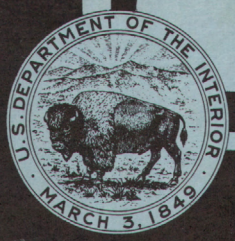
Water Resources Data for Arizona

Part 1. Surface Water Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

CALENDAR FOR WATER YEAR 1974

[redacted]

1973

OCTOBER

S	M	T	W	T	F	S
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NOVEMBER

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1974

JANUARY

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JUNE

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AUGUST

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SEPTEMBER

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1974

Water Resources Data for Arizona

Part 1. Surface Water Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

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
City of Williams
Metropolitan Water District of Southern California
Corps of Engineers, U.S. Army
Bureau of Reclamation, U.S. Department of the Interior

Water-resources records, 1974, for Arizona are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Arizona
   Part 1. Surface Water Records

2. Water Resources Data for Arizona
   Part 2. Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
301 W. Congress Street
Tucson, Arizona 85701

1975

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WATER RESOURCES DATA FOR ARIZONA, 1974

PART 1. SURFACE-WATER RECORDS

INTRODUCTION

Surface-water records for the 1974 water year for Arizona, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report and their locations shown in figures 1, 3, and 4. Records for a few pertinent gaging stations in bordering States also are included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of H. M. Babcock, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Arizona.

Beginning with the 1961 water year, surface-water records have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year to meet local needs.

Records of discharge and stage of streams and canals and contents and stage of lakes and reservoirs are published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and since then are in a 5-year series. More information is given under the heading "Publications."

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, J. A. Brown, president, succeeded by C. A. Waite.
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 F. O. Allen, secretary-manager, succeeded by J. A. Falbo.
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.
City of Williams, Floyd Malone, mayor.
Metropolitan Water District of Southern California, F. M. Clinton, general manager, succeeded by J. H. Lauten, 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.

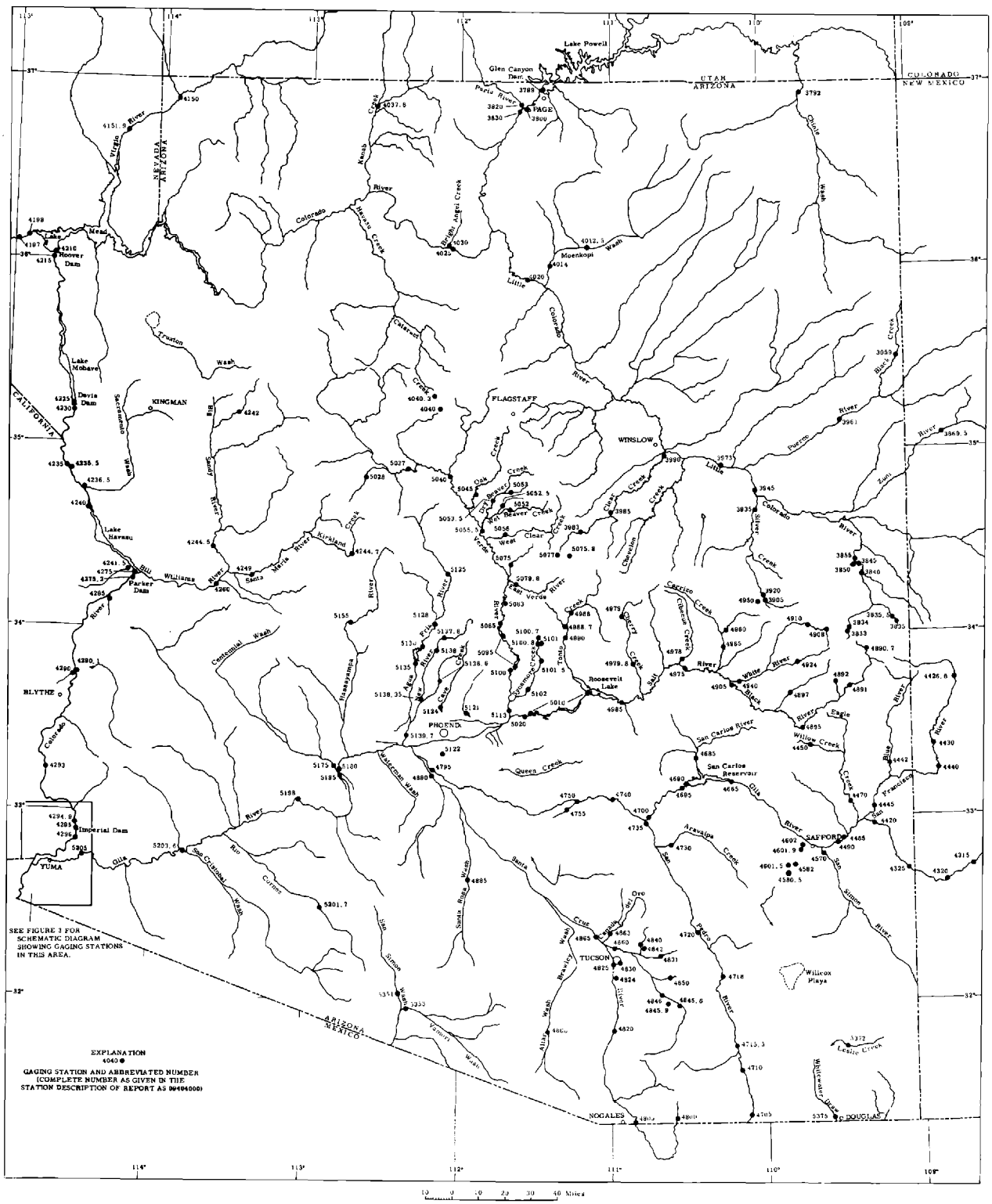

Figure 1. --Map of Arizona showing location of active gaging stations.

DEFINITION OF TERMS

Terms related to streamflow and other hydrologic data, as used in this report, are defined below. Also see table 1, "Factors for conversion of English units to International System of Units (SI)."

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.

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.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

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

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.

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.

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

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.

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.

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

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

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD Stations provide indices of runoff and of the general distribution of water in the principal river basins of the conterminous United States and Alaska.

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 list of gaging 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 and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and 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. 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. 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.

EXPLANATION OF SURFACE-WATER DATA

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 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 determining 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 1974 water year is shown on the reverse side 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.

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.

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 WSP 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.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on the water temperature, and on the sediment. These data are given in Part 2 of this report. Under the "REMARKS" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

HYDROLOGIC CONDITIONS

As is common in Arizona, streamflow varied greatly in the 1974 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 17 to 106 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 five of the six index stations in 1974, and only slightly above median at the sixth. By contrast, in 1973, streamflow was excessive at five stations.

In general, flows were deficient October to June. Only July had flows appreciably above median. Flow of Salt River near Roosevelt was deficient for eight consecutive months, February to September.

Monthly mean discharge of San Pedro River at Charleston was record low in October and June; records have been collected at this site for 63 years.

The extreme variability of streamflow is well illustrated by the records for Santa Cruz River near Nogales, which has 55 years of record. From Aug. 20, 1973, to June 30, 1974, a period of more than 10 months, there was no flow at this station. This was the longest continuous period of no flow ever recorded. Then, on Aug. 1, a flow of 17,100 ft^3/s (484 m^3/s) occurred, which is an alltime high for this station.

The yearly mean discharge for the 1974 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	28,260	*17
Virgin River at Littlefield	90,480	*62
Gila River at head of Safford Valley, near Solomon	92,280	*45
San Pedro River at Charleston	38,530	106
Salt River near Roosevelt	199,700	*51
Verde River below Tangle Creek, above Horseshoe Dam	168,800	*59

*Deficient.

The discharge of Colorado River near Grand Canyon was 8,499,000 acre-feet (10,500 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 7,790 acre-feet (9.61 hm^3) for the 1974 water year, which is 71 percent of the median flow for the period of record, 1906-74. 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 decreased in most major reservoirs during the 1974 water year, whereas storage increased slightly in a few other major 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, 1973-74 (acre-feet)	Percent of average contents on September 30
Lake Powell	+726,000	--
Lakes Mead-Mohave	-850,000	106
San Carlos Reservoir . . .	-376,300	224
Salt-Verde system	-595,500	143
Lake Pleasant	-52,330	178

Diversions of streamflow for irrigation of Arizona lands during the 1974 water year totaled 3,270,000 acre-feet (4,030 hm^3), slightly less than in 1973. About 1,918,000 acre-feet (2,360 hm^3) was diverted from the Colorado River for use by the Colorado River Indian Reservation, the Gila Project, and the Yuma Project. About 737,100 acre-feet (909 hm^3) of the water diverted from the Colorado River was returned to the river or discharged across the Arizona-Sonora international boundary. About 1,352,000 acre-feet (1,670 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 2 shows the discharge for the 1974 water year compared with the median runoff for the period 1931-60 at three representative gaging stations for which long-term records are available.

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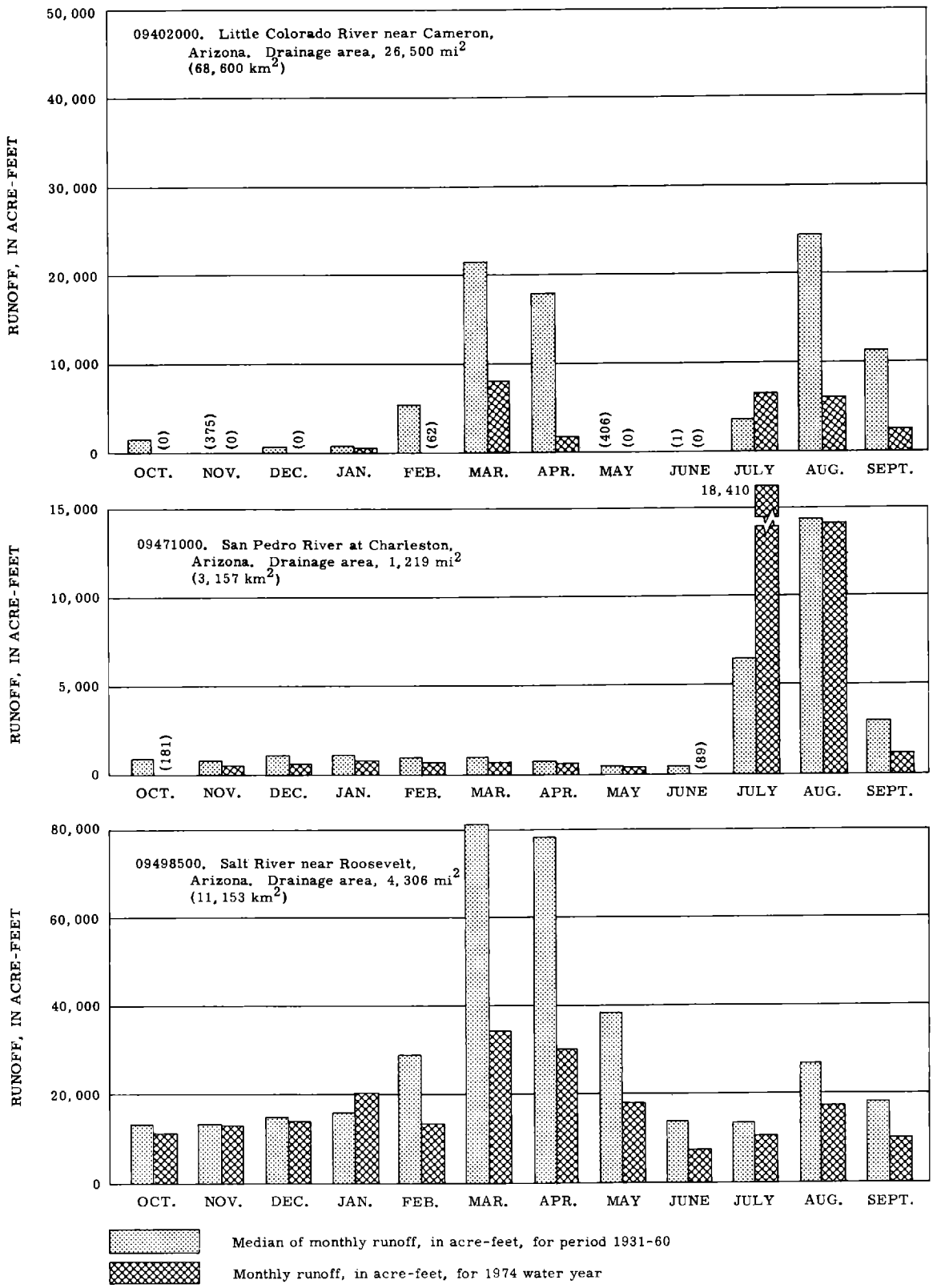

FIGURE 2.--RUNOFF DURING 1974 WATER YEAR COMPARED WITH MEDIAN RUNOFF FOR PERIOD 1931-60 FOR THREE REPRESENTATIVE GAGING STATIONS.

Table 1.--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 of Units (SI)]

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)

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 (renumbered), 3 mi (5 km) upstream from Walker Creek, 4 mi (6 km) west 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.--10 years, 17.0 ft^3/s (0.481 m^3/s), 12,320 acre-ft/yr (15.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 646 ft^3/s (18.3 m^3/s) Mar. 2 (gage height, 4.13 ft or 1.259 m); no flow on several days.
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 (17.0 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	3.3	8.0	4.0	3.0	30	1.0	.15	0	0		0
2	.30	2.4	9.0	1.0	3.0	230	1.0	.03	0	0		0
3	.30	2.4	9.0	1.0	3.0	250	1.0	2.0	0	0		0
4	.30	2.4	9.0	1.0	3.0	30	1.0	.75	0	0		0
5	.30	2.4	6.0	1.0	3.0	9.0	1.0	1.0	0	0		0
6	.30	2.0	6.0	1.0	3.0	7.0	1.0	1.2	.18	0		0
7	.30	2.0	6.0	1.0	3.0	7.0	1.0	1.2	.70	0		0
8	.40	2.4	3.0	1.0	3.0	7.0	1.0	1.0	.02	0		0
9	2.1	3.0	2.0	2.0	3.0	7.0	1.0	.88	.02	0		0
10	1.1	3.6	2.0	2.0	3.0	7.0	.90	.67	.04	0		0
11	1.2	3.6	2.0	2.0	3.0	7.0	.90	.75	.05	0		0
12	5.0	3.8	2.0	2.0	3.0	7.0	.90	.61	.03	0		0
13	4.4	3.8	5.0	3.0	5.0	7.0	.90	.27	0	0		0
14	3.3	4.1	5.0	3.0	10	7.0	.90	.31	0	0		0
15	3.6	4.1	5.0	3.0	9.0	6.5	.90	.27	.09	0		0
16	3.3	3.8	5.0	3.0	4.0	6.0	.90	.06	0	0		0
17	3.0	3.6	2.0	3.0	3.0	4.1	.75	.15	0	0		0
18	3.0	3.0	2.0	3.0	3.0	2.7	.75	.35	.06	11		14
19	2.7	6.6	2.0	3.0	3.0	2.0	.67	.22	0	9.8		27
20	2.7	7.5	2.0	3.0	3.0	2.0	.67	.15	0	39		9.0
21	2.7	8.0	2.0	8.0	3.0	2.5	.75	.27	0	9.5		4.1
22	3.0	8.5	2.0	10	3.0	2.0	.88	.35	0	83		1.4
23	2.7	8.5	5.0	10	2.0	1.2	.88	.35	0	71		3.0
24	2.4	6.0	5.0	10	2.0	1.1	.88	.35	0	40		1.6
25	2.4	8.5	5.0	10	2.0	1.0	1.0	.35	0	30		2.0
26	2.4	9.5	3.0	5.0	2.0	1.0	1.0	.35	0	10		1.3
27	2.4	9.0	3.0	3.0	3.0	1.0	.75	.27	0	5.0		1.2
28	2.0	9.0	3.0	3.0	8.0	1.0	.75	.09	0	2.0		1.8
29	2.4	8.0	3.0	3.0	------	1.0	.75	.01	0	.50		1.4
30	3.3	8.0	4.0	3.0	------	1.0	.47	.03	0	0		1.2
31	3.0	------	4.0	3.0	------	1.0	------	.10	------	0		------
TOTAL	66.60	152.8	131.0	111.0	101.0	649.1	26.25	14.54	1.19	310.80	0	69.0
MEAN	2.15	5.09	4.23	3.58	3.61	20.9	.88	.47	.040	10.0	0	2.30
MAX	5.0	9.5	9.0	10	10	250	1.0	2.0	.70	83	0	27
MIN	.30	2.0	2.0	1.0	2.0	1.0	.47	.01	0	0	0	0
AC-FT	132	303	260	220	200	1,290	52	29	2.4	616	0	137

CAL YR 1973 TOTAL 13,072.13 MEAN 35.8 MAX 250 MIN 0 AC-FT 25,930
WTR YR 1974 TOTAL 1,633.28 MEAN 4.47 MAX 250 MIN 0 AC-FT 3,240

PEAK DISCHARGE (BASE, 500 CFS).--Mar. 2 (1600) 646 cfs (4.13 ft).

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, 20,103,000 acre-ft (24,800 hm^3) June 30 (elevation, 3,667.35 ft or 1,117.808 m); minimum, 17,242,000 acre-ft (21,300 hm^3) Nov. 7 (elevation, 3,645.68 ft or 1,111.203 m).
Period of record: Maximum contents, 20,103,000 acre-ft (24,800 hm^3) June 30, 1974 (elevation,3,667.35 ft or 1,117.808 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)

3,640	16,542,000	3,660	19,099,000
3,650	17,789,000	3,670	20,474,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17,284	17,264	17,393	17,648	17,430	17,600	17,937	18,128	19,468	20,095	19,424	18,511
2	17,281	17,259	17,403	17,622	17,442	17,611	17,939	18,170	19,528	20,077	19,403	18,494
3	17,279	17,267	17,427	17,591	17,450	17,621	17,944	18,195	19,574	20,073	19,385	18,462
4	17,272	17,262	17,430	17,566	17,457	17,632	17,954	18,234	19,618	20,063	19,361	18,433
5	17,272	17,252	17,432	17,540	17,474	17,643	17,959	18,276	19,671	20,040	19,341	18,407
6	17,271	17,246	17,430	17,522	17,479	17,645	17,976	18,303	19,694	20,029	19,314	18,399
7	17,272	17,242	17,432	17,502	17,488	17,656	17,981	18,351	19,743	20,018	19,282	18,389
8	17,272	17,247	17,435	17,484	17,499	17,665	17,981	18,390	19,758	19,986	19,259	18,377
9	17,272	17,256	17,443	17,467	17,512	17,676	17,983	18,420	19,790	19,963	19,241	18,359
10	17,267	17,261	17,442	17,448	17,524	17,679	17,986	18,470	19,823	19,931	19,217	18,332
11	17,252	17,268	17,442	17,438	17,530	17,688	17,981	18,516	19,854	19,909	19,205	18,328
12	17,259	17,272	17,454	17,430	17,543	17,703	17,968	18,589	19,872	19,886	19,183	18,306
13	17,266	17,277	17,458	17,434	17,549	17,717	17,992	18,659	19,882	19,856	19,159	18,285
14	17,273	17,281	17,463	17,429	17,554	17,734	17,985	18,715	19,893	19,841	19,132	18,275
15	17,272	17,278	17,468	17,429	17,562	17,751	17,987	18,770	19,901	19,820	19,104	18,267
16	17,268	17,281	17,483	17,427	17,568	17,759	17,990	18,828	19,919	19,794	19,068	18,240
17	17,264	17,293	17,485	17,427	17,583	17,777	17,992	18,875	19,925	19,751	19,036	18,227
18	17,264	17,312	17,495	17,419	17,583	17,799	17,982	18,916	19,941	19,719	19,000	18,219
19	17,261	17,311	17,500	17,432	17,581	17,813	17,977	18,964	19,958	19,699	18,964	18,210
20	17,258	17,312	17,513	17,438	17,583	17,831	17,982	19,012	19,967	19,683	18,925	18,195
21	17,268	17,324	17,523	17,427	17,590	17,850	17,986	19,063	19,986	19,674	18,898	18,177
22	17,272	17,337	17,530	17,415	17,595	17,861	17,987	19,103	20,005	19,649	18,867	18,173
23	17,266	17,344	17,543	17,413	17,590	17,885	17,981	19,140	20,029	19,634	18,828	18,146
24	17,262	17,362	17,563	17,398	17,598	17,902	17,981	19,179	20,046	19,623	18,790	18,137
25	17,262	17,367	17,583	17,397	17,600	17,909	17,987	19,224	20,060	19,589	18,759	18,106
26	17,253	17,359	17,590	17,397	17,600	17,916	18,000	19,261	20,070	19,569	18,722	18,084
27	17,256	17,356	17,595	17,408	17,597	17,913	18,001	19,286	20,074	19,554	18,684	18,065
28	17,266	17,364	17,606	17,418	17,597	17,912	18,030	19,301	20,077	19,538	18,648	18,036
29	17,267	17,376	17,612	17,418	------	17,908	18,054	19,323	20,093	19,510	18,609	18,027
30	17,263	17,388	17,636	17,417	------	17,930	18,089	19,363	20,103	19,480	18,577	18,010
31	17,257	------	17,641	17,419	------	17,935	------	19,410	------	19,454	18,543	------
MAX	17,284	17,388	17,641	17,648	17,600	17,935	18,089	19,410	20,103	20,095	19,424	18,511
MIN	17,252	17,242	17,393	17,397	17,430	17,600	17,937	18,128	19,468	19,454	18,543	18,010
(†)	3,645.80	3,646.85	3,648.84	3,647.09	3,648.49	3,651.14	3,652.34	3,662.30	3,667.35	3,662.62	3,655:82	3,651.73
(‡)	-27,000	+131,000	+253,000	-222,000	+178,000	+338,000	+154,000	+1,321,000	+693,000	-649,000	-911,000	-533,000

CAL YR 1973 ..... ‡ +4,870,000
WTR YR 1974 ..... ‡ +726,000

† 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.
(International Hydrological Decade River 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, 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.--52 years (1911-62), 17,850 ft^3/s (505.5 m^3/s), 12,923,000 acre-ft/yr (15,900 hm^3/yr); 10 years (1964-74), 12,230 ft^3/s (346.4 m^3/s), 8,861,000 acre-ft/yr (10,930 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 27,700 ft^3/s (784 m^3/s) Jan. 2, Aug. 20 (gage height, 11.68 ft or 3.560 m); minimum daily discharge, 1,410 ft^3/s (39.9 m^3/s) Mar. 24.
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 good. 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 in Part 2 of this report.

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

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	7,070	8,700	3,830	6,210	4,630	11,000	6,810	8,970	9,020	18,800	20,700	20,700
2	8,380	9,520	2,910	18,500	3,520	4,530	8,450	9,910	8,860	21,000	16,700	14,900
3	9,520	9,170	7,110	25,000	1,610	2,200	9,530	10,500	11,800	21,100	15,500	17,900
4	8,450	7,970	7,290	23,700	4,240	9,880	8,190	9,060	13,000	18,000	12,800	17,600
5	8,800	12,200	9,290	18,000	2,760	9,290	8,480	7,040	11,900	19,900	16,600	15,800
6	5,650	13,400	9,560	14,900	2,860	8,380	4,530	9,120	10,800	19,400	19,100	10,800
7	4,840	10,700	8,240	18,300	3,890	6,620	5,540	8,190	11,900	16,700	19,800	8,890
8	6,330	6,740	6,010	18,600	5,790	7,480	8,290	10,900	9,880	19,700	18,900	9,100
9	8,350	6,070	3,940	17,800	2,530	5,820	8,020	14,800	10,500	20,900	17,100	15,100
10	9,680	4,940	7,840	21,600	1,610	7,170	6,400	16,400	14,500	21,700	15,500	15,500
11	10,500	3,920	5,540	20,900	5,240	9,840	10,100	16,200	14,300	20,100	13,900	15,400
12	7,390	5,730	4,730	18,600	4,760	6,150	8,200	11,100	16,400	18,600	17,500	11,800
13	4,530	5,620	7,010	12,100	3,560	5,680	8,110	16,200	19,000	17,400	15,700	11,400
14	2,990	7,420	7,570	15,300	4,840	4,530	6,730	17,900	19,400	17,000	18,800	7,380
15	9,170	8,700	6,590	13,200	5,050	5,590	6,620	18,400	17,300	18,600	21,400	6,620
16	11,700	6,390	3,330	12,500	5,980	6,680	6,870	16,800	15,000	22,000	23,000	14,000
17	11,900	3,330	8,700	12,500	2,870	3,990	8,210	15,800	19,300	22,900	21,900	13,100
18	10,600	2,190	7,640	13,600	6,860	3,960	10,300	13,600	19,200	23,400	21,000	12,500
19	11,700	6,390	4,710	8,490	7,840	4,920	12,600	9,170	19,000	22,000	23,200	11,400
20	9,020	7,290	4,480	4,890	8,040	4,250	8,210	11,000	18,600	17,000	24,200	15,900
21	4,630	7,260	4,870	15,400	8,010	4,580	6,850	12,300	17,500	16,900	19,000	16,500
22	6,180	3,350	4,450	15,700	9,600	4,370	9,760	16,000	18,100	18,800	20,200	11,500
23	10,100	3,890	2,350	13,700	7,540	2,010	13,300	15,500	15,400	19,300	23,100	16,400
24	10,600	3,240	1,960	15,000	3,200	1,410	10,300	14,600	18,200	22,500	22,400	14,600
25	11,200	3,330	1,640	11,100	9,450	7,070	7,490	11,900	18,000	20,700	20,900	18,000
26	10,600	11,200	3,560	6,470	8,010	8,870	8,180	8,810	19,100	22,400	22,800	18,000
27	7,040	15,400	5,320	2,590	8,110	10,100	8,010	12,200	18,900	18,200	23,700	16,800
28	3,870	7,510	3,370	7,970	8,450	12,100	7,600	17,500	17,900	17,600	23,600	15,800
29	7,640	3,350	4,480	8,940	------	11,400	8,840	17,900	13,500	23,600	20,600	10,100
30	8,700	3,020	3,010	7,940	------	3,990	8,810	14,300	14,400	20,700	21,600	13,100
31	9,920	------	6,590	7,010	------	2,000	------	13,000	------	21,400	20,200	------
TOTAL	257,050	207,940	167,920	426,510	150,850	195,860	249,330	405,070	460,660	618,300	611,400	416,590
MEAN	8,292	6,931	5,417	13,760	5,388	6,318	8,311	13,070	15,360	19,950	19,720	13,890
MAX	11,900	15,400	9,560	25,000	9,600	12,100	13,300	18,400	19,400	23,600	24,200	20,700
MIN	2,990	2,190	1,640	2,590	1,610	1,410	4,530	7,040	8,860	16,700	12,800	6,620
AC-FT	509,900	412,400	333,100	846,000	299,200	388,500	494,500	803,500	913,700	1,226M	1,213M	826,300

CAL YR 1973 TOTAL 4,559,760 MEAN 12,490 MAX 30,500 MIN 1,640 AC-FT 9,044,000
WTR YR 1974 TOTAL 4,167,480 MEAN 11,420 MAX 25,000 MIN 1,410 AC-FT 8,266,000

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.--51 years, 30.4 ft^3/s (0.861 m^3/s), 22,020 acre-ft/yr (27.2 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, 520 ft^3/s (14.7 m^3/s) July 23 (gage height, 7.90 ft or 2.408 m); minimum daily, 3.0 ft^3/s (0.085 m^3/s) June 26-29, 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; no flow for part of several days in most years prior to 1928, result of upstream freezeup.

REMARKS.--Records good. 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 in Part 2 of this report.

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

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	5.5	8.8	28	16	23	32	12	4.5	4.2	3.3	56	4.5
2	6.8	11	28	11	32	40	14	4.5	4.2	3.0	61	4.5
3	6.0	11	27	6.0	33	68	24	4.5	4.0	3.3	124	4.8
4	5.8	12	18	8.0	32	46	16	4.8	3.9	3.4	34	5.5
5	5.8	12	18	8.0	31	26	13	5.0	3.6	3.4	16	5.5
6	6.2	13	21	10	24	24	11	5.0	3.4	3.4	16	80
7	5.8	13	21	11	22	25	8.6	5.0	3.6	3.4	16	28
8	6.2	14	20	12	15	24	7.4	4.8	3.4	3.6	13	10
9	6.5	14	22	18	16	24	9.8	4.5	3.9	3.3	14	8.2
10	7.0	15	21	33	18	28	10	4.2	3.9	3.3	16	7.4
11	7.4	14	20	29	23	28	9.4	4.2	3.9	3.3	13	5.8
12	7.4	15	20	19	27	24	9.8	4.2	3.9	3.3	9.4	6.0
13	7.8	15	23	22	30	24	7.4	4.2	3.8	3.3	7.4	6.2
14	7.8	14	29	26	30	23	6.8	4.2	3.8	3.3	6.5	6.5
15	8.2	13	23	30	28	23	7.8	4.4	3.8	3.4	5.8	5.8
16	7.8	14	20	30	28	23	7.0	4.0	3.8	5.3	5.5	10
17	7.4	14	19	30	32	23	7.4	4.2	3.6	68	5.5	16
18	7.8	16	22	32	32	23	7.4	4.2	3.8	16	5.8	24
19	8.2	16	23	33	24	20	8.2	4.4	3.4	12	5.2	15
20	8.2	20	19	37	27	18	7.4	4.4	3.4	41	5.2	10
21	8.2	16	18	31	24	16	7.0	4.5	3.2	16	5.0	7.4
22	8.2	21	13	31	20	15	6.8	4.4	3.3	28	5.0	7.0
23	8.6	21	19	16	23	14	6.0	4.4	3.3	156	5.2	7.0
24	8.2	20	23	18	21	13	5.5	4.4	3.2	74	5.0	7.4
25	8.2	21	21	16	20	13	5.8	4.4	3.2	26	5.0	6.8
26	8.2	24	18	18	21	12	5.0	4.4	3.0	15	5.0	7.8
27	8.2	19	18	18	26	13	5.0	4.4	3.0	12	5.0	6.5
28	8.6	20	17	20	26	16	5.0	4.2	3.0	13	4.8	6.2
29	8.6	18	34	31	------	15	4.8	4.0	3.0	9.8	4.8	6.0
30	8.6	25	27	27	------	13	4.5	3.9	3.2	6.2	4.5	6.0
31	8.6	------	27	26	------	13	------	4.0	------	44	4.5	------
TOTAL	231.8	479.8	677	673.0	708	719	259.8	136.2	106.7	592.3	489.1	331.8
MEAN	7.48	16.0	21.8	21.7	25.3	23.2	8.66	4.39	3.56	19.1	15.8	11.1
MAX	8.6	25	34	37	33	68	24	5.0	4.2	156	124	80
MIN	5.5	8.8	13	6.0	15	12	4.5	3.9	3.0	3.0	4.5	4.5
AC-FT	460	952	1,340	1,330	1,400	1,430	515	270	212	1,170	970	658

CAL YR 1973 TOTAL 10,188.0 MEAN 27.9 MAX 429 MIN 2.4 AC-FT 20,210
WTR YR 1974 TOTAL 5,404.5 MEAN 14.8 MAX 156 MIN 3.0 AC-FT 10,720

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

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); 10 years (1964-74), 12,260 ft^3/s (347 m^3/s), 8,882,000 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 1973 TO SEPTEMBER 1974

Month	Mean	Runoff in acre-feet
October	8,299	510,300
November	6,947	413,400
December	5,439	334,400
CAL YR 1973	12,520	9,064,000
January	13,780	847,300
February	5,413	300,600
March	6,341	389,900
April	8,320	495,100
May	13,070	803,700
June	15,360	913,900
July	19,960	1,228,000
August	19,740	1,214,000
September	13,900	827,000
WTR YR 1974	11,430	8,277,000

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.--14 years, 2.35 ft^3/s (0.067 m^3/s), 1,700 acre-ft/yr (2.10 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 16 ft^3/s (0.45 m^3/s) Oct. 24-26, 1971; no flow for long periods.

REMARKS.--Records poor except those for October and September, which are fair. Diversion is to supply Greer Lakes, used for recreation and storage for irrigation.

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	.90	4.8	4.9	4.0	.10	.10	3.0					0
2	.80	4.8	4.8	4.0	.10	.10	8.0					0
3	1.0	4.8	4.5	4.0	.10	.10	8.0					0
4	.90	5.8	4.5	4.0	.10	.10	8.0					0
5	.80	5.2	4.5	4.0	.10	.10	8.0					0
6	.60	5.1	4.5	4.0	.10	.10	8.0					0
7	.50	5.1	4.5	4.0	.10	.10	8.0					0
8	.40	5.1	4.5	4.0	.10	.10	8.0					0
9	.40	5.1	4.5	4.0	.10	.20	8.0					0
10	.40	5.1	4.5	4.0	.10	.20	8.0					0
11	.40	5.1	4.5	4.0	.10	.20	10					0
12	.40	5.1	4.5	4.0	.10	.10	10					0
13	.30	5.1	4.3	4.1	.10	.10	10					0
14	.40	5.1	4.3	4.5	.10	.10	3.0					3.6
15	.60	4.5	4.5	4.5	.10	.20	0					9.8
16	.40	4.5	4.5	4.5	.10	.20	0					7.7
17	.40	4.5	4.5	5.0	.10	.20	0					7.3
18	.20	4.5	4.5	5.0	.10	.10	0					9.3
19	.20	4.5	4.5	5.0	.10	.10	0					12
20	.20	4.5	4.5	5.0	.10	.10	0					7.3
21	.20	4.5	4.5	5.0	.10	.10	0					6.7
22	.20	4.5	4.5	5.0	.10	.10	0					6.7
23	.30	5.1	4.5	4.0	.10	.10	0					6.0
24	.70	5.0	4.5	3.0	.10	.10	0					5.8
25	.40	5.0	4.5	3.0	.10	.10	0					5.8
26	3.1	5.0	4.5	3.0	.10	.10	0					5.4
27	5.4	5.0	4.5	2.0	.10	.10	0					5.6
28	5.1	5.0	4.5	1.0	.10	.10	0					5.2
29	5.1	5.0	4.0	.10	------	.10	0					4.9
30	4.9	4.9	3.8	.10	------	.10	0					4.9
31	4.9	------	4.0	.10	------	.10	------		------			------
TOTAL	40.50	147.3	138.1	111.90	2.80	3.70	108.0	0	0	0	0	114.0
MEAN	1.31	4.91	4.45	3.61	.10	.12	3.60	0	0	0	0	3.80
MAX	5.4	5.8	4.9	5.0	.10	.20	10	0	0	0	0	12
MIN	.20	4.5	3.8	.10	.10	.10	0	0	0	0	0	0
AC-FT	80	292	274	222	5.6	7.3	214	0	0	0	0	226

CAL YR 1973 TOTAL 873.50 MEAN 2.39 MAX 12 MIN 0 AC-FT 1,730
WTR YR 1974 TOTAL 666.30 MEAN 1.83 MAX 12 MIN 0 AC-FT 1,320

NOTE.--No gage-height record Mar. 1 to Apr. 17.

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.--14 years, 15.4 ft^3/s (0.436 m^3/s), 11,160 acre-ft/yr (13.8 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, 45 ft^3/s (1.27 m^3/s) Mar. 30 (gage height, 1.64 ft or 0.500 m); minimum daily, 2.0 ft^3/s (0.057 m^3/s) Nov. 16 to Dec. 2.
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 fair 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	2.9	2.0	2.5	8.0	8.2	12	12	14	3.5	9.1	6.2
2	7.9	2.9	2.0	2.5	8.0	12	6.0	13	14	3.5	11	6.0
3	7.9	2.9	2.5	2.5	8.0	9.0	4.8	13	14	3.1	15	8.2
4	7.5	3.3	2.5	3.0	8.0	9.0	5.4	14	14	3.1	9.0	7.5
5	8.2	3.3	2.5	3.0	8.0	9.0	6.5	14	13	3.5	10	6.8
6	8.2	2.9	2.5	3.0	8.0	9.0	8.2	14	13	3.8	12	6.5
7	8.2	2.9	2.5	3.0	8.0	8.6	7.9	14	13	5.4	10	6.5
8	8.2	3.1	2.5	3.0	8.0	8.2	6.5	14	13	4.5	10	6.2
9	8.2	2.9	2.5	3.0	8.0	8.0	6.2	14	12	3.5	7.9	6.2
10	8.5	2.9	2.5	3.0	8.0	9.0	5.7	16	12	5.9	7.1	6.2
11	8.6	2.9	2.5	3.0	8.0	9.0	4.2	17	12	6.8	7.1	6.0
12	8.6	2.6	2.5	3.0	8.0	8.0	4.0	17	12	6.8	6.5	6.0
13	8.6	2.2	2.5	2.9	7.9	8.2	4.0	18	12	7.5	6.2	6.5
14	8.6	2.2	2.9	3.0	8.0	9.0	8.6	17	11	8.2	6.0	6.5
15	7.9	2.2	3.0	3.0	8.0	10	12	17	11	8.2	9.3	4.0
16	7.5	2.0	3.0	3.0	7.0	11	12	18	11	7.9	9.7	3.3
17	7.5	2.0	3.0	3.0	7.0	12	13	18	10	8.2	8.6	3.3
18	7.9	2.0	3.0	3.0	7.0	12	14	17	9.0	7.9	13	4.5
19	7.9	2.0	3.0	3.0	7.0	14	13	16	8.0	8.2	11	5.1
20	7.9	2.0	3.0	2.5	7.0	14	11	16	7.0	8.2	8.2	4.0
21	7.9	2.0	3.0	2.5	8.0	12	11	15	6.0	7.9	8.2	3.8
22	7.5	2.0	3.0	2.5	8.0	12	11	15	5.0	6.5	7.5	3.8
23	7.5	2.0	3.0	3.0	8.0	11	12	15	4.0	6.0	7.1	3.5
24	7.1	2.0	3.0	4.0	8.0	11	13	15	4.0	6.0	6.8	3.5
25	7.5	2.0	3.0	5.0	8.0	12	14	15	4.0	6.2	6.5	3.5
26	5.0	2.0	3.0	5.0	8.0	14	16	15	4.2	7.1	6.8	3.5
27	2.2	2.0	3.0	6.0	8.0	15	14	15	4.0	6.2	6.5	3.5
28	2.4	2.0	3.5	7.0	8.0	17	13	15	4.2	6.2	6.8	3.3
29	2.6	2.0	2.5	8.0	------	22	13	15	3.8	7.1	6.5	3.3
30	2.6	2.0	2.6	8.0	------	26	12	15	3.5	9.6	6.0	3.3
31	2.9	------	2.5	8.0	------	26	------	15	------	8.6	6.2	------
TOTAL	217.0	72.1	84.5	116.9	218.9	375.2	294.0	474	277.7	195.1	261.6	150.5
MEAN	7.00	2.40	2.73	3.77	7.82	12.1	9.80	15.3	9.26	6.29	8.44	5.02
MAX	8.6	3.3	3.5	8.0	8.0	26	16	18	14	9.6	15	8.2
MIN	2.2	2.0	2.0	2.5	7.0	8.0	4.0	12	3.5	3.1	6.0	3.3
AC-FT	430	143	168	232	434	744	583	940	551	387	519	299

CAL YR 1973 TOTAL 12,722.3 MEAN 34.9 MAX 256 MIN 2.0 AC-FT 25,230
WTR YR 1974 TOTAL 2,737.5 MEAN 7.50 MAX 26 MIN 2.0 AC-FT 5,430

PEAK DISCHARGE (BASE, 60 CFS).--No peak above base.

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.--7 years, 6.22 ft^3/s (0.176 m^3/s), 4,510 acre-ft/yr (5.56 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 7.1 ft^3/s (0.20 m^3/s) Mar. 31 (gage height, 5.91 ft or 1.801 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 periods of no gage-height record and winter periods, which are poor.

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	.23	.52	.60	.70	1.5	2.0	3.2	.44	.13	.16	.61	0
2	.18	.48	.50	.60	1.5	2.0	2.2	.39	.13	.60	3.8	0
3	.18	.48	.40	.50	1.5	2.0	2.0	.39	.04	.56	1.3	.44
4	.18	.56	.40	.60	1.5	2.0	1.9	.39	.13	.52	.97	1.2
5	.23	.56	.40	.70	1.0	2.5	1.8	.44	.13	.31	.84	.35
6	.27	.44	.50	.70	1.0	2.5	1.7	.44	.04	.97	.71	.04
7	.31	.39	.50	.60	1.0	2.5	1.6	.52	.04	1.2	.71	0
8	.23	.39	.50	.70	1.0	2.5	1.5	.52	.08	.84	1.2	0
9	.18	.35	.50	.80	1.0	2.5	1.4	.48	.13	.60	1.1	0
10	.27	.35	.50	.80	1.5	3.0	1.3	.44	.13	.31	.71	0
11	.44	.35	.50	.90	1.5	3.0	1.2	.39	.08	.31	.48	0
12	.44	.35	.50	.90	1.5	3.0	1.1	.39	.04	.27	.35	0
13	.48	.35	.60	1.0	1.5	3.0	1.0	.35	0	.56	.35	0
14	.48	.31	.70	1.5	1.5	3.0	.90	.31	0	.64	.23	0
15	.44	.27	.60	1.5	1.5	3.5	.80	.31	.08	.64	.23	0
16	.44	.31	.50	1.5	1.5	3.5	.70	.31	.08	.77	.23	0
17	.48	.31	.50	2.0	1.0	3.5	.60	.31	0	.64	.31	0
18	.48	.31	.50	2.7	1.0	3.5	.50	.44	0	.90	.39	0
19	.48	.35	.50	1.8	1.0	4.0	.44	.35	0	1.4	.39	.44
20	.48	.39	.50	1.7	1.0	4.0	.44	.27	0	.84	.35	.84
21	.48	.30	.50	3.8	1.0	4.0	.44	.27	0	.77	.27	.60
22	.48	.30	.50	2.0	1.5	4.0	.44	.27	.04	.60	.35	.44
23	.48	.50	.50	2.0	1.5	4.0	.39	.27	.04	.39	.31	.35
24	.44	.50	.60	2.5	1.5	4.0	.39	.27	0	.31	.27	.97
25	.48	.50	.60	2.5	1.5	4.5	.44	.27	0	.23	.27	.44
26	.48	.60	.60	2.5	2.0	4.5	.48	.23	0	.23	.23	.39
27	.52	.40	.70	2.5	2.0	4.5	.39	.23	0	.23	.18	.35
28	.56	.50	.70	2.5	2.0	4.5	.39	.13	0	.31	.13	.31
29	.56	.50	.70	2.5	------	4.5	.39	.04	0	.31	.05	.20
30	.52	.60	.70	2.5	------	4.3	.39	.08	.08	.27	0	.15
31	.56	------	.70	2.5	------	4.5	------	.13	------	.31	0	------
TOTAL	12.46	12.52	17.00	50.00	38.5	104.8	30.42	10.07	1.42	17.00	17.32	7.51
MEAN	.40	.42	.55	1.61	1.38	3.38	1.01	.32	.047	.55	.56	.25
MAX	.56	.60	.70	3.8	2.0	4.5	3.2	.52	.13	1.4	3.8	1.2
MIN	.18	.27	.40	.50	1.0	2.0	.39	.04	0	.16	0	0
AC-FT	25	25	34	99	76	208	60	20	2.8	34	34	15

CAL YR 1973 TOTAL 8,324.71 MEAN 22.8 MAX 295 MIN 0 AC-FT 16,510
WTR YR 1974 TOTAL 319.02 MEAN .87 MAX 4.5 MIN 0 AC-FT 633

PEAK DISCHARGE (BASE, 40 CFS).--No peak above base.

NOTE.--No gage-height record Nov. 24 to Jan. 11, Feb. 18 to Mar. 29.

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.--7 years, 6.06 ft^3/s (0.172 m^3/s), 4,390 acre-ft/yr (5.41 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5.8 ft^3/s (0.16 m^3/s) Aug. 29 (gage height, 5.09 ft or 1.551 m); minimum daily, 0.03 ft^3/s (0.002 m^3/s) Mar. 7, 9-18.
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. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.10	.11	.08	.12	.04	3.2	.22	.20	2.1	.27	2.2
2	.12	.09	.11	.09	.12	.04	2.3	2.3	.20	2.0	.24	2.6
3	.12	.09	.11	.09	.12	.04	1.5	3.0	.20	1.7	.27	2.5
4	.12	.09	.11	.10	.12	.04	1.3	2.7	.20	1.7	.30	2.2
5	.12	.09	.11	.10	.12	.04	1.3	1.7	.20	1.0	.33	2.2
6	.12	.09	.11	.11	.12	.04	1.5	1.4	.20	.22	.27	2.1
7	.12	.09	.11	.11	.12	.03	.65	1.1	.20	.20	.24	2.0
8	.14	.09	.11	.11	.11	.04	.88	.10	.20	.20	.27	1.3
9	.12	.08	.11	.12	.12	.03	1.5	.10	.20	.20	.27	.55
10	.12	.08	.11	.12	.12	.03	.60	.10	.20	.14	.27	.45
11	.12	.08	.11	.12	.12	.03	.20	.10	.20	.11	.27	.42
12	.12	.09	.11	.12	.12	.03	.22	.10	.20	.14	.27	.42
13	.12	.10	.11	.12	.14	.03	.22	.11	.20	.20	.30	.42
14	.12	.10	.11	.12	.14	.03	.20	.11	.20	.20	.27	.39
15	.12	.09	.10	.12	.12	.03	.18	.11	.22	.20	.24	.36
16	.12	.08	.09	.12	.12	.03	.22	.12	.22	.22	.22	.39
17	.11	.08	.09	.14	.10	.03	.18	.12	.22	.22	.16	.42
18	.11	.08	.09	.16	.10	.03	.20	.12	.24	.27	.18	.33
19	.11	.08	.09	.16	.09	.04	.33	.12	.24	.22	.20	.33
20	.11	.08	.08	.16	.09	.05	.20	.12	2.0	.18	.24	.39
21	.11	.08	.08	.16	.08	.05	.20	.12	2.3	.18	.22	.27
22	.11	.08	.08	.14	.07	.09	.20	.12	2.3	.20	.18	.22
23	.11	.08	.08	.14	.06	.27	.24	.12	2.6	.22	.16	.22
24	.11	.09	.08	.14	.05	.82	.20	.14	2.7	.27	.18	.20
25	.10	.09	.07	.12	.05	1.6	.20	.14	2.5	.27	.22	.18
26	.10	.10	.07	.12	.05	1.7	.22	.14	2.6	.24	.22	.16
27	.10	.10	.07	.12	.05	2.0	.22	.16	2.3	.27	.24	.14
28	.10	.10	.07	.12	.05	1.7	.20	.16	2.2	.27	1.3	.14
29	.10	.11	.08	.12	------	2.2	.20	.16	2.3	.27	4.9	.14
30	.10	.11	.08	.12	------	3.2	.22	.16	2.2	.27	5.5	.18
31	.10	------	.08	.12	------	3.2	------	.18	------	.27	3.2	------
TOTAL	3.51	2.69	2.92	3.79	2.79	17.53	18.98	15.45	29.94	14.15	21.40	23.82
MEAN	.11	.090	.094	.12	.10	.57	.63	.50	1.00	.46	.69	.79
MAX	.14	.11	.11	.16	.14	3.2	3.2	3.0	2.7	2.1	5.5	2.6
MIN	.10	.08	.07	.08	.05	.03	.18	.10	.20	.11	.16	.14
AC-FT	7.0	5.3	5.8	7.5	5.5	35	38	31	59	28	42	47

CAL YR 1973 TOTAL 8,593.55 MEAN 23.5 MAX 355 MIN .07 AC-FT 17,050
WTR YR 1974 TOTAL 156.97 MEAN .43 MAX 5.5 MIN .03 AC-FT 311

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.--34 years, 21.0 ft^3/s (0.595 m^3/s), 15,210 acre-ft/yr (18.8 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, 3,240 ft^3/s (91.8 m^3/s) Aug. 4 (gage height, 18.46 ft or 5.627 m); minimum daily, 0.20 ft^3/s (0.006 m^3/s) May 19, July 2, 3.
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, 18.46 ft (5.627 m) Aug. 4, 1974; 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.5	2.8	4.5	5.0	5.3	14	1.9	1.5	.46	.76	1.4
2	1.8	1.7	2.8	4.5	5.0	5.0	10	1.8	1.5	.20	.76	1.4
3	1.1	1.5	2.8	4.0	5.0	3.6	11	1.4	1.5	.20	.76	1.5
4	1.2	1.7	2.8	4.0	5.0	5.3	8.0	1.2	1.5	.32	201	1.6
5	1.3	1.7	2.8	4.0	5.0	6.4	5.8	1.2	1.5	.40	15	1.7
6	1.3	1.6	2.8	4.0	5.0	6.8	4.3	1.2	1.2	.46	6.0	1.2
7	1.4	1.7	2.8	4.0	4.5	7.2	5.5	1.2	1.0	1.0	5.5	1.2
8	1.4	1.7	3.1	4.5	4.5	7.6	4.1	1.2	.90	1.4	3.6	1.1
9	1.4	1.7	3.3	4.5	4.5	7.6	2.5	1.1	1.5	1.4	2.8	1.0
10	1.4	1.6	3.4	5.0	4.5	8.0	2.6	.94	1.6	1.5	2.0	1.0
11	1.4	1.7	3.4	5.0	4.5	9.2	3.0	.94	1.7	2.2	2.0	1.1
12	1.4	1.6	3.6	5.0	4.5	9.2	2.3	.82	1.7	2.2	1.2	1.0
13	1.5	1.7	3.6	5.5	4.8	8.8	1.6	.52	1.8	2.2	1.3	1.2
14	1.5	1.6	3.6	5.5	5.5	8.4	1.3	.60	1.5	2.0	3.6	1.2
15	1.7	1.5	3.6	5.5	6.4	7.2	1.4	.70	1.5	1.0	1.7	1.4
16	1.7	1.5	3.8	5.5	7.2	6.8	1.4	.58	1.5	2.0	1.5	1.6
17	1.7	1.5	4.3	5.5	8.0	7.2	1.5	.24	1.4	8.2	1.5	2.0
18	1.5	1.5	4.8	5.8	8.4	7.2	1.9	.28	1.4	3.4	1.5	2.5
19	1.5	1.7	5.0	5.5	8.8	8.0	2.3	.20	1.6	2.3	1.5	3.3
20	1.6	1.7	4.6	5.5	10	14	2.5	.58	1.5	3.3	1.5	4.1
21	1.7	1.7	5.0	5.5	8.0	14	2.6	.70	1.1	2.2	1.5	3.6
22	1.7	1.9	5.5	5.0	6.8	13	2.3	.82	1.1	2.2	1.2	3.4
23	1.6	1.9	5.5	4.5	5.3	11	2.0	.82	1.2	1.9	1.2	3.6
24	1.6	2.2	5.0	4.5	5.5	9.6	1.9	.82	1.2	1.7	1.3	3.6
25	1.6	2.3	5.0	4.5	6.4	7.6	1.9	1.3	.58	1.5	1.4	3.6
26	1.7	2.6	5.0	4.5	5.3	6.8	1.8	1.4	.64	1.2	1.3	3.6
27	1.7	2.6	5.0	4.5	5.0	8.0	1.7	1.2	.94	.88	1.2	4.1
28	1.6	2.6	4.6	4.0	4.8	9.2	1.7	1.3	.82	.70	1.1	4.6
29	1.3	2.8	4.5	4.0	------	10	1.7	1.4	.52	.52	1.3	5.0
30	1.5	2.8	4.5	4.5	------	15	1.7	1.5	.58	.58	1.3	5.3
31	1.5	------	4.5	5.0	------	14	------	1.6	------	.58	1.3	------
TOTAL	47.1	55.8	123.8	147.8	163.2	267.0	106.3	31.46	37.98	50.10	269.58	72.9
MEAN	1.52	1.86	3.99	4.77	5.83	8.61	3.54	1.01	1.27	1.62	8.70	2.43
MAX	1.8	2.8	5.5	5.8	10	15	14	1.9	1.8	8.2	201	5.3
MIN	1.1	1.5	2.8	4.0	4.5	3.6	1.3	.20	.52	.20	.76	1.0
AC-FT	93	111	246	293	324	530	211	62	75	99	535	145

CAL YR 1973 TOTAL 25,213.70 MEAN 69.1 MAX 913 MIN 1.1 AC-FT 50,010
WTR YR 1974 TOTAL 1,373.02 MEAN 3.76 MAX 201 MIN .20 AC-FT 2,720

PEAK DISCHARGE (BASE, 400 CFS).--Aug. 4 (1530) 3,240 cfs (18.46 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, 24,200 acre-ft (29.8 hm^3) Oct. 1-4; maximum gage height, 52.20 ft (15.911 m) Oct. 1; minimum contents, 10,900 acre-ft (13.4 hm^3) Sept. 24-30; minimum gage height 39.68 ft (12.094 m) Sept. 30.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24,200	23,700	23,500	23,400	23,600	23,700	23,600	23,000	20,300	17,400	15,000	12,400
2	24,200	23,600	23,400	23,300	23,600	23,700	23,600	23,000	20,200	17,300	15,000	12,300
3	24,200	23,600	23,400	23,300	23,600	23,600	23,600	22,900	20,100	17,300	14,900	12,200
4	24,200	23,600	23,300	23,300	23,700	23,600	23,700	22,900	20,000	17,200	14,900	12,100
5	24,100	23,600	23,300	23,300	23,600	23,600	23,700	22,800	20,000	17,000	14,800	12,000
6	24,100	23,600	23,300	23,300	23,600	23,600	23,600	22,700	19,800	17,000	14,800	11,900
7	24,100	23,600	23,300	23,300	23,600	23,600	23,600	22,700	19,800	16,900	14,700	11,800
8	24,000	23,600	23,300	23,300	23,600	23,600	23,600	22,600	19,700	16,700	14,700	11,700
9	24,000	23,600	23,300	23,300	23,600	23,600	23,600	22,500	19,600	16,700	14,700	11,600
10	24,000	23,600	23,300	23,300	23,600	23,600	23,600	22,500	19,500	16,600	14,600	11,500
11	24,000	23,600	23,300	23,400	23,600	23,600	23,600	22,400	19,400	16,400	14,600	11,400
12	23,900	23,500	23,300	23,300	23,600	23,600	23,500	22,400	19,300	16,400	14,500	11,200
13	23,900	23,500	23,300	23,300	23,600	23,600	23,500	22,300	19,100	16,300	14,500	11,200
14	23,900	23,500	23,300	23,400	23,600	23,600	23,500	22,200	19,100	16,200	14,400	11,100
15	23,900	23,500	23,400	23,400	23,700	23,600	23,500	22,100	18,900	16,100	14,400	11,000
16	23,900	23,400	23,400	23,300	23,700	23,600	23,500	21,900	18,900	16,100	14,200	11,000
17	23,900	23,400	23,400	23,400	23,700	23,600	23,500	21,800	18,800	16,000	14,100	11,000
18	23,900	23,400	23,300	23,400	23,700	23,600	23,500	21,700	18,700	16,000	14,000	11,000
19	23,900	23,400	23,300	23,400	23,700	23,600	23,500	21,600	18,600	15,900	13,900	11,000
20	23,800	23,400	23,300	23,500	23,700	23,600	23,400	21,600	18,500	15,800	13,800	11,000
21	23,800	23,400	23,300	23,600	23,700	23,600	23,400	21,400	18,400	15,700	13,700	11,000
22	23,800	23,400	23,300	23,500	23,700	23,600	23,300	21,300	18,300	15,600	13,500	11,000
23	23,800	23,400	23,200	23,600	23,700	23,600	23,200	21,200	18,200	15,600	13,400	11,000
24	23,800	23,400	23,200	23,600	23,700	23,600	23,200	21,200	18,100	15,500	13,300	10,900
25	23,800	23,400	23,300	23,600	23,700	23,600	23,200	21,100	18,000	15,500	13,200	10,900
26	23,800	23,400	23,300	23,600	23,700	23,600	23,100	20,900	18,000	15,400	13,100	10,900
27	23,800	23,400	23,300	23,600	23,700	23,600	23,100	20,800	17,800	15,300	12,900	10,900
28	23,700	23,400	23,300	23,600	23,700	23,600	23,100	20,700	17,700	15,300	12,800	10,900
29	23,700	23,500	23,300	23,600	------	23,600	23,000	20,600	17,600	15,200	12,700	10,900
30	23,700	23,500	23,300	23,600	------	23,700	23,000	20,600	17,500	15,200	12,600	10,900
31	23,700	------	23,300	23,600	------	23,600	------	20,400	------	15,100	12,500	------
MAX	24,200	23,700	23,500	23,600	23,700	23,700	23,700	23,000	20,300	17,400	15,000	12,400
MIN	23,700	23,400	23,200	23,300	23,600	23,600	23,000	20,400	17,500	15,100	12,500	10,900
(†)	51.79	51.61	51.51	51.75	51.78	51.76	51.29	49.18	46.59	44.25	41.57	39.68
(‡)	-500	-200	-200	+300	+100	-100	-600	-2,600	-2,900	-2,400	-2,600	-1,600

CAL YR 1973 MAX 24,200 MIN 23,200 ‡ +16,700
WTR YR 1974 MAX 24,200 MIN 10,900 ‡ -13,300

† 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.--22 years (1950-53, 1955-74), 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	0	30	31	29	47
2							0	0	31	32	30	47
3							0	15	31	34	30	47
4							0	15	32	34	25	47
5							0	15	33	34	20	47
6							0	15	32	34	20	47
7							0	20	32	34	20	47
8							0	20	33	33	20	47
9							0	15	33	31	20	47
10							0	15	33	28	24	48
11							0	20	33	26	28	49
12							0	25	34	26	36	49
13							0	25	35	26	41	49
14							0	28	35	27	43	49
15							0	28	36	26	43	49
16							0	28	38	27	44	15
17							0	28	39	26	45	0
18							0	29	39	27	45	0
19							4.2	28	39	27	44	0
20							5.7	25	38	27	45	0
21							5.7	27	38	27	45	0
22							5.7	29	38	27	46	0
23							5.8	29	37	27	46	0
24							5.9	29	37	27	46	0
25							6.0	29	36	27	46	0
26							6.0	29	33	27	46	0
27							3.0	29	27	28	46	0
28							0	30	28	27	46	0
29					------		0	30	28	27	46	0
30					------		0	30	30	27	47	0
31		------			------		------	30	------	27	47	------
TOTAL	0	0	0	0	0	0	48.0	715	1,018	888	1,159	731
MEAN	0	0	0	0	0	0	1.60	23.1	33.9	28.6	37.4	24.4
MAX	0	0	0	0	0	0	6.0	30	39	34	47	49
MIN	0	0	0	0	0	0	0	0	27	26	20	0
AC-FT	0	0	0	0	0	0	95	1,420	2,020	1,760	2,300	1,450

CAL YR 1973 TOTAL 5,260.10 MEAN 14.4 MAX 46 MIN 0 AC-FT 10,430
WTR YR 1974 TOTAL 4,559.00 MEAN 12.5 MAX 49 MIN 0 AC-FT 9,040

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.--31 years (1941-53, 1955-74), 3.32 ft^3/s (0.094 m^3/s), 2,410 acre-ft/yr (2.97 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 6.4 ft^3/s (0.181 m^3/s) Apr. 17; minimum daily, 0.12 ft^3/s (0.003 m^3/s) Nov. 4. 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. Flow 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.15	.26	.18	.26	.15	.22	2.0	2.4	3.7	4.8	4.2
2	.26	.15	.22	.22	.26	.15	.22	1.8	3.0	3.7	4.2	4.2
3	.26	.15	.22	.22	.26	.15	.22	2.0	3.0	3.2	4.5	4.5
4	.26	.12	.22	.22	.26	.15	.22	2.6	3.4	3.4	4.5	4.5
5	.24	.15	.22	.20	.26	.15	.22	2.8	3.7	3.4	4.2	4.5
6	.18	.15	.22	.20	.26	.15	.22	2.6	3.7	3.4	4.2	4.5
7	.18	.15	.22	.20	.22	.18	.22	2.8	3.7	3.4	4.2	4.5
8	.18	.15	.22	.20	.22	.18	.22	2.8	3.7	3.9	4.2	4.5
9	.18	.18	.26	.20	.22	.18	.22	2.6	3.9	4.2	4.2	4.5
10	.22	.18	.22	.20	.22	.18	.22	2.8	3.9	4.2	4.2	4.5
11	.26	.18	.18	.20	.22	.18	.26	3.2	3.9	4.2	4.8	4.5
12	.26	.18	.18	.20	.18	.22	.26	3.2	4.2	3.7	4.5	4.5
13	.26	.18	.18	.20	.18	.22	.26	3.2	4.5	3.4	4.2	4.2
14	.26	.18	.18	.20	.18	.22	.26	3.2	4.5	3.4	4.2	4.2
15	.22	.18	.18	.20	.18	.22	.31	3.0	4.5	3.7	4.5	4.2
16	.22	.18	.22	.20	.15	.22	2.8	2.8	4.5	3.4	4.5	1.7
17	.22	.18	.22	.18	.15	.22	6.4	2.8	4.5	3.9	4.5	.89
18	.22	.18	.22	.18	.15	.18	6.0	2.8	4.5	4.2	4.5	.89
19	.22	.18	.22	.18	.15	.22	3.4	3.0	4.5	4.2	4.5	.78
20	.22	.18	.22	.18	.18	.22	2.6	3.0	5.1	4.2	4.2	.78
21	.22	.18	.22	.18	.18	.22	2.6	3.0	4.5	4.2	3.9	.78
22	.22	.18	.22	.18	.18	.22	2.6	2.8	4.2	3.9	3.9	.78
23	.22	.18	.22	.18	.18	.22	2.6	2.8	4.2	3.9	4.2	.78
24	.22	.18	.22	.18	.18	.22	2.8	2.8	3.9	4.2	4.5	.68
25	.22	.22	.22	.18	.15	.22	2.8	2.6	4.2	4.2	4.5	.68
26	.22	.22	.18	.18	.15	.22	2.8	2.6	4.5	4.2	4.2	.68
27	.22	.22	.18	.18	.15	.22	2.6	2.6	4.5	3.9	4.5	.68
28	.18	.22	.18	.18	.15	.22	2.2	2.6	3.2	4.2	4.5	.68
29	.15	.22	.18	.18	------	.22	2.0	2.2	3.0	4.2	4.8	.59
30	.15	.26	.18	.22	------	.22	2.0	2.4	3.4	4.5	4.5	.59
31	.15	------	.18	.22	------	.22	------	2.0	------	4.8	4.2	------
TOTAL	6.71	5.41	6.46	6.02	5.46	6.16	49.75	83.4	118.7	121.0	135.3	77.96
MEAN	.22	.18	.21	.19	.20	.20	1.66	2.69	3.96	3.90	4.36	2.60
MAX	.26	.26	.26	.22	.26	.22	6.4	3.2	5.1	4.8	4.8	4.5
MIN	.15	.12	.18	.18	.15	.15	.22	1.8	2.4	3.2	3.9	.59
AC-FT	13	11	13	12	11	12	99	165	235	240	268	155

CAL YR 1973 TOTAL 9,850.13 MEAN 27.0 MAX 502 MIN .12 AC-FT 19,540
WTR YR 1974 TOTAL 622.35 MEAN 1.71 MAX 6.4 MIN .12 AC-FT 1,230

09386950 ZUNI RIVER ABOVE ZUNI RESERVOIR, N. MEX.

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 Zuni 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 mi^2 (2,100 km^2), 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.--5 years, 11.2 ft^3/s (0.317 m^3/s), 8,110 acre-ft/yr (10.0 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,200 ft^3/s (147 m^3/s) Aug. 4 (gage height, 6.61 ft or 2.015 m), from rating curve extended as explained below; no flow for many days.
Period of record: Maximum discharge, 5,200 ft^3/s (147 m^3/s) Aug. 4, 1974 (gage height, 6.61 ft or 2.015 m), from rating curve extended above 670 ft^3/s (19.0 m^3/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 August and winter months, which are poor.

