	1963-75	7-19-75	8.39	80

Annual maximum discharge at crest-stage partial-record stations during water year 1975--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Whitewater Draw basin					
09537400	Whitewater Draw tributary No. 2 near Douglas, Ariz.	Lat 31°21'45", long 109°34'40", in NW¼NW¼ sec.11, T.24 S., R.27 E., Cochise County, at U.S. Highway 666, 1.5 miles northwest of Douglas.	12.4	1968-75	9-13-75	1.59	30

‡ Operated as a continuous-record gaging station.
a. Revised.
b. Spring or summer.
c. Estimated.
d. Portion of drainage basin is generally noncontributing because of a major stock pond. The noncontributing area is shown in parentheses.
e. No evidence of flow reported during the water year.
f. Approximate.
g. October or November.
h. Peak flows originate in 1.2 square miles or urban area at the downstream end of the basin. Little flow has come from the upper 6.1 square miles since at least 1964.
i. August or September.
j. Incomplete record from floodmarks prior to installation of gage.
k. Highest peak in period 1963-1975.
m. Formerly published as station 09482600.
n. Not available at time of printing.
p. March or April.
q. Spring.
r. At site 0.2 mile upstream prior to March 6, 1974.
s. Includes 1,459 square miles above Lake Pleasant that is noncontributing except during occasional periods of spill from Waddell Dam; does not include the area tributary to McMicken Dam from which water is diverted to the Agua Fria River. Diversions from McMicken Dam have negligible effect on peak flows of the Agua Fria River.
t. No flow reached gage during water year; 50 to 75 cfs can bypass gage without being recorded.
u. Includes 20 square miles which also contributes to an adjoining basin.
v. An additional 34 square miles at the headwaters of Hoodoo Wash may also contribute flow to Baragan Wash.

Discharge measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterick (*); measurements of peak flow by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1975

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Little Colorado River basin						
Little Colorado River	Colorado River	Lat 34°05'18", long 109°24'42", in NW¼SE¼ sec.17, T.8 N., R.28 E., Apache County, at bridge 7.1 mi west of Eagar.	—	—	2-13-75	2.74
Do	--do--	Lat 34°06'15", long 109°20'33", in SW¼NE¼ sec.12, T.8 N., R.28 E., Apache County, at bridge on State Highway 273, 3.0 mi west of Eagar.	—	—	2-13-75	3.25
Do	--do--	Lat 34°06'39", long 109°18'52", in NW¼NW¼ sec.8 (revised), T.8 N., R.29 E., Apache County, at bridge on State Highway 73, 1.4 mi west of Eagar.	122	1951-60	2-13-75	3.91
Water Canyon Creek	Little Colorado River	Lat 34°04'03", long 109°17'32", in SE¼SW¼ sec.21, T.8 N., R.29 E., Apache County, about 700 ft below bridge to ranger station, 3.0 mi south of Eagar.	—	—	2-14-75	.01
Do	--do--	Lat 34°05'37", long 109°17'40", in SE¼NW¼ sec.16, T.8 N., R.29 E., Apache County, at bridge 1.3 mi south of Eagar.	—	—	2-13-75	0
Nutrioso Creek	--do--	Lat 34°05'28", long 109°12'09", in SW¼NE¼ sec.17, T.8 N., R.30 E., Apache County, at Correjo Crossing 40 ft below U.S. Highways 180 and 666, 5.2 mi east of Eagar.	—	—	2-13-75	.17
Do	--do--	Lat 34°08'16", long 109°13'54", in NW¼NW¼ sec.36, T.9 N., R.29 E., Apache County, at bridge on U.S. Highway 60, 3 mi east of Springerville.	—	—	2-13-75	0
Do	--do--	Lat 34°08'34", long 109°17'00", in SW¼SW¼ sec.28, T.9 N., R.29 E., Apache County, at crossing 0.7 mi north of Springerville.	—	—	2-13-75	.37
Little Colorado River	Colorado River	Lat 34°08'48", long 109°17'37", in NW¼SE¼ sec.29, T.9 N., R.29 E., Apache County, at bridge on U.S. Highways 60, 180, and 666, 1.1 mi northwest of Springerville.	—	—	2-13-75	4.68
Do	--do--	Lat 34°09'44", long 109°18'06", in SW¼NW¼ sec.20, T.9 N., R.29 E., Apache County, 2.4 mi northwest of Springerville.	—	1944	2-13-75	5.10
Do	--do--	Lat 34°11'10", long 109°18'12", in SW¼SW¼ sec.8, T.9 N., R.29 E., Apache County, at crossing on Hooper Ranch Road, 3.8 mi north of Springerville.	—	—	2-13-75	4.22
Do	--do--	Lat 34°12'08", long 109°17'55", in NE¼SW¼ sec.5, T.9 N., R.29 E., Apache County, at crossing on Clinton Slade Ranch Road, 4.8 mi north of Springerville.	—	—	2-13-75	5.00
Do	--do--	Lat 34°17'06", long 109°21'06", in NE¼NW¼ sec.11, T.10 N., R.28 E., Apache County, at Sherwood Road Crossing, 11 mi northwest of Springerville.	—	1950-53	2-13-75	5.43
Vigil Run	Little Colorado River	Lat 34°17'17", long 109°22'03", in SE¼SW¼ sec.3, T.10 N., R.28 E., Apache County, below culvert on U.S. Highways 180 and 666, 12 mi northwest of Springerville.	—	—	2-13-75	*.64
Coyote Creek	Little Colorado River	Lat 34°17'30", long 109°19'12", in NW¼SW¼ sec.6, T.10 N., R.29 E., Apache County, at crossing 11 mi north of Springerville.	—	—	2-13-75	*.10
Diversion from Coyote Creek	Coyote Creek	Lat 34°18'05", long 109°19'55", in SE¼SW¼ sec.36, T.11 N., R.28 E., Apache County, 700 ft below diversion, 12 mi north of Springerville.	—	—	2-13-75	.18
Little Colorado River	Colorado River	Lat 34°18'16", long 109°21'24", in NE¼SE¼ sec.34, T.11 N., R.28 E., Apache County, 40 ft below Bill Richey Ranch Road, 12 mi north of Springerville.	—	—	2-13-75	5.82

See footnotes at end of the table.

Discharge measurements made at miscellaneous sites during water year 1975--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Little Colorado River basin--Continued				
Little Colorado River	Colorado River	Lat 34°23'14", long 109°23'53", in NW¼NE¼ sec.5, T.11 N., R.28 E., Apache County, 2,400 ft east of U.S. Highways 180 and 666, 8.2 mi south of St. Johns.	—	—	2-13-75	1.71
Do	--do	Lat 34°24'53", long 109°24'10", in NE¼NW¼ sec.29, T.12 N., R.28 E., Apache County, 2,100 ft east of U.S. Highways 180 and 666, 6.5 mi south of St. Johns.	—	—	2-13-75	2.13
Do	--do	Lat 34°26'00", long 109°22'40", in SW¼SW¼ sec.16, T.12 N., R.28 E., Apache County, 1.1 mi east of Salado Springs, 5.0 mi southwest of St. Johns.	—	1940-41	2-13-75	8.08
Do	--do	Lat 34°26'35", long 109°21'37", in SE¼NE¼ sec.15, T.12 N., R.28 E., Apache County, 4.4 mi south of St. Johns.	—	—	2-13-75	7.45
Do	--do	Lat 34°28'07", long 109°21'23", in NW¼SW¼ sec.2, T.12 N., R.28 E., Apache County, 2.5 mi south of St. Johns.	—	—	2-13-75	7.80
Little Reservoir Diversion	Little Colorado River	Lat 34°29'11", long 109°21'22", in NW¼SE¼ sec.34, T.13 N., R.28 E., Apache County, 1.2 mi south of St. Johns.	—	—	2-13-75	0
Little Colorado River	Colorado River	Lat 34°29'25", long 109°21'21", in SW¼NE¼ sec.34, T.13 N., R.28 E., Apache County, 0.9 mi south of St. Johns.	—	—	2-13-75	8.24
Diversion from Little Colorado River	Little Colorado River	Lat 34°30'26", long 109°21'20", in SW¼NE¼ sec.27, T.13 N., R.28 E., Apache County, 0.9 mi northeast of St. Johns.	—	—	2-13-75	a5.10
Little Colorado River	Colorado River	Lat 34°30'25", long 109°21'25", in SW¼NE¼ sec.27, T.13 N., R.28 E., Apache County, at bridge on Highways 61 and 666 at St. Johns.	—	—	2-13-75	3.14
Do	--do	Lat 34°32'32", long 109°22'10", in SE¼SE¼ sec.9, T.13 N., R.28 E., Apache County, at county road bridge 2.5 mi north of St. Johns.	—	—	2-13-75	6.67
Diversion from Little Colorado River	Little Colorado River	Lat 34°33'05", long 109°22'00", in NE¼NE¼ sec.9, T.13 N., R.28 E., Apache County, 3.2 mi north of St. Johns.	—	—	2-13-75	1.93
Little Colorado River	Colorado River	Lat 34°35'02", long 109°24'24", in SE¼SE¼ sec.30, T.14 N. R.28 E., Apache County, at Heap Place Bridge, 5.8 mi north of St. Johns.	—	—	2-13-75	8.00
Do	--do	Lat 34°36'18", long 109°29'22", in SE¼NW¼ sec.21, T.14 N., R.27 E., Apache County, at road crossing 9.6 mi northwest of St. Johns.	—	—	2-13-75	4.14
Do	--do	Lat 34°37'15", long 109°37'38", in SE¼SW¼ sec.7, T.14 N., R.26 E., Apache County, 0.7 mi north of Hunt.	—	—	2-13-75	9.76
Do	--do	Lat 34°38'30", long 109°40'35", in SW¼NW¼ sec.2, T.14 N., R.25 E., Apache County, at former gaging station 3.6 mi northwest of Hunt.	—	1940-72‡	2-13-75	4.35
Zuni River	Little Colorado River	Lat 34°38'48", long 109°33'32", in NE¼SW¼ sec.2, T.14 N., R.26 E., Apache County, 4.8 mi northeast of Hunt.	—	—	2-13-75	0
Do	--do	Lat 34°38'43", long 109°40'25", in SW¼NW¼ sec.2, T.14 N., R.25 E., Apache County, at mouth, 3.6 mi northwest of Hunt.	—	—	2-13-75	.14
Little Colorado River	Colorado River	Lat 34°38'50", long 109°42'10", in NE¼NW¼ sec.4, T.14 N., R.25 E., Apache County, at former gaging station 5 mi northwest of Hunt.	—	1929-33, 1940-72‡	2-13-75	8.92