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	.15	1.4	1.9	1.9	2.1	3.9		0	0	0
2		0	.12	.90	1.8	2.2	3.4	2.6		0	0	0
3		0	.12	1.0	1.7	2.0	4.2	2.2		0	108	0
4		0	.10	1.1	1.6	1.8	3.1	1.9		0	401	0
5		0	.10	1.2	1.5	2.1	2.3	1.7		0	10	0
6		0	.10	1.3	1.4	2.5	2.0	1.9		0	1.0	0
7		0	.25	1.4	1.3	3.0	2.0	2.0		0	2.0	0
8		0	.25	1.5	1.2	4.0	2.2	2.0		0	.20	0
9		0	.20	1.3	1.2	3.5	2.2	1.9		0	0	0
10		0	.20	1.2	1.3	3.0	1.9	1.6		0	0	0
11		0	.20	1.1	1.4	2.7	2.0	1.3		0	0	0
12		0	.10	1.1	1.5	3.5	2.1	1.3		0	0	0
13		0	.30	1.1	1.7	2.3	1.9	1.3		0	0	0
14		0	.50	1.1	1.6	1.8	1.9	1.0		0	0	0
15		0	.50	1.1	1.5	1.4	1.8	.65		0	0	0
16		0	.50	1.0	1.5	1.6	1.7	.35		4.1	0	0
17		0	.60	1.1	1.6	1.4	1.6	.05		4.5	0	0
18		0	.70	1.2	1.7	1.2	1.5	0		6.9	0	0
19		0	.50	1.4	1.6	1.2	1.4	0		18	0	.10
20		0	.50	1.6	1.5	1.7	1.3	0		12	0	3.0
21		0	.50	1.8	1.4	1.4	1.4	0		1.8	0	.02
22		0	.50	1.7	1.3	.70	1.6	0		.92	0	0
23		0	.50	1.6	1.3	.66	1.5	0		.79	0	0
24		2.5	.50	1.6	1.2	.76	1.6	0		.64	0	0
25		2.0	1.0	1.5	1.2	.71	1.8	0		0	0	0
26		1.5	1.5	1.8	1.3	.66	2.0	0		0	0	0
27		1.0	1.5	1.7	1.4	.81	1.8	0		0	0	0
28		1.5	1.5	1.7	1.7	1.3	1.9	0		0	0	0
29		.10	1.3	1.6	------	1.9	2.0	0		0	0	0
30		.15	1.5	1.7	------	2.1	2.6	0		0	0	0
31		------	1.5	1.8	------	2.1	------	0	------	0	0	------
TOTAL	0	8.75	17.79	42.60	41.3	57.90	60.8	27.65	0	49.65	522.20	3.12
MEAN	0	.29	.57	1.37	1.48	1.87	2.03	.89	0	1.60	16.8	.10
MAX	0	2.5	1.5	1.8	1.9	4.0	4.2	3.9	0	18	401	3.0
MIN	0	0	.10	.90	1.2	.66	1.3	0	0	0	0	0
AC-FT	0	17	35	84	82	115	121	55	0	98	1,040	6.2

CAL YR 1973 TOTAL 16,899.73 MEAN 46.3 MAX 788 MIN 0 AC-FT 33,520
WTR YR 1974 TOTAL 831.76 MEAN 2.28 MAX 401 MIN 0 AC-FT 1,650

PEAK DISCHARGE (BASE, 100 CFS).--Aug. 4 (0015) 5,200 cfs (6.61 ft).

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.--21 years, 10.7 ft^3/s (0.303 m^3/s), 7,750 acre-ft/yr (9.56 hm^3/yr); median of yearly mean discharges, 6.9 ft^3/s (0.20 m^3/s), 5,000 acre-ft/yr (6.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 60 ft^3/s (1.70 m^3/s) Mar. 21 (gage height, 2.82 ft or 0.860 m); minimum daily, 1.4 ft^3/s (0.040 m^3/s) Apr. 24, 27.
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 good except those for Nov. 23 to Jan. 19, which are poor. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.5	4.5	3.5	9.8	4.1	2.9	4.2	10	3.5	4.5	4.1
2	4.6	4.1	4.5	3.5	10	5.5	3.0	2.9	10	4.3	4.6	4.2
3	4.5	4.1	4.5	3.5	10	8.0	3.0	2.3	10	6.4	6.0	4.9
4	4.5	5.1	4.0	3.5	10	7.4	3.0	2.2	10	6.2	4.9	6.5
5	4.5	5.0	4.0	3.5	11	6.3	3.1	2.4	11	6.3	4.7	16
6	5.0	4.9	4.0	3.5	11	5.7	3.1	2.7	11	6.4	5.0	12
7	5.1	4.8	4.0	3.5	9.8	5.6	2.8	3.1	10	6.9	4.8	7.8
8	4.8	4.7	4.0	3.5	10	7.0	2.9	3.1	10	5.9	5.1	7.0
9	4.5	4.5	4.0	3.5	10	9.5	6.4	3.0	10	4.4	4.8	6.8
10	4.6	4.5	4.0	3.5	10	8.6	5.1	3.1	10	4.2	4.6	7.0
11	4.6	4.6	4.0	3.5	9.8	7.9	7.5	3.1	10	4.2	4.6	6.4
12	4.7	4.4	4.5	3.5	9.8	9.5	6.3	2.9	10	4.2	4.5	6.3
13	4.6	4.5	4.1	3.5	9.7	12	4.8	2.8	10	4.4	4.4	6.4
14	4.2	4.6	4.0	3.5	9.7	12	3.0	2.7	10	5.0	3.9	6.2
15	4.4	4.3	3.9	3.5	9.7	11	2.4	2.6	10	4.6	2.4	6.3
16	4.5	4.2	3.8	3.5	9.9	11	2.2	2.5	10	4.4	3.4	6.0
17	4.6	3.5	3.8	3.5	9.9	9.9	1.8	2.8	10	4.6	3.4	5.8
18	4.6	3.5	3.4	3.5	10	9.1	2.0	3.0	9.0	5.8	3.5	5.8
19	4.7	5.2	3.5	3.5	9.7	9.2	1.9	2.3	8.0	5.1	3.7	6.0
20	4.6	6.0	3.5	6.8	10	37	1.7	2.2	7.0	5.5	3.4	5.5
21	4.5	4.8	3.5	23	9.4	53	1.5	2.2	6.5	5.5	3.4	5.4
22	4.8	4.5	3.5	19	9.3	30	1.5	2.5	3.8	4.9	3.3	7.2
23	4.9	4.5	3.5	16	9.3	17	1.5	2.6	4.1	5.1	3.2	6.1
24	4.8	4.5	3.5	14	9.1	11	1.4	2.4	5.8	5.7	3.9	5.7
25	4.5	4.5	3.5	13	9.1	7.6	1.5	2.7	6.0	5.3	3.9	5.6
26	4.5	4.5	3.5	13	6.0	5.9	1.5	2.8	3.3	5.1	3.0	5.4
27	4.5	4.5	3.5	14	4.4	4.9	1.4	5.3	3.5	4.9	3.0	5.3
28	4.7	4.5	3.5	13	4.0	4.7	3.5	13	3.7	4.9	3.0	5.1
29	4.6	4.5	3.5	13	------	4.6	3.7	13	3.3	4.8	3.0	4.9
30	4.1	4.5	3.5	13	------	3.9	3.8	13	3.3	4.7	2.9	4.7
31	4.2	------	3.5	10	------	3.2	------	13	------	4.7	3.6	------
TOTAL	142.2	136.3	118.5	234.3	260.4	342.1	90.2	128.4	239.3	157.9	122.4	192.4
MEAN	4.59	4.54	3.82	7.56	9.30	11.0	3.01	4.14	7.98	5.09	3.95	6.41
MAX	5.1	6.0	4.5	23	11	53	7.5	13	11	6.9	6.0	16
MIN	4.1	3.5	3.4	3.5	4.0	3.2	1.4	2.2	3.3	3.5	2.4	4.1
AC-FT	282	270	235	465	517	679	179	255	475	313	243	382

CAL YR 1973 TOTAL 14,397.4 MEAN 39.4 MAX 518 MIN 3.4 AC-FT 28,560
WTR YR 1974 TOTAL 2,164.4 MEAN 5.93 MAX 53 MIN 1.4 AC-FT 4,290

PEAK DISCHARGE (BASE, 100 CFS).--No peak above base.

NOTE.--Doubtful or no gage-height record Nov. 23 to Jan. 19.

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.--21 years (1953-74), 6.07 ft^3/s (0.172 m^3/s), 4,400 acre-ft/yr (5.43 hm^3/yr); median of yearly mean discharges, 3.1 ft^3/s (0.09 m^3/s), 2,200 acre-ft/yr (2.7 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 35 ft^3/s (0.99 m^3/s) Oct. 28; minimum daily, 0.13 ft^3/s (0.004 m^3/s) Dec. 1 to Jan. 15.
1941-45: Maximum daily discharge, 304 ft^3/s (8.61 m^3/s) Mar. 6, 1943; no flow Aug. 8, 9, 1943.
1953-74: 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 Oct. 27-31, 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)
Mar. 5, 1974	a6,548.1	2,560	Apr. 15, 1974	6,539.5	1,520
Mar. 15	6,546.0	2,290	May 8	b6,537.5	1,310
Apr. 5	6,542.7	1,880			

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	2.6	.13	.13	.29	.24	.30	5.5	5.3	5.9	4.2	4.9
2	5.4	2.6	.13	.13	.30	.24	.30	5.5	5.3	5.8	4.0	4.9
3	5.4	2.1	.13	.13	.30	.24	.24	5.4	5.3	5.8	4.0	4.9
4	5.4	3.1	.13	.13	.30	.24	.24	5.4	5.5	5.8	4.3	4.9
5	5.4	3.1	.13	.13	.24	.24	.24	5.4	5.8	5.8	4.9	4.9
6	5.4	3.1	.13	.13	.24	.24	.24	5.3	5.8	5.8	4.7	4.9
7	5.4	3.1	.13	.13	.25	.27	.24	5.3	5.9	5.8	4.0	4.9
8	5.4	3.1	.13	.13	.29	.30	.24	5.3	5.8	5.8	4.0	4.9
9	5.3	3.1	.13	.13	.30	.26	.24	5.3	5.9	5.8	4.0	4.9
10	5.2	3.1	.13	.13	.29	.24	.26	5.3	5.9	5.8	4.0	4.9
11	5.1	3.1	.13	.13	.24	.24	1.0	5.3	6.0	5.8	4.0	4.9
12	5.1	3.1	.13	.13	.24	.24	4.4	5.3	6.0	5.8	4.0	4.9
13	5.2	3.1	.13	.13	.24	.24	4.6	5.3	6.0	5.8	4.0	4.9
14	5.2	3.1	.13	.13	.24	.24	5.4	5.3	6.0	5.8	4.0	4.9
15	5.3	3.1	.13	.13	.24	.26	5.3	5.3	6.0	5.8	4.0	4.9
16	5.3	3.1	.13	.17	.24	.29	5.3	5.3	6.0	5.8	4.2	4.9
17	5.3	3.1	.13	.19	.24	.24	5.3	5.3	6.0	5.8	4.4	4.9
18	5.3	3.1	.13	.24	.24	.25	5.3	5.3	6.0	5.8	4.7	4.5
19	5.3	1.6	.13	.24	.24	.30	5.3	5.3	6.0	5.0	5.1	4.2
20	5.3	.70	.13	.24	.24	.30	5.1	5.3	6.0	4.4	5.1	4.2
21	5.3	.70	.13	.24	.24	.30	4.9	5.3	6.0	4.4	5.0	4.2
22	5.3	.68	.13	.24	.24	.30	4.9	5.3	6.0	4.4	4.9	4.2
23	5.3	.64	.13	.24	.24	.30	5.0	5.3	6.0	4.0	4.9	4.2
24	5.3	.74	.13	.24	.24	.30	5.6	5.3	6.0	3.7	4.9	4.2
25	5.3	.72	.13	.25	.24	.30	5.6	5.3	6.0	4.1	4.9	4.2
26	5.3	.60	.13	.27	.24	.30	5.5	5.2	6.0	4.2	4.9	3.9
27	20	.60	.13	.24	.24	.27	5.5	5.2	6.0	4.2	4.9	3.7
28	35	.60	.13	.24	.24	.24	5.5	5.3	6.0	4.2	4.9	3.7
29	30	.41	.13	.27	------	.24	5.5	5.3	5.9	4.2	4.9	3.7
30	30	.14	.13	.30	------	.26	5.5	5.3	5.9	4.2	4.9	3.7
31	9.0	------	.13	.28	------	.30	------	5.3	------	4.1	4.9	------
TOTAL	263.1	61.93	4.03	5.84	7.12	8.22	103.04	164.8	176.3	159.6	139.6	135.9
MEAN	8.49	2.06	.13	.19	.25	.27	3.43	5.32	5.88	5.15	4.50	4.53
MAX	35	3.1	.13	.30	.30	.30	5.6	5.5	6.0	5.9	5.1	4.9
MIN	5.1	.14	.13	.13	.24	.24	.24	5.2	5.3	3.7	4.0	3.7
AC-FT	522	123	8.0	12	14	16	204	327	350	317	277	270

CAL YR 1973 TOTAL 11,499.84 MEAN 31.5 MAX 520 MIN 0 AC-FT 22,810
WTR YR 1974 TOTAL 1,229.48 MEAN 3.37 MAX 35 MIN .13 AC-FT 2,440

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.--24 years, 17.3 ft^3/s (0.490 m^3/s), 12,530 acre-ft/yr (15.4 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, 558 ft^3/s (15.8 m^3/s) Sept. 22 (gage height, 4.76 ft or 1.45 m); no flow Apr. 4-15, June 26 to July 2, July 4-6.
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 and 1974.

REMARKS.--Records fair except those for period of no gage-height record, 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	.29	1.0	1.0	2.8	.39	.10	2.1	.10	0	13	2.2
2	1.7	.76	1.0	1.5	2.6	.41	.10	3.0	1.1	0	3.0	1.9
3	1.6	1.0	1.0	1.0	2.7	.45	.10	2.9	1.1	.23	2.4	1.2
4	1.4	1.1	1.0	1.0	2.6	.45	0	1.7	.71	0	9.6	1.4
5	1.4	1.1	1.0	5.0	2.9	.40	0	1.9	2.4	0	144	1.9
6	1.9	.71	1.0	4.0	2.2	.35	0	1.3	1.8	0	29	1.4
7	1.6	.67	1.0	4.0	1.3	.28	0	1.8	.73	25	7.2	.87
8	.79	1.2	1.0	10	.95	.28	0	1.7	.54	6.9	5.4	1.9
9	.64	.85	1.0	15	.79	.34	0	2.2	.31	3.6	5.1	1.4
10	.95	.64	1.0	12	.87	.39	0	2.6	.10	1.3	6.6	1.2
11	.95	.62	1.0	10	1.2	.39	0	2.1	1.7	.39	4.6	2.8
12	.80	.62	1.0	8.0	1.9	.46	0	2.0	.66	.10	2.4	3.4
13	.94	.56	1.0	7.0	1.7	.54	0	1.2	.29	1.6	3.2	3.4
14	1.9	.51	1.0	6.0	1.4	.48	0	.90	.75	.95	1.9	2.2
15	1.4	.38	1.0	5.0	1.1	.39	0	1.2	1.1	.45	1.4	1.7
16	1.1	.35	1.0	4.5	.87	.23	1.0	.56	.87	1.2	1.3	1.7
17	.85	.45	1.0	4.7	.95	.45	2.4	1.3	.50	17	10	.95
18	.58	.57	1.0	11	.95	.41	1.7	1.0	1.3	12	3.6	1.4
19	.80	.83	1.0	4.1	.71	.33	2.0	.70	.81	6.6	2.2	2.0
20	.91	.98	1.0	2.5	1.0	.37	1.4	1.2	.74	4.9	1.4	33
21	.55	1.0	1.0	2.4	1.3	.32	1.1	1.3	1.6	3.6	.95	11
22	.99	.55	1.0	2.3	1.1	.28	1.5	1.0	1.1	49	.57	145
23	.83	1.3	1.0	2.3	.79	.38	2.5	.72	.51	13	.51	14
24	.98	1.2	1.0	2.1	.79	.53	1.7	2.5	.18	8.2	.45	7.8
25	.74	1.0	1.0	2.1	.76	.43	1.3	2.6	.10	6.2	.79	9.6
26	.81	1.0	1.0	2.2	1.1	.35	1.3	3.2	0	4.4	1.4	6.9
27	.91	1.0	1.0	2.4	1.0	.31	1.9	2.4	0	4.6	2.0	8.5
28	.75	1.0	1.0	2.1	.64	.22	1.7	2.1	0	2.4	1.1	6.2
29	.87	1.0	1.0	2.2	------	.13	2.8	.84	0	1.9	.87	5.1
30	.67	1.0	1.0	2.6	------	.10	3.1	.90	0	3.0	1.1	3.9
31	.32	------	1.0	2.6	------	.10	------	.30	------	22	1.4	------
TOTAL	33.33	24.66	31.0	142.6	38.97	10.94	27.70	51.22	21.10	200.52	268.44	285.92
MEAN	1.08	.82	1.00	4.60	1.39	.35	.92	1.65	.70	6.47	8.66	9.53
MAX	2.2	1.3	1.0	15	2.9	.54	3.1	3.2	2.4	49	144	145
MIN	.32	.29	1.0	1.0	.64	.10	0	.30	0	0	.45	.87
AC-FT	66	49	61	283	77	22	55	102	42	398	532	567

CAL YR 1973 TOTAL 17,263.89 MEAN 47.3 MAX 579 MIN .29 AC-FT 34,240
WTR YR 1974 TOTAL 1,136.40 MEAN 3.11 MAX 145 MIN 0 AC-FT 2,250

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

NOTE.--No gage-height record Nov. 25 to Jan. 15.

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 mi^2 (21,000 km^2), 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.--45 years (1905-6, 1916-17, 1929-33, 1935-74), 53.0 ft^3/s (1.501 m^3/s), 38,400 acre-ft/yr (47.3 hm^3/yr); median of yearly mean discharges, 45 ft^3/s (1.27 m^3/s), 32,600 acre-ft/yr (40.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,020 ft^3/s (57.2 m^3/s) Sept. 22 (gage height, 12.20 ft or 3.719 m); no flow June 22 to July 4.
Period of record: Maximum discharge not determined, occurred Jan. 19, 1916; maximum discharge recorded, 25,000 ft^3/s (708 m^3/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 July, which are poor. Diversions above station for irrigation of about 22,000 acres (89.0 km^2) 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 hm^3), excluding Lone Pine Reservoir.

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

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	3.6	3.5	2.9	1.8	9.5	3.5	3.2	3.5	1.4	0	14	6.0
2	4.0	3.5	3.2	2.4	9.1	3.1	3.2	4.9	2.8	0	24	4.8
3	4.8	3.5	2.4	2.0	8.3	3.5	2.4	5.9	2.8	0	252	4.4
4	5.2	3.5	2.4	2.0	7.9	3.0	2.8	5.7	3.6	0	260	4.4
5	5.2	3.5	1.9	3.6	7.8	3.0	1.1	3.7	3.3	.10	212	5.2
6	4.4	3.5	2.0	4.5	7.6	3.0	.60	4.5	4.6	1.0	158	4.8
7	5.6	3.5	2.1	5.5	7.8	3.0	.60	4.6	4.2	20	30	2.8
8	4.4	3.5	2.0	5.2	8.1	3.0	.60	4.7	1.3	10	15	4.8
9	2.8	3.5	2.0	10	6.7	3.0	.70	4.5	1.2	3.0	13	4.8
10	3.2	3.5	2.0	22	5.5	3.0	.50	5.2	3.2	3.0	13	4.0
11	3.5	3.5	3.6	18	5.1	3.0	1.6	6.2	.90	3.0	9.0	6.0
12	3.5	3.5	2.7	13	4.5	3.0	.90	5.1	.80	3.0	4.4	5.6
13	3.0	3.5	2.0	12	4.9	3.0	.90	4.9	.50	3.0	5.6	8.0
14	2.8	3.5	2.0	11	6.5	3.0	2.8	4.6	.30	3.0	3.6	22
15	3.4	3.5	1.9	10	7.0	3.0	2.8	4.0	2.8	3.0	8.5	19
16	3.9	3.5	1.8	9.0	7.0	3.0	3.2	4.2	3.0	3.0	30	7.8
17	3.9	3.5	1.7	8.8	7.5	3.0	4.7	3.6	3.0	25	26	6.0
18	3.6	3.5	1.7	19	6.5	3.0	5.6	1.6	3.0	15	11	8.7
19	3.6	3.5	1.7	17	5.3	3.0	4.6	.60	3.0	10	8.5	14
20	3.6	3.5	1.8	11	4.4	3.0	3.8	.30	3.0	8.0	7.0	375
21	3.5	3.0	2.0	11	4.9	3.2	4.2	.40	1.0	5.0	6.5	215
22	3.5	2.1	1.8	9.5	4.8	3.2	4.3	2.4	0	60	5.2	1,420
23	3.5	2.4	2.4	8.6	4.7	3.6	4.2	3.3	0	40	4.8	180
24	3.5	3.0	2.4	8.2	4.3	3.6	4.7	3.2	0	20	1.7	38
25	3.5	3.2	2.4	7.4	4.3	3.6	4.7	2.7	0	15	1.4	23
26	3.5	2.9	3.4	7.1	4.9	3.2	4.2	4.9	0	9.5	4.4	13
27	3.5	2.7	3.9	8.4	4.0	3.2	3.3	6.0	0	9.5	6.5	12
28	3.5	2.6	2.4	8.4	3.9	3.2	4.3	4.6	0	7.5	4.4	10
29	3.5	2.8	1.9	8.7	------	3.2	4.3	4.3	0	4.0	4.0	9.0
30	3.5	2.4	1.8	8.2	------	3.2	5.6	3.5	0	2.0	4.4	8.5
31	3.5	------	1.8	9.1	------	2.8	------	3.3	------	27	3.6	------
TOTAL	116.5	97.1	70.0	282.4	172.8	97.1	90.40	120.90	49.70	312.60	1,151.5	2,446.6
MEAN	3.76	3.24	2.26	9.11	6.17	3.13	3.01	3.90	1.66	10.1	37.1	81.6
MAX	5.6	3.5	3.9	22	9.5	3.6	5.6	6.2	4.6	60	260	1,420
MIN	2.8	2.1	1.7	1.8	3.9	2.8	.50	.30	0	0	1.4	2.8
AC-FT	231	193	139	560	343	193	179	240	99	620	2,280	4,850

CAL YR 1973 TOTAL 44,106.26 MEAN 121 MAX 1,220 MIN .86 AC-FT 87,480
WTR YR 1974 TOTAL 5,007.60 MEAN 13.7 MAX 1,420 MIN 0 AC-FT 9,930

PEAK DISCHARGE (BASE, 1,900 CFS).--Sept. 22 (0345) 2,020 cfs (12.20 ft).

09396100. Puerco River near Chambers, Ariz.

LOCATION.--Lat 35°10'42", long 109°27'15", in NE¼ sec.34, 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, 7,340 ft^3/s (208 m^3/s) probably Aug. 3 (gage height, 5.02 ft or 1.530 m, from high-water mark in gage well).
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										-	-	
2										-	-	
3										-	600	
4										-	-	
5										-	-	
6										-	-	
7										-	-	
8										-	-	
9										-	-	
10										-	-	
11										-	-	
12										-	-	
13										-	-	
14										-	-	
15										-	-	
16										-	-	
17										1,440	-	
18										-	-	
19										-	-	
20										-	-	
21										-	-	
22										-	-	
23										-	-	
24										-	-	
25										-	-	
26										-	-	
27										-	-	
28										-	-	
29					------					-	-	
30					------					-	-	
31		------			------		------		------	-	-	------
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-
MEAN	-	-	-	-	-	-	-	-	-	-	-	-
MAX	-	-	-	-	-	-	-	-	-	-	-	-
MIN	-	-	-	-	-	-	-	-	-	-	-	-
AC-FT	-	-	-	-	-	-	-	-	-	-	-	-

PEAK DISCHARGE (BASE, 3,000 CFS).--July 17 (0430) 6,020 cfs (4.36 ft); probably Aug. 3 (time unknown) 7,340 cfs (5.02 ft, from high-water mark in well).

NOTE.--No gage-height record July 24 to Aug. 7.

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.--July to September 1973: No peak above 500 ft^3/s (14 m^3/s).
Water year 1974: Maximum discharge, 3,880 ft^3/s (110 m^3/s) July 22 (gage height, 3.52 ft or 1.073 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 fair. Published record includes only those days when instantaneous discharge over the crest of the dam exceeds 500 ft^3/s (14 m^2/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). No peaks above 500 ft^3/s (14 m^3/s) July to September 1973.

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				-						-	-	-
2				-						-	-	-
3				-						-	1,280	-
4				-						-	419	-
5				-						-	499	-
6				-						-	310	-
7				-						-	-	-
8				-						-	-	-
9				-						-	-	-
10				-						-	-	-
11				-						-	-	-
12				-						-	-	-
13				-						-	-	-
14				-						-	-	-
15				-						-	-	-
16				-						-	-	-
17				-						258	-	-
18				198						1,200	-	-
19				-						210	-	-
20				-						393	-	200
21				297						615	-	-
22				-						1,360	-	-
23				-						374	-	-
24				-						-	-	-
25				-						-	-	-
26				-						-	-	-
27				-						-	-	-
28				-						-	-	-
29				-	------					-	-	-
30				-	------					-	-	
31		------			------		------		------			------
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-
MEAN	-	-	-	-	-	-	-	-	-	-	-	-
MAX	-	-	-	-	-	-	-	-	-	-	-	-
MIN	-	-	-	-	-	-	-	-	-	-	-	-
AC-FT	-	-	-	-	-	-	-	-	-	-	-	-

PEAK DISCHARGE (BASE, 5,000 CFS).--No peak above base.

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, 7,730 acre-ft (9.53 hm³) Apr. 6-8 (elevation, 6,686.94 ft or 2,038.179 m, Apr. 7); minimum, 2,160 acre-ft (2.66 hm³) July 11-19, 27-29; minimum elevation, 6,640.50 ft (2,024.024 m) July 12, 13, 14.
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)

6,640	2,120	6,660	3,920
6,650	2,920	6,690	8,280

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,710	4,780	3,030	2,230	-	2,920	7,440	6,520	4,490	2,620	2,170	-
2	6,650	4,710	2,970	2,240	-	3,000	7,560	6,460	4,430	2,560	2,170	-
3	6,580	4,660	2,910	2,240	-	3,100	7,670	6,400	4,370	2,500	2,170	-
4	6,530	4,600	2,860	2,240	-	3,190	7,710	6,340	4,310	2,440	2,170	-
5	6,470	4,540	2,810	2,250	-	3,270	7,720	6,270	4,240	2,380	2,180	-
6	6,410	4,480	2,760	2,250	-	3,350	7,730	6,210	4,180	2,320	2,200	-
7	6,350	4,420	2,710	2,260	-	3,440	7,730	6,150	4,110	2,260	2,210	-
8	6,290	4,360	2,650	2,260	-	3,510	7,730	6,090	4,040	2,210	2,210	-
9	6,230	4,300	2,600	2,270	-	3,570	7,710	6,020	3,980	2,190	2,220	-
10	6,170	4,240	2,560	2,270	-	3,600	7,700	5,960	3,920	2,170	2,220	-
11	6,110	4,180	2,530	2,270	-	3,630	7,670	5,900	3,860	2,160	2,220	-
12	6,050	4,110	2,500	2,270	-	3,690	7,630	5,830	3,800	2,160	2,220	-
13	5,990	4,050	2,470	2,270	-	3,770	7,590	5,760	3,740	2,160	2,220	-
14	5,930	3,980	2,440	2,270	-	3,890	7,540	5,700	3,680	2,160	2,210	-
15	5,870	3,920	2,410	2,270	-	4,080	7,490	5,640	3,620	2,160	2,210	-
16	5,810	3,860	2,390	2,270	-	4,350	7,430	5,570	3,560	2,160	2,210	-
17	5,750	3,810	-	2,260	-	4,620	7,380	5,500	3,500	2,160	2,210	-
18	5,690	3,760	-	2,280	-	4,930	7,320	5,430	3,440	2,160	2,200	-
19	5,620	3,710	-	2,280	-	5,210	7,270	5,370	3,370	2,160	2,200	-
20	5,560	3,650	-	2,280	-	5,560	7,210	5,300	3,310	2,170	2,200	-
21	5,490	3,600	-	2,460	-	5,890	7,150	5,230	3,240	2,170	2,200	-
22	5,430	3,550	-	2,560	-	6,140	7,100	5,160	3,180	2,170	2,190	-
23	5,370	3,490	-	2,610	-	6,350	7,030	5,100	3,110	2,170	2,190	-
24	5,300	3,440	-	2,640	-	6,500	6,970	5,030	3,040	2,170	2,190	-
25	5,240	3,380	-	2,660	-	6,630	6,910	4,960	2,980	2,170	2,190	-
26	5,170	3,320	2,220	2,680	-	6,770	6,850	4,890	2,910	2,170	2,190	-
27	5,110	3,270	2,220	2,700	-	6,860	6,780	4,820	2,850	2,160	-	-
28	5,040	3,210	2,220	2,700	2,890	6,980	6,710	4,750	2,790	2,160	-	-
29	4,980	3,140	2,220	2,720	------	7,100	6,650	4,680	2,740	2,160	-	-
30	4,910	3,090	2,220	2,720	------	7,230	6,580	4,620	2,680	2,170	-	a2,180
31	4,850	------	2,230	2,730	------	7,350	------	4,560	------	2,170	a2,190	------
MAX	6,710	4,780	3,030	2,730	-	7,350	7,730	6,520	4,490	2,620	-	-
MIN	4,850	3,090	2,220	2,230	-	2,920	6,580	4,560	2,680	2,160	-	-
(†)	6,667.61	6,651.71	6,641.32	6,647.62	6,649.58	6,684.83	6,680.03	6,665.31	6,646.98	6,640.60	-	-
(‡)	-1,910	-1,760	-860	+500	+160	+4,460	-770	-2,020	-1,880	-510	+20	-10

CAL YR 1973 MAX 15,730 MIN 2,220 ‡-12,880
WTR YR 1974 MAX 7,730 MIN 2,160 ‡ -4,580

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

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).--27 years, 78.7 ft^3/s (2.229 m^3/s), 57,020 acre-ft/yr (70.3 hm^3/yr); median of yearly mean discharges, 57 ft^3/s (1.61 m^3/s), 41,300 acre-ft/yr (51 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 589 ft^3/s (16.7 m^3/s) Mar. 21 (gage height, 6.96 ft or 2.121 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 good. Storage in Blue Ridge Reservoir 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	8.8	8.4	230	5.6				
2				0	7.9	22	189	4.4				
3				0	6.2	54	275	3.2				
4				0	6.0	72	212	2.4				
5				0	6.0	68	163	1.7				
6				0	6.2	66	144	1.0				
7				0	5.4	76	148	.66				
8				0	5.0	78	144	.43				
9				0	4.7	75	134	.25				
10				0	4.0	56	123	.14				
11				0	3.3	40	104	.04				
12				0	3.2	34	78	.01				
13				0	3.1	45	63	0				
14				0	2.6	76	58	0				
15				0	2.2	125	51	0				
16				0	1.8	199	44	0				
17				0	2.2	287	39	0				
18				0	2.6	369	35	0				
19				0	2.8	407	33	0				
20				0	4.4	369	30	0				
21				0	3.7	515	27	0				
22				18	3.2	417	23	0				
23				32	4.0	343	20	0				
24				34	3.8	296	16	0				
25				32	3.7	246	14	0				
26				27	4.2	253	13	0				
27				24	5.3	237	12	0				
28				21	5.8	217	12	0				
29				18	------	221	9.3	0				
30				13	------	263	7.3	0				
31		------		9.5	------	275	------	0	------			------
TOTAL	0	0	0	228.5	122.1	5,609.4	2,450.6	19.83	0	0	0	0
MEAN	0	0	0	7.37	4.36	187	81.7	.64	0	0	0	0
MAX	0	0	0	34	8.8	515	275	5.6	0	0	0	0
MIN	0	0	0	0	1.8	6.4	7.3	0	0	0	0	0
AC-FT	0	0	0	453	242	11,520	4,860	39	0	0	0	0

CAL YR 1973 TOTAL 84,497.50 MEAN 232 MAX 3,100 MIN 0 AC-FT 167,600
WTR YR 1974 TOTAL 8,630.43 MEAN 23.6 MAX 515 MIN 0 AC-FT 17,120

PEAK DISCHARGE (BASE, 500 CFS).--Mar. 21 (0745) 589 cfs (6.96 ft).

NOTE.--No gage-height record Nov. 24 to Dec. 25.

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 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.--43 years (1929-33, 1935-74), 77.7 ft^3/s (2.200 m^3/s), 56,290 acre-ft/yr (69.4 hm^3/yr); median of yearly mean discharges, 60 ft^3/s (1.70 m^3/s), 43,500 acre-ft/yr (54 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 538 ft^3/s (15.2 m^3/s) Mar. 22 (gage height, 6.61 ft or 2.015 m); no flow Oct. 1 to Mar. 15, June 29 to Aug. 12, Aug. 22 to Sept. 17, Sept. 23-30.
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 (380 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 (564 m) downstream from gage in 1929.

REMARKS.--Records fair. Records show discharge over dam and do not include flow in canal that diverts at dam or leakage through dam. Records show no flow for long periods because of leakage and diversions at dam. Measurement of leakage and spring flow below dam was made May 16. Measured flow was 4.47 ft^3/s (0.13 m^3/s), which included 0.43 ft^3/s (0.012 m^3/s) flow over the 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0	265	2.7	.40		0	0
2						0	248	1.6	.40		0	0
3						0	196	1.3	.40		0	0
4						0	244	.97	.40		0	0
5						0	240	.70	.40		0	0
6						0	169	.50	.40		0	0
7						0	128	.39	.50		0	0
8						0	114	.38	.50		0	0
9						0	115	.33	.50		0	0
10						0	109	.29	.50		0	0
11						0	101	.27	.60		0	0
12						0	88	.33	.70		0	0
13						0	73	.38	.70		.04	0
14						0	54	.40	.70		.62	0
15						0	43	.42	.80		1.3	0
16						12	36	.43	.90		2.3	0
17						99	33	.40	1.0		2.7	0
18						254	27	.40	1.1		3.0	.02
19						351	22	.40	1.2		3.2	.20
20						406	21	.40	1.3		2.3	.27
21						381	18	.40	1.2		.23	.16
22						486	17	.40	1.2		0	.06
23						432	15	.40	1.1		0	0
24						378	12	.40	1.2		0	0
25						329	11	.40	1.3		0	0
26						266	9.0	.40	1.2		0	0
27						248	8.1	.40	.49		0	0
28						252	6.7	.40	.12		0	0
29					------	225	5.3	.40	0		0	0
30					------	210	3.9	.40	0		0	0
31		------			------	248	------	.40	------		0	------
TOTAL	0	0	0	0	0	4,577	2,452.0	17.59	21.21	0	15.69	.71
MEAN	0	0	0	0	0	148	81.7	.57	.71	0	.51	.024
MAX	0	0	0	0	0	486	265	2.7	1.3	0	3.2	.27
MIN	0	0	0	0	0	0	3.9	.27	0	0	0	0
AC-FT	0	0	0	0	0	9,080	4,860	35	42	0	31	1.4

CAL YR 1973 TOTAL 84,291.21 MEAN 231 MAX 3,150 MIN 0 AC-FT 167,200
WTR YR 1974 TOTAL 7,084.20 MEAN 19.4 MAX 486 MIN 0 AC-FT 14,050

PEAK DISCHARGE (BASE, 500 CFS).--Mar. 22 (1015) 538 cfs (6.61 ft).

NOTE.--No gage-height record May 17 to June 19.

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, 2,340 ft^3/s (66.3 m^3/s) July 19 (gage height, 4.68 ft or 1.426 m), from floodmarks near staff gage; no flow for many days.
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 good except those for winter periods, which are fair. Records of periodic chemical analyses and daily suspended-sediment loads are published in Part 2 of this report.

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	1.0	1.8	2.7	1.3	3.0	16	1.4	1.3		0	.07	.17
2	.90	1.8	3.0	1.8	3.0	53	2.2	1.3		0	.05	.17
3	.80	1.6	2.7	2.4	2.3	54	2.5	1.1		0	8.5	.15
4	.70	1.6	2.8	3.7	2.8	24	2.0	.94		0	16	.07
5	.70	1.5	2.7	3.0	3.0	6.9	1.6	.94		0	22	.17
6	.70	1.5	1.9	2.8	2.4	3.9	1.8	.94		0	4.3	10
7	.80	1.5	2.0	3.9	2.3	2.2	1.6	.86		0	2.3	1.5
8	.90	1.5	2.5	3.0	2.4	1.9	1.4	.94		0	1.2	.70
9	1.0	1.4	2.7	3.0	2.7	2.2	1.4	.86		0	.57	.50
10	1.1	1.4	2.4	3.0	3.2	2.8	1.3	.61		0	.27	.40
11	1.2	1.5	2.7	3.0	3.7	2.7	1.4	.57		0	.19	.20
12	1.2	1.5	2.5	3.0	3.7	2.8	1.4	.53		0	.21	.10
13	1.1	1.5	2.4	3.9	3.0	2.8	1.3	.44		0	.04	0
14	1.0	1.3	2.5	3.5	3.0	2.8	1.3	.27		0	.01	.20
15	1.0	1.2	1.5	3.5	3.9	2.7	1.4	.23		0	.04	.40
16	.90	1.3	1.6	3.7	3.9	2.4	1.5	.12		0	.15	1.1
17	.90	1.3	1.9	4.1	3.2	2.0	1.6	.07		0	.11	1.2
18	1.0	1.3	2.2	3.9	4.1	1.9	1.8	.25		0	.07	2.0
19	1.1	2.2	2.0	3.9	3.9	1.8	1.6	.40		240	.05	1.2
20	1.2	2.2	1.1	4.1	2.8	2.0	1.4	.27		35	.11	6.5
21	1.3	2.0	1.1	3.7	2.7	2.0	1.4	.31		30	.02	4.1
22	1.4	1.9	1.6	2.7	3.5	1.8	1.5	.53		26	0	3.9
23	1.4	2.7	2.0	2.4	2.7	1.8	1.5	.57		23	.05	9.0
24	1.4	2.0	1.5	2.4	2.0	1.8	1.4	.61		18	.13	3.0
25	1.3	1.9	1.6	3.0	2.2	1.8	1.5	.53		2.7	.13	1.8
26	1.4	1.9	1.5	3.0	2.8	1.8	1.5	.40		.94	.17	1.4
27	1.4	1.4	1.8	3.0	2.7	1.8	1.3	.31		.40	.09	1.4
28	1.4	1.3	2.4	3.0	2.4	1.8	1.3	.17		.25	.13	1.2
29	1.4	1.4	3.5	2.8	------	1.8	1.3	0		1.2	.13	1.3
30	1.8	2.0	3.9	2.1	------	1.6	1.3	0		.40	.15	1.4
31	1.8	------	.86	3.0	------	1.4	------	0	------	.17	.19	------
TOTAL	35.20	49.4	67.56	95.6	83.3	210.2	45.9	16.37	0	378.06	57.43	55.23
MEAN	1.14	1.65	2.18	3.08	2.98	6.78	1.53	.53	0	12.2	1.85	1.84
MAX	1.8	2.7	3.9	4.1	4.1	54	2.5	1.3	0	240	22	10
MIN	.70	1.2	.86	1.3	2.0	1.4	1.3	0	0	0	0	0
AC-FT	70	98	134	190	165	417	91	32	0	750	114	110

WTR YR 1974 TOTAL 1,094.25 MEAN 3.00 MAX 240 MIN 0 AC-FT 2,170

PEAK DISCHARGE (BASE, 1,200 CFS).--July 19 (a0700) 2,340 cfs (b4.68 ft).

a Estimated based on rate of travel between upstream and dowstream stations.
b From floodmarks near staff gage.

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.--21 years (1941-53, 1965-74), 15.9 ft^3/s (0.450 m^3/s), 11,520 acre-ft/yr (14.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,840 ft^3/s (52.1 m^3/s) July 19 (gage height, 10.65 ft or 3.246 m); 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.20	1.4	.10	.80	.80	1.5			0	0	
2	0	0	1.1	.10	.80	7.5	1.6			0	0	
3	0	0	.90	.20	.80	79	1.7			0	3.5	
4	0	0	.60	.10	.80	31	1.8			0	10	
5	0	0	.40	.10	.80	8.0	1.7			0	36	
6	0	0	.20	.10	.80	3.0	1.6			0	19	
7	0	0	.40	.20	.80	.80	1.5			0	2.0	
8	0	0	.70	43	.80	.80	1.4			0	0	
9	0	0	.90	6.0	.80	.80	1.3			0	0	
10	0	0	1.2	4.5	.80	.80	1.2			0	0	
11	0	.40	1.5	4.0	.80	.90	1.0			0	0	
12	0	1.0	1.8	3.5	.80	.90	.80			0	0	
13	0	1.0	1.7	3.0	.80	1.0	.60			0	0	
14	0	1.1	1.5	.60	.80	1.1	.40			0	0	
15	0	1.2	1.1	.40	.80	1.2	.20			0	0	
16	0	1.3	.60	.60	.80	1.3	0			0	0	
17	0	1.4	.30	1.0	.80	1.4	0			0	0	
18	0	1.6	.40	1.4	.80	1.5	0			0	0	
19	0	1.7	.50	2.5	.80	1.6	0			300	0	
20	0	1.8	.50	3.6	.80	1.7	0			101	0	
21	0	2.0	.70	3.6	.80	1.8	0			164	0	
22	0	2.2	.70	2.4	.80	1.9	0			83	0	
23	0	2.2	.90	.80	.80	1.8	0			32	0	
24	0	2.3	1.1	.80	.80	1.6	0			34	0	
25	0	2.4	1.2	.80	.80	1.5	0			5.7	0	
26	0	2.5	1.2	.80	.80	1.4	0			2.0	0	
27	0	2.3	1.2	.80	.80	1.3	0			1.0	0	
28	0	2.1	.70	.80	.80	1.2	0			.50	0	
29	0	2.0	.60	.80	------	1.2	0			0	0	
30	.40	1.6	2.4	.80	------	1.3	0			0	0	
31	.40	------	.10	.80	------	1.4	------		------	0	0	------
TOTAL	.80	34.30	28.50	88.20	22.40	161.50	18.30	0	0	723.20	61.5	0
MEAN	.026	1.14	.92	2.85	.80	5.21	.61	0	0	23.3	1.98	0
MAX	.40	2.5	2.4	43	.80	79	1.8	0	0	300	36	0
MIN	0	0	.10	.10	.80	.80	0	0	0	0	0	0
AC-FT	1.6	68	57	175	44	320	36	0	0	1,430	122	0

CAL YR 1973 TOTAL 1,256.54 MEAN 3.44 MAX 68 MIN 0 AC-FT 2,490
WTR YR 1974 TOTAL 1,138.70 MEAN 3.12 MAX 300 MIN 0 AC-FT 2,260

PEAK DISCHARGE (BASE, 1,400 CFS).--July 19 (1030) 1,840 cfs (10.65 ft).

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.--27 years, 228 ft^3/s (6.457 m^3/s), 165,200 acre-ft/yr (204 hm^3/yr)

EXTREMES.--Current year: Maximum discharge, 1,590 ft^3/s (45.0 m^3/s) July 24, Sept 5 (gage height, 6.00 ft or 1,829 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).

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	8.6	0	152			0	18	0
2				0	10	0	157			0	10	0
3				0	4.7	16	160			0	3.0	0
4				0	4.0	56	192			0	1.0	0
5				0	3.4	78	174			0	448	64
6				0	.70	28	133			0	902	254
7				0	0	12	141			0	820	10
8				0	0	4.4	160			0	425	5.0
9				19	0	2.2	141			0	194	0
10				20	0	11	93			0	90	0
11				1.2	0	10	91			0	53	0
12				.70	0	5.0	88			0	37	0
13				0	0	2.0	80			0	21	0
14				0	0	0	77			0	13	0
15				10	0	0	60			5.0	7.0	0
16				23	0	0	45			2.4	3.0	0
17				15	0	0	35			0	1.0	0
18				11	0	0	20			0	0	0
19				8.2	0	0	10			148	0	0
20				6.6	0	0	5.0			147	0	21
21				5.4	0	235	2.0			307	0	5.0
22				2.4	0	425	0			548	0	0
23				1.4	0	430	0			662	0	16
24				.10	0	566	0			807	0	665
25				.70	0	530	0			310	0	228
26				89	0	435	0			182	0	71
27				45	0	360	0			91	0	34
28				30	0	266	0			52	0	22
29				16	------	206	0			38	0	12
30				14	------	206	0			30	0	5.4
31		------		12	------	180	------		------	20	0	------
TOTAL	0	0	0	330.70	31.40	4,063.6	2,016.0	0	0	3,349.4	3,046.0	1,412.4
MEAN	0	0	0	10.7	1.12	131	67.2	0	0	108	98.3	47.1
MAX	0	0	0	89	10	566	192	0	0	807	902	665
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	656	62	8,060	4,000	0	0	6,640	6,040	2,800

CAL YR 1973 TOTAL 272,042.20 MEAN 745 MAX 7,950 MIN 0 AC-FT 539,600
WTR YR 1974 TOTAL 14,249.50 MEAN 39.0 MAX 902 MIN 0 AC-FT 28,260

PEAK DISCHARGE (BASE,4,000 CFS).--No peak above base.

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); 10 years (1964-74), 12,840 ft^3/s (363.6 m^3/s), 9,303,000 acre-ft/yr (11,500 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 28,200 ft^3/s (799 m^3/s) Aug. 21 (gage height, 15.56 ft or 4.743 m); minimum daily, 2,250 ft^3/s (63.7 m^3/s) Dec. 25.
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 in Part 2 of this report.

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	4,110	9,710	3,710	7,360	7,450	8,920	3,530	9,060	13,300	14,000	20,500	20,400
2	7,110	8,930	4,210	6,690	5,340	8,750	6,950	9,000	9,200	20,000	20,900	18,600
3	8,730	9,810	3,580	22,400	4,160	5,030	8,800	10,100	9,120	21,500	16,700	14,900
4	9,690	9,350	7,510	24,600	3,200	3,210	10,200	11,100	12,400	21,500	15,100	17,700
5	8,770	8,080	7,400	22,900	3,910	9,920	8,430	8,540	13,000	18,100	12,500	18,200
6	8,990	12,800	9,940	18,200	3,860	9,940	9,170	7,240	12,000	20,400	17,900	14,000
7	6,000	13,200	9,810	14,500	3,490	8,670	5,200	9,410	11,200	19,400	21,000	10,900
8	5,320	10,700	8,320	19,600	4,330	7,190	6,110	8,510	12,100	15,000	19,300	8,990
9	6,570	6,780	6,540	19,000	5,990	8,210	9,070	11,700	9,850	21,100	19,000	9,330
10	8,790	6,290	4,350	20,600	3,720	6,300	8,360	15,000	11,100	21,800	18,000	15,100
11	10,100	5,420	8,040	20,800	2,400	7,590	6,860	17,100	14,800	21,300	14,800	15,100
12	10,600	4,420	6,090	21,700	5,100	10,300	10,900	15,500	14,800	20,400	13,900	14,700
13	7,580	6,050	5,200	18,700	5,550	6,520	8,410	11,300	17,800	18,400	17,200	11,400
14	5,000	6,070	7,280	12,200	3,950	6,180	8,330	17,400	19,400	18,700	16,800	9,980
15	3,620	7,780	8,120	15,700	5,290	5,150	7,070	18,100	20,200	16,100	19,800	7,010
16	9,310	8,890	6,890	13,500	5,580	6,190	7,050	18,500	17,700	20,500	21,900	11,100
17	12,000	6,660	3,950	12,800	6,460	7,040	7,300	17,400	15,600	22,800	23,200	14,400
18	12,200	3,950	9,010	13,000	3,670	4,620	8,770	16,000	20,600	23,600	22,300	12,100
19	10,800	2,890	7,860	13,700	7,450	4,570	10,800	13,700	18,900	23,200	21,400	12,100
20	12,000	6,730	5,240	9,090	7,900	5,410	13,000	9,010	19,400	21,300	23,600	11,500
21	9,050	7,450	5,000	5,340	8,500	4,880	8,100	11,700	19,200	17,100	23,500	15,600
22	5,100	7,650	5,370	16,500	8,440	5,150	7,080	13,400	18,000	16,700	18,300	14,200
23	6,580	3,990	4,970	16,100	10,200	5,260	10,700	16,500	18,800	20,100	22,000	11,200
24	10,300	4,240	3,500	14,000	7,780	3,660	13,200	15,900	15,300	21,600	23,900	16,400
25	10,800	3,860	2,250	15,600	3,980	2,720	10,400	14,800	17,900	22,700	22,100	15,200
26	11,500	3,950	2,800	10,900	9,780	7,410	7,710	12,700	18,500	21,800	21,000	18,100
27	10,900	12,500	3,280	6,920	8,480	9,450	8,560	8,850	19,500	22,000	23,900	17,900
28	7,100	15,100	5,810	3,770	8,620	11,200	8,600	12,800	18,900	17,900	23,500	16,900
29	4,450	7,090	3,970	7,940	------	12,900	7,340	18,800	17,900	20,800	22,800	15,000
30	7,920	4,000	4,920	9,390	------	11,600	9,410	17,700	13,600	22,100	21,400	9,710
31	9,050	------	3,700	8,420	------	4,720	------	14,500	------	20,700	21,200	------
TOTAL	260,040	224,340	178,620	441,920	164,580	218,660	255,410	411,320	470,070	622,600	619,400	417,720
MEAN	8,388	7,478	5,762	14,260	5,878	7,054	8,514	13,270	15,670	20,080	19,980	13,920
MAX	12,200	15,100	9,940	24,600	10,200	12,900	13,200	18,800	20,600	23,600	23,900	20,400
MIN	3,620	2,890	2,250	3,770	2,400	2,720	3,530	7,240	9,120	14,000	12,500	7,010
AC-FT	515,800	445,000	354,300	876,500	326,400	433,700	506,600	815,900	932,400	1,235M	1,229M	828,500

CAL YR 1973 TOTAL 4,955,200 MEAN 13,580 MAX 36,900 MIN 2,250 AC-FT 9,829,000
WTR YR 1974 TOTAL 4,284,680 MEAN 11,740 MAX 24,600 MIN 2,250 AC-FT 8,499,000

09403000. Bright Angel Creek near Grand Canyon, Ariz.

LOCATION.--Lat 36°06'11", long 112°05'44", in sec.5, T.31 N., R.3 E. (unsurveyed), Coconino County, in Grand Canyon National Park, on right bank 0.4 mi (0.6 km) upstream from mouth and 4 mi (6 km) northeast of Grand Canyon.

DRAINAGE AREA.--101 mi^2 (262 km^2).

PERIOD OF RECORD.--October 1923 to March 1974 (discontinued).

GAGE.--Nonrecording gage and crest-stage gage at present site and datum since July 19, 1971. Datum of gage is 2,494.51 ft (760.327 m) above mean sea level (National Park Service bench mark). Oct. 20, 1923, to Jan. 29, 1933, and Aug. 25, 1936, to Apr. 21, 1943, nonrecording gages at several sites within 3,200 ft (975 m) of mouth at various datums. Jan. 30, 1933, to Aug. 19, 1936, water-stage recorder 1,300 ft (396 m) downstream from present site at datum 37.9 ft (11.55 m) lower. Apr. 22, 1943, to May 22, 1968, water-stage recorder 1,500 ft (457 m) downstream from present site at datum 42.4 ft (12.92 m) lower. Nov. 14, 1968, to July 18, 1971, nonrecording gage at present site at datum 2.11 ft (0.643 m) higher.

AVERAGE DISCHARGE.--50 years (1923-73), 35.0 ft^3/s (0.991 m^3/s), 25,360 acre-ft/yr (31.3 hm^3/yr).

EXTREMES.--October 1973 to March 1974: Maximum discharge observed, 37 ft^3/s (1.05 m^3/s) Jan. 21 (gage height, 2.12 ft or 0.646 m); minimum daily, 16 ft^3/s (0.45 m^3/s) Feb. 24.
Period of record: Maximum discharge, 4,400 ft^3/s (125 m^3/s) Aug. 19, 1936, from rating curve extended above 250 ft^3/s (7.08 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 10 ft^3/s (0.28 m^3/s) Sept. 28 to Oct. 1, 1961.

REMARKS.--Records good. Diversion above station, beginning June 27, 1970, for municipal supply at Grand Canyon village; during period October 1973 to March 1974 about 510 acre-ft (0.63 hm^3) was diverted, of which 33 percent was used and the remainder wasted into another tributary of the Colorado River. Records of chemical analyses for the period October 1973 to March 1974 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1213: 1941. WSP 1926: Drainage area.

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	18	19	18	21	18	17						
2	18	19	19	20	18	17						
3	17	19	20	19	18	18						
4	17	18	18	19	18	18						
5	18	18	18	20	18	18						
6	18	18	18	19	18	18						
7	19	17	18	19	19	18						
8	19	17	18	22	19	19						
9	19	17	18	20	19	21						
10	19	17	18	19	19	19						
11	19	17	19	19	19	20						
12	19	17	19	19	19	20						
13	18	20	19	19	19	20						
14	17	20	19	19	18	20						
15	17	19	18	18	18	19						
16	17	20	17	18	18	20						
17	17	20	17	23	18	20						
18	17	20	17	20	18	20						
19	17	21	18	18	17	20						
20	17	20	17	20	17	20						
21	18	19	17	30	17	20						
22	17	20	18	20	17	20						
23	17	19	18	20	17	20						
24	18	19	18	19	16	20						
25	17	20	18	19	17	20						
26	18	20	18	19	17	20						
27	17	20	18	19	17	20						
28	17	20	18	20	17	20						
29	17	20	18	19	------	20						
30	19	19	17	19	------	22						
31	19	------	18	19	------	24	------		------			------
TOTAL	551	569	559	614	500	608						
MEAN	17.8	19.0	18.0	19.8	17.9	19.6						
MAX	19	21	20	30	19	24						
MIN	17	17	17	18	16	17						
AC-FT	1,090	1,130	1,110	1,220	992	1,210						

CAL YR 1973 TOTAL 20,952 MEAN 57.4 MAX 508 MIN 16 AC-FT 41,560

PEAK DISCHARGE (BASE, 130 CFS).--No peak above base.

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. Altitude of gage is 4,500 ft (1,372 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 5.75 ft^3/s (0.163 m^3/s), 4,170 acre-ft/yr (5.14 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 84 ft^3/s (2.38 m^3/s) July 23 (gage height, 1.15 ft or 0.351 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 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.--Revised figures of discharge, in cubic feet per second for the water year 1969, superseding figures published in WRD Ariz. 1969, are given below:

July 30, 1969.....2.2

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-ft
July 1969.....	313.60	150	0	10.1	622
WTR YR 1969.....	5,137.10	311	0	14.1	10,190
CAL YR 1969.....	5,053.50	311	0	13.8	10,020

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	8.0	9.0				0		
2			0	.50	6.0	10				0		
3			0	.50	2.0	20				0		
4			0	.50	.20	10				0		
5			0	1.0	.20	7.0				0		
6			0	3.0	.40	3.0				0		
7			0	4.0	.40	1.0				0		
8			.60	4.0	.20	.90				0		
9			1.3	4.0	.20	.80				0		
10			.10	8.0	.30	.20				0		
11			1.9	5.0	.50	4.0				0		
12			2.3	3.0	1.0	8.0				0		
13			0	3.0	1.0	5.0				0		
14			1.8	3.0	3.0	1.0				0		
15			2.2	3.0	3.0	0				0		
16			2.7	4.0	3.0	0				0		
17			3.2	4.0	4.0	0				0		
18			5.4	5.0	4.0	0				.20		
19			1.1	7.0	2.0	0				.40		
20			1.7	10	2.0	0				.30		
21			3.0	8.0	2.0	0				.50		
22			2.0	9.0	1.0	0				2.1		
23			1.0	3.0	1.0	0				7.3		
24			0	1.0	1.0	0				0		
25			0	.50	1.0	0				0		
26			0	3.0	2.0	0				0		
27			0	3.0	3.0	0				0		
28			1.0	5.0	5.0	0				0		
29			3.0	6.0	------	0				0		
30			3.0	8.0	------	0				0		
31		------	2.0	8.0	------	0	------		------	0		------
TOTAL	0	0	39.30	129.00	57.40	79.90	0	0	0	10.80	0	0
MEAN	0	0	1.27	4.16	2.05	2.58	0	0	0	.35	0	0
MAX	0	0	5.4	10	8.0	20	0	0	0	7.3	0	0
MIN	0	0	0	.50	.20	0	0	0	0	0	0	0
AC-FT	0	0	78	256	114	158	0	0	0	21	0	0

CAL YR 1973 TOTAL 3,033.50 MEAN 8.31 MAX 304 MIN 0 AC-FT 6,020
WTR YR 1974 TOTAL 316.40 MEAN .87 MAX 20 MIN 0 AC-FT 628

PEAK DISCHARGE (BASE, 300 CFS).--No peak above base.

NOTE.--No gage-height record for many days during the year.

09404000. Dogtown Reservoir near Williams, Ariz.

LOCATION.--Lat 35°12'45", long 112°07'30", in NE¼SE¼ sec.12, T.21 N., R.2 E., Coconino County, in Kaibab National Forest, at dam on Dogtown Wash, 4 mi (6 km) southeast of Williams.

DRAINAGE AREA.--5.68 m^2 (14.71 km^2).

PERIOD OF RECORD.--March 1963 to June 1974 (discontinued).

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

EXTREMES.--October 1973 to June 1974: Maximum contents observed, 879 acre-ft (1.07 hm^3) Oct. 1, 2; maximum elevation, 7,063.70 ft (2,153.016 m) Oct. 1, 2; minimum contents, 677 acre-ft (835,009 m^3) June 30 (elevation, 7,060.87 ft or 2,152.153 m).
Period of record: Maximum contents, 1,250 acre-ft (1.54 hm^3) about Mar. 27, 1969 (elevation, 7,068.45 ft or 2,154.464 m, from high-water mark); no contents at times.

REMARKS.--Reservoir is formed by an earthfill dam; dam completed and storage began in 1936. Capacity is 1,100 acre-ft (1.36 hm^3) at elevation 7,066.7 ft (2,153.93 m)—average elevation of spillway crest; no record below elevation 7,039.5 ft (2,145.64 m), when contents is less than 0.7 acre-ft (863 m^3). Water is used for municipal supply by the city of Williams.

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

7,060	679
7,062	751
7,064	891

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	796	779	787	787	-	816	766			
2	870	-	793	778	-	788	-	815	763			
3	-	-	793	778	-	798	-	812	762			
4	-	-	793	778	-	803	-	812	760			
5	-	-	792	786	-	805	-	810	758			
6	-	-	792	786	-	807	-	808	755			
7	-	-	792	787	-	809	-	808	750			
8	-	-	791	790	-	811	849	807	747			
9	-	-	791	791	-	814	844	806	744			
10	-	-	790	791	-	814	844	805	742			
11	-	-	791	790	-	814	844	803	738			
12	-	-	790	790	-	816	842	800	735			
13	-	-	789	791	-	827	840	798	732			
14	-	-	789	790	-	838	838	796	729			
15	-	810	788	790	-	845	838	793	726			
16	-	809	788	790	-	852	837	791	722			
17	-	807	788	790	-	857	836	790	719			
18	-	808	787	790	-	862	835	788	715			
19	-	809	785	790	-	864	831	782	711			
20	-	807	785	790	-	866	831	782	708			
21	-	806	785	790	-	867	830	782	705			
22	-	805	783	788	-	868	829	781	702			
23	-	803	782	788	-	868	828	780	699			
24	-	801	781	787	-	869	826	779	696			
25	-	800	780	787	-	868	825	778	693			
26	-	799	779	788	-	867	822	778	690			
27	-	798	778	788	-	866	821	775	687			
28	-	798	778	787	787	866	821	773	684			
29	-	797	778	788	------	866	819	770	681			
30	-	796	778	787	------	866	819	768	677			
31	830	------	776	787	------	866	------	766	------			------
MAX	-	-	796	791	-	869	-	816	766			
MIN	-	-	776	778	-	787	-	766	677			
(†)	-	7,062.65	7,062.35	7,062.51	7,062.52	7,063.65	7,062.98	7,062.22	7,060.87			
(‡)	-40	-34	-20	+11	0	+79	-47	-53	-89			

CAL YR 1973 MAX 1,220 MIN 776 †7,062.35 ‡-374

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.
NOTE.--No elevations recorded Oct. 1 to Nov. 14, Feb. 2-27, Apr. 1-7.

09404030. Kaibab Reservoir near Williams, Ariz.

LOCATION.--Lat 35°17'03", long 112°09'43", in NE¼SE¼ sec.15, T.22 N., R.2 E., Coconino County, in Kaibab National Forest, at dam on Dogtown Wash, 2.8 mi (4.5 km) northeast of Williams.

DRAINAGE AREA.--16.6 mi^2 (43.0 km^2).

PERIOD OF RECORD.--April 1964 to June 1974 (discontinued).

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

EXTREMES.--October 1973 to June 1974: Maximum contents during period, 353 acre-ft (435,000 m^3) Oct. 2 (elevation, 6,782.27 ft or 2,067.24 m); minimum, 154 acre-ft (190,000 m^3) June 30 (elevation, 6,776.41 ft or 2,065.43 m).
Period of record: Maximum contents, 996 acre-ft (1.23 hm^3) Dec. 30, 1965, Apr. 13, 14, 1973 (elevation, 6,793.22 ft or 2,070.57 m); minimum, 96 acre-ft (120,000 m^3) Dec. 30, 1964, to Jan. 5, 1965.

REMARKS.--Reservoir is formed by an earthfill dam. Capacity, 898 acre-ft (1.11 hm^3) at elevation 6,792 ft (2,070 m)—crest of spillway. Water is used for municipal supply by the city of Williams.

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

6,776	144
6,780	265
6,783	383

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	352	-	253	238	-	257	247	223	181			
2	353	-	253	238	-	257	246	222	179			
3	349	-	253	238	-	257	245	222	177			
4	347	-	253	-	-	257	245	221	175			
5	345	-	252	-	-	257	244	221	173			
6	342	-	251	-	229	256	243	220	172			
7	340	-	251	-	228	255	242	220	171			
8	337	-	250	-	228	255	241	220	170			
9	334	-	250	-	228	255	239	220	170			
10	332	-	250	-	227	256	238	218	170			
11	330	-	250	-	227	256	237	217	169			
12	329	-	249	-	226	256	236	216	168			
13	328	-	249	-	225	257	236	215	168			
14	325	-	247	-	226	258	235	214	167			
15	323	264	247	-	227	259	235	213	166			
16	322	262	247	-	229	259	233	212	165			
17	320	260	246	-	233	259	233	211	164			
18	318	260	244	-	234	259	232	210	164			
19	316	260	243	-	235	258	230	208	163			
20	314	259	243	-	234	256	230	206	162			
21	312	257	242	-	234	256	230	206	161			
22	311	256	241	-	234	255	229	204	160			
23	308	255	241	-	234	255	228	202	159			
24	306	254	240	-	236	254	228	200	159			
25	304	254	240	-	238	253	227	199	158			
26	-	254	239	-	243	253	226	196	158			
27	-	254	238	-	249	252	225	193	156			
28	-	254	239	-	256	251	224	191	156			
29	-	254	238	-	------	250	224	188	155			
30	-	254	238	-	------	249	224	187	154			
31	290	------	238	230	------	247	------	184	------			------
MAX	-	-	253	-	-	259	247	223	181			
MIN	-	-	238	-	-	247	224	184	154			
(†)	-	6,779.67	6,779.26	-	6,779.72	6,779.50	6,778.79	6,777.53	6,776.44			
(‡)	-64	-36	-16	-8	+26	-9	-23	-40	-30			

CAL YEAR 1973 ..... ‡ -362

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.
NOTE.--No elevations recorded Oct. 26 to Nov. 14, Jan. 4 to Feb. 5.

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 mi^2 (13,180 km^2), 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.--45 years, 226 ft^3/s (6.400 m^3/s), 163,700 acre-ft/yr (202 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,840 ft^3/s (165 m^3/s) Sept. 5 (gage height, 10.26 ft or 3.127 m); minimum daily, 54 ft^3/s (1.53 m^3/s) Oct. 3-7.
Period of record: Maximum discharge, 35,200 ft^3/s (997 m^3/s) Dec. 6, 1966 (gage height, 15.66 ft or 4.773 m, site then in use), from rating curve extended above 1,500 ft^3/s (42 m^3/s) on basis of slope-area measurement of peak flow; minimum, 39 ft^3/s (1.10 m^3/s) Aug. 4, 6, 9, 1966.

REMARKS.--Records fair. Diversion above station for irrigation of about 23,200 acres (93.9 km^2). Water-quality records for the current year are published in Part 2 of this report.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	132	238	141	214	102	85	70	64	68	111	64
2	56	135	231	141	207	112	72	70	64	68	80	64
3	54	120	256	132	204	304	392	70	64	68	70	66
4	54	123	228	135	195	324	245	70	62	66	68	66
5	54	141	217	189	192	180	144	70	62	66	284	457
6	54	129	198	224	195	153	135	70	64	66	181	1,390
7	54	138	198	214	186	159	105	68	64	66	168	190
8	60	141	192	273	192	171	80	68	62	68	66	80
9	80	129	195	276	195	231	75	66	64	68	64	68
10	95	138	180	252	192	228	72	66	66	70	64	58
11	108	147	177	234	192	228	72	66	66	70	64	60
12	102	141	174	224	183	201	72	66	66	70	64	62
13	80	138	174	224	183	189	70	66	66	70	64	64
14	72	153	171	220	171	177	72	68	64	70	64	68
15	78	144	171	217	168	171	72	68	64	72	64	66
16	82	153	165	201	147	177	72	68	64	75	63	68
17	78	162	171	195	147	189	72	68	62	70	63	66
18	75	171	162	220	147	204	68	68	62	68	63	64
19	85	260	168	234	150	171	68	66	64	72	63	64
20	98	256	168	220	135	141	68	66	62	75	63	62
21	112	207	153	285	141	126	66	66	62	96	63	62
22	112	210	147	444	132	115	68	66	62	94	60	62
23	98	256	150	298	123	98	66	66	62	92	62	62
24	86	242	156	256	126	92	66	66	58	180	62	60
25	80	252	174	262	132	115	66	66	56	135	62	60
26	95	256	189	238	95	102	66	66	56	66	62	60
27	95	245	174	245	98	123	66	66	60	56	64	66
28	108	231	141	242	105	123	68	62	64	62	62	66
29	112	231	153	228	------	102	68	60	66	64	62	64
30	126	242	150	228	------	92	70	60	66	58	62	64
31	129	------	144	231	------	85	------	62	------	75	62	------
TOTAL	2,628	5,423	5,565	7,123	4,547	4,985	2,781	2,064	1,888	2,364	2,474	3,773
MEAN	84.8	181	180	230	162	161	92.7	66.6	62.9	76.3	79.8	126
MAX	129	260	256	444	214	324	392	70	66	180	284	1,390
MIN	54	120	141	132	95	85	66	60	56	56	60	58
AC-FT	5,210	10,760	11,040	14,130	9,020	9,890	5,520	4,090	3,740	4,690	4,910	7,480

CAL YR 1973 TOTAL 154,495 MEAN 423 MAX 3,000 MIN 48 AC-FT 306,400
WTR YR 1974 TOTAL 45,615 MEAN 125 MAX 1,390 MIN 54 AC-FT 90,480

PEAK DISCHARGE (BASE, 1,600 CFS).--Sept. 5 (2130) 5,840 cfs (10.26 ft).

09415190. Virgin River at Riverside, Nev.

LOCATION.--Lat 36°43'57", long 114°13'28", in SW¼NE¼ sec.12, T.14 S., R.69 E., Clark County, on right bank about 1,500 ft (457 m) downstream from highway bridge at Riverside.

DRAINAGE AREA.--5,890 mi^2 (15,260 km^2), approximately.

PERIOD OF RECORD.--December 1970 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,410 ft (429.8 m). Prior to Jan. 17, 1974, at site about 2,100 ft (640 m) upstream at datum 1,415.02 ft (431.298 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,520 ft^3/s (71.4 m^3/s) Sept. 6 (gage height, 10.50 ft or 3.200 m); no flow July 4-9, Aug. 13, 14, Sept. 12-14, 16-18, 21.
Period of record: Maximum discharge, 17,380 ft^3/s (492 m^3/s) Sept. 20, 1972 (gage height, 8.37 ft or 2.551 m, site and datum then in use); no flow on some days each year.
Peak flow of Dec. 6, 1966, was about 35,000 ft^3/s (991 m^3/s) based on indirect measurement made about 19 mi (31 km) upstream, gage height, 12.2 ft (3.72 m), datum in use prior to Jan. 17, 1974, from high-water marks.

REMARKS.--Records poor. Several diversions for irrigation above station.

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	14	93	205	170	195	84	95	4.0	5.4	.10	7.4	.88
2	14	94	200	165	175	82	140	30	9.8	.06	6.6	1.3
3	14	96	200	165	165	100	231	5.4	4.0	.06	5.4	.58
4	12	86	230	155	160	240	155	9.0	.38	0	9.0	.58
5	12	88	220	160	155	260	57	42	.10	0	116	.88
6	12	102	210	230	150	152	36	6.6	9.8	0	115	672
7	12	94	205	260	155	144	91	2.0	.24	0	63	184
8	16	100	205	250	150	164	17	7.4	.03	0	63	28
9	23	100	200	320	155	168	11	11	.88	0	5.4	9.8
10	29	90	210	315	155	184	22	.24	.58	.02	.24	9.8
11	38	100	205	290	155	152	60	.24	.58	.06	1.3	.24
12	52	106	200	275	155	144	28	16	.58	.06	.16	0
13	48	100	200	265	155	152	23	7.4	6.6	.06	0	0
14	45	96	195	265	150	116	23	7.4	.24	1.3	0	0
15	39	108	195	260	145	112	5.4	5.4	.16	.88	.10	.01
16	42	102	195	250	140	120	5.4	24	2.0	.88	.38	0
17	45	110	190	240	125	144	22	1.3	.06	2.0	.38	0
18	43	115	200	220	125	120	20	.58	.24	4.0	.88	0
19	42	130	190	250	125	110	13	13	.02	2.0	.58	.38
20	46	180	193	270	130	75	26	.88	11	1.3	.24	.02
21	60	175	190	260	120	75	32	.38	.88	5.4	.38	0
22	70	144	180	340	122	75	23	.38	.24	5.4	.58	2.0
23	72	150	170	440	116	75	24	28	6.6	2.8	.58	.01
24	66	180	175	280	110	91	20	8.2	.16	6.6	.16	.01
25	62	170	180	210	119	95	39	2.0	.10	114	1.3	.02
26	56	196	205	220	124	91	5.4	11	.16	.58	1.3	.88
27	68	194	220	190	78	105	5.4	2.0	.16	.10	.58	6.6
28	66	190	200	200	80	130	20	2.0	2.0	.24	.24	2.0
29	76	185	170	200	------	125	8.2	2.0	.88	.10	2.0	.50
30	80	190	180	190	------	125	6.6	9.8	5.4	.24	1.3	.50
31	90	------	175	190	------	160	------	4.0	------	.24	.88	------
TOTAL	1,364	3,864	6,093	7,495	3,889	3,970	1,264.4	263.60	69.27	148.48	404.36	920.99
MEAN	44.0	129	197	242	139	128	42.1	8.50	2.31	4.79	13.0	30.7
MAX	90	196	230	440	195	260	231	42	11	114	116	672
MIN	12	86	170	155	78	75	5.4	.24	.02	0	0	0
AC-FT	2,710	7,660	12,090	14,870	7,710	7,870	2,510	523	137	295	802	1,830

CAL YR 1973 TOTAL 150,494.00 MEAN 412 MAX 3,700 MIN 0 AC-FT 298,500
WTR YR 1974 TOTAL 29,746.10 MEAN 81.5 MAX 672 MIN 0 AC-FT 59,000

NOTE.--No gage-height record Oct. 1 to Mar. 6.

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 private 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.--17 years, 30.3 ft^3/s (0.858 m^3/s), 21,950 acre-ft/yr (27.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 281 ft^3/s (7.96 m^3/s) July 31 (gage height, 7.73 ft or 2.356 m); minimum, 25 ft^3/s (0.71 m^3/s) June 27, but may have been less during period of no gage-height record.
Period of record: Maximum discharge, 1,400 ft^3/s (39.6 m^3/s) Aug. 21, 1957 (gage height, 4.70 ft or 1.433 m, site and datum then in use), from rating curve extended above 95 ft^3/s (2.7 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 4.8 ft^3/s (0.14 m^3/s) Aug. 17, 1960.

REMARKS.--Records fair except for periods of no gage-height record, which are poor. 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 in Part 2 of this report.

REVISIONS.--WSP 1926: Drainage area.

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	46	56	49	68	55	57	53	52	36	36	59	40
2	40	53	54	66	59	55	54	47	38	36	54	42
3	45	54	51	65	63	59	54	48	33	40	55	43
4	49	52	53	66	65	59	56	54	35	40	53	45
5	51	52	59	71	60	60	60	58	38	39	51	49
6	50	53	60	75	54	61	62	57	38	41	50	52
7	47	52	60	75	52	62	63	49	34	41	46	48
8	56	50	60	75	54	61	62	42	32	39	47	48
9	58	51	60	75	53	66	63	43	32	42	46	48
10	55	50	60	75	57	61	63	47	31	42	44	46
11	55	50	62	74	60	65	60	52	33	43	37	41
12	56	48	60	74	62	68	61	52	31	45	35	47
13	58	47	60	74	63	68	59	52	30	45	36	48
14	60	49	59	71	62	65	66	55	33	46	39	45
15	60	50	59	70	64	63	64	52	35	52	39	42
16	54	51	59	66	63	57	64	56	36	54	40	40
17	53	52	58	64	71	60	58	64	34	54	41	43
18	53	54	61	65	61	62	51	62	30	52	43	49
19	50	56	59	65	66	54	50	67	28	49	42	52
20	50	56	60	66	60	55	52	62	37	55	43	51
21	49	57	62	62	57	56	54	60	32	55	45	52
22	54	55	62	64	56	58	52	54	35	53	42	55
23	56	58	62	63	56	59	49	50	31	59	40	53
24	54	62	61	64	58	57	46	47	39	133	45	56
25	58	63	64	62	60	56	49	47	42	62	44	55
26	58	60	56	62	61	56	46	49	36	56	41	55
27	59	52	63	64	56	54	48	45	32	53	42	54
28	57	51	60	64	54	53	54	44	36	52	39	53
29	56	51	59	66	------	51	55	42	39	44	37	44
30	55	54	61	65	------	51	61	40	38	46	38	50
31	53	------	63	58	------	51	------	37	------	127	40	------
TOTAL	1,655	1,599	1,836	2,094	1,662	1,820	1,689	1,586	1,034	1,631	1,353	1,446
MEAN	53.4	53.3	59.2	67.5	59.4	58.7	56.3	51.2	34.5	52.6	43.6	48.2
MAX	60	63	64	75	71	68	66	67	42	133	59	56
MIN	40	47	49	58	52	51	46	37	28	36	35	40
AC-FT	3,280	3,170	3,640	4,150	3,300	3,610	3,350	3,150	2,050	3,240	2,680	2,870

CAL YR 1973 TOTAL 18,354 MEAN 50.3 MAX 99 MIN 19 AC-FT 36,410
WTR YR 1974 TOTAL 19,405 MEAN 53.2 MAX 133 MIN 28 AC-FT 38,490

NOTE.--No gage-height record Mar. 20 to Apr. 10, May 22 to June 26.

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, 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, 190 ft^3/s (5.38 m^3/s) July 31 (gage height, 4,85 ft or 1.478 m); minimum daily, 26 ft^3/s (0.74 m^3/s) June 14, 20, but may have been much less in July, during period of uncertain gage-height record and (or) stage-discharge relation, July 5-20.

Period of record: Maximum discharge, 485 ft^3/s (13.7 m^3/s) Aug. 14, 1972 (gage height, 5.65 ft or 1.722 m); 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 (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 m), from floodmarks, discharge, about 1,700 ft^3/s (48 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 in Part 2 of this report.

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	55	67	69	90	73	47	57	78	40	34	90	50
2	64	64	69	94	71	62	60	67	37	30	74	54
3	55	62	69	86	78	54	60	62	41	37	84	55
4	55	62	71	84	82	67	67	67	33	28	80	57
5	64	62	71	94	82	65	69	71	37	34	78	64
6	67	62	76	98	73	65	69	71	41	35	71	65
7	65	62	76	98	71	67	65	64	41	35	69	64
8	65	58	76	105	69	71	71	54	33	33	62	58
9	65	58	76	113	71	74	71	47	30	33	62	57
10	71	58	73	96	74	65	69	47	30	34	57	57
11	71	58	76	76	74	65	69	47	30	35	50	47
12	69	58	76	73	74	69	71	50	34	36	43	47
13	69	58	74	71	78	65	65	47	30	37	44	52
14	69	60	74	78	78	63	73	54	26	38	55	54
15	73	64	69	82	78	62	74	52	34	38	57	46
16	74	64	69	80	78	62	73	50	37	40	58	41
17	73	74	73	80	74	64	69	50	38	43	60	40
18	65	76	78	76	76	69	64	47	36	45	64	47
19	65	80	78	76	78	65	57	50	27	50	64	55
20	64	78	78	82	74	58	62	58	26	55	62	55
21	60	80	80	78	67	60	65	62	46	82	65	57
22	60	78	82	78	54	62	65	57	30	67	65	55
23	64	80	82	78	67	62	64	54	41	71	55	57
24	69	84	80	78	50	60	57	52	31	116	62	54
25	71	88	82	78	69	60	60	52	42	100	65	58
26	71	86	78	78	69	60	62	54	46	74	58	55
27	76	78	78	78	65	58	62	55	38	74	57	54
28	69	73	84	80	54	54	69	50	38	65	57	54
29	67	73	78	82	------	50	73	49	41	55	50	60
30	65	73	78	82	------	50	76	47	38	47	47	80
31	65	------	82	78	------	50	------	46	------	94	50	------
TOTAL	2,055	2,078	2,355	2,600	2,001	1,905	1,988	1,711	1,072	1,595	1,915	1,649
MEAN	66.3	69.3	76.0	83.9	71.5	61.5	66.3	55.2	35.7	51.5	61.8	55.0
MAX	76	88	84	113	82	74	76	78	46	116	90	80
MIN	55	58	69	71	50	47	57	46	26	28	43	40
AC-FT	4,080	4,120	4,670	5,160	3,970	3,780	3,940	3,390	2,130	3,160	3,800	3,270

CAL YR 1973 TOTAL 22,650 MEAN 62.1 MAX 113 MIN 30 AC-FT 44,930
WTR YR 1974 TOTAL 22,924 MEAN 62.8 MAX 116 MIN 26 AC-FT 45,470

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, 20,180,000 acre-ft (24,900 hm³) Oct. 1 (gage height, 1,180.29 ft or 359.752 m); minimum, 18,704,000 acre-ft (23,100 hm³) June 14 (gage height, 1,168.82 ft or 356.256 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 in Part 2 of this report.
DIVERSIONS FROM LAKE MEAD.--Diversions to Boulder City area at dam; diversions to Henderson and Las Vegas areas from intakes 6 miles 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20,180	20,065	19,957	19,736	20,161	19,875	19,456	18,994	18,821	18,793	19,095	19,294
2	20,166	20,058	19,954	19,702	20,166	19,877	19,431	18,970	18,835	18,786	19,104	19,316
3	20,153	20,059	19,942	19,669	20,170	19,896	19,394	18,946	18,819	18,793	19,121	19,325
4	20,139	20,071	19,924	19,665	20,164	19,869	19,375	18,950	18,805	18,811	19,140	19,325
5	20,129	20,067	19,908	19,695	20,153	19,853	19,352	18,955	18,785	18,820	19,140	19,326
6	20,133	20,069	19,902	19,723	20,140	19,831	19,350	18,940	18,771	18,838	19,136	19,329
7	20,140	20,071	19,900	19,730	20,129	19,819	19,353	18,922	18,763	18,857	19,142	19,335
8	20,141	20,075	19,912	19,740	20,106	19,804	19,329	18,897	18,754	18,865	19,135	19,336
9	20,128	20,079	19,923	19,764	20,098	19,801	19,295	18,877	18,759	18,862	19,136	19,324
10	20,112	20,084	19,915	19,797	20,095	19,806	19,276	18,859	18,747	18,867	19,154	19,303
11	20,103	20,087	19,904	19,828	20,087	19,792	19,260	18,867	18,735	18,878	19,173	19,297
12	20,102	20,075	19,895	19,866	20,069	19,772	19,247	18,878	18,721	18,892	19,168	19,294
13	20,100	20,066	19,883	19,903	20,048	19,759	19,238	18,879	18,710	18,912	19,153	19,290
14	20,099	20,053	19,874	19,934	20,032	19,746	19,246	18,864	18,704	18,936	19,141	19,295
15	20,086	20,048	19,870	19,952	20,020	19,723	19,226	18,860	18,712	18,941	19,133	19,298
16	20,071	20,038	19,874	19,976	20,015	19,719	19,205	18,862	18,729	18,946	19,130	19,304
17	20,053	20,044	19,862	19,996	20,015	19,714	19,179	18,862	18,740	18,946	19,145	19,310
18	20,051	20,045	19,857	20,013	20,012	19,690	19,146	18,869	18,735	18,950	19,164	19,310
19	20,058	20,040	19,847	20,030	20,000	19,673	19,126	18,883	18,736	18,960	19,165	19,302
20	20,069	20,026	19,836	20,050	19,975	19,643	19,132	18,880	18,735	18,967	19,170	19,302
21	20,084	20,015	19,826	20,059	19,957	19,616	19,145	18,862	18,736	19,000	19,182	19,303
22	20,087	20,017	19,818	20,062	19,946	19,588	19,125	18,851	18,755	19,000	19,191	19,318
23	20,082	20,009	19,818	20,081	19,946	19,582	19,102	18,843	18,770	18,989	19,184	19,324
24	20,075	20,013	19,807	20,099	19,953	19,576	19,081	18,836	18,773	18,994	19,198	19,318
25	20,073	20,007	19,804	20,116	19,941	19,554	19,067	18,840	18,770	18,995	19,221	19,317
26	20,075	19,992	19,785	20,140	19,927	19,528	19,057	18,848	18,769	19,009	19,226	19,321
27	20,087	19,978	19,767	20,160	19,906	19,501	19,059	18,846	18,766	19,032	19,233	19,326
28	20,100	19,967	19,753	20,165	19,888	19,483	19,064	18,830	18,766	19,062	19,238	19,342
29	20,095	19,971	19,741	20,162	------	19,462	19,047	18,811	18,784	19,067	19,247	19,352
30	20,087	19,970	19,747	20,157	------	19,464	19,022	18,811	18,801	19,081	19,252	19,358
31	20,071	------	19,737	20,160	------	19,482	------	18,811	------	19,088	19,270	------
(*)	1,179.47	1,178.70	1,176.92	1,180.14	1,178.08	1,174.95	1,171.35	1,169.68	1,169.60	1,171.87	1,173.30	1,173.99
(†)	-105,000	-101,000	-233,000	+423,000	-272,000	-406,000	-460,000	-211,000	-10,000	+287,000	+182,000	+88,000
(‡)	7,290	5,770	4,890	4,730	5,170	6,040	6,680	8,560	9,970	9,830	9,690	7,780
(**)	8.6	7.5	5.2	3.6	4.3	4.3	5.6	7.4	7.1	9.4	7.4	8.6
(††)	94,700	82,300	56,700	39,400	47,200	46,600	59,500	77,600	74,100	101,600	78,500	91,700

* Gage height, in feet, at end of month.
** Gross evaporation, in inches, from Lake Mead.
† Change, in contents, in acre-feet.
†† Gross evaporation, in acre-feet, from Lake Mead.
‡ Diversions, in acre-feet.

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 using methods described in Geological Survey Professional Paper 298. "Gross" denotes the total evaporation from the lake without deductions for precipitation on the lake surface or for natural losses that would have occurred in the area now occupied by the lake.

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. 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.-- 40 years (1934-74), 13,430 ft^3/s (380.3 m^3/s), 9,730,000 acre-ft/yr (12,000 hm^3/yr) unadjusted for storage in Lake Mead.

EXTREMES.-- Current year: Maximum daily discharge, 23,300 ft^3/s (660 m^3/s) Jan. 3; minimum daily, 2,030 ft^3/s (57.5 m^3/s) Jan. 12. 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 in Part 2 of this report.

COOPERATION.--Records furnished by Bureau of Reclamation.

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	7,970	10,500	6,580	8,420	8,170	15,400	17,900	20,200	9,180	14,600	15,500	7,280
2	9,170	10,600	7,910	20,800	3,200	5,730	21,600	21,200	7,910	15,200	15,600	9,470
3	11,300	5,670	10,600	23,300	4,260	5,720	21,000	20,100	16,000	15,500	8,540	14,500
4	12,000	5,140	13,600	21,100	9,450	16,900	18,400	7,690	16,800	8,740	7,980	15,400
5	14,000	10,200	11,500	9,830	7,360	16,100	20,300	7,670	18,800	16,100	14,800	15,400
6	5,460	9,080	9,800	10,600	8,820	15,000	9,590	17,800	21,100	7,080	14,700	14,900
7	2,930	9,180	8,800	14,100	11,100	16,500	8,350	17,200	18,100	7,160	15,900	12,200
8	8,700	10,500	4,700	11,000	13,300	18,500	21,100	19,400	9,370	15,000	19,100	10,300
9	10,900	8,740	3,760	6,220	8,720	7,820	18,800	20,700	9,270	14,800	16,900	16,600
10	10,400	5,350	10,500	2,780	4,770	7,360	17,000	19,000	17,400	15,000	6,200	18,900
11	10,000	4,440	10,400	2,040	12,200	15,600	19,100	8,770	17,300	15,000	6,750	15,000
12	10,500	9,650	11,500	2,030	11,200	17,600	16,400	8,160	20,100	12,400	17,100	14,400
13	10,800	10,600	13,400	2,340	13,800	16,200	9,080	16,200	20,200	8,040	20,400	15,900
14	9,950	11,400	10,700	2,990	12,600	17,100	5,400	18,300	20,300	6,280	20,700	8,670
15	13,700	9,430	7,000	4,090	12,000	18,500	18,400	17,300	12,300	14,700	18,500	7,430
16	12,700	9,210	6,600	3,290	7,030	7,920	20,500	15,200	8,540	16,800	19,700	6,000
17	13,400	5,720	12,700	3,840	4,910	7,680	18,100	16,400	12,500	18,000	13,100	3,440
18	11,600	3,630	10,000	4,160	6,930	18,600	18,900	9,340	17,200	18,500	11,500	10,700
19	8,490	10,700	10,600	3,240	13,900	17,200	19,900	8,620	16,800	17,000	18,100	13,700
20	3,890	11,300	13,000	2,820	16,600	19,400	7,750	16,000	17,900	11,800	17,300	14,100
21	3,060	9,190	10,400	5,220	16,100	18,200	6,860	19,400	16,700	11,600	17,300	9,280
22	7,980	6,020	8,390	4,630	13,500	18,000	20,600	15,900	8,230	18,900	18,500	7,660
23	8,860	8,880	6,760	4,820	6,640	7,250	20,100	17,600	8,940	18,300	20,000	13,500
24	7,640	5,620	9,620	4,530	6,750	8,640	18,400	18,000	16,300	17,000	12,800	12,700
25	9,030	5,780	7,600	4,530	14,800	16,800	17,700	13,700	16,800	17,900	9,490	14,500
26	9,010	11,900	11,500	2,780	16,300	17,700	16,200	10,800	17,100	16,600	19,600	14,700
27	3,460	11,700	11,400	2,700	14,900	16,400	7,690	12,200	19,200	7,160	17,900	14,300
28	4,210	12,000	10,800	6,580	17,400	18,100	5,760	19,200	17,000	6,500	18,600	7,240
29	9,710	11,800	6,600	7,860	------	19,700	17,400	18,700	8,620	15,200	18,100	9,950
30	9,810	11,500	3,730	8,580	------	7,020	21,300	17,000	7,830	14,000	19,100	11,400
31	11,600	------	7,550	8,810	------	7,050	------	16,200	------	16,400	7,950	------
TOTAL	282,230	265,430	288,000	220,030	296,710	435,690	479,580	483,950	443,790	427,260	477,710	359,720
MEAN	9,104	8,848	9,290	7,098	10,600	14,050	15,990	15,610	14,790	13,780	15,410	11,990
MAX	14,000	12,000	13,600	23,300	17,400	19,700	21,600	21,200	21,100	18,900	20,700	18,900
MIN	2,930	3,630	3,730	2,030	3,200	5,720	5,400	7,670	7,830	6,280	6,200	3,440
AC-FT	559,800	526,500	571,200	436,400	588,500	864,200	951,200	959,900	880,300	847,500	947,500	713,500

CAL YR 1973 TOTAL 4,185,090 MEAN 11,470 MAX 22,000 MIN 2,930 AC-FT 8,301,000
WTR YR 1974 TOTAL 4,460,100 MEAN 12,220 MAX 23,300 MIN 2,030 AC-FT 8,847,000

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, 1,711,000 acre-ft (2,110 hm^3) Jan. 18 (elevation, 643.45 ft or 196.124 m); minimum, 1,354,000 acre-ft (1,670 hm^3) Sept. 18 (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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,406	1,380	1,466	1,575	1,618	1,635	1,637	1,571	1,626	1,573	1,445	1,413
2	1,403	1,389	1,472	1,596	1,602	1,623	1,649	1,584	1,617	1,565	1,444	1,403
3	1,404	1,390	1,475	1,626	1,591	1,615	1,658	1,595	1,618	1,563	1,424	1,405
4	1,402	1,388	1,483	1,650	1,586	1,618	1,662	1,579	1,622	1,549	1,414	1,409
5	1,407	1,393	1,489	1,655	1,583	1,618	1,665	1,570	1,630	1,542	1,405	1,413
6	1,399	1,392	1,497	1,668	1,578	1,617	1,651	1,571	1,643	1,523	1,402	1,415
7	1,386	1,391	1,499	1,689	1,580	1,627	1,638	1,570	1,654	1,502	1,400	1,414
8	1,384	1,392	1,495	1,704	1,585	1,641	1,642	1,581	1,640	1,500	1,404	1,409
9	1,385	1,392	1,491	1,709	1,587	1,636	1,643	1,598	1,633	1,497	1,404	1,412
10	1,386	1,388	1,492	1,707	1,586	1,636	1,642	1,606	1,637	1,494	1,388	1,422
11	1,387	1,385	1,494	1,707	1,591	1,641	1,643	1,594	1,642	1,492	1,376	1,426
12	1,386	1,385	1,495	1,706	1,594	1,651	1,642	1,585	1,654	1,485	1,373	1,423
13	1,389	1,388	1,504	1,702	1,602	1,660	1,622	1,587	1,661	1,465	1,377	1,422
14	1,394	1,396	1,508	1,701	1,604	1,670	1,608	1,592	1,670	1,450	1,383	1,412
15	1,399	1,397	1,503	1,704	1,608	1,683	1,609	1,594	1,662	1,443	1,384	1,402
16	1,399	1,398	1,504	1,706	1,603	1,671	1,612	1,599	1,652	1,440	1,390	1,385
17	1,398	1,396	1,509	1,710	1,599	1,663	1,613	1,605	1,642	1,444	1,391	1,362
18	1,395	1,394	1,513	1,711	1,588	1,668	1,614	1,597	1,644	1,452	1,388	1,358
19	1,391	1,398	1,514	1,709	1,598	1,667	1,616	1,588	1,647	1,460	1,392	1,358
20	1,382	1,403	1,523	1,706	1,609	1,670	1,597	1,593	1,648	1,460	1,392	1,358
21	1,376	1,407	1,528	1,708	1,620	1,671	1,584	1,605	1,645	1,472	1,391	1,359
22	1,374	1,404	1,532	1,703	1,626	1,672	1,586	1,610	1,628	1,484	1,396	1,358
23	1,377	1,408	1,535	1,700	1,614	1,654	1,589	1,621	1,618	1,492	1,406	1,359
24	1,377	1,403	1,536	1,694	1,604	1,645	1,588	1,627	1,614	1,496	1,405	1,361
25	1,378	1,404	1,541	1,684	1,606	1,647	1,589	1,627	1,610	1,502	1,400	1,363
26	1,381	1,417	1,547	1,673	1,614	1,647	1,589	1,624	1,609	1,499	1,406	1,371
27	1,370	1,432	1,557	1,658	1,620	1,649	1,572	1,620	1,613	1,481	1,414	1,384
28	1,365	1,446	1,565	1,640	1,629	1,655	1,557	1,629	1,613	1,465	1,420	1,378
29	1,371	1,455	1,570	1,637	------	1,662	1,555	1,635	1,596	1,458	1,427	1,379
30	1,368	1,464	1,569	1,630	------	1,648	1,564	1,638	1,582	1,450	1,434	1,380
31	1,376	------	1,570	1,624	------	1,638	------	1,637	------	1,445	1,423	------
MAX	1,407	1,464	1,570	1,711	1,629	1,683	1,665	1,638	1,670	1,573	1,445	1,426
MIN	1,365	1,380	1,466	1,575	1,578	1,615	1,555	1,570	1,582	1,440	1,373	1,358
(†)	630.70	634.17	638.20	640.26	640.44	640.75	637.99	640.71	638.69	633.43	632.55	630.86
(‡)	-36,000	+88,000	+106,000	+54,000	+5,000	+9,000	-74,000	+73,000	-55,000	-137,000	-22,000	-43,000

CAL YR 1973 MAX 1,798 MIN 1,365 ‡ +50,000
WTR YR 1974 MAX 1,711 MIN 1,358 ‡ -32,000

† 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 (152.40 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 (4.1 m) lower. Mar. 16 to May 3, 1949, water-stage recorder at site 0.5 mi (0.8 km) downstream at present datum. May 4, 1949, to Feb. 24, 1956, water-stage recorder at site 400 ft (120 m) upstream at present datum.

AVERAGE DISCHARGE.--25 years (1949-74), 12,670 ft^3/s (358.8 m^3/s), 9,179,000 acre-ft/yr (11,300 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 27,500 ft^3/s (779 m^3/s) Sept. 16 (elevation, 506.32 ft or 154.326 m); minimum daily, 1,930 ft^3/s (54.7 m^3/s) Jan. 17.
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.
1949-74: 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 in Part 2 of this report.

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	12,300	6,030	6,040	6,360	12,500	11,600	16,600	15,800	15,000	18,700	15,600	12,500
2	11,200	5,740	5,000	8,450	12,500	12,700	16,600	14,500	12,600	18,700	17,100	14,900
3	11,500	6,120	7,770	7,320	10,000	9,800	15,700	14,300	15,300	16,000	18,100	14,100
4	11,900	6,110	8,680	7,880	12,000	15,300	16,400	15,700	14,800	16,200	14,200	14,000
5	11,200	6,100	8,510	7,510	9,990	14,900	17,900	12,200	13,900	18,600	17,700	13,500
6	10,100	10,400	6,070	2,920	10,700	15,600	18,700	17,400	14,200	17,900	17,600	13,900
7	9,330	9,620	7,010	3,900	10,900	10,900	14,400	17,300	14,500	14,400	16,100	13,600
8	10,500	9,240	7,100	2,940	10,400	12,100	18,700	12,900	14,600	18,100	16,100	12,800
9	10,600	8,910	4,920	2,920	7,660	10,600	18,800	12,500	12,600	16,200	16,500	14,700
10	9,110	7,890	8,720	3,410	4,820	6,760	18,700	14,200	15,000	16,300	15,100	13,700
11	9,610	6,040	10,100	2,460	9,370	13,500	18,600	15,300	14,800	16,100	12,100	14,200
12	11,000	8,660	10,700	3,910	9,590	11,600	18,600	12,800	13,700	16,100	17,600	14,900
13	9,080	7,790	8,280	2,980	10,200	11,400	18,600	15,000	16,000	18,500	17,800	16,300
14	7,030	8,370	9,030	3,920	11,500	11,000	13,300	15,200	15,100	14,300	17,800	15,300
15	11,000	8,170	9,480	2,150	10,000	11,100	17,300	15,300	17,100	19,100	17,500	13,700
16	13,200	8,030	5,580	2,120	9,730	14,700	18,700	13,200	13,600	18,700	17,400	14,800
17	13,500	8,010	8,960	1,930	7,630	12,200	18,500	13,000	17,400	16,600	13,600	15,800
18	14,200	5,280	8,340	3,900	11,700	15,800	18,700	13,800	15,700	14,300	12,600	12,500
19	10,600	7,790	8,330	3,900	9,870	17,000	18,500	12,900	15,700	13,200	15,600	14,100
20	8,620	7,720	8,380	3,910	10,000	17,700	18,600	13,700	17,000	12,700	18,300	14,600
21	6,690	7,840	7,310	5,920	9,370	17,600	13,200	13,000	18,100	4,780	17,800	8,850
22	8,020	7,770	7,100	6,810	11,600	17,600	18,400	13,600	18,000	12,600	16,800	8,710
23	7,940	6,620	5,080	6,350	13,700	17,500	18,600	12,400	13,700	14,300	15,900	13,400
24	7,920	9,030	8,770	6,790	9,900	12,700	18,700	13,900	18,200	15,200	13,900	11,500
25	8,130	4,180	4,850	9,810	13,600	16,200	17,200	14,100	18,000	14,300	12,900	14,100
26	8,140	4,130	7,050	9,980	11,800	17,100	16,900	12,600	17,500	17,200	15,600	9,830
27	8,670	4,120	6,040	9,940	11,300	14,800	17,200	13,600	16,700	17,700	14,700	9,140
28	5,980	4,160	6,540	16,900	12,600	15,400	13,500	14,000	16,200	14,200	14,900	9,530
29	7,290	6,300	4,990	10,400	------	15,700	17,600	14,700	17,600	18,100	14,700	9,060
30	9,210	6,530	4,990	12,500	------	14,900	17,300	16,400	14,200	18,300	14,400	11,300
31	7,200	------	6,350	11,500	------	13,000	------	16,300	------	18,000	14,200	------
TOTAL	300,770	212,700	226,070	191,690	294,930	428,760	520,500	441,600	466,800	495,380	490,200	389,320
MEAN	9,702	7,090	7,293	6,184	10,530	13,830	17,350	14,250	15,560	15,980	15,810	12,980
MAX	14,200	10,400	10,700	16,900	13,700	17,700	18,800	17,400	18,200	19,100	18,300	16,300
MIN	5,980	4,120	4,850	1,930	4,820	6,760	13,200	12,200	12,600	4,780	12,100	8,710
AC-FT	596,600	421,900	448,400	380,200	585,000	850,400	1,032M	875,900	925,900	982,600	972,300	772,200

CAL YR 1973 TOTAL 4,144,780 MEAN 11,360 MAX 18,400 MIN 1,870 AC-FT 8,221,000
WTR YR 1974 TOTAL 4,458,720 MEAN 12,220 MAX 19,100 MIN 1,930 AC-FT 8,844,000

09423500. Colorado River at Needles, Calif.

LOCATION (revised).--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, 469.99 ft (143.253 m) July 2; minimum, 458.76 ft (139.830 m) Jan. 18.
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.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63.88	62.30	61.86	61.64	64.72	64.44	66.80	67.06	66.51	67.74	67.10	65.40
2	64.86	61.89	61.49	62.00	64.72	64.78	66.93	66.69	65.54	68.14	67.07	65.76
3	64.52	61.94	61.89	62.74	64.40	64.11	66.72	65.64	66.09	67.20	67.76	65.75
4	64.44	61.95	62.29	62.33	64.06	65.26	66.77	66.38	66.15	66.91	66.26	65.71
5	64.88	61.95	63.15	62.09	64.17	65.89	67.30	65.59	65.97	67.67	67.44	65.43
6	64.10	62.28	62.60	61.45	63.58	66.70	68.11	66.79	65.87	68.09	67.65	65.45
7	63.65	64.14	61.80	60.07	63.97	65.28	66.25	67.47	66.02	66.24	66.95	65.41
8	63.99	63.57	62.04	59.86	63.97	64.56	67.59	66.68	65.90	66.96	66.92	65.40
9	64.14	63.35	61.82	59.63	63.14	64.91	67.97	64.75	65.78	67.78	67.20	65.42
10	63.90	63.06	61.72	59.87	62.42	62.88	67.83	65.52	65.72	66.74	66.48	65.56
11	63.62	62.57	63.04	59.61	61.53	63.85	67.89	66.48	66.36	67.03	65.84	65.76
12	63.98	62.23	64.20	59.66	63.25	65.24	67.90	65.53	65.72	66.76	66.75	65.78
13	64.04	63.07	63.28	59.99	63.38	64.65	67.87	65.82	66.20	67.79	67.71	66.24
14	63.15	62.68	63.03	59.22	64.01	64.66	65.87	66.37	66.33	66.25	67.53	66.43
15	63.27	62.88	63.29	60.14	64.06	64.00	67.12	66.29	67.14	67.84	67.37	65.55
16	64.48	62.93	62.52	58.93	63.53	64.86	67.81	65.94	66.01	68.12	67.38	66.24
17	65.62	62.94	62.13	58.86	63.14	65.16	67.85	65.29	66.63	67.30	66.25	65.73
18	66.08	62.42	62.95	59.34	63.31	65.63	68.05	65.32	66.53	66.58	65.41	66.26
19	64.56	61.65	62.88	59.97	63.82	67.14	67.90	65.36	66.33	65.95	66.27	64.82
20	63.73	62.54	62.84	59.98	63.55	67.91	68.06	65.56	66.93	65.67	66.69	65.62
21	62.97	62.73	62.54	60.30	63.52	67.69	66.01	65.37	-	63.95	67.57	64.86
22	62.54	62.35	62.64	61.27	63.78	67.78	67.55	65.64	-	62.80	66.97	63.25
23	62.93	62.83	61.73	61.64	65.50	67.98	68.09	65.08	-	65.10	66.60	64.10
24	62.86	62.24	61.61	61.71	64.21	66.40	68.09	65.55	-	66.37	66.11	65.42
25	62.80	62.57	62.45	62.20	64.97	66.92	67.54	65.42	-	66.45	65.31	64.81
26	63.04	60.81	61.24	63.42	64.77	67.56	67.08	62.72	-	66.52	65.92	64.74
27	63.11	60.45	61.74	63.49	64.43	67.19	67.52	-		67.98	66.19	63.38
28	62.74	60.68	61.65	65.02	64.97	67.12	66.02	-	66.68	66.63	65.94	64.25
29	62.32	60.69	61.68	65.59	------	66.65	67.32	-	67.83	66.64	66.06	62.65
30	62.88	61.97	60.90	64.11	------	66.75	67.61	-	66.01	68.42	66.07	63.58
31	63.22	------	60.78	64.34	------	65.77	------	67.02	------	67.67	66.18	------
MEAN	63.75	62.32	62.25	61.31	63.89	65.80	67.38	-	-	66.82	66.68	65.16
MAX	66.08	64.14	64.20	65.59	65.50	67.98	68.11	-	-	68.42	67.76	66.43
MIN	62.32	60.45	60.78	58.86	61.53	62.88	65.87	-	-	62.80	65.31	62.65

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 (revised), 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.--7 years, 67.3 ft^3/s (1.906 m^3/s), 48,760 acre-ft/yr (60.1 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 fair. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	79	43			0	40	56	56	63	39	74
2	101	66	35			0	49	54	49	67	37	77
3	98	69	40			0	48	48	51	60	39	78
4	100	70	50			0	46	54	52	57	39	78
5	103	71	66			0	55	48	52	61	47	98
6	92	80	59			0	59	53	51	64	50	112
7	87	123	30			0	51	58	51	57	47	108
8	93	110	44			0	55	56	51	55	46	109
9	94	103	50			0	59	45	52	65	48	106
10	92	95	18			0	58	47	50	56	43	110
11	89	77	59			0	58	55	54	56	44	116
12	93	71	31			0	58	48	51	55	44	113
13	94	91	0			10	56	48	52	56	48	119
14	81	81	0			20	56	52	54	49	47	123
15	91	82	0			20	57	52	54	55	49	114
16	129	85	0			19	63	48	55	52	46	129
17	152	87	0			22	63	46	50	47	40	126
18	162	71	0			50	64	48	55	42	40	135
19	133	51	0			61	64	46	53	36	43	115
20	113	77	0			68	65	46	53	35	42	125
21	92	84	0			65	58	47	62	43	46	116
22	85	71	0			65	62	46	82	17	43	92
23	95	83	0			64	65	46	72	30	40	103
24	93	70	0			62	64	46	80	28	38	123
25	90	73	0			48	63	47	71	30	37	113
26	99	17	0			58	60	45	74	33	36	110
27	101	14	0			68	61	45	69	44	37	94
28	88	16	0			50	54	46	65	42	55	110
29	85	17	0		------	50	59	48	71	39	71	64
30	103	48	0		------	51	35	54	66	53	70	88
31	110	------	0		------	52	------	54	------	47	71	------
TOTAL	3,134	2,132	525	0	0	903	1,705	1,532	1,758	1,494	1,422	3,178
MEAN	101	71.1	16.9	0	0	29.1	56.8	49.4	58.6	48.2	45.9	106
MAX	162	123	66	0	0	68	65	58	82	67	71	135
MIN	81	14	0	0	0	0	35	45	49	17	36	64
AC-FT	6,220	4,230	1,040	0	0	1,790	3,380	3,040	3,490	2,960	2,820	6,300

CAL YR 1973 TOTAL 22,729 MEAN 62.3 MAX 188 MIN 0 AC-FT 45,080
WTR YR 1974 TOTAL 17,783 MEAN 48.7 MAX 162 MIN 0 AC-FT 35,270

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, 35 mi (56 km) downstream from Davis Dam, and 36 mi (58 km) upstream from Parker Dam.

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.--7 years, 14.3 ft^3/s (0.405 m^3/s), 10,360 acre-ft/yr (12.8 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 poor. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	59	35	0	14	4.9	6.5	.40	.43			0
2	0	59	39	0	21	3.0	2.2	1.7	.65			0
3	0	59	37	0	18	3.4	5.2	2.1	.64			0
4	0	59	37	0	14	5.7	4.6	2.2	.47			0
5	0	56	35	0	18	1.4	0	2.2	.44			0
6	0	55	37	0	24	0	0	3.6	.47			0
7	0	55	12	0	15	.09	12	0	.20			0
8	0	56	.60	0	12	.73	.65	.76	.47			0
9	0	56	.55	0	12	1.3	0	2.6	0			0
10	0	58	.64	0	11	2.2	0	4.5	0			0
11	0	59	.68	3.1	11	2.3	0	2.8	0			0
12	0	55	1.2	4.6	9.7	2.3	0	1.8	0			0
13	0	57	1.8	3.7	10	3.6	0	4.2	0			0
14	0	56	2.2	3.3	9.1	3.0	19	1.9	0			0
15	49	51	2.2	2.4	9.1	5.0	17	.97	0			0
16	78	45	1.7	2.3	8.6	6.1	0	.91	0			0
17	78	45	1.4	25	9.0	2.6	0	1.3	0			0
18	75	45	2.1	38	9.4	3.8	0	1.5	0			0
19	75	49	2.1	35	8.4	0	0	1.5	0			.10
20	79	46	.78	33	13	0	0	2.7	0			.08
21	78	45	.71	36	7.1	0	19	1.7	0			0
22	77	46	.66	40	6.4	0	9.7	1.8	0			0
23	76	46	.45	34	16	0	0	1.1	0			.08
24	79	46	1.6	29	12	2.8	0	2.2	0			.06
25	75	48	.11	20	4.0	2.4	0	1.3	0			.09
26	66	46	.10	20	1.6	0	.70	1.1	0			.12
27	62	43	.02	21	4.8	0	0	1.3	0			.08
28	62	42	0	17	5.4	0	2.0	.73	0			.12
29	70	40	0	7.1	------	7.9	5.0	.55	0			.14
30	72	37	.20	16	------	8.4	0	.04	0			1.1
31	65	------	0	15	------	14	------	0	------			------
TOTAL	1,216	1,519	253.80	405.5	313.6	86.92	103.55	51.46	3.77	0	0	1.97
MEAN	39.2	50.6	8.19	13.1	11.2	2.80	3.45	1.66	.13	0	0	.066
MAX	79	59	39	40	24	14	19	4.5	.65	0	0	1.1
MIN	0	37	0	0	1.6	0	0	0	0	0	0	0
AC-FT	2,410	3,010	503	804	622	172	205	102	7.5	0	0	3.9

CAL YR 1973 TOTAL 2,988.80 MEAN 8.19 MAX 79 MIN 0 AC-FT 5,930
WTR YR 1974 TOTAL 3,955.57 MEAN 10.8 MAX 79 MIN 0 AC-FT 7,850

09424000. Colorado River near Topock, Ariz.

LOCATION (revised).--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); 40 years (1934-74), 12,970 ft^3/s (367.3 m^3/s), 9,397,000 acre-ft/yr (11,600 hm^3/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 19,100 ft^3/s (541 m^3/s) July 3 (elevation, 455.86 ft or 138.946 m); minimum daily, 1,920 ft^3/s (54.4 m^3/s) Jan. 17; minimum elevation, 448.54 ft (136.715 m), for part of each day Jan. 16-18.
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.
1934-74: 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 excellent. 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.

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

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	9,270	7,010	6,160	5,670	10,200	10,600	13,300	16,100	15,100	15,500	16,300	13,400
2	11,300	6,140	5,570	5,630	10,600	10,600	14,600	15,500	14,000	17,500	15,000	12,400
3	10,600	5,870	5,040	7,410	10,700	10,800	14,500	14,400	13,700	16,900	16,100	13,100
4	10,800	5,890	6,630	6,710	9,340	9,930	14,300	14,800	14,400	15,800	15,600	12,900
5	11,400	5,850	7,710	6,990	10,200	12,500	15,000	14,500	14,300	16,400	14,800	12,700
6	10,800	5,830	7,740	6,370	8,890	13,600	16,500	14,400	14,000	17,600	16,400	12,500
7	10,000	8,720	5,820	3,420	9,470	13,100	15,300	16,400	14,400	16,000	15,900	12,600
8	9,400	8,620	6,340	3,380	9,750	10,700	14,600	16,000	14,100	15,000	15,300	12,500
9	10,200	8,340	6,460	2,840	9,340	11,000	16,600	13,300	14,000	17,200	15,600	12,000
10	10,200	8,130	5,040	2,850	7,490	9,450	16,700	13,500	13,400	15,600	15,000	13,000
11	9,230	7,370	7,560	2,900	5,130	7,440	16,800	14,700	14,500	15,700	14,200	12,700
12	9,530	6,030	9,080	2,430	8,120	11,700	16,900	14,400	14,100	15,500	13,400	12,700
13	10,500	7,740	9,350	3,110	8,590	10,800	16,700	13,800	14,100	16,200	16,200	13,600
14	9,090	7,180	7,960	2,490	9,270	10,700	15,000	14,800	14,900	16,000	16,500	14,300
15	7,610	7,520	8,440	3,060	10,100	10,200	13,800	15,000	15,200	15,600	16,500	13,300
16	10,400	7,570	8,570	2,120	9,170	10,700	16,000	14,800	15,300	17,700	16,300	12,900
17	12,200	7,630	5,940	1,920	8,820	12,500	16,700	13,900	13,900	17,100	15,100	13,100
18	13,100	7,380	7,880	1,950	7,560	11,800	17,100	13,700	15,600	15,900	13,000	14,000
19	12,200	5,450	7,760	2,750	9,860	14,300	17,100	13,900	14,900	14,400	13,000	11,500
20	10,200	6,810	7,860	2,870	8,740	15,700	17,200	13,600	15,200	14,400	14,100	12,600
21	8,690	7,160	7,940	2,940	8,870	15,900	15,500	13,700	15,900	12,700	16,100	12,700
22	7,180	7,010	7,360	4,200	8,720	15,800	14,500	13,600	16,700	7,990	15,600	9,120
23	7,850	7,140	6,830	5,210	10,800	15,900	16,900	13,500	16,100	12,100	15,000	8,890
24	7,740	6,500	5,300	5,200	10,700	14,600	17,300	13,400	14,600	13,800	14,100	12,000
25	7,710	7,830	7,790	5,680	10,200	13,100	16,900	14,100	16,600	14,500	12,700	11,100
26	7,800	4,800	5,180	7,960	11,100	14,600	16,000	13,900	17,100	14,100	12,300	12,100
27	7,830	4,090	6,530	8,280	10,500	15,100	16,200	13,400	16,600	16,500	13,800	9,910
28	8,150	4,000	5,860	9,470	10,800	14,000	15,300	13,800	15,600	15,900	13,400	9,550
29	6,220	3,990	6,100	12,800	------	14,000	14,700	14,100	16,400	14,100	13,400	8,890
30	6,920	5,660	4,950	9,570	------	14,100	16,400	15,100	15,600	17,200	13,500	8,770
31	8,260	------	4,560	10,400	------	12,900	------	15,600	------	17,000	13,600	------
TOTAL	292,380	199,260	211,310	158,580	263,030	388,120	474,400	445,700	450,300	477,890	457,800	360,830
MEAN	9,432	6,642	6,816	5,115	9,394	12,520	15,810	14,380	15,010	15,420	14,770	12,030
MAX	13,100	8,720	9,350	12,800	11,100	15,900	17,300	16,400	17,100	17,700	16,500	14,300
MIN	6,220	3,990	4,560	1,920	5,130	7,440	13,300	13,300	13,400	7,990	12,300	8,770
AC-FT	579,900	395,200	419,100	314,500	521,700	769,800	941,000	884,000	893,200	947,900	908,000	715,700

CAL YR 1973 TOTAL 3,926,720 MEAN 10,760 MAX 17,300 MIN 2,440 AC-FT 7,789,000
WTR YR 1974 TOTAL 4,179,600 MEAN 11,450 MAX 17,700 MIN 1,920 AC-FT 8,290,000

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

MEAN ELEVATION, IN FEET, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.31	51.36	50.99	50.64	52.67	52.88	53.88	54.85	54.56	54.67	54.79	53.71
2	53.02	50.96	50.69	50.62	52.81	52.90	54.34	54.66	54.18	55.32	54.36	53.34
3	52.77	50.83	50.41	51.49	52.82	52.94	54.31	54.25	54.07	55.12	54.73	53.61
4	52.79	50.85	51.21	51.19	52.31	52.64	54.23	54.42	54.31	54.73	54.53	53.53
5	52.98	50.84	51.71	51.34	52.63	53.57	54.47	54.31	54.30	54.94	54.29	53.47
6	52.74	50.82	51.72	51.06	52.11	53.97	54.98	54.27	54.18	55.33	54.81	53.38
7	52.46	52.15	50.79	49.49	52.35	53.79	54.54	54.96	54.31	54.77	54.63	53.40
8	52.22	52.11	51.05	49.48	52.46	52.92	54.35	54.83	54.20	54.45	54.43	53.38
9	52.51	51.99	51.09	49.14	52.29	53.02	55.00	53.88	54.19	55.18	54.54	53.21
10	52.52	51.90	50.36	49.16	51.53	52.40	55.04	53.97	53.97	54.64	54.32	53.55
11	52.16	51.57	51.60	49.22	50.36	51.60	55.07	54.41	54.36	54.64	54.01	53.47
12	52.28	50.93	52.24	48.91	51.80	53.30	55.09	54.27	54.19	54.55	53.74	53.45
13	52.64	51.73	52.32	49.41	51.99	52.96	55.05	54.09	54.19	54.80	54.70	53.76
14	52.09	51.48	51.76	48.99	52.28	52.94	54.43	54.42	54.49	54.72	54.78	54.03
15	51.49	51.63	51.95	49.37	52.62	52.74	54.04	54.50	54.58	54.60	54.76	53.69
16	52.61	51.66	51.98	48.71	52.25	52.93	54.81	54.45	54.61	55.28	54.70	53.54
17	53.29	51.68	50.79	48.56	52.11	53.57	55.05	54.12	54.16	55.06	54.30	53.61
18	53.64	51.57	51.69	48.58	51.60	53.33	55.16	54.06	54.70	54.65	53.55	53.94
19	53.26	50.63	51.64	49.19	52.53	54.22	55.16	54.11	54.48	54.16	53.55	53.00
20	52.60	51.31	51.68	49.27	52.10	54.70	55.22	54.00	54.59	54.16	53.96	53.40
21	52.00	51.47	51.72	49.29	52.17	54.77	54.64	54.03	54.83	53.55	54.63	53.45
22	51.35	51.40	51.47	50.03	52.11	54.74	54.31	54.03	55.09	51.74	54.48	52.12
23	51.66	51.46	51.22	50.56	52.94	54.76	55.11	54.00	54.89	53.33	54.27	52.03
24	51.62	51.16	50.44	50.52	52.91	54.32	55.23	53.94	54.39	53.96	53.95	53.19
25	51.61	51.77	51.65	50.75	52.72	53.79	55.10	54.21	55.06	54.19	53.47	52.88
26	51.66	50.28	50.38	51.80	53.06	54.32	54.80	54.13	55.22	54.07	53.30	53.23
27	51.67	49.90	51.07	51.92	52.85	54.51	54.87	53.93	55.05	54.89	53.85	52.41
28	51.83	49.85	50.74	52.39	52.96	54.11	54.54	54.11	54.72	54.66	53.69	52.30
29	50.95	49.83	50.86	53.60	------	54.11	54.36	54.23	54.98	54.04	53.70	51.99
30	51.30	50.73	50.26	52.39	------	54.14	54.95	54.57	54.69	55.10	53.75	51.98
31	51.91	------	50.06	52.71	------	53.72	------	54.72	------	55.05	53.79	------
MEAN	52.26	51.20	51.21	50.32	52.33	53.57	54.74	54.28	54.52	54.53	54.21	53.20
MAX	53.64	52.15	52.32	53.60	53.06	54.77	55.23	54.96	55.22	55.33	54.81	54.03
MIN	50.95	49.83	50.06	48.56	50.36	51.60	53.88	53.88	53.97	51.74	53.30	51.98

CAL YR 1973 MEAN 52.78 MAX 55.05 MIN 48.54
WTR YR 1974 MEAN 53.03 MAX 55.33 MIN 48.56

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

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), revised, 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.--35 years, 848 ft^3/s (24.02 m^3/s), 614,400 acre-ft/yr (758 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 1973 TO SEPTEMBER 1974

Month	Diversions			
	Maximum	Minimum	Mean	Total
October	3,682	3,406	3,467	107,481
November	3,666	3,333	3,475	104,236
December	3,664	2,537	3,166	98,134
CAL YR 1973	3,740	1,592	3,069	1,120,140
January	3,581	2,635	3,227	100,044
February	2,909	1,113	1,620	45,372
March	3,635	2,956	3,361	104,205
April	3,673	3,357	3,479	104,377
May	3,872	2,446	3,499	108,475
June	3,600	3,430	3,501	105,016
July	3,619	3,355	3,468	107,514
August	3,655	2,622	3,449	106,908
September	3,631	3,018	3,429	102,866
WTR YR 1974	3,872	1,113	3,273	1,194,628

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. Supplementary gage for high flows at site 110 ft (34 m) downstream at datum 6.23 ft (1.899 m) lower.