See footnotes at end of the table.

Discharge measurements made at miscellaneous sites during water year 1975--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Little Colorado River basin--Continued						
Little Colorado River	Colorado River	Lat 34°39'22", long 109°49'58", in SW¼NW¼ sec.32, T.15 N., R.24 E., Apache County, 15 mi southeast of Woodruff.	—	—	2-13-75	5.37
Do	--------do-------	Lat 34°43'07", long 109°54'52", in NE¼NW¼ sec.9, T.15 N., R.23 E., Navajo County, 8.5 mi southeast of Woodruff.	—	—	2-13-75	.76
Do	--------do-------	Lat 34°44'32", long 110°00'50", in SE¼NE¼ sec.33, T.16 N., R.22 E., Navajo County, 3.0 mi southeast of Woodruff.	—	—	2-13-75	.97
Do	--------do-------	Lat 34°44'28", long 110°02'20", in NW¼SE¼ sec.32, T.16 N., R.22 E., Navajo County, below Silver Creek, 2.7 mi south of Woodruff.	—	—	2-13-75	4.37
Do	--------do-------	Lat 34°49'32", long 110°03'50", in SW¼SE¼ sec.36, T.17 N., R.22 E., Navajo County, 3.3 mi northwest of Woodruff.	—	—	2-13-75	4.13
Jumbo Wash basin						
Jumbo Wash	Colorado River	Lat 35°51'30", long 114°39'07" (unsurveyed), Mohave County, 1.0 mi above mouth, 1.0 mi southwest of Willow Beach.	34.6	—	9-8-75	†2,850
Pima Wash basin						
Pima Wash	Lake Havasu	Lat 34°28'44", long 114°19'27", in NW¼SE¼ sec.11, T.13 N., R.20 W., Mohave County, at Acoma Blvd., in Lake Havasu City.	1.07	—	7-19-74	†895
Daytona Wash basin						
Daytona Wash	Lake Havasu	Lat 34°28'27", long 114°18'48", in SW¼SW¼ sec.12, T.13 N., R.20 W., Mohave County, 700 ft downstream from Acoma Blvd., in Lake Havasu City.	.86	—	7-19-74	†859
Gila River basin						
Lee Moore Wash	Santa Cruz River	Lat 32°01'30", long 110°57'07", in SW¼NE¼ sec.19, T.16 S., R.14 E., Pima County, 1,500 ft downstream from bridge on U.S. Highway 89, 3.6 mi north of Sahuarita.	142	—	7- 7-74	†9,150
Pantano Wash tributary	Pantano Wash	Lat 32°11'05", long 110°47'05", in SE¼NE¼ sec.27, T.14 S., R.15 E., Pima County, 150 ft north of Stella Road and 0.25 mi west of Harrison Road, in Tucson.	.70	—	7-16-75	†b886
Atterbury Wash tributary	Atterbury Wash	Lat 32°09'07", long 110°49'30", in NE¼SW¼ sec.4, T.15 S., R.15 E., Pima County, on Davis Monthan Air Force Base, at Pantano Road, 0.55 mi south of Irvington Road, near Tucson.	.17	—	7-16-75	†b164
Atterbury Wash	Pantano Wash	Lat 32°11'04", long 110°48'55", Pima County, on centerline W½ sec.28, T.14 S., R.15 E., at culvert crossing on Stella Road in Tucson. (University of Arizona crest-stage gage.)	—	—	7-16-75	†b2,580
Do	--------do-------	Lat 32°11'14", long 110°48'55", SW¼NE¼ sec.28, T.14 S., R.15 E., Pima County, at Lakeside Dam spillway 0.2 mi north of Stella Road, in Tucson.	c18.2	—	7-16-75	†b3,080
Twenty-seven Wash tributary No. 1	Twenty-seven Wash	Lat 32°30'40", long 110°54'00", in SW¼SE¼ sec.33, T.10 S., R.14 E., Pinal County, about 0.6 mi upstream from mouth, 1.5 mi northeast of Catalina.	0.64	—	7-19 or 7-20-74	†461

See footnotes at end of the table.

Discharge measurements made at miscellaneous sites during water year 1975--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Gila River basin--Continued				
Twenty-seven Wash tributary No. 2	Twenty-seven Wash	Lat 32°29'15", long 110°55'22", in NW¼SW¼ sec.9, T.11 S., R.14 E., Pima County, at entrance to Lazy A Trailer Court, 50 ft west of U.S. Highway 89, about 1.0 mi south of Catalina.	0.01	—	7-18-74	†25
Twenty-seven Wash	Big Wash	Lat 32°28'42", long 110°55'30", in NW¼NW¼ sec.16, T.11 S., R.14 E., Pima County, at culvert 0.25 mi west of U.S. Highway 89, about 0.8 mi upstream from mouth, and about 1.6 mi south of Catalina.	4.19	—	7-19 or 7-20-74	†1,320
Oak Creek	Verde River	Lat 34°55'36", long 111°44'01", Coconino County, in Coconino National Forest at Encinoso Campground, 3.5 mi northeast of Sedona.	—	1974	1-20-75	*13.0
Do	--------do-------	Lat 34°54'36", long 111°43'40", Coconino County, in Coconino National Forest, 0.75 mi below Indian Gardens, and 2.5 mi northeast of Sedona.	—	1974	1-20-75	*34.7
Do	--------do-------	Lat 34°53'35", long 111°43'50", in SE¼SE¼ sec.33, T.18 N., R.6 E., Coconino County, in Coconino National Forest, below Casper Canyon, 2.3 mi northeast of Sedona.	—	—	1-20-75	*31.5
Soldier Wash	Oak Creek	Lat 35°52'00", long 110°46'00", in NW¼SE¼ sec.7, T.17 N., R.6 E., Coconino County, near U.S. Highway 89A, 0.4 mi southwest of Sedona.	—	—	7-14-75	†2,070
Oak Creek	Verde River	Lat 34°50'36", long 111°46'37", in NW¼NW¼ sec.19, T.17 N., R.6 E., Coconino County, in Coconino National Forest at Chavez Crossing, 2 mi southwest of Sedona.	—	1972, 1974	1-20-75	*30.0
Do	--------do-------	Lat 34°49'32", long 111°47'45", in SE¼NE¼ sec.26, T.17 N., R.5 E., Yavapai County, in Coconino National Forest, 3.5 mi southwest of Sedona.	—	1974	1-20-75	*22.3
Do	--------do-------	Lat 34°49'18", long 111°49'57", in NE¼NE¼ sec.33, T.17 N., R.5 E., Yavapai County, in Coconino National Forest, 5.5 mi southwest of Sedona.	—	1974	1-20-75	*26.5
Do	--------do-------	Lat 34°47'32", long 111°53'22", in SW¼SE¼ sec.11, T.16 N., R.4 E., Yavapai County, in Coconino National Forest, 2 mi north of community of Page Springs.	—	1974	1-20-75	*26.0
Do	--------do-------	Lat 34°45'32", long 111°53'33", in NW¼NE¼ sec.26, T.16 N., R.4 E., Yavapai County, in Coconino National Forest, 0.5 mi south of community of Page Springs.	—	1915, 1974	10-11-74 10-15-74 12-12-74 1-20-75 2-24-75	*43.8 *45.1 *54.2 *59.2 *61.6

‡ Operated as a continuous-record gaging station.
a Computed as difference in flow above and below diversion.
b Preliminary discharge.
c Contributing area, 13.2 sq mi.