AVERAGE DISCHARGE.--10 years, 4.09 ft^3/s (0.116 m^3/s), 2,960 acre-ft/yr (3.65 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,450 ft^3/s (183 m^3/s) July 21 (gage height, 5.64 ft or 1.719 m), 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 and 1974.

REMARKS.--Records poor.

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	.50	.30	1.1	1.2	1.4	.70	.20	.10	.40	.10	.90	.30
2	.50	.30	1.1	1.2	1.4	.70	.20	.10	.40	.10	.90	.30
3	.50	.30	1.1	1.2	1.4	.70	.20	.10	.40	.10	.90	300
4	.50	.30	1.2	1.2	1.4	.70	.20	.10	.40	.10	.80	300
5	.50	.30	1.2	1.2	1.4	.70	.20	.10	.30	.10	.70	10
6	.50	.30	1.2	1.2	1.4	.70	.20	.10	.30	.10	.60	2.0
7	.50	.30	1.2	1.2	1.3	.70	.20	.10	.30	.10	.50	1.0
8	.50	.30	1.2	1.2	1.3	.70	.20	.20	.30	.10	.40	.80
9	.50	.30	1.2	1.2	1.2	.70	.20	.20	.20	.10	.40	.80
10	.50	.40	1.2	1.2	1.2	.60	.20	.20	.20	.20	.40	.80
11	.40	.40	1.2	1.2	1.2	.60	.20	.20	.20	.30	.30	.80
12	.40	.40	1.2	1.2	1.2	.60	.20	.20	.20	.30	.30	.80
13	.40	.40	1.2	1.2	1.1	.60	.20	.20	.20	.30	.30	.60
14	.40	.60	1.2	1.3	1.1	.60	.20	.20	.20	13	.30	.60
15	.40	.60	1.2	1.3	1.1	.50	.10	.20	.20	.30	.30	.60
16	.40	.80	1.2	1.3	1.1	.50	.10	.20	.10	.30	.30	.60
17	.40	.80	1.2	1.3	1.0	.50	.10	.30	.10	20	.30	.60
18	.40	1.0	1.2	1.3	1.0	.50	.10	.30	.10	.30	.30	.60
19	.40	1.0	1.2	1.3	1.0	.50	.10	.30	.10	.30	.30	.60
20	.40	.90	1.2	1.3	1.0	.40	.10	.30	.10	.30	.30	.60
21	.40	.90	1.2	1.3	.90	.40	.10	.30	.10	400	.30	.50
22	.40	.90	1.2	1.3	.90	.40	.10	.30	.10	20	.30	.50
23	.40	.90	1.2	1.3	.90	.40	.10	.30	.10	2.0	.30	.50
24	.40	.90	1.2	1.3	.90	.40	.10	.30	.20	1.0	.30	.50
25	.40	.90	1.2	1.4	.80	.30	.10	.30	.20	1.0	.30	.50
26	.30	.90	1.2	1.4	.80	.30	.10	.40	.20	1.0	.30	.50
27	.30	1.0	1.2	1.4	.80	.30	.10	.40	.10	1.0	.30	.50
28	.30	1.0	1.2	1.4	.80	.30	.10	.40	.10	1.0	.30	.50
29	.30	1.0	1.2	1.4	------	.30	.10	.40	.10	1.0	.30	.50
30	.30	1.1	1.2	1.4	------	.20	.10	.40	.10	1.0	.30	.50
31	.30	------	1.2	1.4	------	.20	------	.40	------	.90	.30	------
TOTAL	12.80	19.50	36.9	39.7	31.00	15.70	4.40	7.60	6.00	466.40	12.80	627.40
MEAN	.41	.65	1.19	1.28	1.11	.51	.15	.25	.20	15.0	.41	20.9
MAX	.50	1.1	1.2	1.4	1.4	.70	.20	.40	.40	400	.90	300
MIN	.30	.30	1.1	1.2	.80	.20	.10	.10	.10	.10	.30	.30
AC-FT	25	39	73	79	61	31	8.7	15	12	925	25	1,240

CAL YR 1973 TOTAL 2,204.90 MEAN 6.04 MAX 174 MIN .20 AC-FT 4,370
WTR YR 1974 TOTAL 1,280.20 MEAN 3.51 MAX 400 MIN .10 AC-FT 2,540

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-21*	(a)	†5.64	6,450	9- 4*	(a)	----	‡3,500
9- 3	‡0300	†4.80	3,920				

* Probable date.
† From high-water mark in gage well.
‡ About.
a Time unknown.
NOTE.--No gage-height record July 17 to Aug. 1.

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 3.00 ft (0.914 m) higher. Oct. 1, 1970, to Oct. 10, 1973, at datum 2.00 ft (0.610 m) higher. Supplementary water-stage recorder for low flows at site 0.8 mi (1.3 km) downstream at different datum.

AVERAGE DISCHARGE.--8 years, 46.6 ft^3/s (1.32 m^3/s), 33,760 acre-ft/yr (41.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,000 ft^3/s (85.0 m^3/s) Sept. 24 (gage height, 5.35 ft or 1.631 m, from high-water mark in gage well); minimum daily, 1.3 ft^3/s (0.037 m^3/s) July 13.
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 August and September, 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	3.9	3.7	4.9	4.6	4.1	4.1	3.3	3.1	2.0	30	2.3
2	4.4	3.5	3.7	4.9	4.6	4.1	3.7	3.3	2.9	2.1	55	2.3
3	4.1	3.1	3.7	4.9	4.6	4.1	3.5	3.1	2.7	2.3	210	2.3
4	4.1	3.1	3.9	4.9	4.6	4.1	3.5	2.9	3.3	2.3	6.0	3.3
5	4.4	3.1	4.1	4.9	4.6	4.4	3.7	2.9	3.3	2.1	45	50
6	4.1	3.1	3.9	4.6	4.6	4.9	3.7	2.9	3.5	1.8	6.0	5.0
7	4.1	3.1	3.9	4.6	4.4	5.4	3.7	2.9	3.3	2.0	4.0	3.0
8	3.9	2.9	3.9	5.4	4.1	5.4	3.7	2.7	3.3	2.3	3.0	3.0
9	4.1	2.9	3.9	4.6	4.4	4.9	3.7	2.9	3.1	2.0	3.0	3.0
10	4.1	2.9	3.9	4.1	4.4	4.4	3.9	3.1	3.1	1.5	3.0	2.5
11	4.1	3.3	4.1	4.1	4.6	4.4	3.9	2.9	3.1	1.5	3.0	2.5
12	4.1	3.3	4.4	4.1	4.1	4.6	3.7	3.1	3.1	1.4	2.5	2.5
13	4.4	3.5	4.4	4.1	4.1	4.6	3.5	2.5	2.9	1.3	2.5	2.5
14	4.1	3.7	4.1	4.1	4.1	4.9	3.5	2.5	2.7	1.5	2.5	2.5
15	4.1	3.7	4.1	4.4	3.7	4.6	3.7	2.5	2.5	1.8	2.5	25
16	3.9	3.7	4.1	4.4	3.5	4.4	3.9	2.1	2.5	2.7	2.5	4.0
17	4.1	3.7	4.4	4.4	3.5	4.1	3.9	2.0	2.5	2.5	2.5	3.0
18	3.9	3.9	4.4	4.4	3.9	4.4	3.7	2.0	2.5	2.5	2.5	3.0
19	3.9	3.9	4.1	4.4	4.1	4.6	3.7	2.3	2.7	3.1	2.5	3.0
20	4.4	3.7	3.9	4.6	4.6	4.9	3.7	2.5	2.7	2.3	2.5	3.0
21	4.1	3.7	3.9	4.9	4.6	5.1	3.3	2.7	2.5	1.7	2.5	3.0
22	4.1	3.7	3.9	4.9	4.9	5.4	3.3	2.5	2.1	1.5	2.5	3.0
23	3.7	3.5	4.1	4.9	4.9	5.9	3.3	2.7	2.1	1.5	2.5	3.0
24	3.7	3.5	4.4	4.9	4.9	5.9	3.5	3.5	2.1	1.5	2.5	120
25	3.9	3.9	4.4	4.9	4.9	5.7	3.7	3.3	2.1	1.5	2.5	15
26	4.4	3.7	4.4	4.6	4.9	5.4	3.9	3.3	1.7	1.5	2.5	4.0
27	4.1	3.5	4.4	4.9	4.4	4.9	3.9	3.1	1.4	1.5	2.5	4.0
28	3.7	3.5	4.4	4.9	4.1	4.9	3.9	3.5	1.4	1.5	2.5	3.5
29	3.3	3.5	4.6	4.9	------	5.1	3.7	3.3	1.4	1.5	2.5	3.5
30	3.3	3.5	4.9	4.6	------	4.9	3.5	3.3	1.5	1.5	2.3	3.5
31	3.5	------	4.9	4.4	------	4.6	------	3.3	------	1.5	2.1	------
TOTAL	124.6	104.0	128.9	143.6	122.7	149.1	110.4	88.9	77.1	57.7	417.4	290.2
MEAN	4.02	3.47	4.16	4.63	4.38	4.81	3.68	2.87	2.57	1.86	13.5	9.67
MAX	4.5	3.9	4.9	5.4	4.9	5.9	4.1	3.5	3.5	3.1	210	120
MIN	3.3	2.9	3.7	4.1	3.5	4.1	3.3	2.0	1.4	1.3	2.1	2.3
AC-FT	247	206	256	285	243	296	219	176	153	114	828	576

CAL YR 1973 TOTAL 49,608.9 MEAN 136 MAX 3,440 MIN 2.9 AC-FT 98,400
WTR YR 1974 TOTAL 1,814.6 MEAN 4.97 MAX 210 MIN 1.3 AC-FT 3,600

PEAK DISCHARGE (BASE, 1,000 CFS).--Sept. 24 (1900) 3,000 cfs (a 5.35 ft).

a From high-water mark in gage well (gage height at supplementary gage, 4.95 ft).
NOTE.--Discharge computed from supplementary gage for entire year.

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.--April to September 1973: Maximum discharge during period, 785 ft^3/s (22.2 m^3/s) Aug. 13 (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, 1.9 ft^3/s (0.054 m^3/s) Sept. 29, 30.

Water year 1974: Maximum discharge, 615 ft^3/s (17.4 m^3/s) Aug. 2 (gage height, 4.07 ft or 1.241 m), 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, 1.2 ft^3/s (0.034 m^3/s) Sept. 28-30.

REMARKS.--Records poor. No known diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							-	3.8	3.2	2.5	2.5	2.4
2							-	3.8	3.2	2.5	2.5	2.4
3							-	3.8	3.0	2.5	2.5	3.8
4							-	3.8	3.0	2.5	2.5	5.3
5							-	4.4	3.0	2.5	2.5	4.0
							-					
6							-	4.4	3.0	2.5	2.5	4.0
7							-	4.7	3.0	2.5	2.5	2.2
8							-	4.7	3.0	2.5	2.5	2.2
9							-	4.4	3.0	2.5	2.5	2.2
10							-	4.1	3.0	2.5	2.5	2.2
							-					
11							-	3.5	2.7	2.5	2.5	2.2
12							4.5	3.2	2.7	2.5	2.5	2.2
13							4.3	3.2	2.7	2.5	45	2.1
14							4.9	3.2	2.7	2.5	3.5	2.1
15							5.0	3.2	2.7	2.5	3.0	2.1
16							5.3	3.2	2.7	2.5	6.0	2.1
17							5.3	3.2	2.7	2.5	3.0	2.1
18							6.4	3.2	2.7	2.5	2.5	2.1
19							5.5	3.2	2.7	2.5	2.5	2.0
20							5.0	3.2	2.5	2.6	2.5	2.0
21							5.0	3.2	2.5	2.6	2.5	2.0
22							4.5	3.2	2.5	2.6	2.5	2.0
23							4.5	3.2	2.5	2.6	2.5	2.0
24							4.5	3.2	2.5	2.6	2.5	2.0
25							4.0	3.2	2.5	2.6	2.5	2.0
26							4.0	3.2	2.4	2.6	2.5	2.0
27							3.8	3.2	2.4	2.6	2.5	2.0
28							3.8	3.2	2.4	2.6	2.5	2.0
29					------		3.8	3.2	2.4	2.6	5.0	1.9
30					------		3.8	3.2	2.4	2.6	2.4	1.9
31		------			------		------	3.2	------	2.6	2.4	------
TOTAL							-	109.4	81.7	78.7	127.8	71.5
MEAN							-	3.53	2.72	2.54	4.12	2.38
MAX							-	4.7	3.2	2.6	45	5.3
MIN							-	3.2	2.4	2.5	2.4	1.9
AC-FT							-	217	162	156	253	142

PEAK DISCHARGE (BASE, 200 CFS).--Aug. 13 (1630) 785 cfs (4.37 ft, from profile past gage).

09424470. Kirkland Creek near Kirkland, Ariz.--Continued

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	1.9	2.5	2.9	2.8	3.3	2.9	2.6	2.7	2.6	1.9	2.2	2.0
2	1.9	2.5	2.9	2.8	3.3	2.9	2.6	2.7	2.5	1.9	26	2.0
3	1.9	2.5	2.9	2.8	3.4	2.9	2.6	2.7	2.5	1.9	5.4	8.6
4	1.9	2.5	2.9	2.8	3.4	2.8	2.6	2.7	2.5	1.9	8.6	9.0
5	1.9	2.5	2.9	2.8	3.4	2.8	2.6	2.7	2.5	1.9	20	2.2
6	2.0	2.6	2.9	2.8	3.4	2.8	2.6	2.7	2.5	1.9	5.0	2.2
7	2.0	2.6	2.9	2.8	3.4	2.8	2.6	2.7	2.5	1.9	3.0	2.2
8	2.0	2.6	2.9	2.9	3.3	2.8	2.6	2.7	2.4	1.9	2.0	2.2
9	2.0	2.6	2.9	2.9	3.3	2.8	2.6	2.7	2.4	1.9	1.8	2.2
10	2.0	2.6	2.9	2.9	3.3	2.8	2.6	2.7	2.4	1.9	1.8	2.2
11	2.1	2.7	2.9	2.9	3.2	2.8	2.6	2.6	2.3	1.9	1.8	2.2
12	2.1	2.7	2.9	2.9	3.2	2.8	2.6	2.6	2.3	1.9	1.8	2.2
13	2.1	2.7	2.9	3.0	3.2	2.8	2.6	2.6	2.3	1.9	1.8	2.2
14	2.1	2.7	2.9	3.0	3.1	2.7	2.6	2.6	2.3	1.9	1.8	2.0
15	2.2	2.7	2.9	3.0	3.1	2.7	2.6	2.6	2.2	1.9	1.8	2.0
16	2.2	2.7	2.9	3.0	3.1	2.7	2.6	2.6	2.2	1.8	1.8	2.0
17	2.2	2.7	2.9	3.0	3.1	2.7	2.6	2.6	2.2	1.8	1.8	1.8
18	2.2	2.7	2.9	3.1	3.1	2.7	2.6	2.6	2.2	1.8	1.8	1.8
19	2.2	2.7	2.9	3.1	3.1	2.7	2.6	2.6	2.1	4.1	1.8	1.8
20	2.3	2.7	2.9	3.1	3.1	2.7	2.6	2.6	2.1	24	1.9	1.6
21	2.3	2.7	2.9	3.1	3.1	2.7	2.7	2.6	2.1	2.0	1.9	1.6
22	2.3	2.8	2.8	3.1	3.0	2.7	2.7	2.6	2.1	1.9	3.4	1.6
23	2.4	2.8	2.8	3.1	3.0	2.7	2.7	2.6	2.1	1.8	2.0	1.4
24	2.4	2.8	2.8	3.1	3.0	2.6	2.7	2.6	2.0	1.8	2.0	1.4
25	2.4	2.8	2.8	3.2	3.0	2.6	2.7	2.6	2.0	1.8	2.0	1.4
26	2.4	2.8	2.8	3.2	2.9	2.6	2.7	2.6	2.0	1.8	2.0	1.4
27	2.5	2.8	2.8	3.2	2.9	2.6	2.7	2.6	2.0	1.8	2.0	1.4
28	2.5	2.8	2.8	3.2	2.9	2.6	2.7	2.6	1.9	8.6	2.0	1.2
29	2.5	2.8	2.8	3.2	------	2.6	2.7	2.6	1.9	2.0	2.0	1.2
30	2.5	2.8	2.8	3.2	------	2.6	2.7	2.6	1.9	1.8	2.0	1.2
31	2.5	------	2.8	3.3	------	2.6	------	2.6	------	1.8	2.0	------
TOTAL	67.9	80.4	88.9	93.3	88.6	84.5	79.0	81.6	67.0	89.1	117.2	68.2
MEAN	2.19	2.68	2.87	3.01	3.16	2.73	2.63	2.63	2.23	2.87	3.78	2.27
MAX	2.5	2.8	2.9	3.3	3.4	2.9	2.7	2.7	2.6	24	26	9.0
MIN	1.9	2.5	2.8	2.8	2.9	2.6	2.6	2.6	1.9	1.8	1.8	1.2
AC-FT	135	159	176	185	176	168	157	162	133	177	232	135

WTR YR 1974 TOTAL 1,005.7 MEAN 2.76 MAX 26 MIN 1.2 AC-FT 1,990

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	0130	3.82	490	8- 5	1300	3.81	485
8- 2	1845	4.07	615				

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.--8 years, 41.9 ft^3/s (1.187 m^3/s), 30,360 acre-ft/yr (37.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, about 600 ft^3/s (17 m^3/s) Aug. 5 (gage height, 3.3 ft or 1.01 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											0	
2											0	
3											50	
4											0	
5											20	
6											100	
7											28	
8											6.0	
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	0	0	0	0	0	0	0	0	0	0	204.0	0
MEAN	0	0	0	0	0	0	0	0	0	0	6.58	0
MAX	0	0	0	0	0	0	0	0	0	0	100	0
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	405	0

CAL YR 1973 TOTAL 48,735.03 MEAN 134 MAX 3,100 MIN 0 AC-FT 96,670
WTR YR 1974 TOTAL 204.00 MEAN .56 MAX 100 MIN 0 AC-FT 405

PEAK DISCHARGE (BASE, 200 CFS).--Aug. 5 (time unknown) about 600 cfs (3.3 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).--35 years, 86.4 ft^3/s (2.447 m^3/s), 62,600 acre-ft/yr (77.2 hm^3/yr); median of yearly mean discharges, 43 ft^3/s (1.22 m^3/s), 31,200 acre-ft/yr (38 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 13 ft^3/s (0.37 m^3/s) Mar. 11-13, 15-17; 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).

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 10,150 acre-ft (12.5 hm^3) Jan 11.

REVISIONS (WATER YEARS).--WSP 1213: 1939(M), 1941(P).

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	7.0	3.2	3.6	5.0	7.7	8.4	10			0	0	0
2	6.7	3.2	3.8	4.7	7.7	8.8	10			0	0	0
3	6.7	3.2	3.8	4.7	7.7	8.4	10			0	0	0
4	6.7	3.2	4.0	4.7	7.7	8.4	10			0	0	0
5	5.7	3.2	4.0	4.7	8.0	8.4	10			0	0	0
6	5.7	3.2	4.0	5.0	8.0	9.6	10			0	1.2	0
7	5.7	1.8	4.0	5.4	8.0	10	10			0	6.0	.96
8	5.7	.10	4.3	6.0	7.7	10	10			0	6.7	3.2
9	5.7	.50	4.3	6.4	7.7	11	8.4			0	6.7	3.6
10	6.0	.50	4.3	6.4	7.7	12	8.4			0	6.7	4.0
11	6.0	.50	4.3	6.4	7.7	13	8.4			0	6.7	4.3
12	6.0	.50	4.3	6.7	7.7	13	8.4			0	7.3	5.0
13	6.4	.50	4.3	6.7	7.7	13	8.4			0	7.3	0
14	6.4	.50	5.0	6.7	7.7	12	8.4			0	7.3	0
15	6.4	.60	4.5	6.7	7.7	13	3.6			0	7.3	0
16	6.4	.60	4.5	6.7	7.3	13	.20			0	7.3	0
17	6.4	.60	4.7	6.7	7.3	13	0			0	7.3	0
18	6.4	.70	4.7	6.7	7.7	12	0			0	7.3	0
19	4.7	.70	4.7	7.0	7.7	8.4	0			0	3.4	.14
20	3.2	.80	4.5	7.0	7.3	8.4	0			0	0	1.9
21	3.2	2.9	4.5	7.0	7.3	8.4	0			0	0	0
22	3.2	4.0	4.7	7.0	7.3	8.4	0			0	0	0
23	3.2	4.0	5.0	7.0	7.7	8.4	0			.40	0	0
24	3.2	3.6	5.0	7.0	7.7	8.4	0			4.7	0	0
25	3.2	3.8	5.0	7.0	7.7	8.4	.41			4.5	0	0
26	3.2	3.8	4.7	7.3	7.7	8.8	0			1.2	0	0
27	3.2	3.2	4.7	7.3	8.0	8.8	0			0	0	0
28	3.2	3.4	4.7	7.3	8.4	9.2	0			0	0	0
29	3.2	3.6	5.0	7.3	------	9.6	0			0	0	0
30	3.2	3.6	5.0	7.3	------	10	0			0	0	4.3
31	3.2	------	5.0	7.3	------	10	------		------	0	0	------
TOTAL	155.1	64.00	136.9	199.1	215.5	312.2	134.61	0	0	10.80	88.5	27.40
MEAN	5.00	2.13	4.48	6.42	7.70	10.1	4.49	0	0	.35	2.85	.91
MAX	7.0	4.0	5.0	7.3	8.4	13	10	0	0	4.7	7.3	5.0
MIN	3.2	.10	3.6	4.7	7.3	8.4	0	0	0	0	0	0
AC-FT	308	127	276	395	427	619	267	0	0	21	176	54
(†)	9,770	9,950	10,030	10,100	9,950	9,960	9,920	9,890	9,710	9,540	9,600	9,560

CAL YR 1973 TOTAL 66,323.80 MEAN 182 MAX 2,150 MIN .10 AC-FT 131,600 ‡ -570
WTR YR 1974 TOTAL 1,346.11 MEAN 3.69 MAX 13 MIN 0 AC-FT 2,670 ‡ -550

† Monthend contents, in acre-feet, in Alamo Lake, furnished by Corps of Engineers.
‡ Change in contents, in acre-feet.

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), revised, downstream from Hoover Dam.

DRAINAGE AREA.--178,800 mi² (463,100 km²), 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, 622,000 acre-ft (767 hm³) May 9 (elevation, 450.67 ft or 137.364 m); minimum, 520,900 acre-ft (642 hm³) Jan. 28 (elevation, 445.33 ft or 135.736 m).
Period of record: Maximum contents, 693,000 acre-ft (854 hm³), 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 hm³) 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 hm³) 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 hm³) 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.

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	557,300	555,400	556,900	543,400	536,800	550,100	565,000	610,200	611,800	604,400	584,400	574,700
2	557,100	554,600	557,100	539,300	538,400	549,500	566,700	612,400	610,200	605,600	581,500	573,000
3	557,300	553,500	549,700	541,100	540,500	547,600	569,000	610,600	608,800	611,200	581,100	573,000
4	558,800	552,100	547,900	544,100	541,100	542,700	570,900	609,800	609,000	612,200	582,300	574,300
5	560,300	547,000	549,900	549,000	546,700	544,300	569,600	609,400	610,800	609,600	580,400	575,800
6	560,900	542,700	554,400	555,800	548,600	549,900	570,300	607,400	611,200	609,200	583,400	574,300
7	558,600	545,900	551,700	557,300	552,400	557,100	569,600	611,600	611,000	606,200	585,700	573,200
8	555,400	549,400	550,600	560,000	555,200	559,000	565,800	617,000	611,400	603,200	585,700	571,300
9	555,000	551,900	550,100	560,200	557,300	564,600	568,000	617,000	611,200	604,400	586,800	568,200
10	556,700	553,900	544,300	560,300	556,000	565,600	569,700	613,400	608,800	604,000	585,900	567,500
11	556,700	553,900	542,700	560,900	548,800	557,500	573,900	612,800	609,200	604,600	581,900	566,700
12	555,400	549,700	546,100	560,200	547,000	559,400	577,700	611,000	610,400	602,400	575,400	567,100
13	555,800	550,100	551,500	560,900	547,400	562,000	577,700	608,400	611,400	599,800	574,700	565,900
14	553,000	550,600	551,000	560,300	549,400	564,400	577,700	609,400	611,400	597,800	576,200	567,300
15	546,700	552,400	551,700	560,900	551,300	559,200	574,300	611,200	611,000	594,200	578,900	568,600
16	546,300	551,300	551,700	559,600	550,600	554,400	576,200	616,000	611,400	598,400	582,100	567,600
17	550,300	549,400	547,600	555,000	550,600	553,700	581,100	614,000	609,200	602,200	583,600	570,700
18	559,400	548,500	548,100	551,000	545,800	548,500	588,200	611,200	609,400	606,200	579,600	574,300
19	566,300	545,400	549,900	547,700	547,400	547,900	588,600	610,200	608,400	611,200	574,500	573,900
20	567,600	544,300	553,700	543,600	547,600	550,100	590,800	609,000	609,400	611,400	573,200	574,100
21	566,500	547,000	559,200	541,600	549,400	557,100	591,600	609,000	611,000	607,800	575,600	576,400
22	563,300	549,900	566,700	537,700	547,900	558,400	588,900	610,000	614,200	596,400	579,600	570,500
23	562,900	552,100	565,000	536,600	547,900	560,200	591,200	613,400	614,200	594,200	580,000	564,600
24	561,800	556,500	559,000	534,100	546,800	561,500	595,800	612,000	610,000	593,800	578,100	566,300
25	562,900	561,800	558,400	527,800	544,100	558,800	601,200	611,600	610,000	597,400	574,500	568,600
26	561,600	562,000	554,800	526,100	546,100	559,400	601,800	611,800	613,800	593,000	570,500	572,800
27	560,000	560,300	554,600	521,500	548,500	565,400	603,400	608,800	616,400	591,800	570,500	573,400
28	559,600	556,900	553,500	521,500	551,200	571,600	603,800	606,000	613,400	589,500	571,400	572,000
29	556,000	553,700	555,400	530,500	------	572,400	602,200	605,400	611,400	582,800	574,100	567,600
30	552,200	554,300	550,400	531,900	------	572,600	606,200	608,200	608,400	582,700	575,800	562,500
31	553,900	------	544,500	536,200	------	569,200	------	609,800	------	584,200	574,900	------
MAX	567,600	562,000	566,700	560,900	557,300	572,600	606,200	617,000	616,400	612,200	586,800	576,400
MIN	546,300	542,700	542,700	521,500	536,800	542,700	565,000	605,400	608,400	582,700	570,500	562,500
(‡)	-8,100	+400	-9,800	-8,300	+15,000	+18,000	+37,000	+3,600	-1,400	-24,200	-9,300	-12,400

CAL YR 1973 MAX 617,400 MIN 531,700 ‡ +4,100
WTR YR 1974 MAX 617,000 MIN 521,500 ‡ +500

‡ Change in contents, in acre-feet.

09427500. Lake Havasu near Parker Dam, Ariz.-Calif.--Continued

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	447.34	447.24	447.32	446.58	446.21	464.41	447.75	450.08	450.16	449.79	448.77	448.26
2	447.33	447.20	447.33	446.35	446.30	446.92	447.84	450.19	450.08	449.85	448.62	448.17
3	447.34	447.14	446.93	446.45	446.42	446.81	447.96	450.10	450.01	450.13	448.60	448.17
4	447.42	447.06	446.83	446.62	446.45	446.54	448.06	450.06	450.02	450.18	448.66	448.24
5	447.50	446.78	446.94	446.89	446.76	446.63	447.99	450.04	450.11	450.05	448.56	448.32
6	447.53	446.54	447.19	447.26	446.87	446.94	448.03	449.94	450.13	450.03	448.72	448.24
7	447.41	446.72	447.04	447.34	447.08	447.33	447.99	450.15	450.12	449.88	448.84	448.18
8	447.24	446.91	446.98	447.48	447.23	447.43	447.79	450.42	450.14	449.73	448.84	448.08
9	447.22	447.05	446.95	447.49	447.34	447.73	447.91	450.42	450.13	449.79	448.90	447.92
10	447.31	447.16	446.63	447.50	447.27	447.78	448.00	450.24	450.01	449.77	448.85	447.88
11	447.31	447.16	446.54	447.53	446.88	447.35	448.22	450.21	450.03	449.80	448.64	447.84
12	447.24	446.93	446.73	447.49	446.78	447.45	448.42	450.12	450.09	449.69	448.30	447.86
13	447.26	446.95	447.03	447.53	446.80	447.59	448.42	449.99	450.14	449.56	448.26	447.80
14	447.11	446.98	447.00	447.50	446.91	447.72	448.42	450.04	450.14	449.46	448.34	447.87
15	446.76	447.08	447.04	447.53	447.02	447.44	448.24	450.13	450.12	449.28	448.48	447.94
16	446.74	447.02	447.04	447.46	446.98	447.19	448.34	450.37	450.14	449.49	448.65	447.89
17	446.96	446.91	446.81	447.22	446.98	447.15	448.60	450.27	450.03	449.68	448.73	448.05
18	447.45	446.86	446.84	447.00	446.71	446.86	448.97	450.13	450.04	449.88	448.52	448.24
19	447.82	446.69	446.94	446.82	446.80	446.83	448.99	450.08	449.99	450.13	448.25	448.22
20	447.89	446.63	447.15	446.59	446.81	446.95	449.11	450.02	450.04	450.14	448.18	448.23
21	447.83	446.78	447.44	446.48	446.91	447.33	449.15	450.02	450.12	449.96	448.31	448.35
22	447.66	446.94	447.84	446.26	446.83	447.40	449.01	450.07	450.28	449.39	448.52	448.04
23	447.64	447.06	447.75	446.20	446.83	447.49	449.13	450.24	450.28	449.28	448.54	447.73
24	447.58	447.30	447.43	446.06	446.77	447.56	449.36	450.17	450.07	449.26	448.44	447.82
25	447.64	447.58	447.40	445.71	446.62	447.42	449.63	450.15	450.07	449.44	448.25	447.94
26	447.57	447.59	447.21	445.62	446.73	447.45	449.66	450.16	450.26	449.22	448.04	448.16
27	447.48	447.50	447.20	445.36	446.86	447.77	449.74	450.01	450.39	449.16	448.04	448.19
28	447.46	447.32	447.14	445.36	447.01	448.10	449.76	449.87	450.24	449.04	448.09	448.12
29	447.27	447.15	447.24	445.86	------	448.14	449.68	449.84	450.14	448.69	448.13	447.89
30	447.07	447.18	446.97	445.94	------	448.15	449.88	449.98	449.99	448.68	448.32	447.62
31	447.16	------	446.64	446.18	------	447.97	------	450.06	------	448.76	448.27	------
MEAN	447.37	447.05	447.08	446.70	446.83	447.93	448.67	450.12	450.12	449.59	448.47	448.04
MAX	447.89	447.59	447.84	447.53	447.34	464.41	449.88	450.42	450.39	450.18	448.90	448.35
MIN	446.74	446.54	446.54	445.36	446.21	446.54	447.75	449.84	449.99	448.68	448.04	447.62

CAL YR 1973.....MAX 450.44 MIN 445.93
WTR YR 1974.....MAX 464.41 MIN 445.36

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.--40 years, 12,190 ft^3/s (345.2 m^3/s), 8,832,000 acre-ft/yr (10,900 hm^3/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 19,200 ft^3/s (544 m^3/s) Apr. 18 (gage height, 71.88 ft or 21.909 m); maximum gage height, 72.18 ft (22.000 m) Aug. 17; minimum daily discharge, 1,220 ft^3/s (34.6 m^3/s) Jan. 16.
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 below 2,000 ft^3/s (57 m^3/s), 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 in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1313: 1941(M).

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	9,950	4,660	3,610	5,790	9,170	10,200	13,500	13,100	12,700	15,600	14,800	12,200
2	9,920	4,850	4,030	6,120	9,090	10,400	13,200	12,700	13,200	15,500	15,300	11,800
3	9,270	4,980	6,390	5,110	8,910	11,400	12,600	13,500	12,300	13,600	15,200	11,700
4	8,490	5,240	6,240	4,390	8,420	11,300	12,700	13,300	12,100	13,600	14,300	9,910
5	8,690	6,850	5,020	3,700	7,780	11,100	14,800	13,400	11,700	16,100	14,100	10,400
6	8,950	6,960	4,100	2,030	7,140	9,920	15,200	13,400	11,500	16,100	13,300	11,500
7	9,340	5,830	5,720	2,120	6,920	8,890	15,500	12,500	11,900	15,600	13,200	11,800
8	9,310	5,400	5,360	1,660	7,920	10,300	15,500	11,900	12,200	15,200	13,300	11,900
9	8,660	5,600	5,200	1,380	7,730	7,780	15,400	11,100	12,000	14,800	13,500	11,800
10	7,340	5,910	6,540	1,550	7,550	8,570	15,000	13,300	12,200	14,200	13,900	11,500
11	7,310	6,100	6,680	1,510	7,890	10,300	14,500	13,000	12,100	14,000	14,700	11,400
12	8,120	6,420	5,750	1,420	8,040	9,780	15,000	12,900	11,600	14,900	14,400	11,000
13	8,570	6,220	5,330	1,320	8,020	8,860	15,700	12,700	11,000	15,300	14,700	12,000
14	8,810	5,600	6,780	1,290	7,700	8,840	15,100	12,300	13,000	15,800	14,200	12,300
15	8,810	5,410	6,670	1,270	8,720	11,900	14,700	11,600	13,300	15,500	13,700	9,190
16	8,830	6,630	7,150	1,220	8,550	11,700	14,300	10,900	13,600	14,500	13,500	11,700
17	8,310	6,910	6,410	2,770	8,700	12,200	13,800	12,500	13,300	14,000	13,200	10,600
18	7,210	6,760	6,130	1,900	9,080	13,500	13,300	12,500	13,600	12,300	13,400	10,600
19	7,600	6,040	5,320	2,920	9,010	13,700	15,800	12,500	13,700	12,200	13,900	10,200
20	7,940	5,150	4,470	3,660	8,130	13,400	15,600	11,900	13,200	12,200	13,700	10,700
21	7,740	4,710	4,010	3,980	7,260	12,000	15,000	11,500	13,900	12,000	13,600	10,300
22	6,830	3,570	2,460	3,830	9,020	14,300	15,000	10,700	13,900	11,000	12,400	10,700
23	6,560	4,780	6,500	4,160	11,200	14,100	14,800	10,000	14,700	11,000	13,500	9,860
24	6,270	3,200	6,920	4,710	11,000	13,500	14,400	11,400	14,900	12,200	13,900	9,050
25	5,600	3,440	6,480	7,270	11,100	13,400	13,800	12,100	15,500	11,300	13,500	8,210
26	6,790	3,370	5,470	8,100	10,200	12,800	14,900	12,100	14,500	14,300	11,900	7,960
27	6,770	3,200	5,190	8,150	9,410	11,800	14,600	12,100	14,100	15,500	12,200	8,210
28	6,790	4,220	5,310	7,550	9,050	10,400	14,300	12,500	15,200	15,800	11,100	8,070
29	6,750	3,470	4,080	7,440	------	12,800	14,300	12,200	15,900	16,000	10,900	8,970
30	6,740	3,640	6,180	8,050	------	13,300	13,400	12,000	15,800	15,800	9,960	9,310
31	5,860	------	6,110	6,900	------	13,000	------	13,300	------	14,900	12,400	------
TOTAL	244,030	156,100	171,610	123,270	242,720	355,440	435,700	381,200	398,600	440,300	415,660	314,840
MEAN	7,872	5,203	5,536	3,976	8,669	11,470	14,520	12,300	13,290	14,220	13,410	10,490
MAX	9,950	6,960	7,150	8,150	11,200	14,300	15,800	13,500	15,900	16,100	15,300	12,300
MIN	5,600	3,200	2,460	1,220	6,920	7,780	12,600	10,000	11,000	11,000	9,960	7,960
AC-FT	484,000	309,600	340,400	244,500	481,400	705,000	864,200	756,100	790,600	874,300	824,500	624,500

CAL YR 1973 TOTAL 3,451,920 MEAN 9,457 MAX 15,300 MIN 2,010 AC-FT 6,847,000
WTR YR 1974 TOTAL 3,679,970 MEAN 10,080 MAX 16,100 MIN 1,220 AC-FT 7,299,000

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, 1,480 ft^3/s (41.9 m^3/s) July 21, 1973; no diversion at times in most years.

REMARKS.--Records good. 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 62,748 acres (254 km^2) during 1973 calendar year on east side of Colorado River between Parker and Ehrenberg.

COOPERATION.--Record of canal intake gate opening (supplementary gage) and return surface flow to Colorado River furnished by Bureau of Indian Affairs.

REVISIONS (WATER YEARS).--WSP 1513: 1915-36.

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	937	658	292	495	621	912	982	1,120	1,120	1,300	1,400	1,200
2	938	663	285	519	559	910	969	1,200	1,090	1,290	1,370	1,120
3	945	663	318	711	531	905	956	1,230	984	1,310	1,380	1,230
4	956	660	369	562	537	897	975	1,210	1,030	1,230	1,350	1,230
5	941	659	424	0	614	864	1,020	1,170	1,150	1,160	1,300	1,160
6	938	665	475	0	693	874	1,020	1,140	1,180	1,260	1,250	1,110
7	943	610	526	0	736	900	1,050	1,220	1,210	1,280	1,160	1,060
8	924	556	535	0	737	891	1,090	1,230	1,230	1,290	996	1,050
9	926	619	497	0	737	858	1,060	1,210	1,190	1,290	995	1,070
10	937	536	489	0	783	804	1,030	1,210	1,110	1,320	1,020	1,050
11	958	534	420	0	866	780	1,090	1,200	1,100	1,380	1,010	1,060
12	935	538	427	0	877	755	1,130	1,160	1,180	1,410	1,060	1,060
13	941	644	435	0	862	770	1,110	1,160	1,260	1,340	1,160	1,050
14	883	652	426	0	903	831	1,150	1,140	1,280	1,320	1,290	1,010
15	905	624	438	0	919	846	1,210	1,160	1,300	1,280	1,320	1,000
16	926	629	448	0	904	902	1,180	1,190	1,290	1,300	1,330	994
17	945	627	476	0	910	877	1,250	1,240	1,270	1,270	1,330	986
18	962	619	510	145	902	953	1,250	1,260	1,300	1,260	1,280	984
19	962	613	585	422	906	969	1,120	1,200	1,250	1,250	1,300	976
20	945	563	601	320	912	978	1,080	1,140	1,200	1,250	1,320	974
21	885	534	631	263	876	1,070	1,100	1,130	1,230	1,210	1,330	938
22	816	531	642	262	813	1,090	1,110	1,030	1,300	1,160	1,310	909
23	756	496	612	261	833	997	1,120	1,010	1,290	1,160	1,310	884
24	755	445	514	297	871	952	1,130	1,010	1,260	1,240	1,300	859
25	758	369	439	320	860	919	1,140	1,000	1,260	1,340	1,320	855
26	757	315	522	227	860	885	1,130	997	1,250	1,360	1,310	773
27	733	258	612	295	857	948	1,130	1,030	1,260	1,350	1,260	774
28	733	335	644	417	890	1,010	1,100	1,180	1,250	1,370	1,140	794
29	634	338	622	486	------	1,030	1,070	1,230	1,250	1,390	1,150	783
30	629	308	531	539	------	1,020	1,080	1,220	1,240	1,370	1,210	780
31	650	------	495	596	------	986	------	1,160	------	1,380	1,240	------
TOTAL	28,799	16,675	15,238	7,137	22,369	28,386	32,832	35,807	36,314	40,120	38,501	29,723
MEAN	864	556	492	230	799	916	1,094	1,155	1,210	1,294	1,242	991
MAX	962	684	644	711	919	1,090	1,250	1,260	1,300	1,410	1,400	1,230
MIN	629	258	285	0	531	755	956	997	984	1,160	995	773
AC-FT	53,160	33,070	30,220	14,160	44,370	56,300	65,120	71,020	72,030	79,580	76,370	58,960
(†)	35,980	28,020	22,110	20,100	23,670	30,410	29,230	35,910	32,390	33,020	32,750	34,120

CAL YR 1973 TOTAL 334,363.00 MEAN 916 MAX 1,480 MIN 0 AC-FT 663,200 † 376,300
WTR YR 1974 TOTAL 329,901.00 MEAN 904 MAX 1,410 MIN 0 AC-FT 654,400 † 357,700

† Return surface flow, 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 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.--24 years (1950-74), 1,200 ft^3/s (33.98 m^3/s), 869,400 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 91,582 acres (371 km^2) during the 1973 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.

REVISIONS (WATER YEARS).--WSP 1213: 1946-48.

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	956	489	568	744	1,050	1,500	1,270	1,810	1,630	1,810	1,710	1,620
2	989	458	551	1,010	1,230	1,480	1,420	1,830	1,570	1,780	1,560	1,750
3	1,050	809	706	1,100	1,070	1,390	1,540	1,850	1,560	1,860	1,620	1,700
4	1,050	804	734	997	1,060	1,410	1,560	1,840	1,570	1,830	1,440	1,680
5	1,010	950	775	238	1,130	1,360	1,620	1,700	1,680	1,890	1,400	1,500
6	975	985	798	0	1,140	1,270	1,600	1,670	1,710	1,960	1,380	1,580
7	978	923	770	0	1,160	1,180	1,550	1,650	1,700	1,740	1,420	1,540
8	964	956	697	0	1,220	1,200	1,620	1,750	1,670	1,830	1,530	1,500
9	1,100	985	645	0	1,100	980	1,620	1,740	1,570	1,920	1,580	1,570
10	1,210	878	742	0	912	759	1,670	1,810	1,580	1,870	1,510	1,730
11	1,160	817	776	0	1,020	745	1,630	1,720	1,590	1,830	1,480	1,730
12	1,030	917	720	511	971	836	1,610	1,660	1,630	1,780	1,700	1,760
13	1,050	896	655	513	1,090	992	1,610	1,730	1,770	1,710	1,750	1,770
14	1,020	930	816	473	1,180	1,080	1,510	1,770	1,760	1,540	1,710	1,720
15	1,050	952	742	452	1,200	1,210	1,710	1,780	1,770	1,690	1,710	1,570
16	1,080	1,030	661	479	1,120	1,300	1,740	1,820	1,730	1,670	1,740	1,680
17	1,060	957	739	540	1,000	1,130	1,790	1,750	1,810	1,740	1,850	1,780
18	931	773	745	566	1,090	1,250	1,830	1,610	1,790	1,830	1,680	1,740
19	968	793	789	546	1,140	1,380	1,850	1,530	1,960	1,900	1,830	1,680
20	911	718	861	537	1,140	1,470	1,810	1,460	1,980	1,780	1,680	1,620
21	855	756	872	603	1,150	1,600	1,630	1,460	1,880	1,720	1,660	1,510
22	890	645	723	610	1,260	1,540	1,700	1,460	1,720	1,680	1,690	1,430
23	1,090	657	627	673	1,360	1,390	1,670	1,440	1,580	1,620	1,740	1,520
24	1,150	610	530	892	1,360	1,390	1,710	1,430	1,750	1,630	1,630	1,370
25	1,080	494	400	977	1,400	1,490	1,750	1,450	1,750	1,670	1,330	1,330
26	941	553	572	951	1,360	1,490	1,720	1,320	1,800	1,860	1,560	1,410
27	874	539	560	954	1,500	1,500	1,650	1,450	1,820	1,700	1,700	1,280
28	758	554	745	1,020	1,450	1,500	1,540	1,480	1,770	1,670	1,820	1,150
29	848	660	824	1,020	------	1,410	1,660	1,520	1,900	1,810	1,830	1,100
30	1,020	676	820	1,030	------	1,360	1,740	1,590	1,780	1,770	1,780	1,180
31	988	------	736	1,040	------	1,290	------	1,650	------	1,800	1,700	------
TOTAL	31,966	24,269	22,099	18,476	32,863	39,882	49,330	50,730	51,760	54,890	50,720	46,500
MEAN	1,002	809	713	596	1,174	1,287	1,644	1,636	1,726	1,771	1,636	1,550
MAX	1,210	1,030	872	1,100	1,500	1,600	1,850	1,850	1,980	1,960	1,850	1,780
MIN	758	494	400	0	912	745	1,270	1,320	1,560	1,540	1,330	1,100
AC-FT	63,420	48,140	43,830	36,650	65,180	79,110	97,850	100,600	102,700	108,900	100,600	92,230
(†)	40,480	37,790	34,310	30,960	30,570	37,860	38,970	44,760	40,890	43,710	45,270	45,200

CAL YR 1973 TOTAL 463,945.00 MEAN 1,271 MAX 2,100 MIN 0 AC-FT 920,200 † 454,900
WTR YR 1974 TOTAL 472,605.00 MEAN 1,295 MAX 1,980 MIN 0 AC-FT 937,400 † 470,800

† Return flows, in acre-feet, to Colorado River.

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.--5 years, 7,300 ft^3/s (206.7 m^3/s), 5,289,000 acre-ft/yr (6,520 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 12,800 ft^3/s (362 m^3/s) June 29, July 15; minimum daily, 1,240 ft^3/s (35.1 m^3/s) Jan. 17.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,100	4,440	3,140	4,790	5,830	6,840	10,700	9,290	9,840	12,100	11,500	9,330
2	7,660	3,440	3,070	4,260	7,370	7,340	10,800	8,950	9,770	12,500	12,200	9,210
3	7,500	3,640	3,370	4,540	7,510	7,550	10,300	9,100	9,860	11,000	12,100	8,890
4	7,070	3,800	5,050	3,480	7,280	8,280	9,830	9,450	9,480	10,300	12,300	8,650
5	6,510	3,990	5,090	4,600	6,830	8,560	9,920	9,490	9,020	11,600	11,700	8,290
6	6,690	5,180	3,800	3,750	6,080	8,430	11,500	9,540	8,730	12,500	11,600	7,960
7	6,850	5,070	3,480	2,550	5,610	7,350	11,900	9,430	8,750	12,500	10,400	8,980
8	7,230	4,390	4,590	2,650	5,280	7,120	11,500	8,640	9,120	12,100	10,800	9,240
9	7,010	4,310	4,410	2,300	6,200	7,890	11,700	8,070	8,920	11,700	11,100	9,170
10	6,320	4,430	4,270	2,000	6,230	6,200	11,800	8,120	9,510	11,300	11,000	8,860
11	5,410	4,570	5,260	1,700	6,080	7,320	12,000	9,100	9,400	11,000	11,700	8,880
12	5,600	4,650	5,470	1,340	6,700	7,830	11,200	9,340	9,340	11,300	11,900	8,420
13	6,140	4,900	4,630	1,320	6,280	7,860	11,600	8,970	8,400	11,800	11,600	8,550
14	6,640	4,670	4,330	1,330	5,930	7,220	12,000	8,560	8,690	12,400	11,400	9,140
15	6,920	4,120	5,640	1,330	6,050	6,930	11,300	8,490	10,000	12,800	11,100	9,550
16	6,460	3,880	5,580	1,290	6,700	9,280	10,700	7,710	10,200	12,200	10,600	9,530
17	6,650	5,190	5,790	1,240	6,790	9,490	10,300	7,750	10,400	11,400	10,300	8,960
18	6,490	5,590	5,210	1,450	6,780	9,910	9,950	8,660	10,300	9,930	10,600	7,880
19	5,310	5,240	4,880	1,700	7,050	10,800	10,600	8,900	9,820	9,450	10,100	9,280
20	5,830	4,830	4,020	2,710	6,810	10,600	11,900	8,910	10,000	9,690	10,900	8,100
21	6,250	4,170	3,170	3,070	6,250	10,100	11,600	8,590	10,600	9,520	10,700	8,400
22	6,040	3,710	2,780	3,310	5,490	9,670	11,400	8,270	10,700	9,260	9,530	7,170
23	5,100	3,460	2,280	3,360	6,950	11,500	11,300	7,780	11,100	7,710	9,690	8,430
24	4,830	3,790	5,380	3,390	8,460	11,200	10,900	7,460	11,800	8,490	10,600	7,970
25	4,730	2,860	5,930	3,720	8,370	10,600	10,400	8,340	11,600	9,320	10,800	6,970
26	4,340	3,020	5,720	5,990	8,190	10,600	10,500	9,060	11,800	9,170	10,300	6,800
27	5,160	3,030	4,450	6,730	7,210	9,990	11,100	8,940	10,800	12,300	9,680	6,360
28	5,360	2,860	4,060	6,680	6,820	8,980	10,900	8,850	10,900	12,500	9,130	6,740
29	5,390	3,630	3,900	6,460	------	8,230	10,900	8,980	12,800	12,500	8,160	6,790
30	5,210	3,210	3,310	5,900	------	10,300	10,500	8,720	11,900	12,400	7,880	7,470
31	5,030	------	4,880	6,700	------	10,700	------	9,150	------	12,200	8,580	------
TOTAL	189,830	124,070	136,940	105,640	187,130	274,670	331,000	270,610	303,550	344,940	329,950	249,970
MEAN	6,124	4,136	4,417	3,408	6,683	8,860	11,030	8,729	10,120	11,130	10,640	8,332
MAX	8,100	5,590	5,930	6,730	8,460	11,500	12,000	9,540	12,800	12,800	12,300	9,550
MIN	4,340	2,860	2,280	1,240	5,280	6,200	9,830	7,460	8,400	7,710	7,880	6,360
AC-FT	376,500	246,100	271,600	209,500	371,200	544,800	656,500	536,800	602,100	684,200	654,500	495,800

CAL YR 1973 TOTAL 2,641,640 MEAN 7,237 MAX 12,500 MIN 2,280 AC-FT 5,240,000
WTR YR 1974 TOTAL 2,848,300 MEAN 7,804 MAX 12,800 MIN 1,240 AC-FT 5,650,000

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., 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.--18 years, 8,921 ft^3/s (252.6 m^3/s), 6,463,000 acre-ft/yr (7,970 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 13,800 ft^3/s (391 m^3/s) July 1, 16; maximum gage height, 10.30 ft (3.139 m) Aug. 5; minimum daily discharge, 1,900 ft^3/s (53.8 m^3/s) Jan. 18; minimum gage height, about 4.1 ft (1.25 m), Jan. 18, based on minimum observed gage height of 4.25 ft (1.295 m) Jan. 14.
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 except for those below 3,000 ft^3/s (85 m^3/s) and those for August and September, which are good. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,700	6,160	4,140	5,330	6,940	7,470	11,800	11,600	10,400	13,000	12,800	9,630
2	9,350	5,710	4,000	5,430	6,560	7,630	11,400	10,800	10,700	12,900	12,300	10,100
3	8,940	4,670	3,930	5,000	7,710	7,950	11,400	10,400	10,800	13,300	12,800	10,000
4	8,710	4,790	4,170	5,090	7,910	8,250	11,000	10,500	10,800	12,000	13,000	9,740
5	8,320	4,940	5,510	4,410	7,680	8,890	10,800	10,700	10,200	11,400	13,000	9,560
6	7,820	5,080	5,710	5,310	7,190	9,070	11,200	10,800	9,910	12,500	12,500	9,220
7	7,930	6,010	4,690	4,450	6,600	9,090	12,300	10,800	9,540	13,100	12,400	9,190
8	8,090	5,990	4,360	3,820	6,200	8,200	12,700	10,600	9,650	13,200	11,300	9,880
9	8,320	5,440	5,150	3,860	6,010	8,180	12,600	9,860	10,100	12,800	11,500	10,200
10	8,140	5,310	5,120	3,290	6,670	8,560	12,300	9,190	10,200	12,400	11,800	10,100
11	7,480	5,380	5,000	3,130	6,710	7,230	12,300	9,600	10,300	12,100	11,700	9,860
12	6,840	5,540	5,890	2,650	6,810	8,340	11,900	10,300	10,200	11,800	12,300	9,600
13	6,970	5,600	6,130	2,200	7,250	8,570	12,000	10,500	10,000	12,200	12,400	9,190
14	7,330	5,800	5,320	2,100	6,890	8,250	12,300	10,100	9,440	12,600	12,300	9,560
15	7,770	5,630	5,080	2,050	6,570	7,840	12,600	9,720	9,790	13,100	12,000	9,960
16	8,050	5,110	6,120	2,000	6,650	8,010	12,100	9,630	10,900	13,300	11,800	10,300
17	7,750	4,870	6,270	1,950	7,140	9,590	11,600	8,940	11,100	12,800	11,400	10,300
18	7,710	5,870	6,310	1,900	7,320	10,100	11,300	9,280	11,200	12,100	11,100	9,580
19	7,620	6,330	5,800	2,300	7,380	10,400	11,000	9,860	11,100	11,000	11,400	8,920
20	6,620	6,080	5,490	2,520	7,450	11,300	11,500	10,100	10,900	10,500	10,900	9,910
21	7,020	5,720	4,790	3,290	7,240	11,300	12,500	10,100	11,100	10,500	11,400	9,240
22	7,350	5,130	4,110	3,720	6,780	10,700	12,400	9,810	11,500	10,500	11,400	9,350
23	7,130	4,590	3,810	3,940	6,230	10,800	12,200	9,630	11,700	10,200	10,500	8,640
24	6,410	4,400	3,600	4,020	7,360	12,200	12,200	8,990	12,100	9,280	10,600	9,310
25	6,200	4,680	5,720	4,060	8,670	12,000	11,800	8,920	12,600	9,630	11,300	8,760
26	6,080	3,800	6,420	4,380	8,820	11,700	11,400	9,600	12,500	10,200	11,600	8,090
27	5,770	3,940	6,210	6,240	8,670	11,600	11,600	10,200	12,700	10,200	11,000	7,930
28	6,280	3,940	5,240	7,240	7,860	10,900	12,000	10,200	11,900	12,700	10,400	7,500
29	6,410	3,870	4,770	7,240	------	10,200	12,000	10,100	11,900	13,100	10,100	7,550
30	6,410	4,360	4,590	6,970	------	9,960	11,800	10,100	13,400	13,000	9,280	7,730
31	6,280	------	4,180	6,500	------	11,300	------	10,000	------	13,000	9,150	------
TOTAL	230,800	154,740	157,630	126,390	201,270	295,580	356,000	310,930	328,630	370,410	357,430	278,900
MEAN	7,445	5,158	5,085	4,077	7,188	9,535	11,870	10,030	10,950	11,950	11,530	9,297
MAX	9,700	6,330	6,420	7,240	8,820	12,200	12,700	11,600	13,400	13,300	13,000	10,300
MIN	5,770	3,800	3,600	1,900	6,010	7,230	10,800	8,920	9,440	9,280	9,150	7,500
AC-FT	457,800	306,900	312,700	250,700	399,200	586,300	706,100	616,700	651,800	734,700	709,000	553,200

CAL YR 1973 TOTAL 2,925,780 MEAN 8,016 MAX 12,500 MIN 3,510 AC-FT 5,803,000
WTR YR 1974 TOTAL 3,168,710 MEAN 8,681 MAX 13,400 MIN 1,900 AC-FT 6,285,000

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.--40 years (1934-74), 11,250 ft^3/s (318.6 m^3/s), 8,151,000 acre-ft/yr (10,100 hm^3/yr).

EXTREMES.--1934-74: 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.

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 1973 TO SEPTEMBER 1974

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	7,382	453,900	741	7,690
November	5,236	311,500	615	10,660
December	5,366	330,000	614	5,880
CAL YR 1973	8,110	5,872,000	7,830	
January	4,121	253,400	592	5,030
February	7,345	407,900	535	7,160
March	9,320	573,100	599	10,460
April	11,950	710,800	578	7,330
May	10,180	625,700	664	2,880
June	10,450	621,800	631	4,460
July	11,810	726,400	669	2,370
August	11,950	734,800	674	5,890
September	9,392	558,900	660	5,600
WTR YR 1974	8,713	6,308,000	7,570	

* 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.