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

LITTLE COLORADO RIVER BASIN

09401240 MOENKOPI WASH NEAR SHONTO (LAT 36°24'51", LONG 110°27'28")

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
FEB. 27...	0950	.27	11	40	300	150	190	7.7	250	1500	24

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED BORON (B) (UG/L)
FEB. 27...	.6	3.1	.01	2500	2320	3.40	1400	1200	2.2	2750	120

09401250 MOENKOPI WASH NEAR MOENKOPI, ARIZ. (LAT 36°06'36", LONG 111°09'19")

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT. 31...	1300	8.5	6.8	10	150	34	120	7.7
NOV. 25...	1330	2.0	8.2	40	85	19	110	4.1
JAN. 15...	1215	1.2	13	10	94	24	120	4.3
FEB. 28...	1430	2.3	7.0	30	70	18	100	3.5
MAR. 20...	1330	2.1	9.1	20	140	53	150	6.3
MAY 06...	1305	2.4	6.7	20	71	26	130	4.7
JUNE 09...	1220	.78	4.1	10	50	22	140	6.2
JULY 09...	1330	.86	12	10	190	50	300	15
11...	1230	86	13	10	250	59	150	15
13...	1215	205	13	10	310	72	130	12
AUG. 11...	1130	.21	7.8	10	170	49	190	11
12...	1415	4.3	9.3	20	180	44	190	11
22...	1415	1.2	7.8	0	110	29	170	8.0
SEP. 23...	1130	3.9	8.3	30	240	51	85	9.3

LITTLE COLORADO RIVER BASIN

09401250 MOENKOPI WASH NEAR MOENKOPI, ARIZ. (LAT 36°06'36", LONG 111°09'19").--Continued

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.									
31...	136	--	660	9.9	.5	1.7	.02	1140	1060
NOV.									
25...	245	--	290	10	.5	.03	.00	667	648
JAN.									
15...	314	--	310	15	.5	.43	.00	747	738
FEB.									
28...	218	--	260	11	.5	.04	.01	614	578
MAR.									
20...	228	0	610	15	.5	.39	.01	1190	1100
MAY									
06...	247	--	350	19	.6	.00	.00	749	730
JUNE									
09...	216	0	310	17	.7	.03	.01	679	657
JULY									
09...	163	0	1100	22	.9	4.5	.00	1940	1790
11...	222	0	910	22	.7	.68	.00	1670	1530
13...	194	0	1100	14	.6	.42	.00	1900	1750
AUG.									
11...	146	0	880	22	.7	.04	.00	1490	1400
12...	183	0	820	14	.8	.31	.01	1420	1360
22...	195	0	590	15	.7	.05	.00	1090	1030
SEP.									
23...	103	0	880	21	.6	1.5	.01	1510	1350

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED BORON (B) (UG/L)
OCT.								
31...	1.55	510	400	2.3	1490	7.8	11.0	40
NOV.								
25...	.91	290	90	2.8	950	8.3	9.0	100
JAN.								
15...	2.38	330	76	2.9	1100	8.1	1.0	80
FEB.								
28...	.84	250	70	2.8	901	8.5	--	80
MAR.								
20...	1.62	570	380	2.7	1580	8.8	17.0	90
MAY								
06...	1.02	280	82	3.4	950	--	17.0	130
JUNE								
09...	.92	220	38	4.2	900	8.7	31.0	120
JULY								
09...	2.64	680	550	5.0	2420	8.2	34.0	180
11...	2.27	870	690	2.2	1700	7.3	29.0	190
13...	2.58	1100	910	1.7	2120	7.3	22.5	160
AUG.								
11...	2.03	630	510	3.3	1800	7.9	28.0	190
12...	1.93	630	480	3.3	1650	7.9	29.0	150
22...	1.48	390	230	3.7	1400	8.0	33.0	130
SEP.								
23...	2.05	810	720	1.3	1625	7.2	18.0	90

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DIVERSIONS AND RETURN FLOWS BETWEEN DAVIS DAM AND PARKER DAM

09423650 TOPOCK MARSH OUTLET NEAR TOPOCK, ARIZ. (LAT 34°44'13", LONG 114°29'22")

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT.						
01...	1450	3.1	1230	1.67	1850	29.5
17...	1125	.50	1180	1.60	1830	22.0
NOV.						
01...	1640	.00	1160	1.58	1820	17.0
14...	1230	.00	1200	1.63	1780	17.0
DEC.						
02...	1500	.00	1170	1.59	1760	14.0
13...	0930	.00	1170	1.59	1760	9.0
JAN.						
02...	1515	.00	1150	1.56	1740	6.5
16...	0945	.00	1140	1.55	1710	7.5
FEB.						
03...	1400	.00	1140	1.55	1720	10.5
14...	0815	.00	1120	1.52	1730	11.0
MAR.						
03...	1315	.00	1140	1.55	1720	15.5
20...	1230	.00	1150	1.56	1730	17.0
APR.						
01...	1630	.00	1190	1.62	1740	13.0
16...	1600	.00	1140	1.55	1710	20.0
MAY						
01...	1245	.00	1100	1.50	1670	20.0
16...	1330	.00	1120	1.52	1690	23.0
JUNE						
02...	1015	.00	1190	1.62	1760	24.0
17...	1030	.00	1230	1.67	1790	26.0
JULY						
01...	1220	.00	1260	1.71	1850	28.0
16...	1345	.00	1280	1.74	1880	28.0
AUG.						
01...	0940	.00	1260	1.71	1860	28.0
SEP.						
02...	1410	.00	1250	1.70	1830	28.5
16...	1400	.00	1240	1.69	1820	29.0

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

09531900 MAIN OUTLET DRAIN EXTENSION BELOW MORELOS DAM, ARIZ. (M.O.D.E. 3)
(LAT 32°42'16", LONG 114°43'32")

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5720	5710	5660		5600	5850	5550	5810	5680			
2	5670	5720	5670		5620	5940	5910	5740	5680			
3	5700	5810	5660		5620	5690	5880	5700	5750			
4	5720	5770	5680		5540	5860	---	5700	5750			
5	5700	5800	5710		5590	5860	---	5790	5640			
6	5690	5820	5790		5550	5880	---	5810	5570			
7	5670	5810	5760		5510	5890	7220	5780	5620			
8	5670	5810	5760		5430	5890	5780	5830	5610			
9	5570	5810	5800		5560	5880	5790	5780	5570			
10	5600	5800	5840		5550	5900	5660	5680	5590			
11	5620	5710	5900		5470	5870	5590	5680	5680			
12	5640	5700	5770		5390	5880	5960	5730	5550			
13	5560	5700	5840		5500	5890	6110	5650	5810			
14	5600	5740	5830		5630	5910	5810	5700	5940			
15	5550	5760	5820		5550	5890	5860	5700	5940			
16	5580	5740	5930		5570	5870	5860	5720	5890			
17	5610	5770	5850		5580	5950	5870	5780	5830			
18	5580	5760	5770		5590	5910	5820	5770	5850			
19	5560	5810	5840		5550	5800	5830	5760	5850			
20	5610	5780	5830		5600	5860	5910	5630	5870			
21	5630	5770	5820		5870	5920	5860	5750	5860			
22	5590	5770	5850		6020	5910	5860	5690	5720			
23	5690	5790	5850		5770	5890	5840	5770	5740			
24	5490	5710	5860		5850	5850	5840	5790	5800			
25	5670	5580	5860		5820	5890	5860	5740	5750			
26	5770	5770	5850		5870	5960	5870	5670	5820			
27	5790	5760	5880		5870	5890	5890	5740	5780			
28	5780	5640	5830		5850	5940	5850	5680	5700			
29	5770	5680	5660		---	5900	5780	5740	5820			
30	5650	5670	5840		---	5840	5740	5660	5680			
31	5630	---	5840		---	5440	---	5810	---			
MEAN	5650	5750	5810		5640	5870	5880	5730	5740			
YEAR	MAX	7220	MIN	5390	MEAN	5760						