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, 1,590 ft^3/s (45.0 m^3/s) Jan. 10; minimum daily, 148 ft^3/s (4.19 m^3/s) Jan. 16 to Feb. 5.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245	244	250	238	148	239	347	607	585	336	336	246
2	245	244	249	238	148	239	347	523	244	525	336	437
3	343	244	249	238	148	239	347	523	400	525	336	834
4	245	244	248	238	148	238	347	775	497	522	910	852
5	245	244	248	238	148	238	347	1,170	329	688	1,050	866
6	245	244	248	238	238	310	347	961	344	737	727	886
7	245	244	248	660	238	527	347	963	344	336	351	868
8	245	244	248	1,210	238	338	347	963	344	336	346	868
9	245	244	248	1,510	238	338	347	999	344	336	346	866
10	367	244	238	1,590	238	815	347	968	344	336	346	866
11	245	244	238	928	238	337	347	968	344	336	346	866
12	245	244	238	945	238	337	347	972	344	336	346	943
13	245	244	238	928	238	352	347	972	344	336	346	840
14	245	244	238	517	238	337	347	970	344	336	346	698
15	345	244	238	210	238	337	347	795	344	524	346	992
16	307	244	238	148	238	337	347	879	344	336	726	936
17	369	244	238	148	238	337	649	1,070	344	336	346	1,080
18	245	244	238	148	238	337	362	1,060	344	619	346	837
19	245	244	238	148	238	337	357	1,070	344	445	346	837
20	245	244	238	148	238	337	357	1,060	344	409	442	833
21	245	244	238	148	238	337	357	1,030	344	336	441	837
22	245	244	238	148	338	337	357	1,020	344	336	346	835
23	245	244	238	148	238	337	357	1,060	344	336	346	833
24	245	244	238	148	238	337	357	1,090	513	336	346	762
25	245	294	238	148	238	620	509	1,080	334	336	346	534
26	245	481	238	148	238	531	618	1,080	334	336	535	533
27	245	429	238	148	529	434	357	1,080	334	336	534	246
28	245	252	238	148	238	337	357	983	334	336	440	246
29	245	251	238	148	------	626	537	791	334	336	346	246
30	245	251	238	148	------	337	525	792	334	336	246	246
31	245	------	238	148	------	337	------	793	------	336	246	------
TOTAL	8,101	7,814	7,472	12,294	6,605	11,476	11,608	29,067	10,764	12,386	13,192	21,769
MEAN	261	260	241	397	236	370	387	938	359	400	426	726
MAX	369	481	250	1,590	529	815	649	1,170	585	737	1,050	1,080
MIN	245	244	238	148	148	238	347	523	244	336	246	246
AC-FT	16,070	15,500	14,820	24,390	13,100	22,760	23,020	57,650	21,350	24,570	26,170	43,180

CAL YR 1973 TOTAL 119,132 MEAN 326 MAX 1,810 MIN 228 AC-FT 236,300
WTR YR 1974 TOTAL 152,548 MEAN 418 MAX 1,590 MIN 148 AC-FT 302,600

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, 1,660 ft^3/s (47.0 m^3/s) Jan. 10 (gage height, 7.04 ft or 2.146 m); minimum daily, 139 ft^3/s (3.94 m^3/s) Jan. 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.

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	255	339	239	447	189	270	478	500	739	320	360	282
2	254	402	239	632	185	337	413	508	310	331	349	589
3	253	377	237	388	183	459	346	504	274	335	350	800
4	244	337	239	301	183	452	345	810	294	336	353	818
5	243	352	249	301	182	427	366	1,190	351	624	617	867
6	263	410	270	290	228	404	374	1,010	436	822	669	919
7	275	365	270	272	270	381	368	999	364	373	438	925
8	277	320	249	573	281	379	558	989	255	343	567	885
9	275	297	237	1,240	284	380	374	977	224	312	551	904
10	267	292	234	1,570	282	380	346	982	282	305	512	887
11	241	289	254	961	280	422	342	972	363	317	439	887
12	246	288	270	823	278	614	335	952	338	332	367	887
13	269	284	272	880	280	739	336	947	334	454	360	887
14	272	280	272	570	282	470	353	937	320	526	355	884
15	268	283	272	253	281	422	349	831	289	454	344	866
16	257	282	272	235	280	407	347	851	355	338	353	898
17	261	283	280	243	284	404	345	1,060	468	333	373	908
18	261	284	280	235	281	402	338	1,070	447	352	377	908
19	260	298	280	225	282	397	338	1,070	425	354	350	890
20	258	305	270	199	278	381	333	1,080	380	366	316	890
21	270	315	252	377	278	391	370	1,100	342	338	327	890
22	274	310	260	499	266	379	494	1,080	353	324	406	887
23	268	302	270	342	228	391	439	1,070	344	669	540	884
24	269	288	275	213	260	391	369	1,100	336	744	519	862
25	270	256	265	206	265	376	334	1,090	325	412	469	795
26	257	252	252	203	271	372	334	1,090	318	373	348	642
27	236	261	252	199	252	411	334	1,090	313	368	333	385
28	234	270	254	201	250	484	438	1,090	311	363	342	324
29	240	244	267	171	------	477	512	1,010	316	355	315	316
30	250	240	272	139	------	475	512	878	318	353	282	310
31	263	------	275	180	------	484	------	844	------	356	282	------
TOTAL	8,030	9,105	8,079	13,368	7,143	13,158	11,520	29,681	10,524	12,582	12,563	23,076
MEAN	259	304	261	431	255	424	384	957	351	406	405	769
MAX	277	410	280	1,570	284	739	558	1,190	739	822	669	925
MIN	234	240	234	139	182	270	333	500	224	305	282	282
AC-FT	15,930	18,060	16,020	26,520	14,170	26,100	22,850	58,870	20,870	24,960	24,920	45,770

CAL YR 1973 TOTAL 127,045 MEAN 348 MAX 1,810 MIN 71 AC-FT 252,000
WTR YR 1974 TOTAL 158,829 MEAN 435 MAX 1,570 MIN 139 AC-FT 315,000

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.--47 years (1928-74), 133 ft³/s (3.767 m³/s) 96,360 acre-ft/yr (119 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 712 ft³/s (20.2 m³/s) July 16 (gage height, 3.50 ft or 1.067 m); minimum, 19 ft³/s (0.54 m³/s) June 19.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	46	65	59	59	55	57	62	28	25	140	59
2	31	47	63	59	62	55	59	64	28	25	216	55
3	31	47	63	62	62	55	64	57	28	30	228	52
4	34	47	61	62	62	55	62	52	27	28	175	55
5	34	47	60	64	62	57	59	50	25	27	279	57
6	37	47	58	64	59	59	59	48	25	35	240	55
7	38	47	58	64	59	59	57	52	27	35	431	50
8	38	47	58	67	59	59	52	52	25	59	338	48
9	37	47	60	70	57	59	52	50	25	57	344	46
10	36	47	62	75	57	59	52	50	25	46	235	46
11	36	47	62	75	55	59	52	50	25	35	180	46
12	36	47	62	72	55	59	55	48	23	34	136	44
13	36	47	58	67	57	59	55	46	23	46	108	52
14	36	49	54	64	59	57	55	44	23	67	90	64
15	36	49	54	64	62	57	52	41	23	209	97	70
16	38	47	52	62	59	57	55	39	23	345	144	72
17	41	46	52	62	59	55	55	39	22	140	112	72
18	41	47	52	62	59	55	55	39	22	97	93	81
19	43	51	52	62	62	55	55	39	20	86	104	101
20	43	54	54	64	62	55	52	39	20	126	86	97
21	41	59	54	64	62	59	55	39	20	220	72	97
22	41	61	54	67	62	62	55	35	20	123	70	101
23	41	65	54	64	59	64	55	35	20	112	78	97
24	43	67	56	64	59	62	55	35	22	70	86	93
25	43	67	56	62	57	62	57	34	22	57	104	108
26	43	67	54	62	55	59	57	34	20	52	86	108
27	43	65	54	62	55	59	59	32	23	50	75	90
28	44	67	54	62	55	62	59	30	23	50	70	78
29	44	67	54	59	------	62	62	30	23	55	72	72
30	44	67	56	59	------	59	62	30	25	121	72	67
31	46	------	56	59	------	59	------	28	------	127	64	------
TOTAL	1,206	1,605	1,762	1,984	1,651	1,809	1,690	1,323	705	2,589	4,625	2,133
MEAN	38.9	53.5	56.8	64.0	59.0	58.4	56.3	42.7	23.5	83.5	149	71.1
MAX	46	67	65	75	62	64	64	64	28	345	431	108
MIN	31	46	52	59	55	55	52	28	20	25	64	44
AC-FT	2,390	3,180	3,490	3,940	3,270	3,590	3,350	2,620	1,400	5,140	9,170	4,230

CAL YR 1973 TOTAL 115,344 MEAN 316 MAX 1,590 MIN 31 AC-FT 228,800
WTR YR 1974 TOTAL 23,082 MEAN 63.2 MAX 431 MIN 20 AC-FT 45,780

PEAK DISCHARGE (BASE, 600 CFS).--July 16 (0100) 712 cfs (3.50 ft).

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 mi^2 (7,327 km^2).

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.--58 years (1905-6, 1908-10, 1912-55, 1962-74), 197 ft^3/s (5.579 m^3/s), 142,700 acre-ft/yr (176 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,520 ft^3/s (43.0 m^3/s) Sept. 5 (gage height, 10.95 ft or 3.338 m); minimum, 4.4 ft^3/s (0.12 m^3/s) July 2, 3.
Period of record: Maximum discharge, 40,000 ft^3/s (1,130 m^3/s) Sept. 29, 1941 (gage height, 31 ft or 9.4 m, from floodmark), computed on basis of known peak flow for station below Blue Creek; minimum, 2.2 ft^3/s (0.062 m^3/s) Aug. 5, 1947.

REMARKS.--Records fair. Diversions for irrigation of about 5,000 acres (2,020 hm^2) 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	32	68	70	71	52	48	60	20	4.7	91	67
2	23	32	65	78	66	50	51	64	20	4.7	126	61
3	23	37	68	76	62	51	52	63	20	4.7	142	59
4	24	33	64	76	58	53	43	59	19	5.2	260	59
5	24	33	62	75	67	54	47	44	18	5.2	305	216
6	24	38	62	76	65	54	54	41	17	7.3	257	70
7	24	42	64	81	65	50	52	39	17	7.0	338	57
8	28	42	61	82	63	52	52	39	16	6.0	329	44
9	25	42	65	103	64	55	52	38	14	5.4	293	39
10	24	42	68	88	67	57	50	38	14	5.4	236	36
11	24	43	68	92	65	59	50	39	13	5.7	190	32
12	24	50	70	91	61	58	60	33	12	6.0	160	29
13	24	51	63	82	54	62	50	32	11	68	139	33
14	24	59	59	79	50	60	45	30	11	150	120	31
15	25	55	59	78	52	61	47	29	11	224	134	30
16	26	60	60	74	52	63	46	29	10	233	131	30
17	33	62	61	75	56	51	46	28	10	161	135	30
18	34	64	63	75	60	54	54	27	11	194	111	32
19	28	63	63	74	55	62	53	27	10	126	188	60
20	30	66	65	78	53	67	49	26	9.1	123	128	100
21	34	70	61	84	58	67	43	26	9.4	157	105	88
22	28	72	63	80	61	66	42	24	12	117	85	91
23	30	72	61	80	59	64	44	24	11	92	92	93
24	28	69	62	83	57	63	46	24	8.5	84	110	96
25	29	66	62	77	56	62	45	23	7.6	85	136	131
26	30	66	63	76	51	59	47	22	6.7	80	113	86
27	30	70	68	72	48	55	49	22	6.2	74	104	106
28	33	74	72	74	53	54	55	23	6.0	84	150	96
29	32	74	68	72	------	49	56	23	5.4	120	90	88
30	33	73	68	74	------	48	56	21	5.2	113	70	88
31	33	------	70	75	------	44	------	20	------	99	74	------
TOTAL	855	1,652	1,996	2,450	1,649	1,756	1,484	1,037	361.1	2,451.3	4,942	2,098
MEAN	27.6	55.1	64.4	79.0	58.9	56.6	49.5	33.5	12.0	79.1	159	69.9
MAX	34	74	72	103	71	67	60	64	20	233	338	216
MIN	23	32	59	70	48	44	42	20	5.2	4.7	70	29
AC-FT	1,700	3,280	3,960	4,860	3,270	3,480	2,940	2,060	716	4,860	9,800	4,160

CAL YR 1973 TOTAL 157,596.0 MEAN 432 MAX 2,430 MIN 21 AC-FT 312,600
WTR YR 1974 TOTAL 22,731.4 MEAN 62.3 MAX 338 MIN 4.7 AC-FT 45,090

PEAK DISCHARGE (BASE, 3,000 CFS).--No peak above base.

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.--47 years (1927-74), 175 ft^3/s (4.96 m^3/s), 126,800 acre-ft/yr (156 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, 7.560 ft^3/s (214 m^3/s) Aug. 4 (gage height, 14.10 ft or 4.298 m); minimum, 2.5 ft^3/s (0.071 m^3/s) July 12 (gage height, 3.60 ft or 1.097 m).
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	29	67	66	81	51	41	48	18	3.2	89	68
2	17	29	64	68	75	49	44	55	17	3.5	105	63
3	17	30	67	71	73	48	46	56	17	3.5	153	60
4	17	30	67	70	66	49	41	59	15	3.5	752	57
5	18	26	65	71	71	53	38	54	14	3.5	674	286
6	17	27	64	71	74	53	41	44	14	3.5	350	62
7	18	30	64	74	74	51	44	41	12	3.4	331	53
8	18	32	65	75	74	48	48	38	11	3.1	460	44
9	21	33	65	83	75	52	46	32	10	2.8	310	39
10	19	33	68	84	77	55	46	33	9.8	2.7	276	36
11	19	34	68	86	75	56	45	32	9.2	2.7	216	34
12	20	36	70	92	71	54	50	33	8.5	2.7	172	33
13	21	39	68	85	64	54	50	30	7.8	59	134	36
14	21	41	63	83	54	53	44	29	7.3	81	110	41
15	21	43	60	80	53	56	41	27	6.8	289	657	38
16	22	44	60	76	53	53	41	26	6.0	301	101	36
17	24	50	57	77	53	49	39	25	5.6	218	72	36
18	28	51	58	77	59	42	38	24	5.4	156	68	40
19	28	52	58	77	58	46	42	24	5.2	214	177	104
20	24	53	60	76	53	52	42	25	4.6	117	87	107
21	27	58	59	86	54	56	39	25	4.3	141	72	75
22	27	60	59	85	59	56	31	24	4.2	141	68	76
23	26	62	59	85	58	57	30	23	3.8	93	115	80
24	26	61	59	86	57	56	30	21	3.8	73	114	85
25	24	61	59	84	55	55	35	21	3.4	58	164	117
26	25	56	57	82	53	55	36	20	3.4	51	137	106
27	24	62	60	81	49	50	37	20	3.2	43	95	87
28	26	64	62	76	50	47	40	21	3.1	32	233	89
29	28	66	64	79	------	45	44	24	3.2	74	108	79
30	28	67	64	79	------	42	44	24	3.2	134	71	79
31	29	------	65	82	------	40	------	21	------	61	71	------
TOTAL	696	1,359	1,945	2,447	1,768	1,583	1,233	979	239.8	2,374.1	6,542	2,146
MEAN	22.5	45.3	62.7	78.9	63.1	51.1	41.1	31.6	7.99	76.6	211	71.5
MAX	29	67	70	92	81	57	50	59	18	301	752	286
MIN	16	26	57	66	49	40	30	20	3.1	2.7	68	33
AC-FT	1,380	2,700	3,860	4,850	3,510	3,140	2,450	1,940	476	4,710	12,980	4,260

CAL YR 1973 TOTAL 61,002.0 MEAN 167 MAX 3,000 MIN 16 AC-FT 121,000
WTR YR 1974 TOTAL 23,311.9 MEAN 63.9 MAX 752 MIN 2.7 AC-FT 46,240

PEAK DISCHARGE (BASE 1,900 CFS).--Aug. 4 (2115) 7,560 cfs (14.10 ft); Aug. 15 (1800) 4,000 cfs (11.20 ft).

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 1973.

COOPERATION.--Records furnished by Gila Water Commissioner.

ANNUAL DIVERSIONS, IN ACRE-FEET, TO EACH CANAL DURING CALENDAR YEAR 1973 AND WATER YEAR 1974

	Canal	Calendar year 1973	Water year 1974
09433000.	Sunset	13,480	10,520
09436000.	New Model	4,400	2,130
09437500.	Valley	2,090	319
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	19,970	12,970

COMBINED MONTHLY DISCHARGE OF CANALS DIVERTING FROM GILA RIVER IN DUNCAN VALLEY, N. MEX.-ARIZ., DURING WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Month	Discharge, in cubic feet per second			Diversions in acre-feet
	Maximum	Minimum	Mean	
October	26	12	17.1	1,050
November	43	15	26.5	1,570
December	34	8.6	22.1	1,360
CAL YR 1973	75	0	27.6	19,970
January	32	6.7	19.0	1,170
February	23	1.6	10.6	591
March	21	12	13.9	855
April	31	20	26.3	1,570
May	29	12	19.2	1,180
June	14	0	4.3	256
July	54	0	13.6	838
August	37	10	22.2	1,370
September	34	12	19.5	1,160
WTR YR 1974	54	0	17.9	12,970

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. Prior to June 24, 1974, at site 500 ft (150 m) downstream.

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.--53 years (1911-17, 1927-74), 186 ft^3/s (5.27 m^3/s), 134,800 acre-ft/yr (166 hm^3/yr); median of yearly mean discharges, 130 ft^3/s (3.7 m^3/s), 94,200 acre-ft/yr (120 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,460 ft^3/s (98.0 m^3/s) July 19 (gage height, 8.63 ft or 2.630 m); minimum daily, 8.9 ft^3/s (0.25 m^3/s) June 24.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	25	37	66	82	38	25	21	25	12	69	46
2	22	26	38	68	84	40	28	21	21	13	70	43
3	21	25	38	68	82	38	25	20	13	11	124	41
4	23	26	41	71	79	32	24	19	16	10	209	39
5	24	24	43	79	77	29	23	17	14	10	1,320	65
6	25	24	40	76	66	30	23	16	14	96	420	113
7	26	25	34	74	72	33	23	13	14	24	447	61
8	24	26	36	79	74	36	21	12	16	17	396	56
9	24	25	36	84	79	32	24	11	16	14	299	52
10	24	26	34	82	82	30	24	10	16	12	216	50
11	24	26	42	82	84	29	24	11	14	12	164	49
12	24	25	51	84	86	32	24	11	12	12	122	47
13	24	26	60	88	91	30	24	10	12	13	94	47
14	24	25	62	88	88	30	21	9.0	11	13	76	47
15	23	24	56	86	74	28	21	9.0	10	326	439	66
16	21	25	49	94	66	29	20	10	10	701	1,270	54
17	21	24	51	91	65	29	20	14	9.0	238	174	52
18	21	24	51	89	64	25	23	17	10	144	158	58
19	23	26	55	89	58	21	21	14	10	476	74	220
20	24	25	58	86	56	24	19	13	10	594	140	92
21	24	23	62	84	59	23	18	17	10	167	75	88
22	24	24	65	88	56	23	18	24	10	93	57	70
23	24	23	67	89	55	25	18	24	10	81	53	67
24	24	23	62	88	49	25	17	23	8.9	49	259	65
25	24	23	64	88	46	25	18	21	9.3	42	256	67
26	25	21	64	89	47	25	23	23	9.8	32	110	108
27	25	20	65	84	47	23	23	24	11	25	107	94
28	24	19	65	79	43	24	20	25	11	48	62	84
29	25	19	65	77	------	24	20	26	10	22	111	75
30	25	23	65	79	------	26	20	26	9.8	69	70	62
31	25	------	67	82	------	25	------	26	------	88	51	------
TOTAL	734	720	1,623	2,551	1,915	883	652	537.0	372.8	3,464	7,492	2,078
MEAN	23.7	24.0	52.4	82.3	68.4	28.5	21.7	17.3	12.4	112	242	69.3
MAX	26	26	67	94	91	40	28	26	25	701	1,320	220
MIN	21	19	34	66	43	21	17	9.0	8.9	10	51	39
AC-FT	1,460	1,430	3,220	5,060	3,800	1,750	1,290	1,070	739	6,870	14,860	4,120

CAL YR 1973 TOTAL 147,385.0 MEAN 404 MAX 3,040 MIN 18 AC-FT 292,300
WTR YR 1974 TOTAL 23,021.8 MEAN 63.1 MAX 1,320 MIN 8.9 AC-FT 45,660

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-15	2330	8.22	3,020	8-5	0730	7.95	2,780
7-19	2330	8.63	3,460	8-16	0100	8.31	3,100

NOTE.--No gage-height record June 20-23.

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 (396 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 (6.5 m) higher.

AVERAGE DISCHARGE.--15 years, 25.3 ft³/s (0.716 m³/s), 18,330 acre-ft/yr (22.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 832 ft³/s (23.6 m³/s) July 29 (gage height, 5.00 ft or 1.524 m); minimum, 1.8 ft³/s (0.051 m³/s) June 29, 30.

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), 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 good. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	8.7	9.3	9.7	8.2	7.7	5.5	5.5	3.7	2.2	8.2	5.8
2	7.4	8.7	9.5	11	8.5	8.3	5.9	5.5	3.4	2.8	6.8	5.8
3	7.4	8.3	9.1	8.4	8.0	8.9	5.6	5.6	3.4	2.8	7.5	5.8
4	7.0	8.7	8.0	10	8.3	8.1	5.4	5.9	3.4	2.2	36	5.8
5	7.4	8.7	8.4	10	8.6	7.7	5.2	5.9	3.4	2.0	12	7.5
6	7.4	8.7	7.5	9.6	8.5	7.7	5.1	6.2	3.4	2.4	10	6.1
7	7.4	8.7	8.0	11	8.1	8.0	5.0	6.4	3.4	6.2	12	5.8
8	7.4	8.7	8.9	11	7.3	7.9	4.8	5.8	3.4	6.1	13	5.6
9	7.8	8.7	8.3	10	8.3	7.6	4.7	5.4	3.1	3.7	13	5.3
10	7.8	8.7	7.4	9.0	8.7	7.5	4.7	5.1	3.4	3.7	7.8	5.3
11	7.8	8.7	8.3	8.3	8.7	6.9	4.8	5.0	3.4	3.4	6.1	5.0
12	8.3	8.7	9.2	8.4	10	6.8	5.2	4.4	3.1	3.3	5.6	4.8
13	8.3	7.8	9.2	9.7	9.5	6.7	5.0	4.4	3.1	3.7	5.3	4.8
14	7.8	8.1	9.2	9.3	8.8	6.3	4.7	4.4	2.8	4.0	5.3	5.0
15	7.8	7.7	8.3	9.0	8.3	6.1	4.8	4.2	2.8	4.0	6.8	5.6
16	7.8	7.5	7.4	9.0	8.5	5.9	4.8	4.0	2.8	5.1	7.8	5.3
17	7.8	8.2	8.3	9.5	8.7	6.0	4.6	4.2	2.8	5.0	6.8	5.0
18	7.8	8.0	8.3	10	9.0	5.8	4.4	4.4	2.8	5.3	6.4	5.0
19	7.8	8.3	7.4	9.3	8.2	5.8	4.8	4.8	2.8	21	6.4	6.4
20	7.8	8.6	6.3	9.4	9.3	8.9	4.7	4.5	2.8	8.7	5.9	5.6
21	8.3	7.8	6.7	9.9	5.1	7.5	4.8	4.6	2.8	10	5.9	5.3
22	7.8	7.9	7.4	9.7	8.0	6.9	4.8	4.7	2.8	8.7	7.5	5.0
23	7.8	9.2	9.2	7.5	8.5	7.2	4.6	4.6	2.5	7.4	8.2	5.0
24	8.3	8.3	7.8	7.7	7.3	6.5	4.6	4.2	2.8	7.0	6.4	4.8
25	8.3	8.1	7.0	8.0	7.5	6.2	4.8	4.2	2.5	5.9	6.1	4.8
26	8.3	9.6	7.4	8.6	7.4	6.0	4.9	3.9	2.8	5.9	5.8	5.0
27	8.3	7.8	7.4	9.6	7.5	6.1	5.1	3.9	2.5	5.9	6.1	5.0
28	8.3	7.6	10	7.0	7.7	6.0	5.2	3.7	2.2	5.9	7.5	4.8
29	8.7	9.0	9.7	7.7	------	5.9	5.1	3.7	2.2	40	6.4	4.5
30	8.7	9.0	10	8.1	------	5.8	5.2	3.4	2.0	8.0	5.8	4.5
31	8.3	------	7.4	8.4	------	5.7	------	3.4	------	6.1	5.6	------
TOTAL	244.1	252.5	256.3	283.8	230.5	214.4	148.8	145.9	88.3	208.4	260.0	160.0
MEAN	7.87	8.42	8.27	9.15	8.23	6.92	4.96	4.71	2.94	6.72	8.39	5.33
MAX	8.7	9.6	10	11	10	8.9	5.9	6.4	3.7	40	36	7.5
MIN	7.0	7.5	6.3	7.0	5.1	5.7	4.4	3.4	2.0	2.0	5.3	4.5
AC-FT	484	501	508	563	457	425	295	289	175	413	516	317

CAL YR 1973 TOTAL 26,960.2 MEAN 73.9 MAX 1,050 MIN 6.3 AC-FT 53,480
WTR YR 1974 TOTAL 2,493.0 MEAN 6.83 MAX 40 MIN 2.0 AC-FT 4,940

PEAK DISCHARGE (BASE, 450 CFS).--July 29 (1630) 832 cfs (5.00 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 4,844 ft (1,476.5 m) above mean sea level. Prior to Aug. 11, 1912, nonrecording gages at various sites, within 500 ft (152 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 (1 m) higher.

AVERAGE DISCHARGE.--10 years, (1965-74), 73.4 ft³/s (2.079 m³/s), 53,180 acre-ft/yr (65.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 274 ft³/s (7.76 m³/s) Sept. 15 (gage height, 2.76 ft or 0.841 m); no flow many days.
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, Arizona.

REMARKS.--Records fair. Diversions for irrigation of about 1,500 acres (607 hm²) above station.

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	1.6	.65	11	14	15	0	4.1	.19		0	13	0
2	1.6	.65	13	14	15	0	5.8	.18		0	14	0
3	1.6	.65	13	14	14	1.6	8.0	.17		0	19	0
4	1.6	1.1	13	16	13	5.2	7.2	.16		0	47	0
5	1.6	1.6	12	16	14	3.0	6.8	.15		0	66	0
6	.65	2.0	9.6	16	14	1.6	5.8	.13		0	92	0
7	.65	2.5	9.6	16	14	2.5	4.7	.12		0	25	0
8	.65	3.0	10	16	10	3.0	3.6	.11		0	24	0
9	1.1	1.6	11	16	9.0	4.7	2.0	.10		0	31	0
10	1.6	10	11	15	11	3.6	3.0	.09		0	26	0
11	1.1	13	10	14	14	3.6	3.0	.08		0	17	0
12	.65	11	11	16	14	2.0	1.6	.07		0	11	0
13	1.1	12	12	17	15	1.1	.65	.06		0	3.6	0
14	6.7	13	12	17	14	.65	.65	.05		0	.65	0
15	3.6	12	11	17	14	1.1	.65	.04		0	0	74
16	.65	13	10	17	13	.65	.65	.03		.65	0	18
17	.65	14	10	17	13	.65	.65	.03		3.0	0	10
18	.65	13	11	18	13	.65	.65	.18		1.1	4.6	4.7
19	.65	12	12	18	13	.65	.65	.40		0	3.6	23
20	.65	11	11	17	14	5.1	.65	.65		0	2.5	12
21	.20	10	9.6	18	12	10	.65	.65		0	.20	9.6
22	.65	8.8	8.0	17	11	10	.65	.20		0	0	7.2
23	.65	8.0	9.6	16	10	8.0	.65	.20		0	0	2.5
24	.65	11	12	15	6.3	7.2	.65	.20		0	3.1	5.8
25	.65	12	8.8	15	5.2	6.8	.65	.20		0	12	6.3
26	.65	13	7.2	16	4.7	6.8	.65	.18		0	7.2	7.2
27	.65	11	7.6	16	3.6	7.2	.65	.18		0	.20	6.8
28	.65	10	8.8	15	0	5.8	.20	.14		0	0	5.2
29	.65	11	14	14	------	4.7	.20	.07		0	0	3.6
30	.65	12	16	15	------	4.7	.20	0		13	0	3.6
31	.65	------	14	15	------	3.6	------	0	------	14	0	------
TOTAL	35.75	254.55	338.8	493	318.8	116.15	65.95	5.01	0	31.75	422.65	199.5
MEAN	1.15	8.49	10.9	15.9	11.4	3.75	2.20	.16	0	1.02	13.6	6.65
MAX	6.7	14	16	18	15	10	8.0	.65	0	14	92	74
MIN	.20	.65	7.2	14	0	0	.20	0	0	0	0	0
AC-FT	71	505	672	978	632	230	131	9.9	0	63	838	396

CAL YR 1973 TOTAL 67,704.05 MEAN 185 MAX 1,840 MIN 0 AC-FT 134,300
WTR YR 1974 TOTAL 2,281.91 MEAN 6.2 MAX 92 MIN 0 AC-FT 4,530

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

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.--47 years, 70.5 ft³/s (1.997 m³/s), 51,080 acre-ft/yr (63.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 264 ft³/s (7.48 m³/s) July 29 (gage height, 3.26 ft or 0.994 m); minimum, 12 ft³/s (0.34 m³/s) at times.

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) on basis of slope-area measurement at gage height 10.74 ft (3.274 m); 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. Diversions for irrigation of about 2,000 acres (810 hm²) above station. Water quality records for the current year are published in Part 2 of 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	22	33	31	34	20	15	20	17	14	30	22
2	18	22	33	31	34	20	17	20	16	15	29	21
3	18	22	32	32	34	21	19	18	17	14	33	20
4	18	22	30	32	33	20	19	19	17	13	41	19
5	18	22	30	32	33	19	18	22	15	12	61	18
6	16	22	30	33	33	19	18	20	15	13	50	17
7	16	23	30	33	33	20	19	19	14	13	41	16
8	15	23	30	33	31	21	17	19	14	13	34	16
9	16	23	30	33	30	21	16	20	14	13	36	20
10	15	23	30	32	30	23	18	19	15	12	39	17
11	17	24	29	32	31	23	18	20	15	12	33	15
12	17	26	29	33	31	23	17	18	15	13	25	16
13	17	26	28	34	30	22	17	20	15	14	18	18
14	18	27	28	34	31	22	16	18	15	15	17	25
15	18	28	27	35	31	21	17	18	15	16	20	46
16	18	28	27	35	30	21	16	17	15	15	19	45
17	18	30	26	34	29	21	18	17	14	24	19	35
18	18	30	27	35	28	20	19	16	13	18	19	32
19	18	31	27	35	28	21	19	17	14	16	19	36
20	18	32	26	35	28	22	20	17	14	17	16	40
21	18	32	27	35	27	21	20	17	13	16	16	37
22	18	32	27	35	26	24	18	18	13	17	17	33
23	19	33	28	35	25	25	18	20	13	16	19	28
24	20	33	28	35	23	24	18	19	13	16	21	29
25	20	33	28	34	21	21	19	19	12	17	24	33
26	20	34	28	35	20	20	20	17	12	17	22	31
27	21	34	27	36	20	19	20	16	13	18	22	28
28	21	34	28	36	20	19	20	16	14	18	25	26
29	21	33	29	36	------	17	20	15	13	34	21	24
30	22	34	30	34	------	16	20	16	13	30	20	26
31	22	------	31	34	------	16	------	17	------	36	22	------
TOTAL	568	838	893	1,049	804	642	546	564	428	527	828	789
MEAN	18.3	27.9	28.8	33.8	28.7	20.7	18.2	18.2	14.3	17.0	26.7	26.3
MAX	22	34	33	36	34	25	20	22	17	36	61	46
MIN	15	22	26	31	20	16	15	15	12	12	16	15
AC-FT	1,130	1,660	1,770	2,080	1,590	1,270	1,080	1,120	849	1,050	1,640	1,560

CAL YR 1973 TOTAL 87,449 MEAN 240 MAX 1,980 MIN 15 AC-FT 173,500
WTR YR 1974 TOTAL 8,476 MEAN 23.2 MAX 61 MIN 12 AC-FT 16,810

PEAK DISCHARGE (BASE, 800 CFS).--No peak above base.

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.--6 years (1968-74), 56.9 ft^3/s (1.611 m^3/s), 41,220 acre-ft/yr (50.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,380 ft^3/s (67.4 m^3/s) Aug. 23 (gage height, 9.8 ft or 2.99 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, 1.7 ft^3/s (0.048 m^3/s) July 11, 12.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	3.7	4.1	7.1	13	11	16	9.8	4.1	2.5	9.7	5.7
2	4.8	3.5	4.1	7.5	13	11	18	9.4	4.0	2.5	8.0	5.2
3	4.8	3.5	4.2	8.4	13	12	19	8.9	3.9	2.5	74	5.1
4	4.6	3.4	4.2	8.8	13	12	18	8.5	3.8	2.3	27	7.0
5	4.5	3.4	4.2	9.3	12	12	17	8.1	3.8	2.3	18	10
6	4.5	3.4	4.3	9.7	12	12	16	7.8	3.7	2.9	14	8.4
7	4.6	3.5	4.2	10	12	12	16	7.9	3.7	17	17	11
8	4.5	3.5	4.1	15	12	12	16	8.0	3.5	3.8	37	8.8
9	4.5	3.4	4.1	44	12	13	16	7.9	3.1	2.5	57	6.3
10	4.4	3.4	4.1	22	12	13	16	7.5	3.1	1.8	24	5.3
11	4.6	3.5	4.1	16	12	13	16	7.3	3.0	1.7	15	5.0
12	4.6	3.6	4.1	15	12	13	16	6.9	2.9	1.7	12	4.4
13	4.5	3.8	4.1	13	12	13	15	6.6	2.9	5.6	11	6.1
14	4.0	3.9	4.2	13	12	13	15	6.7	2.9	4.4	10	11
15	3.8	4.0	4.2	13	12	12	14	6.4	2.7	4.8	17	15
16	3.8	4.2	4.2	12	12	12	14	6.1	2.7	4.2	13	15
17	3.7	4.2	4.3	12	12	12	14	6.0	2.5	4.2	17	19
18	3.7	4.2	4.4	12	12	12	13	6.1	2.5	3.9	14	12
19	3.7	4.5	4.6	13	12	13	13	5.8	2.5	7.0	13	28
20	3.7	4.7	4.8	13	12	23	12	5.8	2.3	107	17	16
21	3.6	4.3	5.0	13	12	18	11	5.8	2.3	51	16	13
22	3.6	4.3	5.3	13	12	16	11	5.5	2.5	24	16	11
23	3.5	4.2	5.2	14	12	16	11	5.2	2.3	18	126	11
24	3.6	4.2	5.4	13	12	16	11	5.0	2.5	14	30	9.5
25	3.6	4.4	5.6	13	12	16	11	4.8	2.5	12	20	15
26	3.6	4.6	5.9	13	12	16	11	4.9	2.5	11	20	15
27	3.5	4.5	6.0	14	11	16	11	4.6	2.5	17	10	12
28	3.5	4.2	6.0	13	11	16	11	4.4	2.5	14	10	9.9
29	3.6	4.1	6.2	13	------	16	10	4.4	2.5	11	10	8.8
30	3.6	4.1	6.4	13	------	16	9.9	4.3	2.5	13	10	8.2
31	3.7	------	6.6	13	------	16	------	4.2	------	10	6.7	------
TOTAL	125.7	118.2	148.2	418.8	338	434	417.9	200.6	88.2	379.6	699.4	317.7
MEAN	4.05	3.94	4.78	13.5	12.1	14.0	13.9	6.47	2.94	12.2	22.6	10.6
MAX	5.0	4.7	6.6	44	13	23	19	9.8	4.1	107	126	28
MIN	3.5	3.4	4.1	7.1	11	11	9.9	4.2	2.3	1.7	6.7	4.4
AC-FT	249	234	294	831	670	861	829	398	175	753	1,390	630

CAL YR 1973 TOTAL 47,818.7 MEAN 131 MAX 796 MIN 3.4 AC-FT 94,850
WTR YR 1974 TOTAL 3,686.3 MEAN 10.1 MAX 126 MIN 1.7 AC-FT 7,310

PEAK DISCHARGE (BASE, 800 CFS).--July 20 (1645) 1,600 cfs (8.7 ft); Aug. 23 (1730) 2,380 cfs (9.8 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.--50 years (1913-15, 1916-17, 1927-74) 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, 964 ft^3/s (27.3 m^3/s) July 21 (gage height, 4.36 ft or 1.329 m); maximum gage height, 4.60 ft (1.402 m) Aug. 6; minimum daily discharge, 12 ft^3/s (0.34 m^3/s) July 5.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	47	46	65	71	51	45	38	25	20	59	46
2	34	42	47	65	71	51	52	36	27	21	51	41
3	34	42	50	69	71	51	62	34	24	15	176	32
4	33	42	51	68	71	52	68	30	21	14	134	28
5	31	42	48	71	69	52	65	30	19	12	203	28
6	30	44	47	74	69	50	63	32	20	16	178	29
7	29	44	47	78	69	50	60	31	18	39	310	30
8	28	41	47	83	69	42	60	30	16	55	110	37
9	28	39	47	103	66	40	59	28	18	35	101	37
10	28	38	51	134	65	44	58	24	21	25	152	36
11	27	39	51	78	63	48	59	27	16	22	85	36
12	30	41	51	78	63	47	59	32	14	16	78	33
13	34	42	50	76	65	52	56	31	18	12	69	29
14	37	42	50	66	65	53	56	28	21	55	58	33
15	38	44	50	65	65	53	53	29	21	44	95	45
16	37	41	48	66	55	53	51	30	17	171	78	81
17	35	42	48	68	53	53	51	28	18	64	65	80
18	35	38	48	69	56	52	44	30	17	47	59	117
19	35	45	51	68	59	53	39	28	17	103	59	187
20	34	52	52	68	56	60	40	28	16	66	55	105
21	34	55	55	68	63	74	44	29	16	329	53	91
22	36	53	56	69	63	69	50	24	14	101	44	80
23	38	53	56	69	62	66	45	21	14	62	38	78
24	39	53	59	71	62	66	41	23	14	48	165	68
25	40	53	60	69	59	65	34	20	21	40	59	63
26	41	53	63	69	56	62	38	16	20	37	60	78
27	44	56	63	74	55	59	40	16	18	36	60	73
28	44	52	60	74	52	58	42	22	18	44	60	65
29	44	50	59	74	------	55	42	22	17	39	106	62
30	46	47	56	74	------	46	41	23	20	91	66	54
31	46	------	60	74	------	42	------	23	------	73	51	------
TOTAL	1,104	1,372	1,627	2,297	1,763	1,669	1,517	843	556	1,752	2,937	1,802
MEAN	35.6	45.7	52.5	74.1	63.0	53.8	50.6	27.2	18.5	56.5	94.7	60.1
MAX	46	56	63	134	71	74	68	38	27	329	310	187
MIN	27	38	46	65	52	40	34	16	14	12	38	28
AC-FT	2,190	2,720	3,230	4,560	3,500	3,310	3,010	1,670	1,100	3,480	5,830	3,570

CAL YR 1973 TOTAL 170,168 MEAN 466 MAX 3,320 MIN 27 AC-FT 337,500
WTR YR 1974 TOTAL 19,239 MEAN 52.7 MAX 329 MIN 12 AC-FT 38,160

PEAK DISCHARGE (BASE, 2,000 CFS).--No peak above base.

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.--29 years, 9.68 ft^3/s (0.274 m^3/s), 7,010 acre-ft/yr (8.64 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	12	5.8	12	6.2	12	22	22	25	25	18	14
2	17	12	5.8	12	9.9	12	22	22	25	24	17	14
3	17	12	5.8	9.8	12	12	22	22	25	24	17	14
4	17	12	5.8	6.2	12	12	21	22	25	25	14	14
5	17	12	5.8	6.2	12	12	22	24	25	25	12	14
6	17	12	5.8	6.2	12	12	22	25	25	24	12	14
7	17	12	5.8	6.2	12	12	22	25	26	25	12	14
8	17	12	5.8	6.2	12	12	22	25	26	25	12	14
9	17	7.9	5.8	6.2	14	12	22	25	26	24	10	14
10	17	6.0	5.8	6.2	11	12	22	25	26	25	12	14
11	17	6.0	5.8	6.2	12	12	22	25	26	25	15	15
12	17	6.0	5.8	6.2	12	12	22	25	26	25	17	16
13	17	6.0	5.8	6.2	12	12	22	25	26	22	17	17
14	20	6.0	5.8	6.2	12	12	22	23	26	24	17	14
15	21	6.0	5.8	6.2	12	12	22	22	26	25	17	12
16	23	6.0	5.8	6.2	12	12	22	23	26	25	14	12
17	22	6.0	5.8	6.2	12	12	22	22	26	26	12	12
18	16	6.0	5.8	6.2	12	12	22	22	26	21	12	14
19	24	5.9	5.8	6.2	12	12	19	22	21	18	12	17
20	25	6.0	5.8	6.2	12	12	18	22	22	18	12	17
21	25	6.0	5.8	6.2	12	12	18	23	24	12	15	17
22	25	6.0	5.8	6.2	12	12	18	25	24	0	13	17
23	25	6.0	5.8	6.2	12	12	18	25	23	3.4	15	17
24	20	6.0	5.8	6.2	12	12	20	25	21	9.8	13	14
25	17	6.0	5.8	6.2	12	12	22	25	24	14	15	12
26	17	6.0	5.8	6.2	12	12	22	25	24	17	16	13
27	17	5.8	8.6	6.2	11	12	22	25	25	17	17	17
28	17	5.8	12	6.2	12	12	22	25	24	18	17	17
29	14	5.8	12	6.2	------	12	22	25	25	18	17	14
30	12	5.8	12	6.2	------	17	22	25	25	18	16	12
31	12	------	12	6.2	------	21	------	25	------	18	14	------
TOTAL	573	229.0	207.4	207.4	328.1	386	638	741	744	620.2	449	436
MEAN	18.5	7.63	6.69	6.69	11.7	12.5	21.3	23.9	24.8	20.0	14.5	14.5
MAX	25	12	12	12	14	21	22	25	26	26	18	17
MIN	12	5.8	5.8	6.2	6.2	12	18	22	21	0	10	12
AC-FT	1,140	454	411	411	651	766	1,270	1,470	1,480	1,230	891	865

CAL YR 1973 TOTAL 5,548.20 MEAN 15.2 MAX 26 MIN 0 AC-FT 11,000
WTR YR 1974 TOTAL 5,559.10 MEAN 15.2 MAX 26 MIN 0 AC-FT 11,030

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).--30 years, 44.1 ft^3/s (1.249 m^3/s), 31,950 acre-ft/yr (39.4 hm^3/yr); median of yearly mean discharges, 33 ft^3/s (0.93 m^3/s), 23,900 acre-ft/yr (29 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 630 ft^3/s (17.8 m^3/s) Aug. 3 (gage height, 4.60 ft or 1.402 m, at supplementary gage); minimum, 18 ft^3/s (0.51 m^3/s) Oct. 2.
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 7½ 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; 90 percent of the pumpage was from Eagle Creek.

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	19	25	20	21	19	23	24	29	29	34	39	33
2	19	24	21	21	19	23	28	28	30	35	42	30
3	19	24	21	21	19	24	32	28	30	34	170	35
4	19	24	21	21	20	24	32	28	31	32	80	32
5	19	24	21	22	21	24	30	28	31	32	66	35
6	20	24	21	22	21	24	30	28	31	35	49	40
7	21	24	21	23	22	23	30	30	32	41	63	35
8	21	24	21	25	22	23	30	30	32	40	50	31
9	21	24	21	32	22	24	31	30	32	38	38	32
10	21	23	21	28	22	24	32	28	32	35	35	30
11	22	22	22	26	22	24	32	28	32	34	32	30
12	22	21	22	24	22	23	32	27	31	34	32	29
13	22	21	21	23	22	23	31	27	32	35	34	58
14	22	20	21	23	22	23	31	27	32	44	34	51
15	22	20	21	22	22	23	31	26	32	45	51	40
16	22	20	21	22	23	23	31	25	32	48	119	37
17	23	20	21	22	23	23	31	25	31	44	50	35
18	24	20	21	21	24	23	31	25	32	42	40	35
19	26	22	21	21	24	24	31	24	31	44	38	36
20	28	22	21	20	24	28	31	24	30	49	36	39
21	32	22	21	20	24	28	30	24	27	109	33	39
22	34	22	20	20	24	26	28	23	30	52	32	38
23	35	22	20	20	24	26	27	24	32	40	34	38
24	36	21	21	20	24	25	27	24	32	30	34	39
25	36	21	21	20	24	25	27	24	32	28	35	38
26	32	22	21	19	24	25	29	24	32	27	32	35
27	31	22	21	20	23	25	30	22	34	30	34	35
28	32	21	20	20	23	24	30	22	34	33	35	36
29	32	20	19	20	------	24	29	22	35	35	37	37
30	30	20	19	19	------	24	29	23	34	51	35	37
31	26	------	20	19	------	24	------	27	------	41	34	------
TOTAL	788	661	644	677	625	749	897	804	947	1,251	1,473	1,095
MEAN	25.4	22.0	20.8	21.8	22.3	24.2	29.9	25.9	31.6	40.4	47.5	36.5
MAX	36	25	22	32	24	28	32	30	35	109	170	58
MIN	19	20	19	19	19	23	24	22	27	27	32	29
AC-FT	1,560	1,310	1,280	1,340	1,240	1,490	1,780	1,590	1,880	2,480	2,920	2,170
(†)	257	344	325	158	0	0	0	32	588	833	1,070	1,030
(‡)	1,180	1,240	1,160	986	1,020	1,290	1,220	1,450	1,780	1,710	1,540	1,630

CAL YR 1973 TOTAL 31,584 MEAN 86.5 MAX 1,100 MIN 13 AC-FT 62,650 † 926 ‡ 13,950
WTR YR 1974 TOTAL 10,611 MEAN 29.1 MAX 170 MIN 19 AC-FT 21,050 † 4,640 ‡ 16,210

PEAK DISCHARGE (BASE, 800 CFS).--No peak above base.

† 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.--60 years, 443 ft^3/s (12.55 m^3/s), 321,000 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, 3,280 ft^3/s (92.9 m^3/s) Aug. 16 (gage height, 6.69 ft or 2.039 m); minimum daily, 27 ft^3/s (0.76 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 in Part 2 of this report.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	86	86	124	160	106	74	72	45	31	160	105
2	58	78	90	132	162	102	79	68	45	38	166	97
3	60	73	92	136	163	111	87	65	44	36	260	100
4	62	75	100	136	160	111	97	63	43	33	349	72
5	58	72	102	141	159	104	101	62	38	28	1,330	64
6	60	73	102	141	151	101	97	62	36	50	923	139
7	60	73	98	141	151	95	93	63	36	56	982	111
8	60	72	92	146	150	95	93	63	36	57	684	99
9	56	70	90	167	150	95	91	60	36	57	700	86
10	54	70	92	203	152	91	91	58	36	47	518	68
11	60	70	96	192	150	91	93	54	38	38	378	61
12	66	72	107	172	151	92	93	54	36	34	282	58
13	72	73	111	169	154	94	93	58	34	32	218	85
14	73	73	113	169	151	95	91	56	35	70	170	84
15	66	73	113	154	146	94	93	52	36	166	200	81
16	65	73	109	156	132	92	93	51	36	843	1,560	92
17	63	72	107	164	121	92	91	51	33	424	440	95
18	63	72	109	159	123	90	87	51	32	303	297	96
19	62	73	109	163	126	91	83	51	31	209	216	292
20	60	80	111	164	122	97	78	51	32	1,080	227	241
21	60	84	115	165	127	110	78	51	31	535	182	211
22	68	86	118	165	125	114	80	51	30	323	147	167
23	73	88	118	170	121	110	84	48	30	221	102	145
24	77	90	118	167	118	103	78	42	28	150	248	143
25	77	88	122	167	118	101	76	44	28	113	461	143
26	82	90	129	168	118	99	72	42	29	97	241	159
27	86	96	129	165	116	93	74	38	29	81	193	182
28	84	86	127	163	114	91	76	38	28	89	147	163
29	84	84	124	160	------	91	78	43	28	81	171	158
30	84	84	122	158	------	85	77	44	27	87	175	138
31	88	------	122	160	------	76	------	45	------	220	118	------
TOTAL	2,103	2,349	3,373	4,937	3,891	3,012	2,571	1,651	1,026	5,629	12,245	3,735
MEAN	67.8	78.3	109	159	139	97.2	85.7	53.3	34.2	182	395	125
MAX	88	96	129	203	163	114	101	72	45	1,080	1,560	292
MIN	54	70	86	124	114	76	72	38	27	28	102	58
AC-FT	4,170	4,660	6,690	9,790	7,720	5,970	5,100	3,270	2,040	11,170	24,290	7,410

CAL YR 1973 TOTAL 336,051 MEAN 921 MAX 7,000 MIN 54 AC-FT 666,600
WTR YR 1974 TOTAL 46,522 MEAN 127 MAX 1,560 MIN 27 AC-FT 92,280

PEAK DISCHARGE (BASE, 4,000 CFS).--No peak above base.

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 entire acreage during calendar year 1973. 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 1973 AND WATER YEAR 1974

	Canal	Calendar year 1973	Water year 1974
09449500.	Brown	3,060	1,200
09451500.	Tidwell	602	552
09452000.	Fourness	400	166
09452500.	San Jose	19,770	12,920
09453000.	Montezuma	23,280	14,560
09453500.	Union	26,170	17,330
09458000.	Graham	15,070	5,500
09459500.	Smithville	9,760	5,230
09461500.	Dodge-Nevada	8,500	4,400
09462500.	Curtis	7,880	6,190
09463500.	Fort Thomas	10,440	5,210
09464000.	Colvin-Jones	0	0
09464500.	T. D. Burton	20	0
	Total	125,000	73,260

COMBINED MONTHLY DISCHARGE OF CANALS DIVERTING FROM GILA RIVER IN SAFFORD VALLEY, ARIZ., DURING WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Month	Discharge, in cubic feet per second			Diversions in acre-feet
	Maximum	Minimum	Mean	
October	54	36	45.2	2,780
November	70	31	51.2	3,050
December	132	12	86.7	5,330
CAL YR 1973	394	12	173	125,000
January	199	104	161	9,900
February	191	140	166	9,230
March	136	82	104	6,400
April	83	61	70.3	4,180
May	59	27	41.8	2,570
June	34	16	24.0	1,430
July	284	18	106	6,490
August	366	123	228	14,010
September	208	73	133	7,890
WTR YR 1974	366	12	101	73,260

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.--40 years, 12.9 ft^3/s (0.365 m^3/s), 9,350 acre-ft/yr (11.5 hm^3/yr); median of yearly mean discharges, 10 ft^3/s (0.28 m^3/s), 7,200 acre-ft/yr (8.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,840 ft^3/s (137 m^3/s) Aug. 15 (gage height, 17.83 ft or 5.435 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	73	0
2										15	60	0
3										0	0	0
4										0	6.6	0
5										0	20	0
6										0	0	0
7										0	0	0
8										0	0	0
9										0	6.4	0
10										0	37	0
11										0	0	0
12										0	0	0
13										0	0	250
14										5.1	0	0
15										380	466	0
16										.70	336	0
17										19	0	0
18										16	0	0
19										9.2	0	0
20										274	0	.30
21										3.7	0	54
22										0	0	24
23										0	57	0
24										0	5.0	0
25										0	0	0
26										0	0	0
27										0	0	0
28										0	0	0
29					------					167	0	0
30					------					120	0	0
31		------			------		------		------	0	0	------
TOTAL	0	0	0	0	0	0	0	0	0	1,009.70	1,067.0	328.30
MEAN	0	0	0	0	0	0	0	0	0	32.6	34.4	10.9
MAX	0	0	0	0	0	0	0	0	0	380	466	250
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	2,000	2,120	651

CAL YR 1973 TOTAL 743.90 MEAN 2.04 MAX 134 MIN 0 AC-FT 1,480
WTR YR 1974 TOTAL 2,405.00 MEAN 6.59 MAX 466 MIN 0 AC-FT 4,770

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-15	1800	16.40	4,270	8-15	2300	17.83	4,840
7-29	2300	14.66	3,570				

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, 549 ft^3/s (15.5 m^3/s) Aug. 5 (gage height, 4.40 ft or 1.341 m); no flow Oct. 7 to Nov. 17, June 1-30.
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 for many days 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	0	.37	.23	.33	.29	.86	.49		1.7	.64	.45
2	.02	0	.41	.29	.33	.29	1.9	.49		.06	.74	.54
3	.01	0	.45	.29	.33	.33	1.4	.49		.04	1.7	.54
4	.01	0	.45	.33	.33	.37	1.1	.45		.04	3.7	.54
5	.01	0	.41	.64	.33	.37	.98	.45		.04	27	.49
6	.01	0	.41	.59	.33	.37	.92	.45		.04	49	.49
7	0	0	.41	.54	.33	.37	.86	.45		.47	41	.49
8	0	0	.41	.92	.33	.37	.92	.41		.06	20	.41
9	0	0	.37	2.8	.29	.49	.92	.37		.03	14	.33
10	0	0	.33	1.3	.29	.49	.92	.33		.02	10	.29
11	0	0	.33	.86	.29	.45	.92	.26		.01	7.6	.23
12	0	0	.29	.59	.29	.41	.86	.23		.01	5.9	.17
13	0	0	.29	.54	.33	.37	.80	.20		.01	4.6	13
14	0	0	.29	.54	.33	.37	.80	.20		2.3	3.6	3.0
15	0	0	.29	.54	.33	.37	.74	.20		3.6	3.6	1.4
16	0	0	.29	.54	.29	.41	.74	.14		1.1	3.3	1.1
17	0	0	.26	.54	.29	.45	.74	.14		.92	2.6	.86
18	0	.07	.26	.59	.29	.49	.74	.11		.92	2.1	1.3
19	0	.20	.26	.59	.29	.64	.74	.09		8.8	2.1	3.1
20	0	.23	.26	.59	.29	1.6	.69	.09		24	1.6	1.9
21	0	.23	.26	.54	.29	1.4	.64	.07		9.3	1.3	1.9
22	0	.23	.26	.59	.29	1.1	.64	.07		5.7	1.2	2.1
23	0	.23	.26	.59	.29	1.1	.59	.06		4.6	1.1	4.0
24	0	.26	.26	.54	.29	.98	.59	.06		3.3	1.1	4.4
25	0	.29	.23	.49	.29	.86	.59	.04		2.4	.92	4.6
26	0	.37	.23	.45	.29	.80	.64	.03		1.7	.98	4.4
27	0	.33	.23	.45	.29	.80	.59	.02		1.3	1.2	4.4
28	0	.33	.23	.41	.29	.74	.59	.02		1.1	.86	4.4
29	0	.33	.23	.37	------	.74	.54	.01		1.7	.80	3.8
30	0	.33	.23	.37	------	.74	.54	.01		1.1	.59	3.3
31	0	------	.23	.33	------	.80	------	.01	------	.74	.49	------
TOTAL	.08	3.43	9.49	18.98	8.56	19.36	24.50	6.44	0	77.11	215.32	67.93
MEAN	.003	.11	.31	.61	.31	.62	.82	.21	0	2.49	6.95	2.26
MAX	.02	.37	.45	2.8	.33	1.6	1.9	.49	0	24	49	13
MIN	0	0	.23	.23	.29	.29	.54	.01	0	.01	.49	.17
AC-FT	.2	6.8	19	38	17	38	49	13	0	153	427	135

CAL YR 1973 TOTAL 3,331.29 MEAN 9.13 MAX 80 MIN 0 AC-FT 6,610
WTR YR 1974 TOTAL 451.20 MEAN 1.24 MAX 49 MIN 0 AC-FT 895

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 1	1830	2.50	45	8- 5	1300	4.40	549
7-14	1800	2.33	32	8- 6	1800	3.57	239
7-19	2230	2.73	68	9-13	1130	3.40	191
8- 4	2030	3.00	106				

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.--7 years (1967-74), 1.24 ft^3/s (0.0351 m^3/s), 898 acre-ft/yr (1.11 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 57 ft^3/s (1.61 m^3/s) Aug. 6 (gage height, 3.00 ft or 0.914 m); no flow Oct. 1 to Nov. 9, June 3-30.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.12	.10	.18	.12	.18	.31	.01	.17	.03	.18
2		0	.12	.12	.15	.12	.36	.31	.01	.01	.10	.18
3		0	.12	.10	.15	.12	.36	.27	0	.01	.15	.18
4		0	.12	.12	.15	.12	.27	.27	0	.01	.35	.18
5		0	.12	.27	.15	.12	.27	.22	0	.01	1.5	.18
6		0	.12	.18	.15	.12	.27	.27	0	.01	4.8	.18
7		0	.15	.18	.15	.12	.27	.27	0	2.2	5.1	.18
8		0	.15	.53	.15	.12	.22	.22	0	.22	3.8	.15
9		0	.15	1.1	.15	.22	.22	.22	0	.12	3.4	.12
10		.01	.12	.67	.15	.18	.22	.22	0	.04	2.5	.10
11		.02	.12	.41	.15	.18	.22	.22	0	.03	2.1	.08
12		.04	.12	.36	.15	.18	.22	.27	0	.02	1.7	.08
13		.08	.15	.27	.15	.18	.22	.27	0	.02	1.4	2.7
14		.08	.15	.27	.15	.18	.22	.27	0	.44	1.2	.67
15		.08	.15	.27	.12	.15	.22	.27	0	2.2	2.1	.47
16		.08	.15	.22	.12	.15	.18	.22	0	.60	1.8	.41
17		.10	.15	.22	.12	.15	.18	.22	0	.22	1.1	.36
18		.10	.15	.18	.12	.15	.18	.22	0	.15	.90	.47
19		.12	.15	.18	.12	.18	.18	.18	0	3.0	.74	.74
20		.12	.12	.18	.12	.60	.22	.18	0	2.4	.74	.74
21		.12	.12	.18	.12	.41	.22	.18	0	.74	.67	.74
22		.12	.12	.18	.12	.36	.27	.15	0	.53	.60	.67
23		.15	.12	.18	.12	.31	.27	.15	0	.31	.53	.67
24		.15	.12	.18	.12	.27	.22	.10	0	.27	.41	.67
25		.15	.12	.18	.12	.27	.27	.10	0	.18	.36	.82
26		.18	.12	.18	.12	.22	.27	.08	0	.15	.47	.82
27		.18	.12	.22	.12	.22	.31	.04	0	.12	.41	.74
28		.15	.12	.22	.12	.18	.36	.03	0	.10	.31	.67
29		.15	.12	.22	------	.18	.36	.02	0	.08	.27	.60
30		.15	.10	.18	------	.18	.31	.01	0	.06	.27	.60
31		------	.10	.18	------	.18	------	.01	------	.04	.18	------
TOTAL	0	2.33	3.98	8.03	3.81	6.24	7.54	5.77	.02	14.46	39.99	15.35
MEAN	0	.078	.13	.26	.14	.20	.25	.19	.0007	.47	1.29	.51
MAX	0	.18	.15	1.1	.18	.60	.36	.31	.01	3.0	5.1	2.7
MIN	0	0	.10	.10	.12	.12	.18	.01	0	.01	.03	.08
AC-FT	0	4.6	7.9	16	7.6	12	15	11	.04	29	79	30

CAL YR 1973 TOTAL 1,131.40 MEAN 3.10 MAX 21 MIN 0 AC-FT 2,240
WTR YR 1974 TOTAL 107.52 MEAN .29 MAX 5.1 MIN 0 AC-FT 213

PEAK DISCHARGE (BASE, 10 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 1	1900	2.42	13	8- 5	1400	2.44	14
7- 7	0700	2.69	29	8- 6	1730	3.00	57
7-15	1500	2.62	24	9-13	1130	2.80	37
7-19	2000	2.60	23				

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.--7 years (1967-74), 1.19 ft^3/s (0.0337 m^3/s), 862 acre-ft/yr (1.06 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 42 ft^3/s (1.19 m^3/s) Aug. 6 (gage height, 1.83 ft or 0.558 m); no flow for many days. Period of record: Maximum discharge, 51 ft^3/s (1.44 m^3/s) Oct. 19, 1972 (gage height, 1.89 ft or 0.576 m); 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.14	.24	.24	.56	.46	.20	0	.09	.32
2			0	.14	.24	.24	.56	.46	.17	0	.09	.32
3			0	.14	.24	.24	.51	.46	.14	0	.09	.32
4			0	.14	.24	.24	.51	.46	.14	0	.09	.36
5			0	.14	.24	.24	.51	.46	.14	0	.09	.36
6			0	.14	.24	.24	.51	.41	.12	0	7.0	.32
7			0	.14	.24	.24	.51	.41	.12	0	11	.32
8			.03	.14	.24	.24	.51	.46	.12	0	5.1	.32
9			.07	.14	.24	.24	.51	.46	.12	0	3.9	.32
10			.09	.14	.24	.24	.51	.46	.12	0	3.0	.32
11			.09	.14	.24	.24	.46	.51	.09	0	2.3	.28
12			.12	.14	.24	.24	.46	.51	.07	0	2.0	.28
13			.14	.14	.24	.24	.46	.63	.06	0	1.8	1.1
14			.12	.17	.24	.24	.46	.63	.04	0	1.6	1.2
15			.12	.20	.24	.24	.46	.69	.04	0	3.6	.76
16			.12	.20	.24	.24	.46	.69	0	0	3.0	.69
17			.12	.20	.24	.24	.46	.69	0	0	1.9	.69
18			.12	.20	.24	.24	.46	.69	0	0	1.6	.92
19			.12	.20	.24	.24	.41	.63	0	0	1.2	3.9
20			.12	.20	.24	.28	.41	.63	0	0	1.1	4.4
21			.12	.20	.24	.32	.41	.56	0	0	.92	3.0
22			.12	.20	.24	.41	.41	.56	0	0	.76	3.4
23			.12	.20	.24	.56	.41	.51	0	0	.69	2.8
24			.12	.20	.24	.63	.41	.46	0	0	.63	2.3
25			.12	.20	.24	.63	.41	.41	0	0	.56	1.9
26			.12	.20	.24	.63	.41	.41	0	0	.56	1.7
27			.12	.20	.24	.63	.41	.32	0	0	.51	1.7
28			.12	.20	.24	.63	.41	.28	0	0	.46	1.4
29			.12	.20	------	.63	.41	.28	0	.01	.41	1.4
30			.12	.20	------	.63	.46	.24	0	.07	.36	1.2
31		------	.12	.20	------	.56	------	.24	------	.09	.36	------
TOTAL	0	0	2.70	5.39	6.72	11.10	13.85	15.07	1.69	.17	56.77	38.30
MEAN	0	0	.087	.17	.24	.36	.46	.49	.056	.006	1.83	1.28
MAX	0	0	.14	.20	.24	.63	.56	.69	.20	.09	11	4.4
MIN	0	0	0	.14	.24	.24	.41	.24	0	0	.09	.28
AC-FT	0	0	5.4	11	13	22	27	30	3.4	.3	113	76

CAL YR 1973 TOTAL 992.02 MEAN 2.72 MAX 20 MIN 0 AC-FT 1,970
WTR YR 1974 TOTAL 151.76 MEAN .42 MAX 11 MIN 0 AC-FT 301

PEAK DISCHARGE (BASE, 8.0 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8- 6	2030	1.83	42	9-20	1330	1.47	11
8-15	1800	1.50	13				

09460200. Frye Creek at Thatcher, Ariz.

LOCATION.--Lat 32°50'00", long 109°45'39", in SW¼ sec.11, T.7 S., R.25 E., Graham County, on left bank 1,300 ft (400 m) downstream from Frye Creek detention dam and 1 mi (2 km) south of Thatcher.

DRAINAGE AREA.--24.3 mi^2 (62.9 km^2).

PERIOD OF RECORD.--February 1963 to June 1974 (discontinued).

GAGES.--Frye Creek: Water-stage recorder and concrete control. Datum of gage is 2,955.09 ft (900.711 m) above mean sea level (Soil Conservation Service bench mark).
09460190. Frye Creek Reservoir: Water-stage recorder on dam above intake structures. Datum of gage is 2,967.49 ft (904.491 m) above sea level.

AVERAGE DISCHARGE.--10 years (1963-73), 0.392 ft^3/s (0.011 m^3/s), 284 acre-ft/yr (350,000 m^3/yr); median of yearly mean discharges, 0.27 ft^3/s (0.008 m^3/s), 200 acre-ft/yr (247,000 m^3/yr).

EXTREMES.--October 1973 to June 1974: No flow for entire period.
Period of record: Maximum discharge, 220 ft^3/s (6.23 m^3/s) Sept. 24, 1967 (gage height, 4.34 ft or 1.323 m); maximum gage height, 4.44 ft (1.353 m) Aug. 26, 1972; no flow for most of time in each year.

REMARKS.--No flow since July 15, 1973, until station was discontinued June 30, 1974. Figures of discharge for calendar year 1973 are as follows: Total, 75.00 ft^3/s-days; mean, 0.205 ft^3/s; maximum, 8.2 ft^3/s; minimum, 0; runoff, 149 acre-ft. Floodflows regulated by uncontrolled storage in Frye Creek flood-control reservoir—capacity, 2,190 acre-ft (2.70 hm^3) below elevation 2,992 ft (912.0 m), crest of emergency spillway. No storage occurred during the period Oct. 1, 1973, through June 30, 1974. Diversions above reservoir for domestic and stock water. Urban development of about 80 acres (324,000 m^2) in basin. Records of suspended-sediment loads when flow did occur were published in Part 2 of these reports.

REVISIONS.--Revised records of total outflow from Frye Creek Reservoir for certain flow events in water years 1964-65 were published in Part 2 of this report for 1966.
Figure of total outflow from Frye Creek Reservoir for flow event No. 98, Mar. 21-24, 1973, is corrected to 3.2 acre-ft, superseding figure published in WRD Ariz. 1973.

09466500. Gila River at Calva, Ariz.

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, on left bank 530 ft (162 m) downstream from Southern Pacific Railroad bridge at head of San Carlos Reservoir, 2.2 mi (3.5 km) northwest 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 2,513.64 ft (766.157 m) above mean sea level. Prior to Oct. 1, 1954, and Aug. 25, 1958, to Dec. 31, 1962, at site 530 ft (162 m) upstream at datum 1.13 ft (0.344 m) higher. Oct. 1, 1954, to Aug. 24, 1958, at site 530 ft (162 m) upstream at datum 1.87 ft (0.570 m) lower. Supplementary water-stage recorder since Oct. 20, 1972, at bridge on U.S. Highway 70, 6.3 mi (10.1 km) upstream, at datum 2,560.19 ft (780.346 m) above mean sea level.

AVERAGE DISCHARGE.--45 years, 269 ft^3/s (7.618 m^3/s), 194,900 acre-ft/yr (240 hm^3/yr); median of yearly mean discharges, 180 ft^3/s (5.10 m^3/s), 130,000 acre-ft/yr (160 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,160 ft^3/s (32.9 m^3/s) July 20 (gage height, 5.18 ft or 1.579 m at supplementary gage); minimum 0.20 ft^3/s (0.006 m^3/s) July 12, 13.
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. Flood of Oct. 20, 1972, destroyed gage. Records computed from supplementary gage 6.3 mi (10.1 km) upstream. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	12	19	28	34	30	32	24	5.2	1.4	15	20
2	9.7	12	18	36	32	30	28	23	5.6	1.0	222	12
3	9.2	12	14	53	31	31	25	20	5.2	1.3	133	12
4	9.2	14	15	53	30	35	23	19	5.0	1.5	83	5.7
5	9.2	15	16	56	31	36	24	19	5.0	2.2	181	8.0
6	11	16	20	55	32	34	24	20	5.0	6.0	719	8.6
7	12	16	32	57	31	33	24	18	5.0	4.1	388	9.7
8	12	16	38	61	31	33	23	18	5.0	4.1	444	18
9	11	16	30	61	32	37	23	16	5.0	3.1	256	14
10	11	14	31	58	32	39	23	15	5.0	1.6	264	9.2
11	12	13	32	56	31	39	22	14	5.2	1.0	154	7.1
12	12	12	29	61	32	38	20	13	5.2	.40	95	6.4
13	11	12	27	70	33	35	21	10	4.5	.30	36	8.6
14	11	14	32	64	41	32	20	7.5	4.1	.80	12	369
15	10	14	34	71	37	35	20	10	3.7	2.2	6.7	95
16	10	14	34	58	35	35	23	9.7	3.3	2.0	487	45
17	11	15	34	51	36	33	25	10	2.9	382	462	21
18	11	16	33	38	35	31	30	12	2.4	401	176	13
19	11	18	32	34	34	30	29	11	2.4	147	85	12
20	12	18	31	34	34	37	27	11	2.2	242	57	324
21	13	18	31	35	32	35	26	8.6	2.9	409	30	182
22	11	16	30	36	31	31	24	7.5	1.6	210	21	66
23	10	18	30	35	30	31	22	7.5	1.8	136	23	64
24	12	14	33	31	28	33	18	7.5	1.8	66	14	36
25	11	14	42	32	28	33	18	9.7	2.0	39	24	22
26	10	14	42	34	31	30	24	9.2	1.6	24	182	17
27	9.7	19	44	37	30	27	28	8.0	1.6	17	56	34
28	9.7	16	45	37	28	30	29	7.1	1.5	12	33	55
29	10	14	36	37	------	31	22	6.4	1.0	7.1	46	45
30	11	17	29	37	------	34	20	6.0	1.0	50	29	41
31	11	------	28	37	------	37	------	5.6	------	55	27	------
TOTAL	333.4	449	941	1,443	902	1,035	717	383.3	103.7	2,230.10	4,760.7	1,580.3
MEAN	10.8	15.0	30.4	46.5	32.2	33.4	23.9	12.4	3.46	71.9	154	52.7
MAX	13	19	45	71	41	39	32	24	5.6	409	719	369
MIN	9.2	12	14	28	28	27	18	5.6	1.0	.30	6.7	5.7
AC-FT	661	891	1,870	2,860	1,790	2,050	1,420	760	206	4,420	9,440	3,130

CAL YR 1973 TOTAL 291,833.50 MEAN 800 MAX 8,250 MIN 7.5 AC-FT 578,900
WTR YR 1974 TOTAL 14,878.50 MEAN 40.8 MAX 719 MIN .30 AC-FT 29,510

PEAK DISCHARGE (BASE, 3,000 CFS).--No peak above base.

NOTE.--Records are from supplementary gage.

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 Jan. 31, 1942.

AVERAGE DISCHARGE.--45 years (1929-74), 47.4 ft^3/s (1.34 m^3/s), 34,340 acre-ft/yr (42.3 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, 7,800 ft^3/s (220 m^3/s) July 20 (gage height, 7.35 ft or 2.24 m); no flow July 3-7.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	8.5	13	15	12	11	13	6.2	3.5	.50	31	4.2
2	5.9	8.5	13	15	11	11	13	7.4	3.8	.20	196	4.5
3	5.9	8.5	16	14	11	12	13	7.9	3.8	0	52	4.8
4	5.9	9.1	14	13	11	11	12	7.9	3.8	0	16	5.2
5	5.9	9.1	14	13	11	11	11	8.5	4.2	0	12	39
6	5.9	9.1	14	14	11	11	11	8.5	3.8	0	37	14
7	6.2	9.1	14	13	11	11	12	11	3.1	0	13	5.9
8	5.9	9.1	15	18	11	11	12	13	2.6	1.8	15	5.9
9	5.9	9.7	15	26	11	13	11	12	2.8	2.0	10	4.2
10	6.8	9.7	15	27	11	15	11	11	2.8	1.8	8.5	3.8
11	7.4	10	16	22	12	14	11	9.1	2.8	1.4	7.4	3.5
12	7.4	10	16	23	12	13	11	6.8	2.4	1.4	7.4	3.5
13	7.4	10	16	18	13	11	11	7.4	1.4	.60	7.4	8.7
14	7.4	10	16	16	13	10	10	7.9	2.2	.70	6.2	9.1
15	7.4	10	16	16	13	9.1	9.1	8.5	1.8	.70	5.9	7.4
16	7.9	11	16	16	13	7.4	7.9	7.4	2.4	.60	5.9	6.2
17	7.9	11	16	16	13	7.9	7.9	7.9	2.2	3.8	5.9	5.9
18	7.9	11	16	16	13	7.9	7.4	7.4	2.4	3.5	7.9	11
19	8.5	13	16	16	12	9.1	7.4	6.8	2.2	2.6	5.5	5.9
20	8.5	13	16	15	12	17	7.4	6.2	2.4	461	5.5	19
21	8.5	13	15	15	11	23	7.4	6.2	2.0	27	5.9	16
22	8.5	12	15	14	9.7	62	7.9	5.9	1.6	18	5.9	8.5
23	8.5	12	15	13	9.7	41	7.4	5.5	1.2	11	7.9	6.8
24	8.5	13	15	13	9.7	31	7.9	5.2	1.4	7.4	8.5	7.9
25	8.5	13	15	13	11	22	7.9	5.2	.70	5.9	9.1	8.5
26	8.5	14	15	13	11	18	8.5	5.5	.50	45	8.5	9.7
27	8.5	15	14	13	11	17	8.5	5.2	.60	13	10	34
28	7.9	14	14	13	11	16	8.5	4.2	.60	11	9.7	16
29	7.9	13	14	12	------	16	7.9	2.8	.50	8.5	7.4	10
30	7.9	13	14	12	------	15	7.4	2.8	.50	5.9	5.2	7.9
31	7.9	------	14	12	------	13	------	3.1	------	286	4.2	------
TOTAL	229.0	331.4	463	485	321.1	497.4	288.4	220.4	66.00	921.30	537.8	297.0
MEAN	7.39	11.0	14.9	15.6	11.5	16.0	9.61	7.11	2.20	29.7	17.3	9.90
MAX	8.5	15	16	27	13	62	13	13	4.2	461	196	39
MIN	5.9	8.5	13	12	9.7	7.4	7.4	2.8	.50	0	4.2	3.5
AC-FT	454	657	918	962	637	987	572	437	131	1,830	1,070	589

CAL YR 1973 TOTAL 32,991.70 MEAN 90.4 MAX 3,130 MIN 3.5 AC-FT 65,440
WTR YR 1974 TOTAL 4,657.80 MEAN 12.8 MAX 461 MIN 0 AC-FT 9,240

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	1800	7.35	7,800	8-2	2015	4.60	2,780
7-31	1700	5.35	3,900				

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, 656,200 acre-ft (809 hm^3) Oct. 1 (elevation, 2,492.12 ft or 759.598 m); minimum, 280,700 acre-ft (346 hm^3) Sept. 30 (elevation, 2,458.18 ft or 749.253 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)

2,450	217,800	2,480	502,800
2,460	296,000	2,490	627,700
2,470	392,100	2,500	770,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	656,200	638,400	632,400	615,600	611,200	589,300	546,900	504,600	457,900	399,200	347,900	310,200
2	655,500	638,400	631,700	615,900	610,600	588,100	545,300	502,900	456,200	396,800	347,100	308,700
3	654,700	638,100	631,200	615,600	610,500	586,700	543,700	501,200	454,400	394,600	346,100	307,000
4	654,100	638,000	630,600	615,100	610,000	585,300	542,600	499,600	452,600	392,700	345,000	305,400
5	653,100	637,800	630,100	615,300	609,300	583,900	541,400	497,800	450,600	390,600	344,500	303,900
6	652,400	637,700	629,700	615,200	608,500	582,500	540,000	496,400	448,700	388,300	344,500	302,500
7	651,700	637,600	629,300	615,200	607,900	581,000	539,000	494,700	446,500	386,100	344,900	300,800
8	650,900	637,400	628,900	615,900	607,000	579,600	537,700	492,700	444,700	384,000	344,300	299,200
9	649,900	637,300	628,400	615,700	606,300	578,200	536,600	491,100	443,200	381,700	343,700	297,700
10	649,300	637,300	628,000	615,600	605,600	576,900	534,700	489,500	441,400	379,600	342,800	296,000
11	648,600	637,200	627,400	615,900	604,900	575,700	533,300	487,900	439,500	377,200	341,800	294,300
12	647,900	637,000	627,200	615,900	604,100	574,300	532,000	486,300	437,700	375,200	340,500	292,700
13	647,200	636,800	626,800	615,900	603,500	573,000	530,700	484,600	435,900	373,200	339,200	291,300
14	646,800	636,500	626,400	615,900	602,800	571,600	529,400	483,100	434,300	371,500	337,800	290,600
15	646,200	636,500	626,000	615,700	602,200	570,300	528,100	481,600	432,500	369,700	336,200	289,600
16	645,600	636,400	625,500	615,700	601,400	568,700	526,400	480,100	430,400	367,700	334,600	288,600
17	645,100	636,200	624,900	615,600	600,500	567,400	525,000	478,600	428,600	366,100	334,800	287,500
18	644,400	636,100	624,300	615,300	599,600	565,700	523,700	477,400	426,600	364,400	333,400	286,700
19	643,900	636,100	623,700	615,200	598,900	564,400	522,100	476,100	424,600	362,600	331,700	285,800
20	643,300	636,100	622,700	614,800	598,200	563,500	520,800	475,100	422,500	362,000	330,000	285,500
21	642,800	635,800	622,200	614,600	597,400	561,900	519,400	474,300	420,500	362,200	328,500	285,000
22	642,100	635,700	621,600	614,200	596,600	560,500	518,100	472,700	418,600	361,400	326,900	284,600
23	641,600	635,700	621,000	613,900	595,900	559,100	516,500	471,700	416,800	360,500	324,900	283,900
24	640,900	635,700	620,200	613,500	595,100	557,800	515,300	470,200	414,400	359,100	323,100	283,300
25	640,400	635,400	619,500	613,200	593,900	556,400	514,000	469,200	412,400	357,600	321,300	282,700
26	639,700	635,000	619,000	613,000	593,000	555,000	512,400	467,900	410,300	355,900	319,800	282,500
27	639,400	634,400	618,400	612,600	592,000	553,700	510,800	466,600	408,400	354,400	318,200	282,000
28	639,300	633,700	617,800	612,200	590,700	552,300	509,200	465,000	406,000	352,900	316,600	281,600
29	639,200	633,000	617,200	611,900	------	551,100	507,800	463,300	403,700	351,000	315,100	281,100
30	638,800	632,800	616,600	611,700	------	549,600	506,300	461,600	401,200	350,100	313,500	280,700
31	638,600	------	616,300	611,300	------	548,100	------	459,700	------	349,000	311,900	------
MAX	656,200	638,400	632,400	615,900	611,200	589,300	546,900	504,600	457,900	399,200	347,900	310,200
MIN	638,600	632,800	616,300	611,300	590,700	548,100	506,300	459,700	401,200	349,000	311,900	280,700
(†)	2,490.82	2,490.38	2,489.13	2,488.75	2,487.16	2,483.77	2,480.30	2,476.24	2,470.87	2,465.75	2,461.82	2,458.18
(‡)	-18,400	-5,800	-16,500	-5,000	-20,600	-42,600	-41,800	-46,600	-58,500	-52,200	-37,100	-31,200

CAL YR 1973 MAX 843,100 MIN 382,900 ‡+237,300
WTR YR 1974 MAX 656,200 MIN 280,700 ‡-376,300

† 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).--62 years (1900-1901, 1903-4, 1914-74), 348 ft^3/s (9.855 m^3/s), 252,100 acre-ft/yr (311 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, 1,000 ft^3/s (28.3 m^3/s) June 30 to July 9; minimum daily, 3.7 ft^3/s (0.10 m^3/s) Nov. 11-17, 22, 23.

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.

1928-74: 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321	4.8	225	173	175	682	674	765	823	1,000	753	748
2	290	4.8	225	173	175	682	674	790	807	1,000	710	748
3	268	5.4	200	173	175	724	660	794	794	1,000	618	748
4	268	7.3	227	173	257	748	635	794	794	1,000	481	748
5	260	5.4	227	175	324	757	628	794	823	1,000	302	736
6	246	5.4	206	175	324	757	614	798	836	1,000	246	740
7	234	5.4	195	175	327	748	604	813	840	1,000	246	748
8	223	4.2	193	136	340	744	604	786	840	1,000	390	744
9	223	4.2	193	92	374	744	604	790	840	1,000	503	765
10	223	4.2	193	81	374	748	618	757	840	996	503	802
11	225	3.7	193	74	374	748	656	744	840	962	564	790
12	225	3.7	193	74	377	740	656	744	840	954	618	740
13	225	3.7	193	74	377	724	656	740	840	954	601	621
14	225	3.7	193	74	377	716	678	720	844	793	601	544
15	225	3.7	248	74	391	740	705	701	849	930	709	544
16	225	3.7	278	79	426	773	705	652	849	949	752	516
17	225	3.7	278	142	426	798	693	621	861	949	752	465
18	225	4.2	306	152	426	798	678	597	882	949	748	447
19	225	4.2	327	152	417	798	678	559	924	907	781	417
20	225	4.2	296	160	400	781	678	499	941	635	802	406
21	225	4.2	265	154	400	744	678	512	937	420	802	323
22	225	3.7	265	169	400	744	678	516	937	417	798	173
23	225	3.7	265	175	412	744	682	516	937	529	790	156
24	225	4.2	300	175	426	744	697	544	937	692	802	214
25	225	79	327	175	453	720	697	601	937	716	802	282
26	225	225	327	175	474	720	716	601	949	761	769	278
27	11	225	327	175	528	720	752	601	962	764	748	263
28	8.8	225	327	175	682	720	752	635	966	773	724	248
29	8.0	225	327	175	------	686	752	701	991	752	716	251
30	7.0	225	222	175	------	674	752	794	1,000	582	748	241
31	6.0	------	173	175	------	674	------	823	------	757	748	------
TOTAL	6,196.8	1,309.4	7,714	4,479	10,611	22,840	20,254	21,302	26,460	26,141	20,127	15,446
MEAN	200	43.6	249	144	379	737	675	687	882	843	649	515
MAX	321	225	327	175	682	798	752	823	1,000	1,000	802	802
MIN	6.0	3.7	173	74	175	674	604	499	794	417	246	156
AC-FT	12,290	2,600	15,300	8,880	21,050	45,300	40,170	42,250	52,480	51,850	39,920	30,640

CAL YR 1973 TOTAL 150,210.6 MEAN 412 MAX 882 MIN 1.0 AC-FT 297,900
WTR YR 1974 TOTAL 182,880.2 MEAN 501 MAX 1,000 MIN 3.7 AC-FT 362,700

09470000. Gila River at Winkelman, Ariz.

LOCATION.--Lat 33°00'10", 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, 2.3 mi (3.7 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 1,920.95 ft (585.506 m) above mean sea level. Sept. 10, 1917, to June 27, 1918, non-recording gage at bridge 1.5 mi (2.4 km) downstream at different datum. Supplementary nonrecording gage 1.4 mi (2.3 km) downstream since Aug. 9, 1963, at datum 1,908.08 ft (581.583 m) above mean sea level; supplementary water-stage recorder since Jan. 6, 1964, at bridge 1.5 mi (2.4 km) downstream at datum 1,907.00 ft (581.254 m) above mean sea level.

AVERAGE DISCHARGE (adjusted for storage in San Carlos Reservoir).--33 years (1941-74), 246 ft^3/s (6.97 m^3/s), 178,200 acre-ft/yr (220 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, 6,420 ft^3/s (182 m^3/s) Aug. 2 (gage height, 11.82 ft or 3.603 m at supplementary gage); minimum daily, 6.6 ft^3/s (0.19 m^3/s) Nov. 17.
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. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321	18	243	179	185	660	635	659	795	971	867	731
2	317	17	243	184	186	663	645	672	789	963	2,180	729
3	293	15	226	182	186	667	638	689	757	961	991	727
4	279	14	244	178	189	707	621	694	760	959	681	731
5	279	14	242	182	320	707	598	689	761	959	455	730
6	260	14	241	182	322	707	595	688	810	963	350	742
7	258	13	214	181	319	703	567	703	806	963	300	735
8	235	12	214	190	319	699	570	710	810	960	277	723
9	232	11	212	123	355	699	563	696	804	958	483	723
10	235	9.4	212	103	368	696	563	696	806	962	491	762
11	235	8.6	213	85	365	696	601	665	804	958	500	770
12	237	8.4	211	76	365	696	615	670	813	911	593	738
13	236	7.5	211	76	365	685	610	676	815	906	632	686
14	236	7.5	212	75	368	667	604	667	808	782	644	555
15	240	7.5	216	76	368	678	647	662	816	905	646	529
16	239	7.5	292	77	403	681	653	626	817	904	724	523
17	241	6.6	292	92	416	725	654	580	817	891	735	480
18	241	6.8	292	172	419	732	632	560	833	882	738	443
19	244	9.5	335	171	416	736	624	535	861	948	740	433
20	244	10	339	172	393	750	623	451	911	909	784	420
21	244	9.4	279	179	384	707	619	510	925	586	787	390
22	247	7.9	274	173	384	689	629	467	923	436	784	246
23	246	8.6	273	187	384	689	619	467	923	433	788	179
24	249	9.0	272	185	406	696	629	475	925	592	778	157
25	249	8.4	327	182	412	696	638	542	920	671	784	268
26	249	126	324	182	459	663	630	569	916	704	775	269
27	194	234	325	184	462	663	664	563	938	777	723	283
28	47	240	326	183	603	663	672	568	946	781	721	242
29	30	242	323	183	------	667	668	624	951	738	685	245
30	23	244	310	183	------	638	664	717	972	585	713	244
31	21	------	184	184	------	638	------	781	------	777	728	------
TOTAL	6,901	1,346.6	8,121	4,761	10,121	21,363	18,690	19,271	25,532	25,695	22,077	15,433
MEAN	223	44.9	262	154	361	689	623	622	851	829	712	514
MAX	321	244	339	190	603	750	672	781	972	971	2,180	770
MIN	21	6.6	184	75	185	638	563	451	757	433	277	157
AC-FT	13,690	2,670	16,110	9,440	20,080	42,370	37,070	38,220	50,640	50,970	43,790	30,610

CAL YR 1973 TOTAL 157,400.6 MEAN 431 MAX 1,030 MIN 6.6 AC-FT 312,200
WTR YR 1974 TOTAL 179,311.6 MEAN 491 MAX 2,180 MIN 6.6 AC-FT 355,700

PEAK DISCHARGE, UNADJUSTED FOR RELEASE FROM COOLIDGE DAM (BASE, 1,300 CFS).--July 27 (1930) 1,340 cfs (6.14 ft); Aug. 2 (0500) 6,420 (11.82 ft).

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.--32 years (1930-33, 1935-40, 1950-74), 31.1 ft^3/s (0.881 m^3/s), 22,530 acre-ft/yr (27.8 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, 7,360 ft^3/s (208 m^3/s) July 30 (gage height, 11.37 ft or 3.466 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.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.50	.40	.80	.10	.10	.80	2.3	6.6	306	0
2	.20	0	.50	.80	1.3	.20	.20	.80	2.2	1.6	546	.10
3	0	.20	.50	0	2.0	.50	.20	.70	2.2	23	462	137
4	.10	.40	.50	0	2.5	.90	.50	.60	.90	1.0	1,150	18
5	.10	.30	.50	0	.70	.80	.40	.70	2.0	.20	789	5.2
6	0	.10	.50	0	.10	.80	.70	.80	1.9	50	640	.90
7	0	.10	.50	0	.20	.60	.80	.90	2.3	269	159	12
8	.10	0	.50	0	.20	.60	.90	1.1	1.1	209	170	.60
9	.10	0	.50	28	.30	.10	1.0	1.5	.60	.40	19	.10
10	.50	0	.60	22	.20	.10	1.0	1.1	0	.10	10	0
11	.60	0	.40	.70	.40	.40	1.3	.90	.30	0	5.8	.50
12	.50	.10	.10	0	.10	.50	.70	1.0	.70	0	4.1	.30
13	.20	.40	.10	0	.10	.50	.80	.50	1.6	0	3.1	20
14	0	.60	.10	0	.20	1.1	.30	.40	1.5	0	2.5	14
15	0	.10	.10	0	.20	0	.30	.30	1.0	0	39	6.7
16	0	0	0	0	.20	0	.40	.40	2.2	0	33	.40
17	0	0	.10	0	.20	0	.50	.80	1.4	.10	3.1	.20
18	.20	0	.40	0	.40	0	.80	1.0	.50	57	30	.10
19	.10	0	.10	0	.40	.10	.50	.90	.40	693	31	0
20	.10	0	.10	0	.60	.40	.50	.60	1.8	1,320	5.2	0
21	.20	.30	.20	0	1.1	.40	1.0	1.1	1.2	95	1.9	0
22	.10	.20	.40	0	1.6	.30	1.2	1.0	1.9	27	110	0
23	.10	.30	.10	0	1.9	.20	1.0	1.3	1.8	10	13	0
24	0	.40	.10	0	2.2	.30	1.0	.30	1.0	3.6	3.3	0
25	.10	.60	0	0	2.4	.20	1.0	.20	.70	1.7	1.9	.40
26	.10	.10	.10	0	1.8	0	1.0	1.0	.50	58	1.0	12
27	.10	0	.60	0	.70	.20	.30	.60	.40	229	.50	28
28	.20	.20	.80	0	.10	.70	.30	1.1	.60	15	.40	1.5
29	.30	.50	.50	0	------	.80	.40	1.2	.80	17	.30	.50
30	.40	.50	.20	0	------	1.0	.60	1.2	1.3	2,520	.10	.40
31	.20	------	.40	.10	------	0	------	2.0	------	196	0	------
TOTAL	4.60	5.40	10.00	52.00	22.90	11.80	19.70	26.80	37.10	5,803.30	4,540.20	258.90
MEAN	.15	.18	.32	1.68	.82	.38	.66	.86	1.24	187	146	8.63
MAX	.60	.60	.80	28	2.5	1.1	1.3	2.0	2.3	2,520	1,150	137
MIN	0	0	0	0	.10	0	.10	.20	0	0	0	0
AC-FT	9.1	11	20	103	45	23	39	53	74	11,510	9,010	514

CAL YR 1973 TOTAL 3,850.90 MEAN 10.6 MAX 630 MIN 0 AC-FT 7,640
WTR YR 1974 TOTAL 10,792.70 MEAN 29.6 MAX 2,520 MIN 0 AC-FT 21,410

PEAK DISCHARGE (BASE, 2,400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-19	0930	8.50	2,670	8-4	2130	10.80	6,220
7-20	0200	11.20	7,020	8-6	0030	8.70	2,900
7-30	0900	11.37	7,360				

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.--63 years (1904-5, 1912-74), 60.4 ft^3/s (1.711 m^3/s), 43,760 acre-ft/yr (54.0 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, 13,100 ft^3/s (371 m^3/s) July 20 (gage height, 8.60 ft or 2.621 m); minimum, 0.40 ft^3/s (0.011 m^3/s) June 7.
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 except those for July 29 to Aug. 7, which are fair. 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 in Part 2 of this report.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	5.5	10	12	12	12	12	8.5	1.7	4.2	109	10
2	1.2	6.2	10	13	13	12	12	8.5	1.4	50	815	11
3	1.1	6.6	10	13	13	11	12	9.0	1.0	49	1,000	42
4	1.3	7.0	10	12	13	12	14	8.5	1.2	30	1,110	39
5	1.4	7.5	10	12	13	12	14	9.0	1.1	8.3	1,950	22
6	1.4	7.0	10	12	12	12	13	9.5	1.1	2.3	928	18
7	1.4	8.0	10	12	12	12	12	9.5	.80	245	165	18
8	1.3	8.0	10	13	12	12	12	10	.90	411	152	18
9	1.3	8.5	10	18	13	12	12	10	1.0	65	60	12
10	1.4	8.5	10	26	12	12	12	10	1.2	20	39	11
11	2.2	9.0	10	22	12	12	12	9.5	1.2	8.5	26	11
12	3.0	9.0	10	15	12	12	13	9.0	1.2	9.0	22	11
13	2.8	9.0	11	14	12	12	12	9.5	1.2	12	18	13
14	2.8	9.0	10	13	12	12	11	9.0	1.2	18	18	22
15	3.0	9.5	11	12	12	12	11	10	1.3	8.0	15	22
16	3.0	10	11	12	11	12	10	10	1.7	10	50	20
17	3.0	10	11	12	12	13	10	9.5	1.4	14	56	13
18	3.2	11	11	12	11	13	9.5	9.0	1.3	35	295	30
19	3.2	10	10	11	11	13	9.5	6.2	1.3	715	92	18
20	3.4	10	10	11	11	12	9.0	8.5	1.4	3,410	26	42
21	3.4	10	11	11	11	12	8.0	6.0	1.5	413	20	34
22	4.2	11	11	11	11	12	8.0	5.0	1.5	221	48	18
23	3.8	11	11	12	12	12	8.0	3.2	1.5	77	46	13
24	4.2	10	11	12	12	12	8.5	3.2	1.7	33	26	15
25	4.2	9.5	11	12	12	12	9.0	3.0	2.2	18	22	18
26	4.5	9.5	11	12	12	12	9.5	2.3	4.2	10	20	15
27	5.3	9.0	10	12	12	12	9.5	1.0	2.3	392	18	20
28	4.8	9.0	11	12	12	12	9.0	2.5	1.7	225	13	20
29	4.5	9.5	11	12	------	12	8.0	2.0	1.5	183	11	12
30	4.8	9.5	12	12	------	12	8.5	1.5	2.2	2,190	10	10
31	5.0	------	12	12	------	12	------	1.7	------	394	10	------
TOTAL	91.5	267.3	327	407	335	374	318.0	214.1	44.90	9,280.3	7,190	578
MEAN	2.95	8.91	10.5	13.1	12.0	12.1	10.6	6.91	1.50	299	232	19.3
MAX	5.3	11	12	26	13	13	14	10	4.2	3,410	1,950	42
MIN	1.1	5.5	10	11	11	11	8.0	1.0	.80	2.3	10	10
AC-FT	181	530	649	807	664	742	631	425	89	18,410	14,260	1,150

CAL YR 1973 TOTAL 7,875.10 MEAN 21.6 MAX 574 MIN 1.1 AC-FT 15,620
WTR YR 1974 TOTAL 19,427.10 MEAN 53.2 MAX 3,410 MIN .80 AC-FT 38,530

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-20	0130	8.60	13,100	8- 5	0300	6.20	4,400
7-30	1600	6.58	5,440	8- 6	0500	5.60	3,080
8- 4	1600	6.40	4,900				

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.--7 years, 41.3 ft^3/s (1.17 m^3/s), 29,900 acre-ft/yr (36.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 18,500 ft^3/s (524 m^3/s) July 20 (gage height, 10.43 ft or 3.179 m), from rating curve extended above 4,900 ft^3/s (140 m^3/s) as explained below; no flow for many days.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	8.5	12	11	11	15	3.9		0	405	8.0
2		0	8.4	12	10	13	15	5.0		221	856	50
3		0	9.3	12	11	12	13	3.9		63	1,060	150
4		0	14	12	11	12	11	5.1		51	1,310	80
5		0	13	10	11	13	8.5	3.9		46	1,770	30
6		.30	17	11	11	11	11	5.1		46	666	25
7		1.1	14	11	12	11	9.7	5.1		240	207	25
8		1.5	11	11	13	12	9.7	3.9		558	190	20
9		1.1	8.4	17	14	15	9.7	6.2		300	92	20
10		1.4	8.5	21	13	14	8.5	3.5		20	59	15
11		1.4	5.0	28	11	11	9.7	3.1		8.5	45	15
12		1.4	8.3	18	9.1	9.9	12	2.0		6.2	34	15
13		1.5	8.6	11	11	12	12	.40		2.7	30	10
14		1.7	8.8	8.3	9.2	12	11	0		133	61	10
15		1.8	8.3	11	8.7	11	11	0		119	39	10
16		2.3	9.5	11	12	13	11	0		99	79	10
17		2.5	9.8	10	11	15	9.7	0		152	56	10
18		2.7	10	9.5	11	15	9.7	0		223	295	10
19		3.3	11	9.6	11	17	8.5	0		741	208	10
20		3.3	12	12	12	17	7.4	0		4,330	59	50
21		3.3	18	13	9.1	15	6.2	0		453	34	40
22		3.2	16	11	10	16	5.0	0		153	40	30
23		3.0	11	11	12	16	5.0	0		41	125	20
24		3.3	11	11	9.1	16	6.2	0		19	56	15
25		4.1	12	11	10	16	7.4	0		9.7	34	15
26		6.3	12	11	10	16	7.4	0		3.9	28	46
27		7.4	12	12	11	15	6.2	0		248	21	25
28		9.0	11	11	12	16	5.0	0		136	18	29
29		9.5	12	11	------	15	3.9	0		420	15	14
30		7.8	13	11	------	15	5.0	0		1,990	12	8.7
31		------	12	11	------	15	------	0	------	608	9.7	------
TOTAL	0	84.20	343.4	381.4	306.2	427.9	270.4	51.10	0	11,441.0	7,913.7	815.7
MEAN	0	2.81	11.1	12.3	10.9	13.8	9.01	1.65	0	369	255	27.2
MAX	0	9.5	18	28	14	17	15	6.2	0	4,330	1,770	150
MIN	0	0	5.0	8.3	8.7	9.9	3.9	0	0	0	9.7	8.0
AC-FT	0	167	681	757	607	849	536	101	0	22,690	15,700	1,620

CAL YR 1973 TOTAL 8,069.05 MEAN 22.1 MAX 394 MIN 0 AC-FT 16,000
WTR YR 1974 TOTAL 22,035.00 MEAN 60.4 MAX 4,330 MIN 0 AC-FT 43,710

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	0345	10.43	18,500	8- 4	1745	6.30	5,720
7-30	*1700	†6.43	6,720	8- 5	0415	5.92	4,300
8- 1	2045	5.94	4,720				

* About.
† From high-water mark in gage well.

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. Altitude of gage is 3,310 ft (1,009 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 34.0 ft^3/s (0.963 m^3/s), 24,630 acre-ft/yr (30.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,520 ft^3/s (270 m^3/s) July 20 (gage height, 10.85 ft or 3.307 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.

REVISIONS (WATER YEARS).--WRD Ariz. 1969: 1966-67(M,P).

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	234	.20
2										0	932	.10
3										0	698	.90
4										0	693	36
5										0	1,540	14
6										0	883	2.9
7										0	399	.10
8										220	106	0
9										177	103	0
10										20	25	0
11										0	3.1	0
12										0	.30	0
13										0	0	0
14										15	0	0
15										248	4.5	1.2
16										83	13	0
17										0	2.1	.10
18										384	21	14
19										276	438	50
20										3,430	191	302
21										490	16	133
22										90	.50	41
23										10	3.5	0
24										5.0	60	0
25										0	8.2	71
26										185	3.9	33
27										271	2.8	22
28										107	1.6	5.0
29					------					379	.90	3.0
30					------					612	.60	2.0
31		------			------		------		------	1,060	.40	------
TOTAL	0	0	0	0	0	0	0	0	0	8,062.0	6,384.40	731.50
MEAN	0	0	0	0	0	0	0	0	0	260	206	24.4
MAX	0	0	0	0	0	0	0	0	0	3,430	1,540	302
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	15,990	12,660	1,450

CAL YR 1973 TOTAL 4,357.20 MEAN 11.9 MAX 489 MIN 0 AC-FT 8,640
WTR YR 1974 TOTAL 15,177.90 MEAN 41.6 MAX 3,430 MIN 0 AC-FT 30,110

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-18	2200	7.32	4,580	7-30	2300	6.42	3,560
7-20	1000	10.85	9,520	8- 2	0230	6.18	3,200
7-26	2200	6.48	3,460	8- 4	2230	6.20	3,100

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.

AVERAGE DISCHARGE.--27 years (1943-46, 1950-74), 44.7 ft^3/s (1.266 m^3/s), 32,390 acre-ft/yr (39.9 hm^3/yr); median of yearly mean discharges, 32 ft^3/s (0.91 m^3/s), 23,200 acre-ft/yr (29 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 12,100 ft^3/s (343 m^3/s) July 20 (gage height, 15.9 ft or 4.846 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. 16, Feb. 12, Mar. 14, and Apr. 17.

REVISIONS.--WSP 1283: Drainage area.

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	.30	.50	.80	1.0						0	350	3.0
2	.30	.50	1.0	1.0						0	150	73
3	.30	.50	1.0	.50						12	130	30
4	.30	.50	1.2	.50						32	120	25
5	.30	.50	1.4	.50						2.0	110	20
6	.30	.50	1.4	.50						1.0	100	15
7	.30	.50	1.4	.50						30	90	10
8	.30	.60	1.5	.50						164	82	9.0
9	.30	.60	1.5	2.6						151	82	8.0
10	.30	.60	1.5	.50						29	63	7.0
11	.30	.60	1.4	.40						4.0	46	6.0
12	.30	.60	1.4	.40						3.0	43	5.0
13	.30	.60	1.5	.40						2.0	35	99
14	.30	.60	1.5	.30						1.0	30	20
15	.40	.60	1.5	.30						237	25	9.0
16	.40	.60	1.4	.30						183	20	8.0
17	.40	.60	1.4	.20						7.6	10	7.0
18	.40	.60	1.5	.20						320	5.0	36
19	.40	.60	1.7	.20						830	197	32
20	.40	.70	2.0	.30						3,460	204	16
21	.40	.70	2.7	.30						862	95	881
22	.40	.70	2.0	.20						169	50	52
23	.40	.70	1.7	0						20	25	55
24	.40	.70	1.7	0						10	15	51
25	.40	.70	2.0	0						5.0	10	46
26	.50	.70	2.4	0						2.0	9.0	36
27	.50	.70	2.0	.20						420	8.0	3.7
28	.50	.70	1.5	0						171	7.0	4.3
29	.50	.70	1.0	0	------					387	6.0	2.0
30	.50	.70	1.0	.50	------					192	5.0	.50
31	.50	------	1.0	0	------		------		------	1,580	4.0	------
TOTAL	11.60	18.40	47.00	12.30	0	0	0	0	0	9,286.6	2,126.0	1,569.50
MEAN	.37	.61	1.52	.40	0	0	0	0	0	300	68.6	52.3
MAX	.50	.70	2.7	2.6	0	0	0	0	0	3,460	350	881
MIN	.30	.50	.80	0	0	0	0	0	0	0	4.0	.50
AC-FT	23	36	93	24	0	0	0	0	0	18,420	4,220	3,110

CAL YR 1973 TOTAL 5,739.40 MEAN 15.7 MAX 827 MIN 0 AC-FT 11,380
WTR YR 1974 TOTAL 13,071.40 MEAN 35.8 MAX 3,460 MIN 0 AC-FT 25,930

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-18	2300	14.20	6,890	7-30	0330	12.55	3,930
7-20	1600	15.9	12,100	9-21	1630	14.85	8,750

NOTE.--No gage-height record Oct. 1 to Nov. 29, Apr. 18 to June 18.

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 mi^2 (1,401 km^2).

PERIOD OF RECORD.--May 1931 to December 1942 (published as "near Feldman"), May 1966 to current year.

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.--19 years, 29.1 ft^3/s (0.824 m^3/s), 21,080 acre-ft/yr (26.0 hm^3/yr); median of yearly mean discharges, 22 ft^3/s (0.62 m^3/s), 15,900 acre-ft/yr (19.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,100 ft^3/s (59.5 m^3/s) Aug. 2 (gage height, 4.8 ft or 1.46 m); minimum daily, 1.9 ft^3/s (0.054 m^3/s) June 2.

Period of record: Maximum discharge since at least 1931, 10,500 ft^3/s (297 m^3/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 ft^3/s (12.2 m^3/s) on basis of slope-area measurement at gage height 12.5 ft (3.81 m), from profile past gage; minimum, 0.3 ft^3/s (0.008 m^3/s) Aug. 30, 1940.

A discharge of 20,000 ft^3/s (566 m^3/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 ft^3/s (144 m^3/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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	13	16	12	15	12	17	7.3	2.3	2.8	40	4.6
2	8.4	14	16	20	16	12	19	6.9	1.9	3.4	340	10
3	9.4	12	16	17	16	10	19	7.5	2.3	3.7	11	13
4	9.9	11	17	18	17	13	13	8.7	2.6	3.3	13	10
5	10	12	18	19	17	13	12	9.0	3.1	3.2	88	42
6	10	12	18	18	17	14	10	10	4.0	5.6	61	57
7	9.3	13	20	17	17	9.1	10	9.6	4.4	9.6	39	22
8	9.0	15	21	21	17	13	8.4	9.6	3.7	35	35	15
9	11	14	20	46	17	23	7.6	9.2	5.0	18	18	13
10	11	14	19	37	16	21	8.1	10	5.5	13	14	13
11	12	14	20	19	17	21	11	8.4	5.9	11	12	13
12	13	14	21	15	17	21	14	7.5	6.1	8.0	11	12
13	12	15	19	14	16	21	13	7.1	5.8	8.5	7.4	38
14	11	17	20	13	17	21	13	6.9	4.5	9.9	7.8	22
15	11	17	22	13	16	19	13	7.1	4.0	74	8.3	17
16	14	17	22	13	16	19	11	6.7	2.8	63	8.4	16
17	14	18	22	13	15	17	10	3.8	3.8	16	9.1	11
18	13	18	22	13	17	18	11	4.1	4.4	22	6.1	17
19	9.2	27	22	13	17	19	10	3.1	3.3	102	8.3	72
20	14	21	21	11	20	26	10	4.0	3.2	83	9.5	20
21	13	20	21	11	19	36	10	5.2	2.7	51	8.7	18
22	14	20	21	12	19	24	9.2	4.3	2.8	33	9.6	16
23	8.9	20	20	13	17	23	8.8	7.2	3.2	25	11	15
24	14	20	20	13	17	22	8.5	7.0	2.9	18	10	15
25	15	18	20	13	17	21	8.3	6.0	2.8	8.6	8.7	15
26	15	20	18	14	18	20	10	4.8	3.0	12	9.4	13
27	17	26	18	17	18	19	11	2.8	3.1	35	9.2	10
28	16	19	18	15	17	19	9.6	3.5	3.1	48	9.8	10
29	16	16	17	14	------	19	11	2.2	3.6	22	9.4	10
30	13	15	17	14	------	18	8.4	2.1	3.3	26	5.3	9.0
31	12	------	17	14	------	15	------	2.3	------	42	4.8	------
TOTAL	372.6	502	599	512	475	578.1	334.9	193.9	109.1	815.6	842.8	568.6
MEAN	12.0	16.7	19.3	16.5	17.0	18.6	11.2	6.25	3.64	26.3	27.2	19.0
MAX	17	27	22	46	20	36	19	10	6.1	102	340	72
MIN	7.5	11	16	11	15	9.1	7.6	2.1	1.9	2.8	4.8	4.6
AC-FT	739	996	1,190	1,020	942	1,150	664	385	216	1,620	1,670	1,130

CAL YR 1973 TOTAL 11,923.3 MEAN 32.7 MAX 890 MIN 1.9 AC-FT 23,650
WTR YR 1974 TOTAL 5,903.6 MEAN 16.2 MAX 340 MIN 1.9 AC-FT 11,710

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.--8 years, 46.6 ft^3/s (1.320 m^3/s), 33,760 acre-ft/yr (41.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,620 ft^3/s (187 m^3/s) July 21 (gage height, 10.03 ft or 3.057 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 in Part 2 of this report.

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	1.5	3.9	3.9	3.0	6.1			0	249	.70
2		0	1.5	3.9	3.9	3.4	6.1			0	1,170	.50
3		0	1.5	3.9	3.4	3.9	4.4			0	382	6.0
4		0	1.5	3.9	4.4	3.0	3.4			0	310	8.2
5		0	1.6	3.9	4.4	3.9	3.0			0	1,110	1.2
6		0	1.1	4.4	3.9	4.9	2.6			0	808	63
7		0	1.1	4.4	3.9	4.4	2.2			0	452	16
8		0	.70	4.9	3.9	4.9	1.9			0	104	2.7
9		0	.60	9.9	3.4	7.5	.70			0	35	.50
10		0	.90	39	2.2	8.2	.40			59	22	.40
11		0	1.1	9.0	3.9	7.5	.90			45	12	.20
12		0	.90	5.5	3.9	6.8	1.1			2.9	7.4	0
13		0	1.3	4.4	4.4	6.1	1.1			1.7	5.9	71
14		0	1.3	3.4	4.9	5.5	.90			16	3.9	28
15		0	1.3	3.4	5.5	5.5	.70			15	2.4	10
16		0	1.3	3.4	6.1	4.9	.60			193	26	2.0
17		0	1.3	3.4	6.8	3.4	.20			83	11	.50
18		0	1.6	3.4	6.1	2.2	.10			6.9	6.4	0
19		0	1.6	3.4	7.5	2.6	.10			528	6.4	21
20		0	1.3	3.4	8.2	5.5	.10			958	63	2.9
21		0	1.3	3.4	9.0	6.1	.10			2,020	36	83
22		0	1.9	3.4	9.0	6.8	.10			130	14	200
23		0	2.2	3.9	7.5	6.8	.10			59	4.9	3.9
24		0	2.2	3.9	6.8	6.8	.20			28	3.9	2.9
25		0	2.2	3.9	6.8	6.1	.90			18	3.4	14
26		0	2.2	3.9	7.5	5.5	.70			26	2.9	2.9
27		.70	2.2	3.9	5.5	5.5	.30			127	2.4	10
28		2.2	2.6	3.4	3.4	5.5	.30			340	2.2	6.9
29		2.2	3.0	3.9	------	5.5	.20			72	2.2	2.9
30		1.5	3.0	3.9	------	5.5	0			170	1.5	2.4
31		------	3.4	3.9	------	5.5	------		------	792	1.2	------
TOTAL	0	6.60	51.20	166.2	150.1	162.7	39.50	0	0	5,690.5	4,861.0	563.70
MEAN	0	.22	1.65	5.36	5.36	5.25	1.32	0	0	184	157	18.8
MAX	0	2.2	3.4	39	9.0	8.2	6.1	0	0	2,020	1,170	200
MIN	0	0	.60	3.4	2.2	2.2	0	0	0	0	1.2	0
AC-FT	0	13	102	330	298	323	78	0	0	11,290	9,640	1,120

CAL YR 1973 TOTAL 13,687.20 MEAN 37.5 MAX 2,280 MIN 0 AC-FT 27,150
WTR YR 1974 TOTAL 11,691.50 MEAN 32.0 MAX 2,020 MIN 0 AC-FT 23,190

PEAK DISCHARGE (BASE, 4,000 CFS).--July 21 (0130) 6,620 cfs (10.03 ft); Aug. 2 (0800) 5,140 cfs (9.58 ft).

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 mi² (46,648 km²), of which 5,125 mi² (13,274 km²) 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).--63 years, 465 ft³/s (13.17 m³/s), 336,900 acre-ft/yr (415 hm³/yr); median of yearly mean discharges, 330 ft³/s (9.35 m³/s), 239,000 acre-ft/yr (295 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,880 ft³/s (110 m³/s) Aug. 2 (gage height, 10.55 ft or 3.216 m); minimum daily, 14 ft³/s (0.40 m³/s) Nov. 17.
Period of record: Maximum discharge, about 132,000 ft³/s (3,740 m³/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 ft³/s (0.003 m³/s) June 25, 1961.
Maximum discharge since completion of Coolidge Dam, 42,800 ft³/s (1,210 m³/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 km²) 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 in Part 2 of this report.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	371	43	214	216	212	700	705	710	795	986	1,140	770
2	351	36	221	210	210	705	705	720	785	972	2,790	770
3	312	32	223	204	208	705	685	740	780	972	1,280	775
4	303	30	211	202	206	745	670	760	775	972	1,360	775
5	294	28	241	210	275	750	650	760	780	972	1,180	775
6	282	26	241	210	338	750	645	760	816	972	1,890	800
7	265	24	216	202	356	755	615	760	822	972	927	986
8	254	23	209	239	365	755	602	760	810	972	432	795
9	244	22	206	422	387	760	606	745	810	972	443	800
10	244	20	216	338	418	750	606	740	810	1,000	522	834
11	241	18	214	144	422	745	635	715	810	1,000	514	834
12	241	23	214	113	426	750	655	710	805	942	562	840
13	241	19	214	104	426	725	650	710	800	912	620	879
14	238	16	211	101	422	710	650	700	800	795	660	758
15	241	15	209	96	418	715	685	665	800	822	665	602
16	249	15	271	94	443	720	700	635	795	1,060	775	586
17	241	14	318	96	474	755	700	606	810	972	775	554
18	241	15	334	135	478	770	690	578	805	912	785	498
19	241	20	375	164	482	780	665	562	810	1,330	785	530
20	244	18	396	170	466	816	655	498	852	1,170	912	482
21	249	15	358	180	440	765	650	504	870	2,060	906	515
22	249	15	318	182	436	765	645	494	870	720	870	675
23	249	15	318	188	429	765	645	474	870	538	852	326
24	251	16	315	196	443	755	650	478	882	590	834	299
25	251	15	354	198	454	755	670	522	882	670	822	329
26	254	18	407	200	490	725	665	570	894	670	816	308
27	246	125	403	208	510	710	685	562	894	720	770	317
28	111	162	403	208	598	710	710	578	918	1,070	770	278
29	67	186	403	210	------	715	700	615	930	828	740	262
30	57	197	403	214	------	710	700	675	942	827	740	288
31	50	------	275	212	------	700	------	770	------	1,150	770	------
TOTAL	7,372	1,221	8,911	5,866	11,232	22,936	19,894	20,076	25,022	29,500	27,907	18,240
MEAN	238	40.7	287	189	401	740	663	648	834	952	900	608
MAX	371	197	407	422	598	816	710	770	942	2,060	2,790	986
MIN	50	14	206	94	206	700	602	474	775	538	432	262
AC-FT	14,620	2,420	17,670	11,640	22,280	45,490	39,460	39,820	49,630	58,510	55,350	36,180

CAL YR 1973 TOTAL 188,369 MEAN 516 MAX 3,050 MIN 14 AC-FT 373,600
WTR YR 1974 TOTAL 198,177 MEAN 543 MAX 2,790 MIN 14 AC-FT 393,100

PEAK DISCHARGE (BASE, 4,000 CFS).--No peak above base.

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 recorded head on dam, 2.40 ft (0.732 m) Aug. 2; 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	0.07	0.61	0
2	0	0	0	0	0	0	0	.03	0	0	.73	0
3	0	0	0	0	0	0	0	.13	0	.01	.78	0
4	0	0	0	0	0	0	0	.06	0	.19	.70	0
5	0	0	0	0	0	0	0	0	0	.20	.19	0
6	0	0	0	0	0	.05	0	0	0	.22	0	(e)
7	0	0	0	0	0	(e)	0	0	0	.30	0	.16
8	0	0	0	0	0	(e)	0	0	0	.24	0	0
9	0	0	0	0	0	(e)	0	.06	0	0	0	.04
10	0	0	0	0	0	(e)	0	.10	0	0	0	(e)
11	0	0	0	0	0	0	0	.02	0	0	0	.07
12	0	0	0	0	0	0	0	0	0	0	0	(e)
13	0	0	0	0	0	0	0	0	0	.03	0	0
14	0	0	0	0	0	0	0	0	0	.08	0	.09
15	0	0	0	0	0	0	0	0	0	.03	0	0
16	0	0	0	0	0	0	0	0	0	.16	0	0
17	0	0	0	0	0	0	0	0	0	.15	0	0
18	0	0	0	0	0	.02	0	0	.01	.05	0	0
19	0	0	0	0	0	.07	0	0	.07	.06	0	0
20	0	0	0	0	0	.07	0	0	.09	.46	0	0
21	0	0	0	0	0	(e)	0	0	0	.46	0	0
22	0	0	0	0	0	(e)	0	0	0	.30	0	.12
23	0	0	0	0	0	(e)	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	.27	0	0
29	0	0	0	0	--	0	0	0	0	0	0	0
30	0	0	0	0	--	0	0	0	0	(e)	0	0
31	0	--	0	0	--	0	--	0	--	.10	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 1973 TO SEPTEMBER 1974

Month	Discharge, in cubic feet per second			Diversions in acre-feet	Water sluiced above flume (acre-feet)†
	Maximum	Minimum	Mean		
October	332	0	203	12,500	0
November	218	20	45.9	2,730	1,570
December	340	188	243	14,940	0
CAL YR 1973	929	0	454	328,300	3,940
January	347	94	179	11,000	109
February	464	176	337	18,720	0
March	800	599	708	43,540	147
April	702	564	634	37,710	16
May	722	451	614	37,730	14
June	922	699	789	46,930	0
July	961	555	861	52,910	518
August	974	444	691	42,500	367
September	759	288	553	32,930	85
WTR YR 1974	961	0	489	354,100	2,820

† 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.--32 years (1940-46, 1948-74), 22.9 ft^3/s (0.649 m^3/s), 16,590 acre-ft/yr (20.5 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, 1,220 ft^3/s (34.6 m^3/s) Aug. 7 (gage height, 8.06 ft or 2.457 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 poor. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	1.0	
2										0	10	
3										0	165	
4										0	702	
5										0	768	
6										0	355	
7										0	697	
8										0	330	
9										0	100	
10										0	30	
11										0	10	
12										0	3.0	
13										0	1.0	
14										0	.20	
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										157	0	
24										19	0	
25										16	0	
26										11	0	
27										6.4	0	
28										1.7	0	
29					------					.10	0	
30					------					0	0	
31		------			------		------		------	1.3	0	------
TOTAL	0	0	0	0	0	0	0	0	0	212.50	3,172.20	0
MEAN	0	0	0	0	0	0	0	0	0	6.85	102	0
MAX	0	0	0	0	0	0	0	0	0	157	768	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	421	6,290	0

CAL YR 1973 TOTAL 1,138.34 MEAN 3.12 MAX 391 MIN 0 AC-FT 2,260
WTR YR 1974 TOTAL 3,384.70 MEAN 9.27 MAX 768 MIN 0 AC-FT 6,710

PEAK DISCHARGE (BASE, 700 CFS).--Aug. 5 (2100) 1,200 cfs (8.03 ft); Aug. 7 (2015) 1,220 cfs (8.06 ft).