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
LITTLE COLORADO RIVER BASIN													
09385500 LITTLE COLORADO RIVER BELOW LYMAN RESERVOIR NEAR ST. JOHNS, ARIZ. (LAT 34°22'05", LONG 109°22'56")													
FEB., 1975 13...	1800	0.25	19	10	44	18	37	3.8	258	--	35	14	0.5
09388000 LITTLE COLORADO RIVER BELOW ZUNI RIVER NEAR HUNT, ARIZ. (LAT 34°38'50", LONG 109°42'10")													
FEB., 1975 13...	--	8.9	8.6	20	200	87	580	23	325	--	970	590	1.8
09401236 YELLOW WATER CANYON NEAR SHONTO, ARIZ. (LAT 36°30'33", LONG 110°26'20")													
JULY, 1975 15...	0800	.50	15	60	120	39	39	10	159	0	380	13	.9
09401248 BEGASHIBITO WASH NEAR TONALEA, ARIZ. (LAT 36°12'58", LONG 110°58'36")													
JAN., 1975 21...	1400	--	11	10	130	34	110	3.2	257	--	450	25	.5
JUNE 09...	1330	.05	10	30	95	34	120	4.5	158	0	480	31	.8
340518109244200 LITTLE COLORADO RIVER BELOW SOUTH FORK NEAR SPRINGERVILLE, ARIZ. (LAT 34°05'18", LONG 109°24'42")													
FEB., 1975 13...	--	2.7	20	110	19	7.0	8.7	1.7	100	--	5.2	3.0	.2
340528109120900 NUTRIOSO CREEK BELOW CORREJO CROSSING, ARIZ. (LAT 34°05'28", LONG 109°12'09")													
FEB., 1975 13...	--	.17	15	20	56	18	38	1.2	310	--	19	19	.3
340834109170000 NUTRIOSO CREEK AT MOUTH, SPRINGERVILLE, ARIZ. (LAT 34°08'34", LONG 109°17'00")													
FEB., 1975 13...	--	.37	24	20	45	21	41	1.0	295	--	27	24	.6
340944109180600 LITTLE COLORADO RIVER BELOW BECKER LAKE NEAR SPRINGERVILLE, ARIZ. (LAT 34°09'44", LONG 109°18'06")													
FEB., 1975 13...	--	5.1	20	10	40	18	34	1.8	275	--	11	9.9	.3

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180°C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED BORON (B) (UG/L)
LITTLE COLORADO RIVER BASIN													
09385500 LITTLE COLORADO RIVER BELOW LYMAN RESERVOIR NEAR ST. JOHNS, ARIZ. (LAT 34°22'05", LONG 109°22'56")--Continued													
FEB., 1975 13...	0.04	0.04	312	299	0.42	180	0	1.2	400	--	5.0	--	70
09388000 LITTLE COLORADO RIVER BELOW ZUNI RIVER NEAR HUNT, ARIZ. (LAT 34°38'50", LONG 109°42'10")--Continued													
FEB., 1975 13...	.02	.01	2880	2620	3.92	860	590	8.6	4000	--	2.0	--	920
09401236 YELLOW WATER CANYON NEAR SHONTO, ARIZ. (LAT 36°30'33", LONG 110°26'20")--Continued													
JULY, 1975 15...	.96	.00	729	700	.99	460	330	.8	940	7.8	21.0	--	120
09401248 BEGASHIBITO WASH NEAR TONALEA, ARIZ. (LAT 36°12'58", LONG 110°58'36")--Continued													
JAN., 1975 21...	.14	.01	907	891	1.23	460	250	2.2	1120	8.0	1.0	--	120
JUNE 09...	.00	.00	922	853	1.25	380	250	2.7	1240	8.5	29.0	--	190
340518109244200 LITTLE COLORADO RIVER BELOW SOUTH FORK NEAR SPRINGERVILLE, ARIZ. (LAT 34°05'18", LONG 109°24'42")--Continued													
FEB., 1975 13...	.01	.03	106	114	.14	76	0	.4	185	--	1.0	--	7
340528109120900 NUTRIOSO CREEK BELOW CORREJO CROSSING, ARIZ. (LAT 34°05'28", LONG 109°12'09")--Continued													
FEB., 1975 13...	.01	.06	326	320	.44	210	0	1.1	540	--	4.0	--	40
340834109170000 NUTRIOSO CREEK AT MOUTH, SPRINGERVILLE, ARIZ. (LAT 34°08'34", LONG 109°17'00")--Continued													
FEB., 1975 13...	.08	.03	338	330	.46	200	0	1.3	530	--	10.0	--	80
340944109180600 LITTLE COLORADO RIVER BELOW BECKER LAKE NEAR SPRINGERVILLE, ARIZ. (LAT 34°09'44", LONG 109°18'06")--Continued													
FEB., 1975 13...	.50	.24	273	274	.37	170	0	1.1	460	--	7.0	--	40

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
LITTLE COLORADO RIVER BASIN													
341717109220300 VIGIL RUN BELOW HIGHWAY NEAR SPRINGERVILLE, ARIZ. (LAT 34°17'17", LONG 109°22'03")													
FEB., 1975 13...	--	0.64	22	20	40	23	25	6.5	265	--	16	9.9	0.3
341730109191200 COYOTE CREEK ABOVE DIVERSION NEAR MOUTH, ARIZ. (LAT 34°17'30", LONG 109°19'12")													
JAN., 1975 16...	--	2.0	17	10	54	34	240	2.2	305	7	500	36	.3
341816109212400 LITTLE COLORADO RIVER AT RICHEY RANCH NEAR SPRINGERVILLE, ARIZ. (LAT 34°18'16", LONG 109°21'24")													
FEB., 1975 13...	--	5.8	14	10	44	21	38	2.1	301	--	19	16	.4
342600109224000 LITTLE COLORADO RIVER BELOW SALADO SPRING NEAR ST. JOHNS, ARIZ. (LAT 34°26'00", LONG 109°22'40")													
FEB., 1975 13...	--	8.0	17	10	240	59	370	26	519	--	660	410	2.3
343025109212500 LITTLE COLORADO RIVER BELOW HIGHWAY AT ST. JOHNS, ARIZ. (LAT 34°30'25", LONG 109°21'25")													
FEB., 1975 13...	--	3.1	16	10	190	58	380	27	390	--	680	420	2.2
343618109292200 LITTLE COLORADO RIVER BELOW ZION RESERVOIR NEAR ST. JOHNS, ARIZ. (LAT 34°36'18", LONG 109°29'22")													
FEB., 1975 13...	--	4.1	10	20	210	98	650	27	360	--	1200	660	1.8
343922109495800 LITTLE COLORADO RIVER AT APACHE-NAVAJO COUNTY LINE, ARIZ. (LAT 34°39'22", LONG 109°49'58")													
FEB., 1975 13...	--	5.3	8.7	10	190	78	550	22	295	--	990	550	1.6
344432110005000 LITTLE COLORADO RIVER ABOVE SILVER CREEK NEAR WOODRUFF, ARIZ. (LAT 34°44'32", LONG 110°00'50")													
FEB., 1975 13...	--	.97	8.6	60	170	66	490	18	273	--	890	480	1.7

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180°C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED BORON (B) (UG/L)
LITTLE COLORADO RIVER BASIN													
341717109220300 VIGIL RUN BELOW HIGHWAY NEAR SPRINGERVILLE, ARIZ. (LAT 34°17'17", LONG 109°22'03")--Continued													
FEB., 1975 13...	0.01	0.03	258	274	0.35	190	0	0.8	350	--	2.5	--	60
341730109191200 COYOTE CREEK ABOVE DIVERSION NEAR MOUTH, ARIZ. (LAT 34°17'30", LONG 109°19'12")--Continued													
JAN., 1975 16...	.05	.02	1020	1040	1.39	270	13	6.3	1500	--	1.0	--	230
341816109212400 LITTLE COLORADO RIVER AT RICHEY RANCH NEAR SPRINGERVILLE, ARIZ. (LAT 34°18'16", LONG 109°21'24")--Continued													
FEB., 1975 13...	.02	.14	312	303	.42	200	0	1.2	500	--	6.0	--	50
342600109224000 LITTLE COLORADO RIVER BELOW SALADO SPRING NEAR ST. JOHNS, ARIZ. (LAT 34°26'00", LONG 109°22'40")--Continued													
FEB., 1975 13...	.02	.01	2060	2040	2.80	840	420	5.5	3100	--	7.0	--	650
343025109212500 LITTLE COLORADO RIVER BELOW HIGHWAY AT ST. JOHNS, ARIZ. (LAT 34°30'25", LONG 109°21'25")--Continued													
FEB., 1975 13...	.02	.01	2000	1970	2.72	710	390	6.2	3000	--	10.0	--	670
343618109292200 LITTLE COLORADO RIVER BELOW ZION RESERVOIR NEAR ST. JOHNS, ARIZ. (LAT 34°36'18", LONG 109°29'22")--Continued													
FEB., 1975 13...	.01	.02	3090	3030	4.20	930	630	9.3	4200	--	1.0	--	0
343922109495800 LITTLE COLORADO RIVER AT APACHE-NAVAJO COUNTY LINE, ARIZ. (LAT 34°39'22", LONG 109°49'58")--Continued													
FEB., 1975 13...	.00	.01	2590	2540	3.52	800	550	8.5	3800	--	2.0	--	850
344432110005000 LITTLE COLORADO RIVER ABOVE SILVER CREEK NEAR WOODRUFF, ARIZ. (LAT 34°44'32", LONG 110°00'50")--Continued													
FEB., 1975 13...	.00	.01	2320	2260	3.16	700	470	8.1	3000	--	2.0	--	800

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
LITTLE COLORADO RIVER BASIN													
362541110233000 PEABODY RESERVOIR ON BLACK MESA, ARIZ. (LAT 36°25'41", LONG 110°23'30")													
JAN., 1975 22...	1530	--	8.9	10	99	27	53	6.9	217	--	270	13	0.6
363142110243200 COAL MINE WASH NEAR 09401229, ARIZ. (LAT 36°31'42", LONG 110°24'32")													
JAN., 1975 21...	1700	--	16	10	310	160	93	2.7	216	--	1400	21	.5
363213110242800 COAL MINE WASH TRIBUTARY NO. 2 ABOVE 09401229, ARIZ. (LAT 36°32'13", LONG 110°24'28")													
JAN., 1975 21...	1620	--	9.4	80	460	660	770	5.7	248	--	4100	100	.5
363243110252200 YELLOW WATER CANYON AT ROAD CROSSING, ARIZ. (LAT 36°32'43", LONG 110°25'22")													
JAN., 1975 22...	1700	--	2.2	10	140	45	37	2.6	45	--	570	5.0	.3
JULY 29...	1730	E30	11	310	74	12	9.6	7.6	176	0	110	7.6	.6
GILA RIVER BASIN													
09519800 GILA RIVER BELOW PAINTED ROCK DAM, ARIZ. (LAT 33°04'30", LONG 113°00'50")													
DEC., 1974 06...	1230	E4.0	12	10	57	36	340	15	203	--	170	500	.7
FEB., 1975 19...	1335	.30	11	70	76	42	370	13	198	0	190	590	.9
MAY 21...	1230	--	13	20	79	52	460	15	182	0	230	740	1.0
334943112162601 BEARDSLEY CANAL BELOW WADDELL DAM, ARIZ. (LAT 33°49'43", LONG 112°16'26")													
APR., 1975 08...	0900	102	13	--	42	20	32	5.6	203	0	58	24	.5
344532111533300 OAK CREEK BELOW PAGE SPRINGS HATCHERY, ARIZ. (LAT 34°45'32", LONG 111°53'33")													
JAN., 1975 20...	1330	59	15	10	45	18	8.4	1.5	231	--	3.2	7.8	.1

E = Estimated

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180°C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED BORON (B) (UG/L)
LITTLE COLORADO RIVER BASIN													
362541110233000 PEABODY RESERVOIR ON BLACK MESA, ARIZ. (LAT 36°25'41", LONG 110°23'30")--Continued													
JAN., 1975 22...	0.12	0.00	622	586	0.85	360	180	1.2	876	8.2	0.0	--	50
363142110243200 COAL MINE WASH NEAR 09401229, ARIZ. (LAT 36°31'42", LONG 110°24'32")--Continued													
JAN., 1975 21...	6.0	.01	2320	2240	3.16	1400	1300	1.1	2520	8.1	--	--	120
363213110242800 COAL MINE WASH TRIBUTARY NO. 2 ABOVE 09401229, ARIZ. (LAT 36°32'13", LONG 110°24'28")--Continued													
JAN., 1975 21...	270	.01	7990	7420	10.9	3900	3700	5.4	8000	7.0	--	--	900
363243110252200 YELLOW WATER CANYON AT ROAD CROSSING, ARIZ. (LAT 36°32'43", LONG 110°25'22")--Continued													
JAN., 1975 22...	1.7	.01	874	832	1.19	540	500	.7	1120	7.2	--	--	30
JULY 29...	.01	.00	379	320	.52	230	90	.3	400	7.7	17.5	--	130
GILA RIVER BASIN													
09519800 GILA RIVER BELOW PAINTED ROCK DAM, ARIZ. (LAT 33°04'30", LONG 113°00'50")--Continued													
DEC., 1974 06...	.04	--	1250	1230	1.70	290	120	8.7	2250	--	--	--	610
FEB., 1975 19...	.01	.00	1430	1390	1.94	360	200	8.5	2530	8.4	17.0	4	630
MAY 21...	.03	.02	1790	1680	2.43	410	260	9.9	2973	7.8	24.5	4	780
334943112162601 BEARDSLEY CANAL BELOW WADDELL DAM, ARIZ. (LAT 33°49'43", LONG 112°16'26")--Continued													
APR., 1975 08...	.01	.03	306	295	.42	190	21	1.0	540	8.2	12.0	13	110
344532111533300 OAK CREEK BELOW PAGE SPRINGS HATCHERY, ARIZ. (LAT 34°45'32", LONG 111°53'33")--Continued													
JAN., 1975 20...	.04	.01	195	213	.27	190	0	.3	372	8.2	14.0	--	30

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
GILA RIVER BASIN													
344732111532200 OAK CREEK AT HIDDEN VALLEY, ARIZ. (LAT 34°47'32", LONG 111°53'22")													
JAN., 1975 20...	1420	26	14	10	38	17	4.5	1.0	204	0	1.7	2.7	0.1
344918111495100 OAK CREEK AT CROSS CREEK RANCH, ARIZ. (LAT 34°49'18", LONG 111°49'51")													
JAN., 1975 20...	1235	27	14	30	36	16	4.6	1.1	203	0	2.2	3.8	.1
344932111474500 OAK CREEK BELOW DUNCAN DITCH, ARIZ. (LAT 34°49'32", LONG 111°47'45")													
JAN., 1975 20...	1520	22	15	60	36	16	4.7	1.4	201	--	2.8	3.5	.1
345036111463700 OAK CREEK AT CHAVEZ CROSSING, ARIZ. (LAT 34°50'36", LONG 111°46'37")													
JAN., 1975 20...	1055	30	14	10	35	18	4.4	1.1	196	--	1.5	2.6	.1
345333111435000 OAK CREEK ABOVE BLACK DITCH, ARIZ. (LAT 34°53'33", LONG 111°43'50")													
JAN., 1975 20...	1340	32	15	10	41	16	4.7	1.1	197	--	1.8	2.8	.1
345436111434000 OAK CREEK BELOW INDIAN GARDENS, ARIZ. (LAT 34°54'36", LONG 111°43'40")													
JAN., 1975 20...	1045	35	15	10	33	16	4.4	1.2	193	--	2.1	3.6	1.1
345536111440100 OAK CREEK AT ENCINOSO CAMP GROUNDS, ARIZ. (LAT 34°55'36", LONG 111°44'01")													
JAN., 1975 20...	0940	13	12	20	40	18	3.2	.9	219	--	2.1	2.8	.1

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180°C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED BORON (B) (UG/L)
GILA RIVER BASIN													
344732111532200 OAK CREEK AT HIDDEN VALLEY, ARIZ. (LAT 34°47'32", LONG 111°53'22")--Continued													
JAN., 1975 20...	0.04	0.01	164	180	0.22	160	0	0.2	315	8.4	8.0	--	10
344918111495100 OAK CREEK AT CROSS CREEK RANCH, ARIZ. (LAT 34°49'18", LONG 111°49'51")--Continued													
JAN., 1975 20...	.04	.00	162	178	.22	160	0	.2	311	8.4	6.5	--	20
344932111474500 OAK CREEK BELOW DUNCAN DITCH, ARIZ. (LAT 34°49'32", LONG 111°47'45")--Continued													
JAN., 1975 20...	.05	.00	162	179	.22	160	0	.2	309	8.3	--	--	10
345036111463700 OAK CREEK AT CHAVEZ CROSSING, ARIZ. (LAT 34°50'36", LONG 111°46'37")--Continued													
JAN., 1975 20...	.04	.01	150	174	.20	160	1	.2	308	8.3	5.5	--	20
345333111435000 OAK CREEK ABOVE BLACK DITCH, ARIZ. (LAT 34°53'33", LONG 111°43'50")--Continued													
JAN., 1975 20...	.04	.01	158	180	.21	170	7	.2	305	8.3	7.5	--	20
345436111434000 OAK CREEK BELOW INDIAN GARDENS, ARIZ. (LAT 34°54'36", LONG 111°43'40")--Continued													
JAN., 1975 20...	.08	.00	155	172	.21	150	0	.2	298	8.3	8.5	--	10
345536111440100 OAK CREEK AT ENCINOSO CAMP GROUNDS, ARIZ. (LAT 34°55'36", LONG 111°44'01")--Continued													
JAN., 1975 20...	.06	.00	169	187	.23	170	0	.1	330	8.3	4.0	--	10