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.--25 years, 3.03 ft^3/s (0.0858 m^3/s), 2,200 acre-ft/yr (2.71 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, 1,730 ft^3/s (49.0 m^3/s) Aug. 4 (gage height, 6.23 ft or 1.899 m); no flow May 16-21, June 14-21, 27-30, July 11-16.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.26	.27	.35	.33	.18	.07	.06	.03	21	3.5	3.4
2	.10	.27	.28	.37	.33	.14	.07	.06	.03	.40	.24	.35
3	.09	.26	.28	.40	.32	.10	.08	.07	.03	.05	.22	.22
4	.09	.28	.29	.39	.32	.14	.09	.06	.03	.03	191	2.0
5	.09	.26	.32	.44	.32	.14	.09	.04	.04	.01	4.4	2.8
6	.09	.27	.31	.43	.32	.15	.10	.05	.03	0	.25	.27
7	.10	.27	.31	.41	.30	.16	.10	.06	.03	.51	.22	.20
8	.12	.27	.32	.48	.29	.18	.09	.05	.03	25	.20	.19
9	.14	.25	.31	.66	.30	.19	.07	.06	.04	.05	.19	.18
10	.16	.25	.32	.44	.30	.18	.07	.06	.03	.01	.18	.16
11	.18	.24	.32	.41	.30	.19	.07	.06	.03	0	.17	.16
12	.17	.25	.33	.40	.30	.18	.07	.07	.02	0	.17	.18
13	.17	.25	.33	.40	.29	.16	.06	.07	.02	0	.16	.30
14	.17	.25	.34	.40	.27	.14	.05	.06	0	0	.16	.24
15	.17	.24	.34	.40	.29	.14	.05	.03	0	0	5.8	.44
16	.19	.20	.33	.40	.25	.15	.03	0	0	0	84	.22
17	.19	.14	.33	.43	.24	.15	.04	0	0	1.3	3.7	.20
18	.17	.14	.34	.41	.25	.16	.03	0	0	.06	.31	.27
19	.16	.16	.36	.40	.24	.16	.03	0	0	.30	.26	.29
20	.16	.19	.35	.40	.25	.18	.04	0	0	1.9	.23	.25
21	.15	.20	.35	.39	.22	.19	.04	0	0	14	16	.33
22	.18	.23	.35	.38	.20	.17	.04	.02	.16	.17	7.5	19
23	.19	.23	.36	.40	.22	.18	.04	.01	.19	.09	.35	.32
24	.19	.25	.36	.41	.22	.19	.03	.01	.02	.09	.25	45
25	.20	.26	.35	.41	.24	.19	.10	.01	.01	.09	.22	2.8
26	.18	.27	.35	.38	.25	.20	.04	.02	.02	.08	.20	.38
27	.19	.25	.35	.41	.24	.19	.04	.02	0	5.2	.18	.33
28	.20	.24	.35	.38	.20	.17	.05	.02	0	.20	.18	.29
29	.23	.25	.35	.38	------	.14	.05	.01	0	.37	.17	.27
30	.25	.26	.35	.38	------	.09	.06	.01	0	81	.16	.24
31	.27	------	.35	.35	------	.07	------	.02	------	.17	.15	------
TOTAL	5.05	7.14	10.25	12.69	7.60	4.95	1.79	1.01	.79	152.08	320.72	81.28
MEAN	.16	.24	.33	.41	.27	.16	.060	.033	.026	4.91	10.3	2.71
MAX	.27	.28	.36	.66	.33	.20	.10	.07	.19	81	191	45
MIN	.09	.14	.27	.35	.20	.07	.03	0	0	0	.15	.16
AC-FT	10	14	20	25	15	9.8	3.6	2.0	1.6	302	636	161

CAL YR 1973 TOTAL 282.11 MEAN .77 MAX 80 MIN 0 AC-FT 560
WTR YR 1974 TOTAL 605.35 MEAN 1.66 MAX 191 MIN 0 AC-FT 1,200

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-30	0700	5.23	724	8-16	0030	5.39	940
8- 4	1415	6.23	1,730	9-24	1830	4.95	518

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.--55 years (1912-22, 1929-74), 23.2 ft^3/s (0.657 m^3/s), 16,810 acre-ft/yr (20.7 hm^3/yr); median of yearly mean discharges, 18 ft^3/s (0.51 m^3/s), 13,000 acre-ft/yr (16.0 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 17,100 ft^3/s (484 m^3/s) Aug. 1 (gage height, 12.94 ft or 3.944 m); no flow for most of year.

1930-74: 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 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).

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										.60	2,100	71
2										.30	2,320	16
3										62	50	12
4										61	35	2.5
5										0	30	4.6
6										0	25	2.3
7										0	20	1.1
8										0	18	.50
9										0	15	.20
10										0	12	.10
11										0	9.5	0
12										0	7.4	0
13										404	5.1	0
14										776	4.8	.40
15										5.0	3.0	0
16										1.0	35	0
17										0	50	0
18										0	16	4.5
19										1,020	8.0	6.8
20										5.0	34	.50
21										1.0	9.5	.80
22										1.0	5.8	65
23										1.0	5.4	10
24										.60	3.5	35
25										.20	2.2	26
26										.10	1.4	20
27										.10	.50	12
28										600	.40	3.9
29					------					150	.40	2.2
30					------					1.0	.40	1.7
31		------			------		------		------	1.0	.30	------
TOTAL	0	0	0	0	0	0	0	0	0	3,090.90	4,827.60	299.10
MEAN	0	0	0	0	0	0	0	0	0	99.7	156	9.97
MAX	0	0	0	0	0	0	0	0	0	1,020	2,320	71
MIN	0	0	0	0	0	0	0	0	0	0	.30	0
AC-FT	0	0	0	0	0	0	0	0	0	6,130	9,580	593

CAL YR 1973 TOTAL 9,730.20 MEAN 26.7 MAX 1,280 MIN 0 AC-FT 19,300
WTR YR 1974 TOTAL 8,217.60 MEAN 22.5 MAX 2,320 MIN 0 AC-FT 16,300

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-13	2200	8.80	6,910	8- 1	2200	12.94	17,100
7-19	0200	7.35	4,120	9- 1	1730	6.12	2,180
7-28	2030	7.32	4,070				

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 dowstream 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.--29 years, 18.3 ft^3/s (0.518 m^3/s), 13,260 acre-ft/yr (16.3 hm^3/yr); median of yearly mean discharges, 9.5 ft^3/s (0.27 m^3/s), 6,900 acre-ft/yr (8.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,450 ft^3/s (97.7 m^3/s) Sept. 3 (gage height, 8.10 ft or 2.469 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	14	0
2										2.6	579	1.0
3										36	3.0	295
4										0	266	85
5										0	85	0
6										0	113	0
7										1.0	0	0
8										171	0	0
9										0	0	0
10										0	0	0
11										0	0	0
12										0	0	0
13										0	0	0
14										35	0	0
15										5.6	0	0
16										0	0	0
17										0	0	0
18										0	0	0
19										94	0	0
20										183	0	0
21										60	0	0
22										142	0	0
23										50	0	0
24										5.0	0	0
25										0	0	0
26										0	0	0
27										0	0	0
28										0	0	0
29					------					48	0	0
30					------					2.0	0	0
31		------			------		------		------	0	0	------
TOTAL	0	0	0	0	0	0	0	0	0	835.2	1,060.0	381.0
MEAN	0	0	0	0	0	0	0	0	0	26.9	34.2	12.7
MAX	0	0	0	0	0	0	0	0	0	183	579	295
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	1,660	2,100	756

CAL YR 1973 TOTAL 5,444.40 MEAN 14.9 MAX 1,470 MIN 0 AC-FT 10,800
WTR YR 1974 TOTAL 2,276.20 MEAN 6.24 MAX 579 MIN 0 AC-FT 4,510

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-22	2030	7.55	2,860	8-4	1830	7.40	2,680
8- 2	0900	7.80	3,130	9-3	2130	8.10	3,450

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.--9 years, 0.480 ft^3/s (0.0136 m^3/s), 348 acre-ft/yr (429,000 m^3/yr).

EXTREMES.--Current year: Maximum discharge, 689 ft^3/s (19.5 m^3/s) July 7 (gage height, 2.41 ft or 0.735 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										5.0	0	0
2										1.8	3.3	0
3										0	0	2.7
4										0	34	.04
5										0	3.7	0
6										0	.01	4.4
7										124	0	.24
8										10	0	0
9										0	0	0
10										0	0	0
11										0	0	0
12										0	0	0
13										0	0	.40
14										0	0	0
15										0	0	0
16										0	0	0
17										0	0	0
18										2.1	0	0
19										1.6	0	0
20										.67	0	2.0
21										7.1	0	0
22										.99	0	5.2
23										0	.59	0
24										0	.01	0
25										0	0	0
26										0	0	0
27										0	0	0
28										0	0	0
29					------					0	0	0
30					------					0	0	0
31		------			------		------		------	0	0	------
TOTAL	0	0	0	0	0	0	0	0	0	153.26	41.61	14.98
MEAN	0	0	0	0	0	0	0	0	0	4.94	1.34	.50
MAX	0	0	0	0	0	0	0	0	0	124	34	5.2
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	304	83	30

CAL YR 1973 TOTAL 21.80 MEAN .060 MAX 4.5 MIN 0 AC-FT 43
WTR YR 1974 TOTAL 209.85 MEAN .57 MAX 124 MIN 0 AC-FT 416

PEAK DISCHARGE (BASE, 150 CFS).--July 7 (0645) 689 cfs (2.41 ft); Aug. 4 (2000) 206 cfs (1.72 ft).

NOTE.--No gage-height record Oct. 18 to Jan. 9.

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 mi² (5,755 km²), of which 395 mi² (1,023 km²) is in Mexico, adjusted for 15.2 mi² (39.4 km²) of Tucson Arroyo drainage area contributing to this station effective July 1956.

PERIOD OF RECORD.--October 1905 to current year.

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.--69 years, 21.6 ft³/s (0.612 m³/s), 15,650 acre-ft/yr (19.3 hm³/yr); median of yearly mean discharges, 15 ft³/s (0.42 m³/s), 10,900 acre-ft/yr (13 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,930 ft³/s (225 m³/s) July 8 (gage height, 13.44 ft or 4.097 m); no flow for most of year.
Period of record: Maximum discharge, 16,600 ft³/s (470 m³/s) Aug. 23, 1961 (gage height, 20.68 ft or 6.303 m, present datum), from rating curve extended above 4,200 ft³/s (120 m³/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 ft³/s (0.14 m³/s), which are poor. Irrigation above station of about 26,000 acres (105 km²), including about 2,300 acres (9.31 km²) 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	0	.50	0		0	158	0	0
2				0	0	.40	0		0	143	566	0
3				0	0	.30	0		0	23	3.0	58
4				0	0	.40	.10		0	1.0	20	188
5				0	0	.50	.10		0	.50	167	1.0
6				0	0	.60	.10		0	0	88	203
7				0	0	.60	.10		0	513	5.0	.10
8				.10	0	.50	.10		.40	1,300	0	0
9				.80	0	1.2	.10		.60	0	0	0
10				0	0	.10	.10		.70	0	0	0
11				0	0	0	.10		0	0	0	0
12				0	0	.30	.10		0	0	0	0
13				0	0	.30	.20		0	0	0	0
14				0	.20	.30	0		0	0	0	0
15				0	.20	.30	0		0	.60	0	0
16				0	.20	.50	.20		0	0	0	0
17				0	.20	.10	.20		0	0	0	0
18				0	.20	0	.20		0	26	0	0
19				0	.20	.20	0		0	17	0	0
20				0	.30	.40	0		0	63	0	65
21				0	.30	.30	0		0	58	0	.70
22				0	.30	.30	0		0	59	0	20
23				0	.40	.20	0		0	109	0	0
24				0	.40	.10	0		0	5.0	0	0
25				0	.40	.10	0		0	1.0	0	0
26				0	.40	.30	0		0	.50	0	0
27				0	.50	.40	0		0	0	0	0
28				0	.50	.30	0		0	0	0	0
29				0	------	.20	0		0	9.3	0	0
30				0	------	0	0		0	32	0	0
31		------		0	------	0	------		------	5.0	0	------
TOTAL	0	0	0	.90	4.70	9.70	1.70	0	1.70	2,523.90	849.0	535.80
MEAN	0	0	0	.029	.17	.31	.057	0	.057	81.4	27.4	17.9
MAX	0	0	0	.80	.50	1.2	.20	0	.70	1,300	566	203
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	1.8	9.3	19	3.4	0	3.4	5,010	1,680	1,060

CAL YR 1973 TOTAL 3,845.60 MEAN 10.5 MAX 1,240 MIN 0 AC-FT 7,630
WTR YR 1974 TOTAL 3,927.40 MEAN 10.8 MAX 1,300 MIN 0 AC-FT 7,790

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-1	a2300	b9.1	2,080	8-2	1400	9.50	2,430
7-7	1100	10.65	3,730	9-4	0200	9.40	2,390
7-8	0500	13.44	7,930				

a About.
b From high-water mark in well.

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); 18 years (1956-74), 0.92 ft^3/s (0.0261 m^3/s), 667 acre-ft/yr (822,000 m^3/yr).

EXTREMES.--Current year: Maximum discharge, 332 ft^3/s (9.40 m^3/s) July 18 (gage height, 5.24 ft or 1.597 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0						0	5.0	0
2				0						4.5	1.0	0
3				0						.70	0	0
4				0						0	.50	0
5				0						0	2.0	0
6				0						0	0	3.7
7				0						12	0	0
8				.52						.71	0	0
9				9.1						0	0	0
10				.03						0	0	.21
11				0						.20	0	.09
12				0						.26	0	.65
13				0						0	0	.69
14				0						0	.03	0
15				0						.07	.02	4.5
16				0						0	0	.02
17				0						0	0	.40
18				0						21	0	.10
19				0						21	0	0
20				0						10	0	27
21				0						0	0	.07
22				0						0	0	0
23				0						0	0	2.0
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	0	0
30				0	------					2.0	0	0
31		------		0	------		------		------	1.0	0	------
TOTAL	0	0	0	9.65	0	0	0	0	0	73.44	8.55	39.43
MEAN	0	0	0	.31	0	0	0	0	0	2.37	.28	1.31
MAX	0	0	0	9.1	0	0	0	0	0	21	5.0	27
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	19	0	0	0	0	0	146	17	78

CAL YR 1973 TOTAL 182.19 MEAN .50 MAX 41 MIN 0 AC-FT 361
WTR YR 1974 TOTAL 131.07 MEAN .36 MAX 27 MIN 0 AC-FT 260

PEAK DISCHARGE (BASE, 300 CFS).--July 18 (2230) 332 cfs (5.24 ft).

09483100. Tanque Verde Creek near Tucson, Ariz.

LOCATION.--Lat 32°14'48", long 110°40'46", in NE¼NW¼ sec.2, T.14 S., R.16 E., Pima County, on right bank 4.4 mi (7.1 km) east of Tanque Verde School, 7.4 mi (11.9 km) upstream from Agua Caliente Wash, 7.8 mi (12.6 km) northwest of Spud Rock, and 17.5 mi (28.2 km) east of city hall in Tucson.

DRAINAGE AREA.--43.0 mi^2 (111.4 km^2).

PERIOD OF RECORD.--October 1959 to September 1974 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 2,720 ft (829 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 8.90 ft^3/s (0.252 m^3/s), 6,450 acre-ft/yr (7.95 hm^3/yr); median of yearly mean discharges, 5.8 ft^3/s (0.16 m^3/s), 4,200 acre-ft/yr (5.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 804 ft^3/s (22.8 m^3/s) July 8 (gage height, 3.18 ft or 0.969 m); no flow for many days.
Period of record: Maximum discharge, 3,080 ft^3/s (87.2 m^3/s) Dec. 20, 1967 (gage height, 5.14 ft or 1.567 m), from rating curve extended above 650 ft^3/s (18.4 m^3/s) on basis of slope-area measurements at gage heights 3.85 and 4.86 ft (1.173 and 1.481 m); no flow for long periods each year.

REMARKS.--Records fair. No diversion above station except for minor domestic supply.

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	.40	.10	.10			0	45	0
2				0	.30	.10	.10			0	226	0
3				0	.20	.10	.10			0	52	0
4				0	.20	.10	.10			0	53	0
5				0	.20	.10	.10			0	34	0
6				0	.20	.10	.10			0	14	0
7				0	.20	.10	.10			0	7.5	0
8				0	.10	.10	.10			132	3.6	0
9				177	.10	.10	0			5.5	2.0	0
10				72	.10	.10	0			1.0	1.0	0
11				18	.10	.10	0			.20	.40	0
12				9.3	.10	.10	0			.10	.20	0
13				5.4	.10	.10	0			.10	.10	0
14				3.2	.10	.10	0			.10	.10	0
15				2.0	.10	.10	0			98	.10	0
16				1.6	.10	.10	0			105	.10	0
17				1.2	.10	.10	0			18	.10	0
18				1.1	.10	.10	0			8.2	.10	0
19				1.0	.10	.10	0			6.8	.10	0
20				.90	.10	.10	0			44	0	0
21				.80	.10	.10	0			27	0	0
22				.60	.10	.10	0			30	0	0
23				.50	.10	.10	0			10	0	0
24				.50	.10	.10	0			5.0	0	0
25				.50	.10	.10	0			2.6	0	21
26				.40	.10	.10	0			1.3	0	6.4
27				.40	.10	.10	0			.50	0	7.3
28				.50	.10	.10	0			.30	0	2.0
29				.50	------	.10	0			.40	0	.50
30				.50	------	.10	0			.30	0	.20
31		------		.40	------	.10	------		------	.20	0	------
TOTAL	0	0	0	298.30	3.80	3.10	.80	0	0	496.60	439.40	37.40
MEAN	0	0	0	9.62	.14	.10	.027	0	0	16.0	14.2	1.25
MAX	0	0	0	177	.40	.10	.10	0	0	132	226	21
MIN	0	0	0	0	.10	.10	0	0	0	0	0	0
AC-FT	0	0	0	592	7.5	6.1	1.6	0	0	985	872	74

CAL YR 1973 TOTAL 6,113.90 MEAN 16.8 MAX 748 MIN 0 AC-FT 12,130
WTR YR 1974 TOTAL 1,279.40 MEAN 3.51 MAX 226 MIN 0 AC-FT 2,540

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-9	0900	2.58	398	7-15	2130	2.87	579
7-8	0200	3.18	804	8- 1	2130	3.17	796

09484000. Sabino Creek near Tucson, Ariz.

LOCATION.--Lat 32°19'01", long 110°48'36", in SE¼NE¼ sec.9, T.13 S., R.15 E., Pima County, on right bank 0.5 mi (0.8 km) north of Coronado National Forest boundary and 12 mi (19 km) northeast of city hall in Tucson.

DRAINAGE AREA.--35.5 mi^2 (91.9 km^2).

PERIOD OF RECORD.--July 1904 to June 1912 (monthly discharge only), June 1932 to September 1974 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder. Altitude of gage is 2,720 ft (829 m), from topographic map. July 1904 to June 1912, water-stage recorder and sharp-crested weir at site 0.5 mi (0.8 km) upstream at different datum.

AVERAGE DISCHARGE.--49 years (1904-11, 1932-74), 12.2 ft^3/s (0.346 m^3/s), 8,840 acre-ft/yr (10.9 hm^3/yr); median of yearly mean discharges, 8.8 ft^3/s (0.25 m^3/s), 6,400 acre-ft/yr (7.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 117 ft^3/s (3.31 m^3/s) July 20 (gage height, 4.78 ft or 1.457 m); no flow for many days.
Period of record: Maximum discharge, 7,730 ft^3/s (219 m^3/s) Sept. 6, 1970 (gage height, 10.21 ft or 3.112 m), from rating curve extended above 3,000 ft^3/s (85 m^3/s) on basis of slope-area measurement at gage height 9.65 ft (2.941 m); no flow at times in most years.

REMARKS.--Records fair. No diversion above station except for domestic supply.

REVISIONS (WATER YEARS).--WSP 1213: 1938, 1946. WSP 1283: Drainage area.

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		0	1.3	.72	1.8	.18		0	12	.03
2		0		.02	1.3	.70	1.5	.13		0	38	.04
3		0		.02	1.2	.66	1.4	.12		0	39	.04
4		0		.03	1.2	.60	1.3	.08		0	15	.04
5		0		.05	1.1	.71	1.1	.06		0	6.8	.03
6		0		.04	1.0	.98	.98	.03		0	5.4	.06
7		0		0	1.1	1.1	.82	.02		0	3.3	.09
8		0		10	1.2	.91	.64	0		0	2.4	.05
9		0		41	1.0	1.6	.58	0		0	2.0	.03
10		0		20	.82	1.9	.41	0		0	2.6	.02
11		0		7.8	.92	1.8	1.4	0		0	1.4	.01
12		0		3.5	.92	1.5	.44	0		0	1.0	.47
13		0		2.7	.93	1.7	.39	0		0	.65	1.4
14		0		4.3	.95	1.8	.43	0		0	.51	1.8
15		0		5.4	.88	1.9	.40	0		0	.48	2.0
16		0		6.3	.75	2.2	.37	0		0	.48	1.2
17		0		7.6	.65	2.1	.34	0		0	2.2	.71
18		0		8.4	.59	1.9	.25	0		0	4.2	.72
19		0		6.9	.63	1.8	.22	0		32	2.2	.99
20		.05		4.5	.65	2.0	.20	0		41	1.2	1.4
21		.07		4.5	.69	3.2	.22	0		18	.61	9.7
22		0		4.3	.51	5.5	.20	0		18	.49	20
23		0		3.5	.43	4.0	.19	0		12	.65	13
24		0		2.6	.82	3.2	.18	0		7.0	.62	9.1
25		0		1.9	.91	2.6	.18	0		6.5	.55	7.4
26		0		2.0	.89	2.5	.18	0		7.9	.40	11
27		0		2.9	.77	2.1	.18	0		5.8	.14	19
28		0		2.4	.76	1.7	.19	0		2.8	.09	12
29		0		1.8	------	1.4	.18	0		6.8	.07	8.5
30		0		1.5	------	1.5	.18	0		8.2	.04	6.4
31		------		1.4	------	1.8	------	0	------	9.4	.02	------
TOTAL	0	.12	0	157.36	24.87	58.08	16.85	.62	0	175.4	144.50	127.23
MEAN	0	.004	0	5.08	.89	1.87	.56	.020	0	5.66	4.66	4.24
MAX	0	.07	0	41	1.3	5.5	1.8	.18	0	41	39	20
MIN	0	0	0	0	.43	.60	.18	0	0	0	.02	.01
AC-FT	0	.2	0	312	49	115	33	1.2	0	348	287	252

CAL YR 1973 TOTAL 7,881.34 MEAN 21.6 MAX 770 MIN 0 AC-FT 15,630
WTR YR 1974 TOTAL 705.03 MEAN 1.93 MAX 41 MIN 0 AC-FT 1,400

PEAK DISCHARGE (BASE, 200 CFS).--No peak above base.

09484200. Bear Creek near Tucson, Ariz.

LOCATION.--Lat 32°18'22", long 110°48'03", in NW¼ sec.15, T.13 S., R.15 E., Pima County, on left bank 0.8 mi (1.3 km) upstream from mouth and 15 mi (24 km) northeast of city hall in Tucson.

DRAINAGE AREA.--16.3 mi^2 (42.2 km^2).

PERIOD OF RECORD.--October 1959 to September 1974 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 2,670 ft (814 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 4.69 ft^3/s (0.133 m^3/s), 3,400 acre-ft/yr (4.19 hm^3/yr); median of yearly mean discharges, 3.4 ft^3/s (0.10 m^3/s), 2,500 acre-ft/yr (3.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 57 ft^3/s (1.61 m^3/s) Jan. 9 (gage height, 1.31 ft or 0.399 m, from crest-stage gage); no flow for many days.
Period of record: Maximum discharge, 1,150 ft^3/s (32.6 m^3/s) Dec. 22, 1965 (gage height, 4.90 ft or 1.494 m, from floodmarks), from rating curve extended above 300 ft^3/s (8.5 m^3/s) on basis of computation of peak flow over dam; no flow at times in each year.

REMARKS.--Records fair. Minor regulation and diversion for domestic and recreational use above station.

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	.97	.14	.21	.03		0	.15	0
2				0	.97	.14	.21	.03		0	1.2	0
3				0	.87	.14	.21	.03		0	2.6	0
4				0	.78	.11	.21	.02		0	1.5	0
5				0	.69	.08	.17	.02		0	1.2	0
6				0	.61	.08	.14	.02		0	.87	0
7				0	.61	.08	.08	.01		0	.61	0
8				0	.54	.06	.08	.01		0	.41	0
9				15	.47	.14	.08	.01		0	.21	0
10				28	.47	.17	.08	.01		0	.17	0
11				9.6	.47	.17	.08	0		0	.14	0
12				5.0	.47	.17	.06	0		0	.06	0
13				3.3	.41	.14	.06	0		0	.04	0
14				2.6	.35	.11	.06	0		0	.04	0
15				3.3	.35	.08	.06	0		0	.03	0
16				4.4	.35	.08	.06	0		0	.03	0
17				6.2	.30	.08	.06	0		0	.03	0
18				5.6	.30	.08	.04	0		0	.44	0
19				4.4	.25	.08	.04	0		0	.17	0
20				3.5	.25	.08	.04	0		0	.08	0
21				2.9	.21	.08	.04	0		5.9	.04	.10
22				2.7	.21	.08	.04	0		3.7	.01	2.5
23				2.7	.21	.08	.03	0		1.5	.01	3.7
24				2.2	.21	.08	.03	0		.69	.01	1.6
25				1.8	.21	.08	.03	0		.41	.01	1.4
26				1.6	.21	.08	.03	0		.21	0	4.1
27				1.6	.21	.08	.03	0		.17	0	12
28				1.4	.17	.08	.03	0		.08	0	5.0
29				1.4	------	.14	.03	0		.06	0	2.4
30				1.2	------	.21	.03	0		.04	0	1.6
31		------		1.1	------	.21	------	0	------	.04	0	------
TOTAL	0	0	0	111.5	12.12	3.41	2.35	.19	0	12.80	10.06	34.40
MEAN	0	0	0	3.60	.43	.11	.078	.006	0	.41	.32	1.15
MAX	0	0	0	28	.97	.21	.21	.03	0	5.9	2.6	12
MIN	0	0	0	0	.17	.06	.03	0	0	0	0	0
AC-FT	0	0	0	221	24	6.8	4.7	.4	0	25	20	68

CAL YR 1973 TOTAL 3,183.46 MEAN 8.72 MAX 314 MIN 0 AC-FT 6,310
WTR YR 1974 TOTAL 186.83 MEAN .51 MAX 28 MIN 0 AC-FT 371

PEAK DISCHARGE (BASE, 70 CFS).--No peak above base.

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 current year.

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.--6 years, 2.65 ft^3/s (.0750 m^3/s), 1,920 acre-ft/yr (2.37 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,570 ft^3/s (72.8 m^3/s) July 19 (gage height, 5.05 ft or 1.539 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0						0	100	0
2				0						0	25	0
3				0						0	0	10
4				0						0	0	5.0
5				0						0	0	1.5
6				0						0	0	50
7				0						486	0	9.0
8				0						150	0	0
9				.60						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	0	0
15				0						0	0	0
16				0						0	0	0
17				0						0	0	0
18				0						0	0	0
19				0						220	72	0
20				0						346	0	70
21				0						15	0	130
22				0						0	0	125
23				0						0	0	0
24				0						0	0	0
25				0						0	0	0
26				0						61	0	0
27				0						139	0	0
28				0						.70	0	0
29				0	------					250	0	0
30				0	------					0	0	0
31		------		0	------		------		------	0	0	------
TOTAL	0	0	0	.60	0	0	0	0	0	1,667.70	197	400.5
MEAN	0	0	0	.019	0	0	0	0	0	53.8	6.35	13.4
MAX	0	0	0	.60	0	0	0	0	0	486	100	130
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	1.2	0	0	0	0	0	3,310	391	794

CAL YR 1973 TOTAL 362.80 MEAN .99 MAX 200 MIN 0 AC-FT 720
WTR YR 1974 TOTAL 2,265.80 MEAN 6.21 MAX 486 MIN 0 AC-FT 4,490

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 7	0915	4.35	1,720	7-29	0315	4.07	1,350
7-19	1515	5.05	2,570	8- 1	2145	3.93	1,160
7-20	1845	4.82	2,290	8-19	1500	3.91	1,130
7-26	2315	4.09	1,380	9-21	1815	4.06	1,340

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 current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,420 ft (1,042 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 0.772 ft^3/s (0.0219 m^3/s), 559 acre-ft/yr (0.689 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,460 ft^3/s (41.3 m^3/s) Sept. 21 (gage height, 4.0 ft or 1.22 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	19	0
2										0	0	75
3										0	29	24
4										0	2.8	.03
5										0	.16	0
6										0	0	.03
7										12	0	.12
8										1.4	0	.02
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										25	0	0
16										0	0	0
17										0	0	0
18										0	0	0
19										0	0	0
20										50	0	50
21										0	0	56
22										0	0	30
23										0	0	5.0
24										0	0	.20
25										0	0	.15
26										0	0	.06
27										0	0	0
28										0	0	0
29					------					0	0	0
30					------					0	0	0
31		------			------		------		------	0	0	------
TOTAL	0	0	0	0	0	0	0	0	0	88.4	50.96	240.61
MEAN	0	0	0	0	0	0	0	0	0	2.85	1.64	8.02
MAX	0	0	0	0	0	0	0	0	0	50	29	75
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	175	101	477

CAL YR 1973 TOTAL 0.25 MEAN .0007 MAX .17 MIN 0 AC-FT 0.5
WTR YR 1974 TOTAL 379.97 MEAN 1.04 MAX 75 MIN 0 AC-FT 754

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 7	2330	2.95	510	8- 3	1300	3.05	585
7-20	0300	3.21	716	9- 2	2145	3.59	1,050
8- 1	2115	3.02	562	9-21	2315	4.0	1,460

NOTE.--No gage-height record Jan. 22 to Mar. 7.

09484600. Pantano Wash near Vail, Ariz.

LOCATION.--Lat 32°02'09", long 110°40'37", in SW¼SE¼ sec.14, T.16 S., R.16 E., Pima County, on right bank 60 ft (18 m) upstream from dam, 2.2 mi (3.5 km) southeast of Vail, 2.4 mi (3.9 km) southwest of Pistol Hill, and 20 mi (32 km) southeast of city hall in Tucson.

DRAINAGE AREA.--457 mi^2 (1,184 km^2).

PERIOD RECORD.--January 1959 to September 1974 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,205 ft (976.9 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 6.70 ft^3/s (0.190 m^3/s), 4,850 acre-ft/yr (5.98 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,780 ft^3/s (50.4 m^3/s) July 20 (gage height, 7.05 ft or 2.149 m); no flow May 28 to June 12, July 12, 13, 17, 18.
Period of record: Maximum discharge, 9,960 ft^3/s (282 m^3/s) Sept. 10, 1964 (gage height, 11.06 ft or 3.371 m), from rating curve extended above 2,000 ft^3/s (57 m^3/s) on basis of slope-area measurements at gage heights 10.9 and 24 ft (3.32 and 7.3 m); no flow June 26 to July 13, Aug. 7, 1971, result of work on infiltration gallery, June 27 to July 13, 1973, result of ponding during construction work on dam, and May 28 to June 12, July 12, 13, 17, 18, 1974.
A flood of about 38,000 ft^3/s (about 1,100 m^3/s) occurred on Aug. 11, 1958 (gage height, about 24 ft or about 7.3 m, from floodmarks).

REMARKS.--Records fair. No known diversion above station. Records published herein represent flow by gage. Infiltration flow is not included. Base runoff past station consists of downvalley underflow that is brought to the surface by the concrete dam 60 ft (18 m) downstream which extends to bedrock.

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	.10	.10	.10	.10	.10	.10	.20	.30	0	.10	77	.20
2	.10	.10	.10	.10	.10	.10	.20	.30	0	.10	49	32
3	.10	.10	.10	.10	.10	.10	.20	.30	0	.20	1.0	57
4	.10	.10	.10	.10	.10	.10	.20	.40	0	.20	1.0	2.1
5	.10	.10	.10	.10	.10	.10	.30	.40	0	.20	.90	.20
6	.10	.10	.10	.10	.10	.10	.20	.40	0	.30	.80	7.8
7	.10	.10	.10	.10	.10	.10	.30	.30	0	129	.80	9.0
8	.10	.10	.10	.10	.10	.10	.20	.30	0	58	.80	.20
9	.10	.10	.10	.10	.10	.10	.30	.20	0	.10	.80	.20
10	.10	.10	.10	.10	.10	.10	.30	.20	0	.20	.80	.20
11	.10	.10	.10	.10	.10	.10	.30	.20	0	.10	.80	.20
12	.10	.10	.10	.10	.10	.10	.30	.20	0	0	.80	.20
13	.10	.10	.10	.10	.10	.10	.40	.20	.10	0	.80	.20
14	.10	.10	.10	.10	.10	.10	.30	.20	.10	.10	.80	.20
15	.10	.10	.10	.10	.10	.10	.30	.20	.10	7.3	5.0	.20
16	.10	.10	.10	.10	.10	.10	.20	.20	.10	.40	.20	.20
17	.10	.10	.10	.10	.10	.10	.30	.20	.10	0	.10	.20
18	.10	.10	.10	.10	.10	.10	.30	.20	.10	0	.10	.20
19	.10	.10	.10	.10	.10	.10	.30	.20	.10	56	66	.20
20	.10	.10	.10	.10	.10	.20	.30	.20	.10	245	2.0	49
21	.10	.10	.10	.10	.10	.20	.40	.10	.10	11	1.0	121
22	.10	.10	.10	.10	.10	.10	.40	.10	.10	1.2	.50	47
23	.10	.10	.10	.10	.10	.10	.60	.10	.10	.50	.20	2.3
24	.10	.10	.10	.10	.10	.10	.40	.10	.10	.40	.20	1.0
25	.10	.10	.10	.10	.10	.10	.60	.10	.10	.30	.20	1.0
26	.10	.10	.10	.10	.10	.10	.40	.10	.10	.20	.20	1.0
27	.10	.10	.10	.10	.10	.10	.40	.10	.20	31	.20	.80
28	.10	.10	.10	.10	.10	.10	.30	0	.20	1.2	.20	.80
29	.10	.10	.10	.10	------	.20	.30	0	.20	130	.20	.70
30	.10	.10	.10	.10	------	.20	.30	0	.10	1.2	.20	.70
31	.10	------	.10	.10	------	.20	------	0	------	1.2	.20	------
TOTAL	3.10	3.00	3.10	3.10	2.80	3.60	9.50	5.80	2.10	675.50	212.80	336.00
MEAN	.10	.10	.10	.10	.10	.12	.32	.19	.070	21.8	6.86	11.2
MAX	.10	.10	.10	.10	.10	.20	.60	.40	.20	245	77	121
MIN	.10	.10	.10	.10	.10	.10	.20	0	0	0	.10	.20
AC-FT	6.1	6.0	6.1	6.1	5.6	7.1	19	12	4.2	1,340	422	666

CAL YR 1973 TOTAL 1,333.10 MEAN 3.65 MAX 146 MIN 0 AC-FT 2,640
WTR YR 1974 TOTAL 1,260.40 MEAN 3.45 MAX 245 MIN 0 AC-FT 2,500

PEAK DISCHARGE (BASE, 2,000 CFS).--No peak above base.

NOTE.--No gage-height record Aug. 20 to Sept. 24.

09485000. Rincon Creek near Tucson, Ariz.

LOCATION.--Lat 32°07'46", long 110°37'32", in NW¼NE¼ sec.17, T.15 S., R.17 E., Pima County, on left bank 0.2 mi (0.3 km) north of Sentinel Butte, 9 mi (14 km) upstream from mouth, and 22 mi (35 km) southeast of city hall in Tucson.

DRAINAGE AREA.--44.8 mi^2 (116.0 km^2).

PERIOD OF RECORD.--October 1952 to September 1974 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,120 ft (951 m), from topographic map.

AVERAGE DISCHARGE.--22 years, 5.16 ft^3/s (0.146 m^3/s), 3,740 acre-ft/yr (4.61 hm^3/yr); median of yearly mean discharges, 3.8 ft^3/s (0.11 m^3/s), 2,800 acre-ft/yr (3.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 664 ft^3/s (18.8 m^3/s) Aug. 1 (gage height, 4.94 ft or 1.506 m); no flow for many days.
Period of record: Maximum discharge, 9,660 ft^3/s (274 m^3/s) Aug. 19, 1971 (gage height, 10.5 ft or 3.20 m, from high-water mark in well), from rating curve extended above 1,800 ft^3/s (51 m^3/s) on basis of slope-area measurements at gage heights 6.50 ft (1.981 m) and 9.90 ft (3.018 m); no flow for many days in each year.

REMARKS.--Records fair.

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	.16	.03				0	50	
2				0	.16	.02				0	9.7	
3				0	.16	.02				0	1.1	
4				0	.16	.01				0	8.7	
5				0	.16	.01				0	.81	
6				0	.16	.01				2.8	.04	
7				0	.16	.01				0	0	
8				0	.16	0				0	0	
9				36	.23	0				0	0	
10				18	.23	0				0	0	
11				1.1	.23	0				0	0	
12				0	.27	0				0	0	
13				0	.19	0				0	0	
14				0	.16	0				0	0	
15				0	.16	0				0	0	
16				0	.16	0				0	0	
17				.11	.16	0				0	0	
18				1.5	.16	0				0	0	
19				1.4	.16	0				0	0	
20				.89	.16	0				0	0	
21				.72	.13	0				0	0	
22				.98	.10	0				0	0	
23				.72	.08	0				0	0	
24				.41	.07	0				0	0	
25				.31	.06	0				0	0	
26				.27	.05	0				0	0	
27				.23	.04	0				0	0	
28				.23	.03	0				0	0	
29				.23	------	0				0	0	
30				.19	------	0				0	0	
31		------		.16	------	0	------		------	0	0	------
TOTAL	0	0	0	63.45	4.11	.11	0	0	0	2.8	70.35	0
MEAN	0	0	0	2.05	.15	.004	0	0	0	.090	2.27	0
MAX	0	0	0	36	.27	.03	0	0	0	2.8	50	0
MIN	0	0	0	0	.03	0	0	0	0	0	0	0
AC-FT	0	0	0	126	8.2	.2	0	0	0	5.6	140	0

CAL YR 1973 TOTAL 5,111.55 MEAN 14.0 MAX 858 MIN 0 AC-FT 10,140
WTR YR 1974 TOTAL 140.82 MEAN .39 MAX 50 MIN 0 AC-FT 279

PEAK DISCHARGE (BASE, 300 CFS).-- Aug. 1 (2030) 664 cfs (4.94 ft).

09486000. Rillito Creek near Tucson, Ariz.
(Formerly published as sta No. 09485850)

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. Prior to Oct. 1, 1973, at site 1.5 mi (2.4 km) upstream.

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 current year (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.--66 years, 16.3 ft^3/s (0.462 m^3/s), 11,810 acre-ft/yr (14.6 hm^3/yr); median of yearly mean discharges, 8.0 ft^3/s (0.23 m^3/s), 5,800 acre-ft/yr (7.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,440 ft^3/s (40.8 m^3/s) Aug. 2 (gage height, 6.2 ft or 1.89 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	0	0
2										0	174	0
3										0	34	0
4										0	2.4	0
5										0	.01	0
6										0	0	120
7										0	0	30
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										26	0	0
21										0	0	0
22										0	0	40
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					------					0	0	0
30					------					0	0	0
31		------			------		------		------	0	0	------
TOTAL	0	0	0	0	0	0	0	0	0	26	210.41	190
MEAN	0	0	0	0	0	0	0	0	0	.84	6.79	6.33
MAX	0	0	0	0	0	0	0	0	0	26	174	120
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	52	417	377

CAL YR 1973 TOTAL 10,171.00 MEAN 27.9 MAX 2,200 MIN 0 AC-FT 20,170
WTR YR 1974 TOTAL 426.41 MEAN 1.17 MAX 174 MIN 0 AC-FT 846

PEAK DISCHARGE (BASE, 1,000 CFS).--Aug. 2 (1800) 1,440 cfs (6.2 ft); Sept. 6 (1800) 1,030 cfs (5.59 ft).

NOTE.--No gage-height record Jan. 14 to Apr. 4.

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.--9 years, 2.04 ft^3/s (0.058 m^3/s), 1,480 acre-ft/yr (1.82 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 7,700 ft^3/s (218 m^3/s) July 20 (gage height, 5.80 ft or 1.768 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	0	0
2										0	0	0
3										0	14	0
4										0	0	1.0
5										0	0	0
6										0	2.9	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	.60
14										0	0	0
15										0	0	0
16										5.0	0	0
17										0	0	0
18										30	0	0
19										2.1	0	0
20										375	0	.10
21										0	0	0
22										.90	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					------					0	0	0
30					------					0	0	0
31		------			------		------		------	0	0	------
TOTAL	0	0	0	0	0	0	0	0	0	413.00	16.9	1.70
MEAN	0	0	0	0	0	0	0	0	0	13.3	.55	.057
MAX	0	0	0	0	0	0	0	0	0	375	14	1.0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	819	34	3.4

CAL YR 1973 TOTAL 75.70 MEAN .21 MAX 70 MIN 0 AC-FT 150
WTR YR 1974 TOTAL 431.60 MEAN 1.18 MAX 375 MIN 0 AC-FT 856

PEAK DISCHARGE (BASE, 500 CFS).--July 20 (0630) 7,700 cfs (5.80 ft).

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).--31 years (1939-46, 1950-74), 34.4 ft^3/s (0.974 m^3/s), 24,920 acre-ft/yr (30.7 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, 11,700 ft^3/s (331 m^3/s) July 8 (gage height, 13.02 ft or 3.968 m); minimum daily, 10 ft^3/s (0.28 m^3/s) Nov. 26.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	36	25	37	40	39	45	39	40	52	24	34
2	42	42	31	39	40	40	45	39	45	396	997	31
3	45	32	34	42	39	39	45	39	50	113	245	67
4	42	31	39	40	42	40	40	40	45	52	90	283
5	42	31	37	40	40	40	40	42	52	55	380	65
6	40	32	28	39	42	40	39	50	52	60	60	432
7	37	31	40	39	40	40	39	50	47	1,110	50	150
8	42	39	31	42	40	40	39	52	47	1,840	50	75
9	42	32	30	64	39	45	40	52	52	32	40	60
10	40	29	30	45	40	40	39	55	52	50	40	40
11	40	25	30	45	40	42	39	52	47	40	35	40
12	40	36	30	40	40	45	39	47	40	39	35	35
13	40	58	30	40	40	45	42	50	40	34	34	35
14	39	42	30	42	40	42	40	58	42	34	34	35
15	37	55	30	42	40	42	40	52	40	36	32	35
16	45	98	35	40	40	42	40	52	40	34	32	35
17	47	80	40	40	40	40	42	52	40	31	29	34
18	50	37	40	40	40	40	45	55	40	34	26	34
19	50	40	40	39	40	40	36	52	37	222	29	36
20	45	32	42	39	40	42	34	52	39	631	25	157
21	45	25	39	40	40	45	37	50	40	70	26	48
22	45	25	39	39	40	42	40	40	39	90	28	131
23	45	20	39	40	42	42	47	45	39	203	28	58
24	42	20	39	39	40	40	42	50	37	100	29	60
25	45	15	39	40	42	42	40	40	42	50	26	52
26	40	10	39	40	40	42	40	40	52	40	31	50
27	42	13	39	40	40	42	39	47	52	40	34	47
28	40	20	39	42	40	42	37	47	50	35	36	45
29	39	32	39	42	------	45	39	58	50	35	37	45
30	34	32	39	40	------	45	39	52	45	46	34	47
31	31	------	39	40	------	45	------	40	------	34	31	------
TOTAL	1,293	1,050	1,101	1,276	1,126	1,295	1,208	1,489	1,333	5,638	2,627	2,296
MEAN	41.7	35.0	35.5	41.2	40.2	41.8	40.3	48.0	44.4	182	84.7	76.5
MAX	50	98	42	64	42	45	47	58	52	1,840	997	432
MIN	31	10	25	37	39	39	34	39	37	31	24	31
AC-FT	2,560	2,080	2,180	2,530	2,230	2,570	2,400	2,950	2,640	11,180	5,210	4,550

CAL YR 1973 TOTAL 18,525.50 MEAN 50.8 MAX 2,350 MIN 0 AC-FT 36,750
WTR YR 1974 TOTAL 21,732 MEAN 59.5 MAX 1,840 MIN 10 AC-FT 43,110

PEAK DISCHARGE (BASE, 2,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 2	0130	9.60	2,990	7-20	0800	10.25	4,600
7- 7	1330	10.50	4,700	8- 2	1930	9.56	3,380
7- 8	0730	13.02	11,700				

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 current year.

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.--8 years, 7.35 ft^3/s (0.208 m^3/s), 5,330 acre-ft/yr (6.57 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,200 ft^3/s (260 m^3/s) Aug. 4 (gage height, 8.70 ft or 2.652 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									0	0	48	0
2									0	0	5.0	364
3									0	0	0	450
4									0	0	1,720	36
5									0	0	413	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	1.0
14									0	0	0	0
15									0	0	0	3.0
16									0	0	91	0
17									0	94	0	0
18									0	0	0	0
19									0	0	0	0
20									0	256	0	2.0
21									0	24	0	106
22									0	588	0	5.0
23									0	63	0	0
24									0	0	0	0
25									95	0	0	0
26									5.0	0	0	0
27									0	0	0	0
28									0	401	0	0
29					------				0	224	0	0
30					------				0	69	0	0
31		------			------		------		------	0	0	------
TOTAL	0	0	0	0	0	0	0	0	100.0	1,719	2,277.0	967.0
MEAN	0	0	0	0	0	0	0	0	3.33	55.5	73.5	32.2
MAX	0	0	0	0	0	0	0	0	95	588	1,720	450
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	198	3,410	4,520	1,920

CAL YR 1973 TOTAL 810.30 MEAN 2.22 MAX 230 MIN 0 AC-FT 1,610
WTR YR 1974 TOTAL 5,063.00 MEAN 13.9 MAX 1,720 MIN 0 AC-FT 10,040

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-25	1930	5.85	1,300	8- 4	1700	8.70	9,200
7-17	1700	6.08	1,760	8-16	1830	5.48	1,460
7-20	1930	7.30	4,700	9- 2	2100	7.50	5,500
7-22	1900	8.23	7,290	9- 3	2130	7.55	5,600
7-28	0030	6.35	2,700	9-21	1930	5.82	1,150
7-29	0200	5.97	1,540				

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.--20 years, 14.0 ft^3/s (0.396 m^3/s), 10,140 acre-ft/yr (12.5 hm^3/yr); median of yearly mean discharges, 8.1 ft^3/s (0.23 m^3/s), 5,900 acre-ft/yr (7.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 364 ft^3/s (10.3 m^3/s) Aug. 2 (gage height, 5.31 ft or 1.618 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	4.5	
2										0	24	
3										0	0	
4										0	7.9	
5										0	0	
6										0	0	
7										0	0	
8										0	0	
9										0	0	
10										0	0	
11										0	0	
12										0	0	
13										0	0	
14										0	0	
15										.50	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										0	0	
29					------					0	0	
30					------					2.7	0	
31		------			------		------		------	0	0	------
TOTAL	0	0	0	0	0	0	0	0	0	3.20	36.4	0
MEAN	0	0	0	0	0	0	0	0	0	.10	1.17	0
MAX	0	0	0	0	0	0	0	0	0	2.7	24	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	6.3	72	0

CAL YR 1973 TOTAL 22.50 MEAN .062 MAX 11 MIN 0 AC-FT 45
WTR YR 1974 TOTAL 39.60 MEAN .11 MAX 24 MIN 0 AC-FT 79

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 mi^2 (22,225 km^2).

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.--32 years (1940-46, 1948-74), 19.5 ft^3/s (0.552 m^3/s), 14,130 acre-ft/yr (17.4 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).

EXTREMES.--Current year: Maximum discharge, 144 ft^3/s (4.08 m^3/s) July 20 (gage height, 9.64 ft or 2.938 m); no flow for many days.
Period of record: Maximum discharge, 9,200 ft^3/s (261 m^3/s) Sept. 29, 1962 (gage height, 17.50 ft or 5.334 m); no flow for most of time in recent years.

REMARKS.--Records fair. Many diversions above station, mostly by pumping from ground water, for municipal uses and for irrigation of about 240,000 acres (970 km^2), 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0				0				0	.40	.04
2		0				0				0	0	.03
3		0				0				0	0	.01
4		0				0				0	0	0
5		0				0				0	0	0
6		0				0				0	0	0
7		0				0				4.5	0	0
8		0				0				0	0	0
9		0				0				0	0	0
10		0				0				0	0	0
11		0				0				0	0	0
12		0				0				0	0	0
13		0				0				0	0	0
14		0				0				0	3.0	.0
15		0				0				0	3.0	0
16		0				0				0	3.3	0
17		0				0				0	2.7	0
18		0				0				0	2.2	.87
19		0				0				7.0	1.9	.16
20		0				13				72	1.6	0
21		0				2.4				48	1.0	0
22		0				0				1.6	.70	0
23		0				0				0	.58	0
24		.06				0				0	.46	0
25		0				0				0	.34	0
26		0				0				0	.28	0
27		0				0				0	.16	0
28		0				0				0	.10	0
29		0			------	0				0	.08	0
30		0			------	0				0	.06	0
31		------			------	0	------		------	1.2	.05	------
TOTAL	0	.06	0	0	0	15.4	0	0	0	134.3	21.91	1.11
MEAN	0	.002	0	0	0	.50	0	0	0	4.33	.71	.037
MAX	0	.06	0	0	0	13	0	0	0	72	3.3	.87
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	.1	0	0	0	31	0	0	0	266	43	2.2

CAL YR 1973 TOTAL 2,035.01 MEAN 5.58 MAX 485 MIN 0 AC-FT 4,040
WTR YR 1974 TOTAL 172.78 MEAN .47 MAX 72 MIN 0 AC-FT 343

PEAK DISCHARGE (BASE, 380 CFS).--No peak above base.

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.--9 years, 13.3 ft^3/s (0.377 m^3/s), 9,640 acre-ft/yr (11.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 77 ft^3/s (2.18 m^3/s) Mar. 29 (gage height, 2.13 ft or 0.649 m); minimum daily, 0.35 ft^3/s (0.010 m^3/s) July 4.
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); minimum daily, 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 winter periods, 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.93	.90	.80	.50	1.1	21	2.0	.54	.43	.93	.41
2	1.7	.93	.90	.75	.50	1.2	17	1.8	.53	.49	1.8	.43
3	1.7	.83	.90	.60	.50	1.4	14	1.8	.52	.39	1.5	.89
4	1.7	1.6	.90	.55	.50	1.5	14	1.6	.53	.35	1.4	.91
5	1.7	1.2	.90	.50	.50	1.5	17	1.5	.55	.45	1.5	.55
6	1.7	.93	.90	.50	.50	1.5	23	1.5	.52	.72	1.7	.57
7	1.7	.93	.90	.50	.50	1.5	17	1.6	.48	1.5	1.6	.51
8	1.6	.93	.95	.50	.50	1.5	13	1.5	.48	.75	2.6	.44
9	1.6	.93	1.0	.50	.50	1.4	12	1.4	.51	.54	1.9	.46
10	1.7	.83	1.0	.45	.50	1.3	9.5	1.3	.51	.43	1.1	.47
11	1.7	.83	1.0	.45	.50	1.5	9.1	1.2	.50	.38	.89	.42
12	1.6	.83	1.0	.45	.50	1.7	7.9	1.1	.47	.39	.74	.38
13	1.4	.83	1.0	.50	.50	1.8	6.3	.96	.44	.60	.60	.43
14	1.4	.83	1.0	.55	.50	1.9	5.2	1.0	.44	1.4	.53	.60
15	1.4	.74	.95	.60	.50	2.0	4.9	1.0	.50	1.4	.77	.89
16	1.4	.74	.95	.70	.50	2.3	4.7	.84	.46	.91	1.4	.87
17	1.4	.74	.95	.90	.50	3.0	4.2	.90	.42	.84	1.6	.69
18	1.3	.74	.90	1.1	.52	4.0	4.1	1.0	.42	1.1	1.2	.78
19	1.3	.83	.90	1.2	.54	6.0	3.8	.79	.42	.77	1.3	1.6
20	1.3	.83	.80	1.4	.60	8.0	3.3	.73	.40	1.3	.80	.74
21	1.3	.74	.75	1.6	.65	15	3.2	.76	.44	1.1	.61	.71
22	1.3	1.0	.70	2.0	.70	16	3.0	.71	.48	.57	.58	.74
23	1.2	.83	.70	1.7	.70	15	2.7	.70	.49	.47	.58	.60
24	1.2	.93	.70	1.3	.75	16	2.5	.68	.50	.44	.59	.57
25	1.2	.93	.70	.90	.80	20	3.2	.62	.41	.53	.53	.62
26	1.2	.59	.70	.65	.80	23	4.0	.62	.42	.63	.47	.58
27	1.2	.93	.75	.60	.90	25	3.1	.63	.40	.50	.43	.56
28	1.0	.90	.80	.55	1.0	32	2.5	.57	.39	.60	.43	.48
29	.93	.90	.85	.55	------	41	2.3	.54	.39	.74	.47	.46
30	.93	.90	.85	.50	------	43	2.1	.55	.38	.80	.41	.47
31	.93	------	.80	.50	------	33	------	.54	------	.98	.44	------
TOTAL	43.39	26.63	27.00	24.35	16.46	325.1	239.6	32.44	13.94	22.50	31.40	18.83
MEAN	1.40	.89	.87	.79	.59	10.5	7.99	1.05	.46	.73	1.01	.63
MAX	1.7	1.6	1.0	2.0	1.0	43	23	2.0	.55	1.5	2.6	1.6
MIN	.93	.59	.70	.45	.50	1.1	2.1	.54	.38	.35	.41	.38
AC-FT	86	53	54	48	33	645	475	64	28	45	62	37

CAL YR 1973 TOTAL 16,923.32 MEAN 46.4 MAX 802 MIN .59 AC-FT 33,570
WTR YR 1974 TOTAL 821.64 MEAN 2.25 MAX 43 MIN .35 AC-FT 1,630

PEAK DISCHARGE (BASE, 75 CFS).--Mar. 29 (2200) 77 cfs (2.13 ft).

NOTE.--No gage-height record Nov. 28 to Mar. 21.

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.--12 years, 133 ft^3/s (3.767 m^3/s), 96,360 acre-ft/yr (119 hm^3/yr); median of yearly mean discharges, 110 ft^3/s (3.12 m^3/s), 79,700 acre-ft/yr (98 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 342 ft^3/s (9.69 m^3/s) Mar. 31 (gage height, 2.36 ft or 0.719 m); minimum daily, 13 ft^3/s (0.37 m^3/s) Dec.22-27, July 4, 5.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	25	24	23	42	201	47	21	14	45	22
2	20	20	26	22	23	57	177	45	21	15	71	21
3	20	20	22	16	20	85	145	43	20	14	106	26
4	20	22	18	22	20	78	137	41	20	13	109	43
5	20	24	23	25	22	64	134	40	20	13	111	29
6	20	22	17	21	21	66	166	40	20	16	143	28
7	21	21	18	22	19	77	164	41	19	30	135	25
8	21	21	21	23	18	73	149	42	18	28	197	22
9	21	21	20	24	18	65	149	40	18	20	155	21
10	21	21	18	23	22	49	134	38	18	16	101	21
11	21	20	17	17	22	50	117	36	17	15	75	20
12	21	20	19	17	25	55	107	36	17	14	58	18
13	21	20	23	22	27	58	99	35	17	14	46	18
14	21	21	24	25	22	74	88	34	16	18	39	22
15	21	19	21	23	22	101	86	33	16	31	63	26
16	21	17	20	25	25	123	83	31	16	28	82	28
17	21	18	21	27	27	143	80	31	15	32	79	25
18	20	19	21	30	26	169	78	32	15	36	69	27
19	20	23	17	28	23	176	76	30	14	28	70	58
20	20	21	14	29	29	203	69	28	14	27	53	44
21	20	17	14	37	20	217	66	27	14	30	42	35
22	20	20	13	40	22	204	62	26	14	25	38	37
23	20	27	13	26	26	164	59	26	15	20	38	33
24	20	20	13	29	25	155	57	25	16	18	39	29
25	20	17	13	25	26	146	60	24	15	17	41	29
26	20	23	13	26	28	165	77	24	14	17	33	33
27	20	14	13	27	32	163	66	23	14	19	29	30
28	19	20	15	17	35	172	58	23	14	20	27	27
29	20	24	25	21	------	217	53	23	14	22	27	24
30	20	23	26	22	------	260	49	23	14	49	24	23
31	19	------	18	22	------	271	------	22	------	65	22	------
TOTAL	629	615	581	757	668	3,942	3,046	1,009	496	724	2,167	844
MEAN	20.3	20.5	18.7	24.4	23.9	127	102	32.5	16.5	23.4	69.9	28.1
MAX	21	27	26	40	35	271	201	47	21	65	197	58
MIN	19	14	13	16	18	42	49	22	14	13	22	18
AC-FT	1,250	1,220	1,150	1,500	1,320	7,820	6,040	2,000	984	1,440	4,300	1,670

CAL YR 1973 TOTAL 113,781 MEAN 312 MAX 2,850 MIN 13 AC-FT 225,700
WTR YR 1974 TOTAL 15,478 MEAN 42.4 MAX 271 MIN 13 AC-FT 30,700

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

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., 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.--17 years, 8.24 ft^3/s (0.233 m^3/s), 5,970 acre-ft/yr (7.36 hm^3/yr); median of yearly mean discharges, 6.5 ft^3/s (0.18 m^3/s), 4,700 acre-ft/yr (5.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 39 ft^3/s (1.10 m^3/s) Aug. 5 (gage height, 3.10 ft or 0.945 m); minimum daily, 1.1 ft^3/s (0.031 m^3/s) Dec. 25-27.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.3	1.2	1.2	1.3	2.1	5.9	4.6	1.5	1.5	1.7	1.4
2	1.3	1.3	1.2	1.2	1.3	2.5	6.2	4.2	1.6	1.5	1.9	1.5
3	1.3	1.3	1.2	1.2	1.3	2.6	7.7	4.0	1.5	1.5	2.1	1.5
4	1.3	1.4	1.2	1.2	1.3	2.5	7.1	3.8	1.5	1.5	2.1	1.5
5	1.3	1.3	1.2	1.2	1.3	2.5	6.8	3.5	1.5	1.6	3.5	1.5
6	1.3	1.3	1.2	1.2	1.5	2.6	6.2	3.3	1.5	1.6	5.1	1.5
7	1.3	1.3	1.2	1.2	1.5	2.7	5.6	3.3	1.5	1.9	3.6	1.5
8	1.3	1.3	1.2	1.2	1.5	2.7	5.1	3.8	1.6	1.7	3.1	1.5
9	1.3	1.3	1.2	1.2	1.5	2.5	5.1	3.8	1.5	1.6	2.4	1.5
10	1.3	1.3	1.2	1.2	1.5	2.7	5.1	3.3	1.5	1.6	2.0	1.5
11	1.3	1.3	1.2	1.2	1.5	2.9	4.8	3.1	1.6	1.6	1.8	1.5
12	1.3	1.3	1.2	1.2	1.5	3.1	4.4	2.7	1.6	1.6	1.8	1.5
13	1.3	1.3	1.2	1.2	1.6	3.5	4.2	2.4	1.6	1.6	1.8	1.6
14	1.3	1.3	1.2	1.2	1.6	4.2	3.8	2.2	1.6	1.7	1.8	1.5
15	1.3	1.3	1.2	1.2	1.5	4.6	3.8	2.1	1.6	1.8	1.8	1.5
16	1.3	1.3	1.2	1.2	1.5	5.9	3.5	1.9	1.6	1.7	1.8	1.5
17	1.3	1.3	1.2	1.3	1.5	7.7	3.3	1.9	1.6	1.8	1.8	1.5
18	1.3	1.3	1.2	1.3	1.5	9.5	3.3	1.8	1.6	1.7	1.8	1.6
19	1.3	1.4	1.2	1.3	1.6	7.7	3.1	1.7	1.6	1.7	1.7	1.5
20	1.3	1.3	1.2	1.3	1.6	7.7	2.9	1.7	1.6	1.8	1.7	1.5
21	1.3	1.3	1.2	1.6	1.4	12	2.9	1.7	1.6	1.7	1.6	1.9
22	1.3	1.2	1.2	1.4	1.4	12	2.7	1.7	1.6	1.7	1.6	1.6
23	1.3	1.3	1.2	1.3	1.4	9.5	2.7	1.6	1.6	1.7	1.5	1.5
24	1.3	1.2	1.2	1.3	1.4	8.8	2.6	1.6	1.6	1.7	1.5	1.5
25	1.3	1.2	1.1	1.3	1.4	8.4	2.9	1.6	1.6	1.7	1.5	1.5
26	1.3	1.3	1.1	1.3	1.5	8.4	5.1	1.6	1.6	1.6	1.5	1.5
27	1.3	1.2	1.1	1.3	1.6	8.1	6.2	1.6	1.6	1.6	1.5	1.5
28	1.3	1.2	1.2	1.3	1.7	7.1	6.2	1.6	1.5	1.6	1.5	1.5
29	1.3	1.2	1.2	1.3	------	7.1	5.6	1.6	1.5	1.6	1.5	1.5
30	1.3	1.2	1.2	1.3	------	6.8	5.1	1.6	1.5	1.6	1.4	1.5
31	1.3	------	1.2	1.3	------	6.5	------	1.6	------	1.6	1.5	------
TOTAL	40.3	38.5	36.9	39.1	41.2	176.9	139.9	76.9	46.9	51.1	61.9	45.6
MEAN	1.30	1.28	1.19	1.26	1.47	5.71	4.66	2.48	1.56	1.65	2.00	1.52
MAX	1.3	1.4	1.2	1.6	1.7	12	7.7	4.6	1.6	1.9	5.1	1.9
MIN	1.3	1.2	1.1	1.2	1.3	2.1	2.6	1.6	1.5	1.5	1.4	1.4
AC-FT	80	76	73	78	82	351	277	153	93	101	123	90

CAL YR 1973 TOTAL 8,878.1 MEAN 24.3 MAX 244 MIN 1.1 AC-FT 17,610
WTR YR 1974 TOTAL 795.2 MEAN 2.18 MAX 12 MIN 1.1 AC-FT 1,580

PEAK DISCHARGE (BASE, 35 CFS).--Aug. 5 (1730) 39 cfs (3.10 ft).