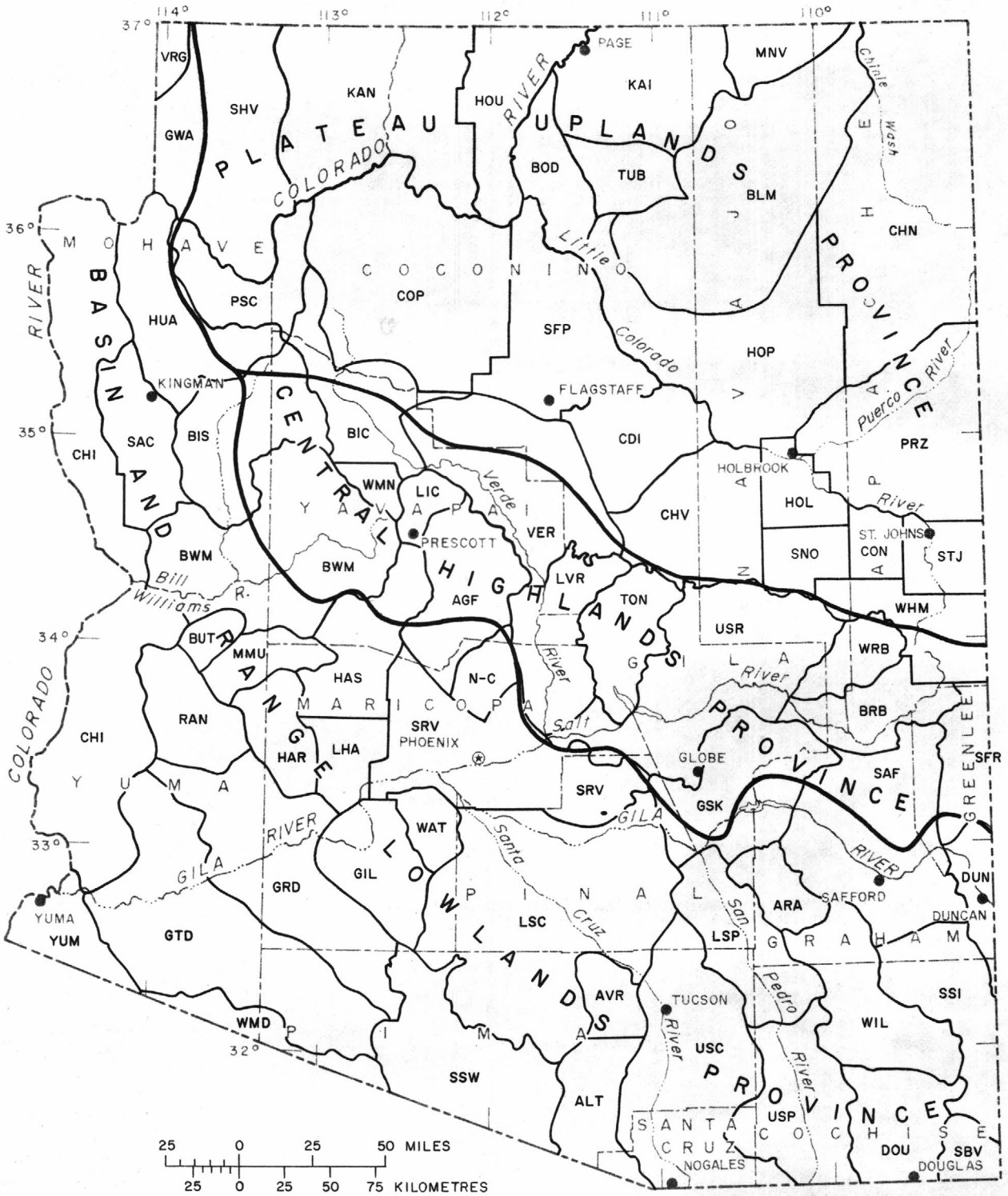


FIGURE 7. --INDEX MAP OF GROUND-WATER AREAS IN ARIZONA.

AREAS AND ABBREVIATIONS

AGF = Agua Fria basin
ALT = Altar Valley
ARA = Aravaipa Valley
AVR = Avra Valley
BIC = Big Chino Valley
BIS = Big Sandy Valley
BWM = Bill Williams
BLM = Black Mesa
BRB = Black River basin
BOD = Bodaway Mesa
BUT = Butler Valley
CDI = Canyon Diablo
CHV = Chevelon
CHN = Chinle
COP = Coconino Plateau
CHI = Colorado River, Hoover Dam to Imperial Dam
CON = Concho
DOU = Douglas basin
DUN = Duncan basin
GIL = Gila Bend basin
GRD = Gila River from Painted Rock Dam to Texas Hill
GSK = Gila River from head of San Carlos Reservoir to Kelvin
GTD = Gila River from Texas Hill to Dome
GWA = Grand Wash
HAR = Harquahala Plains
HAS = Hassayampa basin
HOL = Holbrook
HOP = Hopi
HOU = House Rock
HUA = Hualapai Valley
KAI = Kaibito
KAN = Kanab
LIC = Little Chino Valley
LHA = Lower Hassayampa
LSP = Lower San Pedro basin
LSC = Lower Santa Cruz basin
LVR = Lower Verde Valley
MMU = McMullen Valley
MNV = Monument Valley
N-C = New River-Cave Creek
PSC = Peach Springs Canyon
PRZ = Puerco-Zuni
RAN = Ranegras Plain
SAC = Sacramento Valley
SAF = Safford basin
SRV = Salt River Valley
SBV = San Bernardino Valley
SFP = San Francisco Peaks
SFR = San Francisco River basin
SSI = San Simon basin
SSW = San Simon Wash
SHV = Shivwits
SNO = Snowflake
STJ = St. Johns
TON = Tonto basin
TUB = Tuba City
USR = Upper Salt River basin
USP = Upper San Pedro basin
USC = Upper Santa Cruz basin
VER = Upper Verde Valley
VRG = Virgin River
WAT = Waterman Wash
WMD = Western Mexican drainage
WHM = White Mountains
WRB = White River basin
WIL = Willcox basin
WMN = Williamson Valley
YUM = Yuma

LATITUDE-LONGITUDE	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet above mean sea level)	TYPE OF WELL	RECORDS AVAILABLE (years)	WATER LEVEL, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1975	Date
AGUA FRIA BASIN											
341657N1124312.1	(B-11-4)19bcc	47	4,454	Unused	1946, 1948-49, 1951-57, 1959-60, 1962-66, 1968-72, 1974-75	16.5	7- 3-43	32.1	2- 5-65	20.6	2-12
ALTAR VALLEY											
312950N1113346.1	(D-22-8)19dbc	160	3,610	Domestic, stock	1950-61, 1963-66, 1968-75	91.2	10-18-50	99.4	3- 9-65	94.9	3- 4
ARAVAIPA VALLEY											
324413N1091355.1	(D-8-21)18dad	140	3,880	Irrigation	1955-57, 1959, 1962, 1964-69, 1971-75	28.4	4-23-68	43.1	12-18-57	37.1	1-24
AVRA VALLEY											
321456N1111608.1	(D-13-11)31ccc	900	2,210	Irrigation	1953-57, 1959-63, 1965-66, 1968-71, 1973-75	276.2	3- 6-53	382.4	1- 2-73	375.0	1- 2
320513N1111710.1	(D-15-10)35aaa	295	2,531.1	Unused	1940-42, 1944, 1946-57, 1959-71, 1974-75	212.2	10- 7-48	232.1	1- 2-74	229.3	3- 3
320852N1111500.1	(D-15-11)5ccd	728	2,368.0	Unused	1953-57, 1959-60, 1962-75	281.1	3- 6-53	337.6	8-25-75	335.4	1-27
BIG CHINO VALLEY											
345338N1123118.1	(B-17-2)6bbb	342	4,200	Irrigation	1952-57, 1959-75	129.3	4-27-53	138.8	2- 5-63	130.1	3-11
345608N1123323.1	(B-18-3)23bbc	61	4,420	Unused	1952-57, 1959-67, 1969-75	8.9	2-10-66	18.5	5-31-55	16.0	3-10
BIG SANDY VALLEY											
344040N1133510.1	(B-16-13)36cc	15		Domestic	1945-75	9.7	1-12-45	13.6	10-20-56	10.8	3-26
BLACK MESA											
360055N1103040.1	(A-30-17)9dda	1,683	5,858	Unused	1972-75	323.9	2- 1-73	327.0	4- 5-72	326.3	1-15

LATITUDE-LONGITUDE	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet above mean sea level)	TYPE OF WELL	RECORDS AVAILABLE (years)	WATER LEVEL, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1975	Date
BUTLER VALLEY											
335823N11347	(B-7-15)2ddc	552	1,425	Irrigation	1967-75	149.4	1-22-69	152.2	1- 7-75	152.2	1- 7
CONCHO											
343716N1093857.1	(A-14-25)E12cdd3	630	5,420	Irrigation	1953-58, 1960-75	11.7	5- 1-62	30.2	1- 3-75	30.2	1- 3
DOUGLAS BASIN											
315042N1094143.1	(D-18-26)28aaa2	390	4,268	Irrigation	1965-75	89.0	2-11-65	147.8	2-19-75	147.8	2-19
313826N1094023.1	(D-21-26)2baa	110	4,130	Unused	1947-75	36.6	8-26-47	102.1	7-23-75	99.6 102.1	1-28 7-23
313550N1093920.1	(D-21-26)24baa	196	4,195.8	Domestic	1946-58, 1960-62, 1964-75	112 0	1-31-46	177.0	2-19-75	177.0	2-19
312944N1094232.2	(D-22-26)28bab2	90	4,026.6	Irrigation	1946-47, 1949-51, 1953-71, 1973, 1975	26.4	7-25-46	56.0	3- 6-69	48.0	2-20
312226N1093728.1	(D-24-27)5bdb	82	4,000.2	Stock	1942, 1944-57, 1959-75	54.3	5-26-42	71.9	1-17-74	67.9	2-21
DUNCAN BASIN											
325114N1091058.1	(D-7-31)4bcc	75	3,544.4	Irrigation	1939-43, 1945-75	21.9	2-19-68	41.0	8- 8-56	30.5	2-10
314119N1090528.1	(D-8-32)32cda	110	3,716.0	Domestic	1939-1973, 1975	20.2	1-10-75	38.6	8-27-51	20.2	1-10
GILA BEND BASIN											
331313N1124108.1	(C-2-4)29dda	424	845	Irrigation	1957-75	233.5	2-14-57	264.2	4- 6-67	249.7	1-23
325907N1125430.1	(C-5-6)18ddd	1,502	670	Irrigation	1966-75	35.7	1- 4-66	40.1	2-14-73	39.3	1-22
GILA RIVER DRAINAGE FROM PAINTED ROCK DAM TO TEXAS HILL											
330607N1131619.1	(C-4-10)10aaa	500	688	Unused	1957-75	198.4	2-14-57	239.8	1- 8-75	239.8	1- 8
325353N1133211.1	(C-6-12)19bba	1,352	383	Unused	1945-50, 1952-75	29.2	1- 8-75	44.9	3-16-50	29.2	1- 8
GILA RIVER FROM HEAD OF SAN CARLOS RESERVOIR TO KELVIN											
322102N1102802.1	(D-1-18)11dcc		2,662	Domestic	1967-75	33.0	2-15-73	38.7	3- 2-67	35.2	2-13

LATITUDE-LONGITUDE	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet above mean sea level)	TYPE OF WELL	RECORDS AVAILABLE (years)	WATER LEVEL, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1975	Date
GILA RIVER FROM HEAD OF SAN CARLOS RESERVOIR TO KELVIN--Continued											
330858N1104951.1	(D-3-15)29aba	300	2,740	Irrigation	1952-75	81.6	2-25-60	102.2	9-11-57	97.6	2- 5
330416N1105533.1	(D-4-14)21bcd	80	1,790	Unused	1952-55, 1957-64, 1966-75	5.5	3-26-69	8.3	12- 8-53	5.6	2- 5
GILA RIVER FROM TEXAS HILL TO DOME											
323348N1135711.1	(C-8-17)13add	100	262	Unused	1945-52, 1955-75	6.9	3-16-61	34.1	2-21-51	21.7	1- 9
HARQUAHALA PLAINS											
334326N1133034.1	(B-4-12)5aaa	730	1,638	Irrigation	1963-75	372.2	10-30-68	432.7	3- 6-73	429.0	2-25
HOLBROOK											
345310N1100625.1	(A-17-21)10cba	160	5,140	Unused	1952-58, 1960-75	52.1	4-23-65	53.6	4- 4-66	52.7	2-11
HUALAPAI VALLEY											
352740N1133555.1	(B-24-12)18daa	440	4,255	Irrigation	1953-64, 1967-75	143.4	1-31-72	147.5	6- 2-55	143.5	3-27
LITTLE CHINO VALLEY											
344846N1122714.1	(B-17-2)34acc	420	4,500	Unused	1950-75	4.0	3- 8-72	10.6	3-10-75	10.6	3-10
LOWER HASSAYAMPA											
332045N1125757.1	(C-1-7)15bbb	650	948.9	Unused	1949-75	178.2	3- 4-49	227.0	2- 7-73	226.1	1-10
LOWER SAN PEDRO BASIN											
321715N1102158.1	(D-13-19)23dad	85	3,150	Stock	1949-75	29.1	4-16-68	49.8	3-28-54	38.1	1-24
325217N1104255.1	(D-6-16)33bad	60	2,100	Unused	1949-69, 1971-73, 1975	6.7	2-27-67	22.3	2- 4-75	22.3	2- 4
324312N1103816.1	(D-8-17)19dadl	46	2,400	Domestic	1949-58, 1961-75	5.4	3-18-64	18.2	12- 7-53	16.8	2- 4
323644N1104612.1	(D-9-15)36bbc	92	4,500	Domestic	1949-75	32.7	2-13-74	82	8-16-54	34.3	2- 3

LATITUDE-LONGITUDE	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet above mean sea level)	TYPE OF WELL	RECORDS AVAILABLE (years)	WATER LEVEL, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1975	Date
LOWER SANTA CRUZ BASIN											
322330N1110725.1	(D-12-12)16bad	300	2,085	Unused	1939-57, 1959-63, 1965-75	74.7	2-20-40	123.3	8-25-48	91.3	2- 9
325306N1111215.1	(D-6-11)27cad	300	2,370	Stock	1953-54, 1956, 1960-75	26.9	2- 7-73	51.6	3-10-75	51.6	3-10
324948N1113538.1	(D-7-7)11cdd	460	1,498	Irrigation	1942-57, 1959-64, 1967-75	85.9	3-11-42	299.1	3- 6-75	299.1	3- 6
324102N1114528.1	(D-8-6)31add	280	1,518	Unused	1952, 1955-64, 1966-75	128.9	2-14-52	216.8	1-24-69	214.5	2-21
323753N1112046.1	(D-9-10)19aaa	600	1,830	Unused	1953-64, 1966-75	181.1	3-28-55	226.7	1-17-68	215.2	2-24
323942N1110302.1	(D-9-13)7cbc	275	3,115	Stock	1952-75	43.0	9-23-55	111.5	1- 6-53	61.2	3-10
McMULLEN VALLEY											
334817N1133839.2	(B-5-13)5cbb	755	2,018	Irrigation	1963-75	279.5	3-12-63	375.8	2-25-75	375.8	2-25
335727N1130451.1	(B-7-8)15baa	1,812	2,257	Irrigation	1962-75	479.4	1- 2-64	543.2	1- 2-74	538.5	2-26
PUERCO-ZUNI											
350250N1091710.1	(A-19-29)17acb2	465	6,130	Stock	1969, 1971-75	210.0	7- 9-69	215.2	1-31-75	215.2	1-31
RANEGRAS PLAIN											
334725N1135445.1	(B-5-16)10ddd	164	1,070	Unused	1946, 1948-63, 1965-75	112.6	2-21-46	118.1	1- 6-75	118.1	1- 6
SACRAMENTO VALLEY											
351109N1140300.1	(B-21-17)24cdd1	120	3,310	Domestic	1944-75	101.5	8-14-44	120.0	2-12-63	110.7	1-23
SAFFORD BASIN											
330505N1100228.1	(D-4-22)13acd	100	2,640	Irrigation	1953-75	8.9	3-13-68	29.0	8-31-53	16.5	2-14
330239N1100311.1	(D-4-22)35ada	75	2,859.5	Stock	1939-44, 1946-75	17.1	2-11-43	39.4	3-29-40	20.3	2-14
325633N1095438.1	(D-6-24)5aca	64	2,779.6	Irrigation	1940-75	37.7	3-13-68	57.7	6-28-55	42.4	2-14
325410N1094806.1	(D-6-25)20aaa	46	2,821.6	Irrigation	1939-46, 1948-50, 1952-75	10.8	5-26-41	29.6	10-30-56	13.3	2-14
325224N1093050.1	(D-6-28)31aab	540	3,150	Unused	1951-75	16.7	4-25-73	44.5	7-28-71	30.8	1-24
324849N1094035.1	(D-7-26)22bab	90	2,950.3	Irrigation	1940-75	20.3	5-25-42	68.2	7- 1-57	26.9	2-14

LATITUDE-LONGITUDE	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet above mean sea level)	TYPE OF WELL	RECORDS AVAILABLE (years)	WATER LEVEL, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1975	Date
SAFFORD BASIN--Continued											
324501N1094414.1	(D-8-25)12dba	400	3,235	Irrigation	1950-67, 1969-75	55.6	3-13-50	139.2	7-31-67	77.7	2-14
324115N1094148.1	(D-8-26)33cdc	400	3,340	Irrigation	1950-75	17.0	3-13-50	83.5	3-14-75	83.5	3-14
SALT RIVER VALLEY											
322453N1114111.1	(A-1-6)24dab	585	1,408	Unused	1972-75	521.9	1-18-72	535.0	1- 2-75	535.0	1- 2
333916N1120557.1	(A-4-2)36aaa	670	1,373	Unused	1948, 1954-55, 1957-61, 1963-64, 1966-71, 1973-75	273.1	12-20-48	526.7	2- 5-75	526.7	2- 5
332725N1122533.1	(B-1-2)1cbb	315	1,004	Unused	1961-75	130.2	12- 1-61	150.3	8-22-69	138.5	1-17
332452N1123350.1	(B-1-3)21dbb	425	987	Irrigation	1956-62, 1964-75	137.3	1-10-56	161.2	1-21-66	152.1	1-23
333227N1122806.1	(B-2-2)4dcb	480	1,205	Unused	1940-42, 1946-75	183.7	5-17-40	349.8	2-21-75	349.8	2-21
334230N1122230.1	(B-4-1)9bcd	500	1,335	Unused	1938, 1940-42, 1944, 1946-66, 1968-75	180.0	11-28-38	365.8	2-13-75	365.8	2-13
331817N1114051.1	(D-1-7)31bac1	500	1,334	Unused	1954-75	172.3	3-31-54	211.1	9-20-65	196.0	2-26
SAN BERNARDINO VALLEY											
312528N1091331.1	(D-23-31)18dcb2	328	4,050	Stock	1968, 1970-75	226.9	9-18-68	234.7	2- 6-73	232.0	1- 2
SAN FRANCISCO PEAKS											
350924N1114401.1	(A-21-6)35cba	1,600	7,136.7	Municipal	1954-56, 1958, 1960, 1962-64, 1966-75	1,221	4-13-70	1,241.5	1-26-73	1,233.7	2-28
SAN SIMON BASIN											
322112N1093626.1	(D-12-27)32aab	250	3,980	Stock	1952-54, 1956-57, 1959-64, 1967-75	132.5	12-20-56	137.2	12-12-54	133.0	1- 2
321932N1092554.1	(D-13-29)6ccc	835	3,675	Stock, irrigation	1941-42, 1944, 1946-47, 1949-52, 1954-57, 1959-75	9.5	5- 2-41	237.0	1- 2-75	237.0	1- 2
321200N1090945.1	(D-14-31)22adc	800	3,690	Irrigation	1973-75	100.0	1-24-73	124.4	1- 7-75	124.4	1- 7
314911N1090501.1	(D-18-32)33bca2	227	4,220	Domestic	1969-75	134.7	1-22-70	148.3	1- 2-75	148.3	1- 2

LATITUDE-LONGITUDE	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet above mean sea level)	TYPE OF WELL	RECORDS AVAILABLE (years)	WATER LEVEL, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1975	Date
SAN SIMON WASH											
315444N1115503.1	(D-17-4)34abd	201	2,301	Irrigation	1968-75	123.4	2-23-72	126.9	3-13-75	126.9	3-13
SNOWFLAKE											
343009N1100435.1	(A-13-21)24ccb	328	5,618	Irrigation	1952-58, 1960-61, 1963-75	60.2	4-24-58	97.3	3- 5-70	83.2	1- 2
ST. JOHNS											
343018N1092353.1	(A-13-28)29bcd	50	5,800	Domestic	1944-58, 1960-72, 1975	7.4	3- 1-67	30.9	5- 3-56	14.2	2- 7
TONTO BASIN											
334707N1111543.1	(A-5-11)7dda		2,149	Stock	1969, 1972-75	1.4	3- 1-73	8.2	1-31-75	8.2	1-31
UPPER SALT RIVER BASIN											
332658N1104932.1	(A-1-15)9aad2		3,237	Industrial	1970-75	43.8	3-15-74	63.2	1-20-72	44.0	2-13
332055N1104555.1	(D-1-15)13bda	105	3,800	Unused	1946-55, 1957, 1959-75	3.5	5- 5-49	39.5	2-14-61	7.6	2-13
UPPER SAN PEDRO BASIN											
320005N1101709.1	(D-16-20)34acd2	117	3,525	Irrigation	1969-75	79.0	3-18-69	85.6	1-31-72	80.2	1-23
315500N1101322.1	(D-17-21)32bab	520	3,705	Domestic, stock	1944-75	16.9	12- 9-46	47.8	1-22-75	47.8	1-22
315417N1101400.1	(D-18-21)6aaa2	60	3,620	Domestic	1944-58, 1960-75	25.6	3-30-46	39.7	5-28-54	28.0	1-22
312250N1100639.1	(D-23-22)33dcd2	91.5	4,200	Observation	1954-63, 1966-75	11.5	8-24-55	18.5	7-15-61	17.8	1-20
UPPER SANTA CRUZ BASIN											
320824N1105930.1	(D-15-13)11cba	224	2,457	Observation	1968-75	82.0	2-21-68	138.5	8-25-75	128.8 138.5	1-27 8-25
315700N1105719.1	(D-17-14)18cab	124	2,710	Observation	1939-75	52.2	1- 2-40	89.8	2-24-69	89.4	2- 7
314718N1104139.1	(D-19-16)15aba	300	4,980	Stock	1952-75	203.7	4-10-69	222.4	1-22-70	204.7	2- 6
312758N1105900.1	(D-22-13)35dcd	90	3,430	Irrigation	1939-57, 1959-61, 1963-75	7.4	1-23-68	53.0	3-30-54	27.7	2- 7

LATITUDE-LONGITUDE	LOCAL WELL NUMBER	DEPTH OF WELL (feet)	LAND-SURFACE ALTITUDE (feet above mean sea level)	TYPE OF WELL	RECORDS AVAILABLE (years)	WATER LEVEL, IN FEET BELOW LAND SURFACE					
						Highest	Date	Lowest	Date	1975	Date
UPPER SANTA CRUZ BASIN--Continued											
312419N1105412.1	(D-23-14)27baa	36	3,575	Unused	1939-57, 1959-61, 1963-75	12.6	1- 6-60	21.8	7-28-48	18.3	2- 7
312119N1103517.1	(D-24-17)11cda	23	4,650	Observation	1949-75	1.8	12-30-55	14.6	7-24-64	4.3	3-18
UPPER VERDE VALLEY											
342822N1125312.1	(B-13-6)9dd	52	2,500	Irrigation	1945-49, 1951-57, 1959-75	14.0	1-17-45	19.9	4-26-61	18.1	2-13
343103N1124051.1	(B-14-4)33acb	85	4,340	Unused	1944-49, 1951-57, 1959-75	11.0	4-14-45	21.4	2-13-75	21.4	2-13
WATERMAN WASH											
331257N1122737.1	(C-2-2)27ccc	940	1,135	Irrigation	1954-56, 1959-61, 1963-73, 1975	260.2	2-18-54	393.7	1- 2-75	393.7	1- 2
WHITE MOUNTAINS											
341429N1100252.1	(A-10-22)30aba	750	6,485	Municipal	1969-75	523.2	3-27-69	532.0	2-13-74	527.3	1- 2
WILLCOX BASIN											
323127N1095747.1	(D-10-23)35acb	350	4,465	Stock	1946, 1949-57, 1959-75	224.1	2- 5-63	335.2	1-23-75	335.2	1-23
321838N1095431.1	(D-13-24)16bbb	1,356	4,210	Observation	1942, 1944-75	29.7	5-13-42	130.7	8-31-62	125.6	2- 3
321323N1095217.1	(D-14-24)14bba2	-	4,167	Domestic	1963-69, 1971-75	9.0	2- 6-63	25.4	1-14-74	25.2	2-12
321115N1095552.1	(D-14-24)30dba	-	4,187	Stock	1942, 1944-57, 1963-75	16.0	10-21-55	33.9	1-14-74	28.9	2-12
320235N1094750.1	(D-16-25)16add	65	4,190	Stock	1942, 1944-57, 1959-75	27.0	2-18-69	43.6	12-19-57	27.8	2-11
WILLIAMSON VALLEY											
344636N1123944.1	(B-16-4)14bbb	352	4,600	Irrigation	1952-53, 1955-56, 1958-75	1.5	3-20-74	7.8	10-23-56	2.2	3-12
YUMA											
323840N1143201.1	(C-9-22)17dca	195	205	Unused	1945-58, 1960-75	52.5	11-15-60	97.6	9- 5-46	58.3	1-10

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