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 mi² (1,450 km²).

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).--21 years, 188 ft³/s (5.324 m³/s), 136,200 acre-ft/yr (168 hm³/yr); median of yearly mean discharges, 140 ft³/s (3.96 m³/s), 101,000 acre-ft/yr (125 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 404 ft³/s (11.4 m³/s) Aug. 2 (gage height, 4.13 ft or 1.259 m); minimum daily, 2.6 ft³/s (0.074 m³/s) July 5.
Period of record: Maximum discharge, 17,900 ft³/s (507 m³/s) Oct. 19, 1972 (gage height, 18.0 ft or 5.49 m, from floodmarks), from rating curve extended above 5,000 ft³/s (140 m³/s); minimum daily, 2.6 ft³/s (0.074 m³/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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	32	41	27	41	45	216	51	14	7.8	59	25
2	21	32	41	31	36	54	193	48	14	9.8	87	26
3	21	33	43	32	33	75	173	46	13	11	89	28
4	21	34	40	32	32	89	157	43	12	2.8	116	33
5	22	34	36	36	32	85	144	39	11	2.6	111	45
6	22	34	38	44	32	76	144	37	12	4.8	130	37
7	23	34	37	39	32	77	163	37	11	18	154	31
8	23	33	35	45	27	85	154	41	10	29	137	32
9	23	36	38	48	27	85	151	42	10	27	187	26
10	23	39	38	45	38	79	146	38	9.6	16	132	26
11	24	36	35	38	33	68	136	35	9.9	7.5	94	23
12	26	36	36	30	33	67	122	33	10	4.3	70	20
13	26	38	36	34	33	70	114	31	9.5	9.9	56	20
14	22	39	39	37	36	74	105	32	9.5	11	46	29
15	20	39	40	41	33	91	97	33	9.6	21	41	33
16	17	38	38	39	33	117	91	30	8.2	39	84	35
17	18	36	37	40	35	134	88	29	6.6	34	88	37
18	23	36	37	45	39	154	84	29	5.6	37	80	35
19	15	42	38	47	38	169	85	29	17	45	74	35
20	15	50	36	46	37	198	81	27	10	36	72	55
21	15	46	32	47	42	227	76	26	5.2	39	55	49
22	15	38	36	56	33	231	73	22	5.6	52	47	41
23	15	38	44	57	33	207	68	21	8.2	43	42	42
24	22	41	37	46	36	185	61	20	12	30	44	45
25	26	40	32	47	35	174	59	18	11	22	46	48
26	26	40	32	46	35	170	64	17	9.6	16	44	43
27	26	46	34	46	38	180	75	17	9.3	17	36	43
28	26	35	37	44	40	178	65	15	7.4	21	32	36
29	29	37	32	37	------	190	59	15	7.3	22	30	37
30	32	41	33	39	------	218	54	15	7.2	19	29	35
31	32	------	35	44	------	237	------	15	------	37	30	------
TOTAL	690	1,139	1,143	1,285	972	4,089	3,300	931	295.3	691.5	2,342	1,050
MEAN	22.3	38.0	36.9	41.5	34.7	132	110	30.0	9.84	22.3	75.5	35.0
MAX	32	50	44	57	42	237	216	51	17	52	187	55
MIN	15	32	32	27	27	45	54	15	5.2	2.6	29	20
AC-FT	1,370	2,260	2,270	2,550	1,930	8,110	6,550	1,850	586	1,370	4,650	2,080
MEAN †	40.7	45.6	43.6	48.1	46.4	144	131	53.9	34.6	42.3	90.0	49.5
AC-FT †	2,500	2,710	2,680	2,960	2,580	8,880	7,810	3,320	2,060	2,600	5,540	2,950

CAL YR 1973 TOTAL 173,036.0 MEAN 474 MAX 4,460 MIN 14 AC-FT 343,200 MEAN† 489 AC-FT† 354,200
WTR YR 1974 TOTAL 17,927.8 MEAN 49.1 MAX 237 MIN 2.6 AC-FT 35,560 MEAN† 64.3 AC-FT† 46,590

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

† 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.--17 years, 62.0 ft^3/s (1.756 m^3/s), 44,920 acre-ft/yr (55.4 hm^3/yr); median of yearly mean discharges, 55 ft^3/s (1.56 m^3/s), 39,800 acre-ft/yr (49 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 194 ft^3/s (5.49 m^3/s) Aug. 2 (gage height, 3.19 ft or 0.972 m); minimum daily, 5.1 ft^3/s (0.14 m^3/s) July 4.
Period of record: Maximum discharge (not previously published), 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. No storage or diversion above station.

REVISIONS (WATER YEARS).--WRD Ariz. 1969: 1967.

CORRECTION.--Time of peak discharge for Oct. 20, 1972, was listed in WRD Ariz. 1973 in error as 0045, but should have been 0315.

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	8.6	11	13	10	22	25	84	53	13	5.3	15	9.7
2	8.6	11	15	10	18	31	83	50	12	5.4	51	9.3
3	8.6	11	14	10	16	40	74	49	12	5.5	61	11
4	9.0	11	12	10	19	39	63	49	11	5.1	56	14
5	9.0	13	12	13	19	36	63	50	11	5.4	69	15
6	9.8	12	13	13	18	37	64	50	10	7.5	87	13
7	10	11	15	13	14	39	64	49	9.7	9.0	93	11
8	9.8	9.8	16	13	13	41	68	47	9.4	9.0	105	10
9	9.8	9.8	12	13	12	37	75	44	9.3	7.0	79	9.4
10	11	9.8	13	13	12	29	80	44	8.8	6.0	52	11
11	11	10	14	13	13	31	72	45	8.6	5.4	38	9.4
12	11	10	14	13	14	32	63	45	8.6	5.2	29	8.3
13	11	10	13	19	15	34	61	44	8.3	5.5	22	8.7
14	11	11	13	16	16	41	57	42	8.1	7.9	19	12
15	10	10	12	19	15	50	57	38	7.9	20	17	15
16	10	9.4	12	23	16	63	57	34	7.3	14	21	15
17	10	9.8	12	28	18	70	59	32	7.0	19	23	12
18	10	11	12	38	18	76	61	31	6.7	19	21	15
19	9.8	13	11	33	16	75	64	27	6.6	16	28	21
20	9.8	10	10	30	19	111	63	25	6.3	17	19	19
21	10	9.0	10	50	15	136	60	23	6.3	17	16	17
22	10	9.0	10	52	21	141	54	21	6.4	17	14	16
23	10	9.0	10	34	20	113	54	20	6.2	13	17	14
24	11	9.0	10	31	17	99	56	18	6.6	10	16	13
25	10	9.0	10	28	19	85	60	17	6.4	9.9	18	14
26	10	9.0	10	29	20	82	72	16	6.3	11	15	13
27	11	9.0	10	23	21	78	69	16	6.9	11	13	13
28	10	9.0	10	16	22	75	66	15	6.3	13	13	12
29	10	9.0	10	26	------	77	61	14	6.0	17	12	11
30	10	10	10	26	------	85	58	14	5.7	18	11	11
31	10	------	10	22	------	92	------	13	------	16	10	------
TOTAL	309.8	304.6	368	687	478	2,000	1,942	1,035	244.7	347.1	1,060	382.8
MEAN	9.99	10.2	11.9	22.2	17.1	64.5	64.7	33.4	8.16	11.2	34.2	12.8
MAX	11	13	16	52	22	141	84	53	13	20	105	21
MIN	8.6	9.0	10	10	12	25	54	13	5.7	5.1	10	8.3
AC-FT	614	604	730	1,360	948	3,970	3,850	2,050	485	688	2,100	759

CAL YR 1973 TOTAL 50,970.0 MEAN 140 MAX 984 MIN 8.6 AC-FT 101,100
WTR YR 1974 TOTAL 9,159.0 MEAN 25.1 MAX 141 MIN 5.1 AC-FT 18,170

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	2345	3.00	164	8- 8	0530	2.97	160
8- 2	1545	3.19	194				

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.--20 years (1912-15, 1957-74), 377 ft^3/s (10.68 m^3/s), 273,100 acre-ft/yr (337 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, 574 ft^3/s (16.3 m^3/s) Mar. 22 (gage height, 3.74 ft or 1.140 m); minimum daily, 11 ft^3/s (0.31 m^3/s) July 6.
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 good. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	40	55	43	64	66	351	124	27	13	37	37
2	30	41	55	56	67	72	321	119	26	12	78	35
3	29	42	60	50	67	84	291	111	25	12	135	37
4	29	43	55	38	57	103	252	104	24	12	203	37
5	29	43	55	54	53	131	225	101	22	12	205	50
6	29	44	52	72	55	133	210	98	21	11	187	47
7	29	46	48	62	54	122	205	98	20	12	212	59
8	30	46	48	79	50	121	227	95	19	13	258	50
9	30	45	51	78	41	135	225	95	19	12	250	43
10	30	44	48	88	41	137	225	93	18	14	258	37
11	31	45	48	79	55	121	227	88	18	21	196	35
12	32	49	48	67	58	112	210	86	18	21	150	31
13	33	47	50	55	59	104	191	82	17	18	114	32
14	34	47	50	55	56	104	180	79	16	17	91	32
15	34	47	50	59	55	114	169	77	16	19	77	34
16	34	47	53	61	56	130	158	74	15	20	66	43
17	31	46	53	68	56	167	154	69	15	37	63	48
18	30	46	52	70	56	196	150	64	14	45	106	49
19	29	51	50	81	59	225	148	62	14	53	106	50
20	31	52	47	84	64	291	150	59	13	48	100	57
21	31	55	41	86	64	454	148	57	13	66	93	57
22	28	55	35	90	59	526	143	54	12	58	83	67
23	27	54	34	104	61	498	133	50	14	54	72	62
24	27	53	36	95	60	393	128	45	14	61	62	54
25	27	51	30	87	58	324	128	41	13	50	60	51
26	27	59	30	78	60	283	131	39	12	41	63	73
27	32	56	30	78	60	266	141	37	13	32	61	62
28	34	49	37	82	62	266	150	33	14	28	58	60
29	34	50	55	62	------	255	145	30	13	27	48	55
30	34	50	51	58	------	271	133	29	13	48	45	50
31	35	------	55	63	------	315	------	27	------	42	41	------
TOTAL	950	1,443	1,462	2,182	1,607	6,519	5,649	2,220	508	929	3,578	1,434
MEAN	30.6	48.1	47.2	70.4	57.4	210	188	71.6	16.9	30.0	115	47.8
MAX	35	59	60	104	67	526	351	124	27	66	258	73
MIN	27	40	30	38	41	66	128	27	12	11	37	31
AC-FT	1,880	2,860	2,900	4,330	3,190	12,930	11,200	4,400	1,010	1,840	7,100	2,840

CAL YR 1973 TOTAL 327,675 MEAN 898 MAX 5,970 MIN 27 AC-FT 649,900
WTR YR 1974 TOTAL 28,481 MEAN 78.0 MAX 526 MIN 11 AC-FT 56,490

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

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.--9 years, 25.9 ft^3/s (0.733 m^3/s), 18,760 acre-ft/yr (23.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 81 ft^3/s (2.29 m^3/s) Mar. 30 (gage height, 2.17 ft or 0.661 m); minimum daily, 7.0 ft^3/s (0.20 m^3/s) Jan. 23 to Feb. 9.
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 November to March and July to September, which are poor.

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	9.1	7.9	10	8.0	7.0	12	34	23	24	8.0	12	8.0
2	8.9	7.8	10	8.0	7.0	15	24	24	23	8.0	13	8.0
3	9.0	7.8	10	8.0	7.0	14	22	26	21	8.0	15	8.0
4	9.0	11	10	8.0	7.0	12	30	26	21	8.0	17	8.0
5	9.1	8.9	9.0	8.0	7.0	12	29	26	20	9.0	18	8.0
6	8.9	8.1	8.0	8.0	7.0	12	32	25	19	9.0	18	8.0
7	8.8	8.0	8.0	8.0	7.0	12	31	23	18	13	18	8.0
8	8.6	7.9	8.0	8.0	7.0	12	30	23	18	10	17	8.0
9	9.3	7.7	8.0	8.0	7.0	12	30	26	17	9.0	14	8.0
10	9.9	7.6	8.0	8.0	9.0	12	26	29	16	8.0	13	8.0
11	9.8	7.6	8.0	9.0	10	12	22	30	16	8.0	12	8.0
12	9.7	7.5	8.0	9.0	10	12	21	32	15	8.0	11	8.0
13	9.3	7.6	7.6	9.0	10	12	20	33	14	8.0	11	8.0
14	9.3	7.4	7.4	10	10	15	20	33	14	9.0	11	9.0
15	9.0	7.6	8.0	10	10	18	20	33	13	10	12	9.0
16	9.0	9.6	8.0	10	10	20	22	33	13	11	12	10
17	8.5	9.0	8.0	11	10	24	23	33	13	12	13	12
18	8.5	9.0	8.0	11	10	30	24	32	13	14	16	14
19	8.2	8.0	8.0	11	10	29	24	30	12	16	20	14
20	8.1	8.0	8.0	11	10	25	22	29	12	18	32	12
21	8.1	8.0	8.0	11	10	22	21	27	12	16	20	11
22	8.0	8.0	8.0	9.0	10	22	21	27	11	14	17	10
23	8.0	8.0	8.0	7.0	11	22	23	26	11	12	15	10
24	8.0	8.0	8.0	7.0	11	22	25	26	12	11	13	10
25	8.0	8.0	8.0	7.0	11	22	30	25	10	11	12	9.0
26	8.0	8.0	8.0	7.0	11	23	33	25	10	10	11	9.0
27	7.9	8.0	8.0	7.0	11	25	29	25	9.0	10	10	9.0
28	8.0	8.0	8.0	7.0	11	32	27	25	9.0	10	10	8.0
29	8.0	9.0	8.0	7.0	------	42	26	25	9.0	11	9.0	8.0
30	8.0	10	8.0	7.0	------	50	24	26	8.0	11	9.0	8.0
31	8.9	------	8.0	7.0	------	46	------	25	------	12	8.0	------
TOTAL	268.9	247.0	256.0	264.0	258.0	650	765	851	433.0	332.0	439.0	276.0
MEAN	8.67	8.23	8.26	8.52	9.21	21.0	25.5	27.5	14.4	10.7	14.2	9.20
MAX	9.9	11	10	11	11	50	34	33	24	18	32	14
MIN	7.9	7.4	7.4	7.0	7.0	12	20	23	8.0	8.0	8.0	8.0
AC-FT	533	490	508	524	512	1,290	1,520	1,690	859	659	871	547

CAL YR 1973 TOTAL 18,521.6 MEAN 50.7 MAX 336 MIN 7.4 AC-FT 36,740
WTR YR 1974 TOTAL 5,039.9 MEAN 13.8 MAX 50 MIN 7.0 AC-FT 10,000

PEAK DISCHARGE (BASE, 100 CFS).--No peak above base.

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.--22 years (1945-46, 1950-54, 1957-74), 43.5 ft^3/s (1.232 m^3/s), 31,520 acre-ft/yr (38.9 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.--Current year: Maximum discharge, 140 ft^3/s (3.96 m^3/s) Mar. 30 (gage height, 2.14 ft or 0.652 m); maximum gage height, 2.78 ft (0.847 m) Jan. 22 (backwater from ice); minimum daily, 9.3 ft^3/s (0.28 m^3/s) Sept. 12.
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 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	15	17	15	11	20	70	49	37	12	18	11
2	15	15	17	15	11	20	62	51	35	11	21	10
3	15	15	17	15	11	20	54	53	32	11	25	10
4	15	20	17	15	11	20	50	55	31	11	23	11
5	16	18	15	15	11	20	54	56	29	12	28	11
6	15	17	15	15	11	20	62	55	28	20	36	11
7	15	17	15	15	11	32	60	52	26	23	32	11
8	14	16	18	15	11	20	59	51	26	15	26	10
9	15	16	18	15	11	19	59	53	24	13	22	11
10	16	16	18	15	13	22	57	56	23	12	20	11
11	16	16	18	15	15	24	50	59	22	11	21	9.7
12	16	16	18	15	15	24	47	64	21	11	18	9.3
13	16	16	18	18	15	23	47	67	21	12	15	9.7
14	15	16	18	18	15	30	47	65	21	17	14	14
15	15	16	18	18	15	37	47	62	19	18	16	16
16	16	20	18	18	15	46	47	61	18	17	21	13
17	15	19	18	18	15	53	48	60	17	20	19	12
18	15	20	18	18	15	62	50	57	17	20	27	18
19	15	15	18	18	15	64	50	54	16	25	30	22
20	15	15	18	18	13	60	47	52	16	29	22	15
21	15	15	18	18	13	58	46	48	15	27	19	13
22	15	15	18	14	13	58	45	46	15	21	18	14
23	15	15	15	11	13	54	49	44	16	17	17	13
24	15	15	15	11	13	52	51	44	19	15	18	17
25	15	15	15	11	13	52	59	43	17	15	18	14
26	15	15	15	11	20	55	66	44	13	16	15	13
27	15	15	15	11	20	56	60	44	13	15	14	13
28	15	15	15	11	20	61	56	44	12	16	14	12
29	15	15	15	11	------	77	54	43	12	16	14	11
30	14	15	15	11	------	91	52	42	12	15	12	11
31	16	------	15	11	------	89	------	40	------	20	12	------
TOTAL	470	484	518	455	385	1,339	1,605	1,614	623	513	625	376.7
MEAN	15.2	16.1	16.7	14.7	13.8	43.2	53.5	52.1	20.8	16.5	20.2	12.6
MAX	16	20	18	18	20	91	70	67	37	29	36	22
MIN	14	15	15	11	11	19	45	40	12	11	12	9.3
AC-FT	932	960	1,030	902	764	2,660	3,180	3,200	1,240	1,020	1,240	747

CAL YR 1973 TOTAL 36,019.0 MEAN 98.7 MAX 800 MIN 14 AC-FT 71,440
WTR YR 1974 TOTAL 9,007.7 MEAN 24.7 MAX 91 MIN 9.3 AC-FT 17,870

PEAK DISCHARGE (BASE, 175 CFS).--No peak above base.

NOTE.--Doubtful or no gage-height record Nov. 20 to Mar. 6.

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.--17 years, 32.0 ft^3/s (0.906 m^3/s), 23,180 acre-ft/yr (28.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 89 ft^3/s (2.52 m^3/s) May 15 (gage height, 1.80 ft or 0.549 m, from high-water mark in gage well); minimum daily, 5.7 ft^3/s (0.16 m^3/s) July 11.
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 to February, which are fair.

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	10	8.6	9.8	6.5	10	12	37	40	26	6.6	15	8.0
2	10	8.5	9.5	6.5	9.7	13	36	40	24	6.6	18	8.0
3	10	8.5	8.9	6.0	9.7	14	30	40	22	6.4	29	8.0
4	10	11	8.5	6.0	10	13	26	40	20	6.1	19	9.0
5	10	10	8.5	6.0	10	12	25	40	19	6.4	20	11
6	10	9.0	8.8	6.0	10	12	28	40	17	7.0	24	11
7	10	8.6	9.2	6.0	9.0	13	30	40	17	9.1	34	9.2
8	10	8.9	8.9	6.0	9.0	13	34	40	16	7.8	47	8.0
9	11	8.7	8.9	6.0	9.0	13	39	40	15	6.6	34	7.0
10	11	8.5	8.8	7.0	9.0	12	41	40	14	6.1	25	7.0
11	11	8.1	9.0	7.0	9.0	12	35	40	14	5.7	21	6.0
12	11	7.9	8.1	7.0	8.9	12	30	40	13	5.9	18	6.0
13	11	8.1	7.8	8.0	8.6	13	29	45	12	7.3	15	6.0
14	10	8.2	7.8	8.4	8.3	15	29	50	12	10	14	12
15	10	7.2	7.6	8.8	8.3	19	31	65	12	14	13	20
16	10	7.3	7.5	11	8.6	23	35	64	11	13	15	14
17	9.6	7.7	7.5	12	8.6	28	40	62	10	14	15	10
18	9.5	7.4	7.5	13	8.9	30	45	57	10	13	14	13
19	9.4	8.5	8.0	12	8.6	30	48	53	9.7	10	16	20
20	9.4	7.6	6.8	12	8.9	36	45	49	9.5	10	13	16
21	9.4	11	8.0	11	10	34	40	44	8.9	15	11	13
22	9.1	11	8.0	10	10	37	40	40	8.9	14	11	12
23	9.0	9.7	8.0	9.0	9.7	33	40	37	8.9	11	13	10
24	9.1	8.7	8.0	8.0	10	33	40	36	8.5	8.9	12	10
25	9.1	8.7	8.0	8.0	11	31	40	36	8.3	8.3	13	11
26	9.2	8.6	8.0	8.0	10	32	45	36	8.1	8.1	11	11
27	8.8	7.8	8.0	8.0	11	30	50	35	7.8	8.1	9.7	11
28	8.6	8.9	8.0	8.0	11	29	50	35	7.3	9.7	9.2	9.5
29	8.6	9.0	7.0	8.0	------	30	45	33	7.3	14	9.2	8.9
30	8.6	9.8	7.0	9.0	------	37	40	31	6.8	15	9.0	8.1
31	8.6	------	7.0	10	------	42	------	28	------	13	8.5	------
TOTAL	301.0	261.7	252.4	258.2	264.8	713	1,123	1,316	384.0	296.7	535.6	313.7
MEAN	9.71	8.72	8.14	8.33	9.46	23.0	37.4	42.5	12.8	9.57	17.3	10.5
MAX	11	11	9.8	13	11	42	50	65	26	15	47	20
MIN	8.6	7.2	6.8	6.0	8.3	12	25	28	6.8	5.7	8.5	6.0
AC-FT	597	519	501	512	525	1,410	2,230	2,610	762	589	1,060	622

CAL YR 1973 TOTAL 21,944.1 MEAN 60.1 MAX 338 MIN 6.8 AC-FT 43,530
WTR YR 1974 TOTAL 6,020.1 MEAN 16.5 MAX 65 MIN 5.7 AC-FT 11,940

PEAK DISCHARGE (BASE, 100 CFS).--No peak above base.

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.--18 years, 173 ft^3/s (4.899 m^3/s), 125,300 acre-ft/yr (154 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,110 ft^3/s (88.1 m^3/s) Aug. 1 (gage height, 7.6 ft or 2.32 m, from high-water mark in gage well); minimum daily, 11 ft^3/s (0.31 m^3/s) July 13.
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 July to 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	38	58	45	58	86	250	156	76	19	100	23
2	34	38	57	49	58	92	250	148	74	19	40	22
3	33	38	55	42	53	108	231	150	71	18	15	60
4	34	39	50	36	50	113	201	155	66	18	70	30
5	34	45	48	55	53	110	195	158	63	17	40	25
6	34	44	49	54	51	111	208	159	59	17	30	20
7	35	41	48	55	48	108	202	159	56	16	25	20
8	34	41	48	67	40	108	202	150	54	16	50	20
9	33	40	48	67	45	113	208	146	50	15	50	20
10	32	36	46	63	54	94	217	152	48	15	45	20
11	38	39	45	55	54	93	204	163	44	13	45	20
12	40	38	44	49	58	98	184	171	40	12	40	20
13	41	38	46	54	57	99	175	178	36	11	40	30
14	42	40	48	55	54	103	160	174	36	13	35	25
15	39	39	50	55	55	117	160	163	38	20	32	20
16	38	38	48	55	55	135	160	154	36	30	33	20
17	38	38	46	59	58	159	160	152	32	110	59	25
18	38	40	46	63	62	182	160	149	27	52	46	30
19	37	46	45	64	60	198	160	134	24	86	44	59
20	37	47	41	63	60	261	160	130	22	29	51	53
21	36	39	35	67	59	302	160	122	22	16	42	48
22	36	49	39	94	60	297	160	113	22	15	38	42
23	36	53	41	80	67	276	160	110	22	15	38	39
24	36	53	46	70	64	250	160	102	22	14	34	42
25	38	47	41	70	66	228	170	100	22	13	33	50
26	38	51	35	66	68	222	200	98	22	13	33	44
27	37	47	41	70	77	215	205	97	21	13	30	34
28	36	40	41	54	80	216	195	93	21	13	30	34
29	36	47	49	49	------	254	182	90	20	13	28	32
30	37	55	49	58	------	285	170	87	20	13	28	30
31	37	------	45	59	------	253	------	79	------	12	25	------
TOTAL	1,127	1,284	1,428	1,842	1,624	5,286	5,609	4,192	1,166	696	1,249	957
MEAN	36.4	42.8	46.1	59.4	58.0	171	187	135	38.9	22.5	40.3	31.9
MAX	42	55	58	94	80	302	250	178	76	110	100	60
MIN	32	36	35	36	40	86	160	79	20	11	15	20
AC-FT	2,240	2,550	2,830	3,650	3,220	10,480	11,130	8,310	2,310	1,380	2,480	1,900

CAL YR 1973 TOTAL 159,292 MEAN 436 MAX 3,860 MIN 31 AC-FT 316,000
WTR YR 1974 TOTAL 26,460 MEAN 72.5 MAX 302 MIN 11 AC-FT 52,480

PEAK DISCHARGE (BASE, 1,000 CFS).--Aug. 1 (1530) 3,110 cfs (7.6 ft).

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; 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0	18					
2						0	18					
3						0	18					
4						0	18					
5						10	18					
6						23	18					
7						22	18					
8						20	18					
9						20	17					
10						20	17					
11						20	17					
12						20	17					
13						20	17					
14						20	17					
15						20	17					
16						20	10					
17						20	0					
18						20	0					
19						20	0					
20						20	0					
21						20	0					
22						20	0					
23						20	0					
24						20	0					
25						20	0					
26						20	0					
27						20	0					
28						20	0					
29					------	19	0					
30					------	18	0					
31		------			------	18	------		------			------
TOTAL	0	0	0	0	0	530	273	0	0	0	0	0
MEAN	0	0	0	0	0	17.1	9.10	0	0	0	0	0
MAX	0	0	0	0	0	23	18	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	1,050	541	0	0	0	0	0

CAL YR 1973 TOTAL 3,994.90 MEAN 10.9 MAX 28 MIN 0 AC-FT 7,920
WTR YR 1974 TOTAL 803.00 MEAN 2.20 MAX 23 MIN 0 AC-FT 1,590

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 current year.

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.--23 years, 22.8 ft^3/s (0.646 m^3/s), 16,520 acre-ft/yr (20.4 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, 50 ft^3/s (1.42 m^3/s) Mar. 21 (gage height, 1.71 ft or 0.521 m); minimum daily, 1.4 ft^3/s (0.040 m^3/s) for many days.
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, 0.8 ft^3/s (0.023 m^3/s) July 12-14, 1962.

REMARKS.--Records good except those for period of no gage-height record, which are poor. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.5	2.8	2.5	2.5	1.5	19	2.1	1.7	1.4	2.8	2.4
2	1.6	1.5	2.8	2.5	2.2	1.8	20	2.1	1.7	1.4	2.3	2.1
3	1.6	1.6	2.8	2.5	2.2	1.8	20	2.1	1.7	1.4	2.4	2.1
4	1.6	1.6	2.8	2.5	2.1	1.5	20	2.1	1.7	1.4	2.3	2.0
5	1.6	1.7	2.8	2.5	2.1	2.4	19	2.1	1.7	1.4	2.3	1.7
6	1.7	1.7	2.8	3.0	1.8	15	20	2.4	1.7	2.0	2.2	2.0
7	1.7	1.8	2.8	4.0	2.8	27	19	2.4	1.6	3.0	2.4	1.8
8	1.7	1.8	2.8	6.0	3.8	26	19	2.4	1.6	1.9	3.1	1.6
9	1.7	1.8	2.8	5.0	3.4	29	19	2.1	1.6	1.4	2.3	1.6
10	1.8	1.8	2.8	4.0	2.4	27	19	2.0	1.6	1.5	2.3	1.6
11	1.8	1.8	2.8	3.5	1.8	25	19	2.0	1.6	1.5	2.2	1.5
12	1.8	1.8	2.8	3.0	1.8	25	19	2.0	1.5	1.5	2.2	1.6
13	1.8	1.8	2.8	3.0	1.8	28	19	2.0	1.5	1.5	2.2	1.9
14	1.5	1.8	2.8	3.0	1.8	29	19	2.0	1.6	1.8	2.2	1.8
15	1.5	1.8	2.8	3.0	1.8	27	19	2.0	1.5	1.8	2.3	1.8
16	1.5	2.1	2.8	3.0	1.8	26	18	2.0	1.5	4.5	2.6	1.8
17	1.5	2.1	2.8	3.0	1.5	25	12	1.9	1.4	5.3	2.5	1.7
18	1.5	2.1	2.8	3.0	1.5	25	4.5	2.0	1.4	5.7	2.4	1.5
19	1.5	4.5	2.4	3.0	1.5	26	3.1	1.9	1.4	8.5	2.3	1.8
20	1.5	3.8	2.4	3.0	1.8	32	2.8	1.9	1.4	3.3	2.2	1.8
21	1.5	3.1	2.4	3.5	1.8	46	2.4	2.0	1.5	3.1	2.2	2.1
22	1.5	2.8	2.1	4.0	1.5	39	2.4	2.0	1.5	2.9	2.4	1.8
23	1.6	2.8	2.4	5.0	1.5	31	2.4	1.9	1.5	6.6	2.4	1.5
24	1.5	2.8	2.4	4.0	1.5	28	2.4	1.9	1.5	2.6	2.4	1.5
25	1.4	3.1	2.4	3.5	1.5	26	2.4	1.8	1.5	2.1	2.1	1.5
26	1.5	3.8	2.4	3.5	1.5	24	2.4	1.8	1.4	2.1	1.9	1.8
27	1.4	3.5	2.5	3.0	1.5	23	2.1	1.7	1.4	2.1	1.9	1.8
28	1.5	5.7	2.5	3.0	1.5	22	2.1	1.7	1.4	2.1	1.9	1.5
29	1.5	3.1	2.5	3.0	------	22	2.1	1.7	1.4	2.1	1.9	1.5
30	1.5	3.1	2.5	2.5	------	20	2.1	1.7	1.4	2.0	1.9	1.5
31	1.5	------	2.5	2.5	------	19	------	1.7	------	2.0	1.9	------
TOTAL	48.9	74.2	81.8	102.5	54.7	701.0	352.2	61.4	45.9	81.9	70.4	52.6
MEAN	1.58	2.47	2.64	3.31	1.95	22.6	11.7	1.98	1.53	2.64	2.27	1.75
MAX	1.8	5.7	2.8	6.0	3.8	46	20	2.4	1.7	8.5	3.1	2.4
MIN	1.4	1.5	2.1	2.5	1.5	1.5	2.1	1.7	1.4	1.4	1.9	1.5
AC-FT	97	147	162	203	108	1,390	699	122	91	162	140	104

CAL YR 1973 TOTAL 32,221.6 MEAN 88.3 MAX 908 MIN 1.4 AC-FT 63,910
WTR YR 1974 TOTAL 1,727.5 MEAN 4.73 MAX 46 MIN 1.4 AC-FT 3,430

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

NOTE.--No gage-height record Dec. 27 to Feb. 4.

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.--16 years (1951-60, 1967-74), 43.1 ft^3/s (1.221 m^3/s), 31,230 acre-ft/yr (38.5 hm^3/yr); median of yearly mean discharges, 22 ft^3/s (0.62 m^3/s), 15,900 acre-ft/yr (20 hm^3/yr), unadjusted for transbasin diversion.

EXTREMES.--Current year: Maximum discharge, 160 ft^3/s (4.53 m^3/s) Aug. 3 (gage height, 1.66 ft or 0.506 m); minimum daily, 0.72 ft^3/s (0.020 m^3/s) June 20.
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. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	8.1	12	11	13	9.4	27	7.9	3.0	.72	4.8	1.3
2	7.0	8.4	12	14	12	9.7	29	7.9	3.0	.72	5.6	1.7
3	7.0	8.4	11	13	11	10	28	7.9	2.7	.86	14	1.5
4	6.0	9.0	11	12	10	9.4	27	7.9	2.7	.86	6.5	1.7
5	6.0	9.0	10	17	10	9.4	26	7.9	2.7	.86	6.4	28
6	6.0	9.0	10	12	10	19	26	7.9	2.5	1.7	6.5	10
7	6.0	9.0	10	13	11	40	26	8.5	2.2	3.0	6.9	6.0
8	6.0	9.4	10	26	11	40	25	7.9	2.2	1.5	7.4	3.7
9	6.0	9.4	10	25	16	44	26	6.9	2.2	1.0	6.5	2.5
10	6.0	9.4	10	20	10	40	28	6.5	2.2	.86	5.2	1.7
11	6.3	9.4	10	16	9.7	38	30	6.0	1.7	.86	4.4	1.3
12	6.3	9.4	10	16	9.7	35	32	6.0	1.7	.86	4.0	1.3
13	6.6	9.4	10	15	9.7	38	30	5.6	1.7	1.2	4.0	1.5
14	6.3	9.4	11	14	9.7	40	30	5.6	1.5	1.3	3.7	3.3
15	6.3	9.7	10	14	9.4	36	30	5.6	1.5	1.5	3.7	3.3
16	6.3	9.7	10	14	9.4	35	30	5.2	1.2	2.0	6.9	3.7
17	6.3	9.7	11	14	9.7	34	25	5.2	1.0	6.0	4.8	2.7
18	6.6	9.7	11	14	9.7	32	13	5.6	1.0	14	3.3	2.7
19	6.6	16	11	14	9.4	35	11	5.2	.86	14	3.3	12
20	6.6	16	11	14	10	44	10	5.2	.72	9.0	3.0	8.5
21	6.8	13	12	17	10	64	10	6.0	.86	12	2.5	9.0
22	6.8	12	11	21	9.7	51	10	5.6	1.0	16	2.5	8.5
23	6.8	12	11	18	9.4	40	9.6	5.2	1.0	16	3.3	7.4
24	7.1	11	11	17	9.4	35	9.6	4.8	1.2	5.6	3.3	9.6
25	7.1	11	12	15	9.4	33	10	4.4	1.0	4.8	3.3	9.0
26	7.4	14	13	15	9.4	31	9.8	4.0	1.2	5.6	2.5	10
27	7.1	20	14	15	9.4	30	9.1	3.7	1.2	4.4	1.7	10
28	7.8	17	11	14	9.4	30	9.0	3.3	1.0	4.0	1.5	9.6
29	7.8	14	11	14	------	29	8.6	3.0	.86	3.0	1.7	9.0
30	7.8	13	11	14	------	28	8.4	3.0	.72	3.7	1.3	8.5
31	8.1	------	9.4	13	------	26	------	3.0	------	4.0	1.3	------
TOTAL	207.8	334.5	337.4	481	286.5	994.9	603.1	178.4	48.32	141.90	135.8	189.0
MEAN	6.70	11.2	10.9	15.5	10.2	32.1	20.1	5.75	1.61	4.58	4.38	6.30
MAX	8.1	20	14	26	16	64	32	8.5	3.0	16	14	28
MIN	6.0	8.1	9.4	11	9.4	9.4	8.4	3.0	.72	.72	1.3	1.3
AC-FT	412	663	669	954	568	1,970	1,200	354	96	281	269	375

CAL YR 1973 TOTAL 50,237.00 MEAN 138 MAX 1,350 MIN 6.0 AC-FT 99,650
WTR YR 1974 TOTAL 3,938.62 MEAN 10.8 MAX 64 MIN .72 AC-FT 7,810

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

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.--50 years, 596 ft^3/s (16.88 m^3/s), 431,800 acre-ft/yr (532 hm^3/yr); median of yearly mean discharges, 450 ft^3/s (12.7 m^3/s), 326,000 acre-ft/yr (400 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,680 ft^3/s (47.6 m^3/s) Aug. 6 (gage height, 3.59 ft or 1.094 m); minimum daily, 70 ft^3/s (1.98 m^3/s) July 6-8.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	128	190	175	198	194	693	356	157	75	154	119
2	122	134	198	171	198	202	663	340	154	74	237	113
3	119	134	198	186	198	219	620	324	150	72	232	111
4	122	141	190	164	186	246	578	324	147	72	389	154
5	122	144	182	175	179	265	504	324	141	72	412	228
6	122	154	179	211	179	284	504	324	137	70	400	141
7	119	157	179	211	179	284	491	329	131	70	436	137
8	119	157	171	246	168	294	491	319	125	70	442	144
9	119	157	171	260	157	314	511	309	122	82	430	131
10	119	154	175	251	150	324	517	304	116	79	389	116
11	122	154	171	246	164	294	524	309	113	77	356	108
12	128	154	168	215	175	284	498	314	108	79	294	108
13	131	157	171	198	182	274	460	319	103	88	246	128
14	134	157	175	190	179	279	442	324	100	92	224	154
15	137	157	175	190	175	289	424	309	100	88	211	116
16	134	157	175	190	171	314	406	299	97	100	168	119
17	134	157	175	198	175	356	395	289	95	134	161	134
18	128	157	175	211	175	418	395	284	92	211	206	134
19	125	179	175	215	175	479	395	269	86	168	206	137
20	122	182	168	224	179	584	389	251	84	424	202	202
21	125	179	161	232	186	730	383	251	82	237	202	182
22	125	175	147	246	179	857	372	237	77	215	186	202
23	119	182	147	284	175	849	356	228	75	237	175	171
24	119	186	157	265	186	753	350	215	82	186	194	157
25	119	182	175	246	175	663	356	202	82	161	150	232
26	119	186	157	237	175	591	372	202	82	141	144	171
27	119	206	144	232	182	578	400	194	79	131	147	175
28	125	182	147	228	186	564	406	186	79	128	141	154
29	128	164	168	206	------	550	400	179	79	125	137	144
30	128	175	179	186	------	571	378	175	77	125	128	137
31	128	------	175	194	------	634	------	168	------	137	125	------
TOTAL	3,854	4,888	5,318	6,683	4,986	13,537	13,673	8,457	3,152	4,020	7,524	4,459
MEAN	124	163	172	216	178	437	456	273	105	130	243	149
MAX	137	206	198	284	198	857	693	356	157	424	442	232
MIN	119	128	144	164	150	194	350	168	75	70	125	108
AC-FT	7,640	9,700	10,550	13,260	9,890	26,850	27,120	16,770	6,250	7,970	14,920	8,840

CAL YR 1973 TOTAL 534,325 MEAN 1,464 MAX 10,300 MIN 116 AC-FT 1,060,000
WTR YR 1974 TOTAL 80,551 MEAN 221 MAX 857 MIN 70 AC-FT 159,800

PEAK DISCHARGE (BASE 3,500 cfs).--No peak above base.

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.--15 years, 39.3 ft^3/s (1.113 m^3/s), 28,470 acre-ft/yr (35.1 hm^3/yr); median of yearly mean discharges, 29 ft^3/s (0.821 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) July 19 (gage height, 6.50 ft or 1.981 m); minimum daily, 8.0 ft^3/s (0.23 m^3/s) July 5, 11, 12.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	17	18	18	23	22	25	14	9.8	8.1	10	8.6
2	15	17	18	21	23	22	26	13	9.8	8.1	10	8.6
3	15	17	18	17	23	24	25	12	9.7	8.1	40	10
4	15	18	18	20	23	24	23	12	9.4	8.1	25	9.2
5	15	17	18	27	21	25	23	12	9.3	8.0	50	13
6	15	18	18	23	22	26	22	12	9.1	8.1	30	12
7	16	17	18	22	21	26	22	12	9.4	8.5	15	20
8	15	17	18	38	21	27	21	12	9.4	8.7	10	10
9	16	17	18	32	23	32	20	12	9.7	8.5	10	9.5
10	16	17	18	24	22	30	19	12	9.7	8.1	10	9.2
11	18	17	18	21	22	28	20	12	9.8	8.0	10	8.9
12	19	17	18	20	22	27	20	11	9.3	8.0	10	8.6
13	17	17	18	20	21	26	19	11	9.3	8.2	10	8.9
14	17	17	18	19	21	26	19	11	9.3	8.1	10	30
15	17	17	18	19	21	31	18	11	9.3	18	10	13
16	17	17	18	19	21	34	18	11	9.1	21	9.5	12
17	17	18	18	19	21	37	18	11	8.8	20	22	11
18	16	18	18	18	22	39	16	11	8.9	13	14	11
19	16	26	18	18	22	42	15	11	8.8	364	9.8	11
20	16	20	18	19	23	51	16	11	8.7	156	9.5	11
21	16	19	18	21	23	45	16	12	8.7	60	9.2	13
22	17	19	18	21	22	42	16	11	8.6	20	9.2	47
23	16	19	18	33	22	43	14	11	8.6	15	9.5	26
24	16	19	18	38	22	41	16	11	8.8	10	9.5	20
25	16	19	17	34	22	37	15	11	8.8	10	9.2	31
26	17	22	18	30	22	34	14	11	8.6	10	9.2	78
27	17	19	18	30	22	32	14	11	8.8	10	8.9	53
28	16	20	19	27	22	31	14	10	8.4	10	8.6	30
29	17	18	18	26	------	28	14	10	8.3	10	8.6	15
30	16	18	18	24	------	27	13	9.7	8.2	10	8.6	12
31	17	------	17	24	------	25	------	9.6	------	10	8.6	------
TOTAL	503	548	557	742	617	984	551	351.3	272.4	881.6	423.9	560.5
MEAN	16.2	18.3	18.0	23.9	22.0	31.7	18.4	11.3	9.08	28.4	13.7	18.7
MAX	19	26	19	38	23	51	26	14	9.8	364	50	78
MIN	15	17	17	17	21	22	13	9.6	8.2	8.0	8.6	8.6
AC-FT	998	1,090	1,100	1,470	1,220	1,950	1,090	697	540	1,750	841	1,110

CAL YR 1973 TOTAL 32,460.0 MEAN 88.9 MAX 698 MIN 14 AC-FT 64,380
WTR YR 1974 TOTAL 6,991.7 MEAN 19.2 MAX 364 MIN 8.0 AC-FT 13,870

PEAK DISCHARGE (BASE, 1,000 CFS).--July 19 (1615) 3,180 cfs (6.50 ft).

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.--11 years, 11.4 ft^3/s (0.323 m^3/s), 8,260 acre-ft/yr (10.2 hm^3/yr); median of yearly mean discharges, 8.0 ft^3/s (0.23 m^3/s), 5,800 acre-ft/yr (7.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 950 ft^3/s (26.9 m^3/s) Aug. 2 (gage height, 4.92 ft or 1.500 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); minimum daily, 0.08 ft^3/s (0.002 m^3/s) Sept. 14, 15, 23, 24.
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 poor.

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	.60	.50	1.2	1.4	3.9	1.8	4.5	4.2	.60	.30	2.7	.19
2	.50	.50	1.2	1.2	3.5	1.7	9.0	4.2	.60	.30	60	.16
3	.50	.50	1.2	1.1	3.0	1.7	6.0	3.9	.60	.30	5.9	.16
4	.60	.72	1.2	1.1	3.0	1.7	4.5	3.9	.60	.30	5.6	.19
5	.50	.72	1.2	2.2	3.0	1.7	3.5	3.9	.60	.30	43	.15
6	.41	.72	1.2	1.5	2.7	1.7	2.5	3.9	.60	.30	5.0	.14
7	.41	.72	1.2	1.4	2.5	1.7	2.2	4.2	.60	.30	4.0	.13
8	.41	.72	1.2	14	2.2	5.0	2.1	4.2	.50	.30	8.0	.12
9	.60	.72	1.2	24	2.2	10	2.0	4.2	.50	.30	4.0	.11
10	.60	.60	1.2	9.1	2.0	6.0	2.2	3.5	.50	.30	2.0	.12
11	.60	.72	1.2	4.2	2.0	5.6	2.2	3.2	.50	.30	2.0	.12
12	.60	.72	1.2	3.2	2.0	5.2	2.2	3.0	.50	.27	1.0	.09
13	.60	.72	1.2	3.0	2.0	5.0	2.0	2.7	.50	.72	1.0	.10
14	.50	.72	1.2	2.9	2.0	5.0	2.0	2.7	.40	1.5	1.0	.08
15	.50	.72	1.2	3.2	2.0	5.0	2.0	2.5	.40	3.0	.84	.08
16	.41	.72	1.2	3.9	2.0	5.2	2.0	2.0	.40	1.7	.72	.09
17	.41	.72	1.2	5.2	2.0	5.2	2.2	2.0	.40	1.8	.72	.09
18	.41	.72	1.2	5.9	2.0	5.6	2.2	2.0	.40	5.0	.60	.15
19	.41	1.3	1.2	5.9	2.0	6.0	2.0	1.5	.40	2.2	.50	.15
20	.30	2.0	1.2	6.6	2.0	10	2.2	1.5	.40	1.5	.50	.12
21	.30	1.5	1.2	63	2.0	25	2.2	1.5	.40	1.4	.41	.09
22	.30	1.4	1.2	62	2.0	20	2.2	1.5	.40	1.2	.34	.09
23	.30	1.3	1.2	24	2.0	10	2.2	1.5	.40	1.0	.34	.08
24	.27	1.3	1.2	14	2.0	9.0	3.2	1.0	.30	1.0	.34	.08
25	.34	1.3	1.2	9.5	2.0	8.0	5.7	1.0	.30	.84	.30	.09
26	.41	1.3	1.2	7.6	2.0	7.0	6.0	1.0	.30	.84	.27	.14
27	.41	1.3	1.4	6.6	2.0	6.0	5.3	.90	.30	.84	.27	.12
28	.41	1.2	1.4	5.2	1.8	5.0	5.0	.70	.30	2.5	.25	.13
29	.41	1.2	1.4	5.2	------	5.0	4.9	.70	.30	1.4	.23	.11
30	.41	1.2	1.4	4.9	------	4.5	4.6	.70	.30	1.0	.21	.09
31	.41	------	1.4	4.2	------	4.5	------	.70	------	8.6	.19	------
TOTAL	13.84	28.48	38.2	307.2	63.8	194.8	100.8	74.40	13.30	41.61	152.23	3.56
MEAN	.45	.95	1.23	9.91	2.28	6.28	3.36	2.40	.44	1.34	4.91	.12
MAX	.60	2.0	1.4	63	3.9	25	9.0	4.2	.60	8.6	60	.19
MIN	.27	.50	1.2	1.1	1.8	1.7	2.0	.70	.30	.27	.19	.08
AC-FT	27	56	76	609	127	386	200	148	26	83	302	7.1

CAL YR 1973 TOTAL 8,983.37 MEAN 24.6 MAX 150 MIN .12 AC-FT 17,820
WTR YR 1974 TOTAL 1,032.22 MEAN 2.83 MAX 63 MIN .08 AC-FT 2,050

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-31	1445	3.31	335	8- 5	1330	4.49	766
8- 2	1415	4.92	950				

NOTE.--No gage-height record Feb. 18 to Apr. 9, May 18 to July 11.

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.--9 years, 36.8 ft^3/s (1.042 m^3/s), 26,660 acre-ft/yr (32.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 596 ft^3/s (16.9 m^3/s) Aug. 6 (gage height, 3.23 ft or 0.985 m, from high-water mark in gage well); minimum daily, 5.8 ft^3/s (0.16 m^3/s) June 25.
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 (9.35 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 except those for period of no gage-height record, which are poor.

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	8.6	8.5	10	9.8	16	10	11	7.8	6.6	6.0	6.0	8.0
2	8.5	8.5	10	12	15	11	16	7.6	7.0	6.0	10	8.0
3	8.5	8.5	10	9.7	14	11	13	7.5	7.1	6.0	15	8.0
4	8.5	9.1	10	9.8	14	10	11	7.4	7.1	6.0	30	8.0
5	9.1	8.5	10	30	14	10	11	7.1	7.0	6.0	15	7.0
6	8.5	8.5	9.0	18	13	10	9.7	7.1	7.1	7.0	30	7.0
7	7.9	8.5	9.0	15	13	10	9.3	7.3	6.9	8.0	10	7.0
8	7.9	8.5	9.0	40	12	11	9.1	7.2	7.1	8.0	10	7.0
9	8.5	8.5	9.0	58	12	13	9.0	7.0	7.5	7.0	10	7.0
10	8.5	8.5	9.0	39	12	11	9.1	6.9	7.2	7.0	8.0	7.0
11	8.1	8.5	9.1	25	12	11	9.2	7.2	7.1	6.0	8.0	7.0
12	8.5	8.5	9.1	19	12	11	8.9	7.1	7.0	6.0	8.0	7.0
13	8.1	8.5	9.1	16	12	11	8.7	7.1	7.0	6.0	7.0	7.0
14	8.0	9.1	9.1	15	12	11	8.5	7.1	6.8	10	7.0	7.0
15	7.9	9.1	9.1	15	12	12	8.5	7.0	6.9	8.0	7.0	7.0
16	7.9	9.1	9.1	14	11	14	8.3	7.0	6.6	8.0	7.0	7.0
17	7.9	9.1	9.1	15	11	13	8.2	6.9	6.6	7.0	7.0	6.8
18	7.9	9.1	9.4	17	11	13	8.1	7.4	6.6	6.0	7.0	8.0
19	7.9	15	8.5	17	11	14	8.1	7.3	6.6	20	7.0	8.2
20	7.9	9.7	8.5	18	12	22	8.1	7.3	6.1	10	7.0	11
21	7.9	9.7	8.7	32	11	29	8.1	7.3	6.4	8.0	8.0	8.7
22	7.9	10	8.9	83	11	36	7.7	7.1	6.2	7.0	8.0	7.5
23	7.9	11	9.1	49	11	30	8.3	7.1	6.6	7.0	9.0	6.5
24	7.9	9.8	9.1	34	10	24	8.4	7.0	5.9	7.0	10	6.4
25	7.9	10	9.0	26	10	19	8.7	6.7	5.8	6.0	10	7.3
26	8.5	13	9.0	23	10	17	8.4	7.1	5.9	6.0	9.0	6.4
27	7.9	11	9.0	23	10	16	7.9	6.8	6.0	6.0	8.0	6.2
28	7.9	11	9.1	19	9.8	15	8.1	6.6	6.0	6.0	8.0	6.3
29	7.9	11	9.1	17	------	14	8.0	6.5	6.0	6.0	8.0	6.3
30	7.9	11	9.1	17	------	13	7.9	6.6	6.0	6.0	8.0	9.2
31	8.5	------	9.1	16	------	11	------	6.6	------	6.0	8.0	------
TOTAL	252.7	288.8	284.3	751.3	333.8	463	274.3	219.7	198.7	225.0	310.0	220.8
MEAN	8.15	9.63	9.17	24.2	11.9	14.9	9.14	7.09	6.62	7.26	10.0	7.36
MAX	9.1	15	10	83	16	36	16	7.8	7.5	20	30	11
MIN	7.9	8.5	8.5	9.7	9.8	10	7.7	6.5	5.8	6.0	6.0	6.2
AC-FT	501	573	564	1,490	662	918	544	436	394	446	615	438

CAL YR 1973 TOTAL 32,066.8 MEAN 87.9 MAX 1,140 MIN 7.9 AC-FT 63,600
WTR YR 1974 TOTAL 3,822.4 MEAN 10.5 MAX 83 MIN 5.8 AC-FT 7,580

PEAK DISCHARGE (BASE, 750 CFS).--No peak above base.

NOTE.--No gage-height record June 28 to Sept. 16.

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.--61 years, 842 ft^3/s (23.85 m^3/s), 610,000 acre-ft/yr (752 hm^3/yr); median of yearly mean discharges, 650 ft^3/s (18.4 m^3/s), 471,000 acre-ft/yr (580 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,500 ft^3/s (42.5 m^3/s) July 20 (gage height, 9.14 ft or 2.786 m); minimum daily, 86 ft^3/s (2.44 m^3/s) July 6.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	195	238	232	265	223	720	410	158	92	152	147
2	170	195	247	247	269	235	768	381	158	90	172	137
3	170	195	259	247	262	247	726	358	158	90	298	114
4	170	205	256	250	256	277	660	350	155	88	370	122
5	170	208	253	250	241	313	610	341	155	87	520	135
6	165	202	250	277	232	329	550	341	151	86	560	200
7	165	208	241	301	226	350	545	341	143	90	570	149
8	165	214	241	368	220	358	525	345	141	95	445	141
9	165	211	235	475	214	405	525	325	139	99	510	139
10	165	211	229	475	214	425	540	317	139	101	465	129
11	168	211	232	415	217	415	555	317	139	109	406	118
12	170	208	232	376	232	372	565	321	137	104	362	96
13	172	208	229	333	262	363	530	329	131	101	307	142
14	178	211	229	293	262	368	490	333	124	114	262	139
15	182	205	229	285	259	386	480	337	120	137	229	202
16	188	200	229	273	244	425	470	325	118	118	200	143
17	185	202	229	269	238	475	445	313	116	147	190	135
18	188	202	229	281	235	535	445	305	112	172	192	170
19	188	235	226	293	232	610	445	305	110	226	220	178
20	188	247	223	297	235	762	445	285	104	697	223	168
21	188	244	223	329	238	912	440	269	98	509	220	220
22	188	238	214	425	235	1,100	440	256	96	310	223	220
23	192	235	208	470	226	1,150	425	238	93	268	215	247
24	195	241	205	460	217	1,040	400	226	90	256	215	212
25	192	247	214	400	217	888	400	214	88	208	238	203
26	190	259	220	368	211	774	405	198	92	178	195	262
27	188	273	214	363	211	714	415	192	93	158	182	226
28	188	269	205	337	217	696	445	185	95	147	180	200
29	190	250	211	325	------	675	450	180	95	152	172	182
30	192	235	217	293	------	645	440	170	92	178	161	170
31	195	------	232	269	------	870	------	168	------	161	154	------
TOTAL	5,578	6,664	7,099	10,276	6,587	17,337	15,299	8,975	3,640	5,368	8,808	5,046
MEAN	180	222	229	331	235	559	510	290	121	173	284	168
MAX	195	273	259	475	269	1,150	768	410	158	697	570	262
MIN	165	195	205	232	211	223	400	168	88	86	152	96
AC-FT	11,060	13,220	14,080	20,380	13,070	34,390	30,350	17,800	7,220	10,650	17,470	10,010

CAL YR 1973 TOTAL 739,444 MEAN 2,026 MAX 14,900 MIN 160 AC-FT 1,467,000
WTR YR 1974 TOTAL 100,677 MEAN 276 MAX 1,150 MIN 86 AC-FT 199,700

PEAK DISCHARGE (BASE, 4,000 CFS).--No peak above base.

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 current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,940 ft (896 m), from topographic map.

AVERAGE DISCHARGE.--9 years (1965-74), 125 ft^3/s (3.540 m^3/s), 90,560 acre-ft/yr (112 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,400 ft^3/s (68.0 m^3/s) Aug. 6 (gage height, 8.10 ft or 2.469 m); minimum daily, 5.0 ft^3/s (0.14 m^3/s) Sept. 12.
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 poor.

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	10	16	22	22	47	34	57	21	17	10	32	6.0
2	11	16	23	27	45	37	57	20	17	10	59	6.0
3	10	16	23	25	44	50	56	20	17	10	49	7.0
4	10	17	22	24	42	52	52	19	17	9.0	42	8.0
5	10	18	21	115	41	49	49	20	16	9.0	42	9.0
6	11	17	20	90	40	49	47	19	16	10	310	8.0
7	11	16	19	61	39	51	45	20	15	10	299	8.0
8	11	16	19	365	36	55	43	20	15	14	82	7.0
9	11	16	19	930	35	76	41	20	15	14	40	7.0
10	12	16	19	295	36	61	39	20	14	11	27	6.0
11	12	16	18	151	35	51	37	20	14	10	20	6.0
12	12	16	18	108	35	49	37	19	14	10	17	5.0
13	12	17	19	94	35	57	35	18	14	9.0	14	6.0
14	13	17	19	86	34	71	34	18	14	9.0	12	25
15	13	17	20	83	34	75	32	18	14	44	12	9.0
16	13	17	20	80	34	92	30	18	14	31	11	7.0
17	13	17	19	86	34	94	29	18	14	18	11	7.0
18	13	17	21	83	34	98	27	17	13	38	10	9.0
19	13	27	21	72	34	95	27	17	14	39	9.0	10
20	13	24	21	65	37	94	27	18	13	23	8.0	9.0
21	13	19	20	826	39	135	27	18	13	34	8.0	10
22	14	32	21	314	36	118	27	18	11	22	7.0	9.0
23	14	50	20	149	35	101	25	18	10	18	8.0	8.0
24	14	39	20	108	34	88	25	18	10	14	7.0	8.0
25	14	30	21	86	33	78	25	18	10	12	8.0	8.0
26	15	30	22	73	33	71	25	18	10	10	7.0	48
27	15	30	21	68	33	66	24	17	10	10	8.0	10
28	15	26	22	58	33	60	24	17	10	10	7.0	10
29	15	24	22	55	------	58	23	17	10	10	6.0	8.0
30	16	24	22	54	------	58	23	17	10	12	6.0	7.0
31	16	------	22	49	------	58	------	17	------	10	6.0	------
TOTAL	395	653	636	4,702	1,027	2,181	1,049	573	401	500.0	1,184.0	291.0
MEAN	12.7	21.8	20.5	152	36.7	70.4	35.0	18.5	13.4	16.1	38.2	9.70
MAX	16	50	23	930	47	135	57	21	17	44	310	48
MIN	10	16	18	22	33	34	23	17	10	9.0	6.0	5.0
AC-FT	783	1,300	1,260	9,330	2,040	4,330	2,080	1,140	795	992	2,350	577

CAL YR 1973 TOTAL 91,591.0 MEAN 251 MAX 2,690 MIN 10 AC-FT 181,700
WTR YR 1974 TOTAL 13,592.0 MEAN 37.2 MAX 930 MIN 5.0 AC-FT 26,960

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1- 9	0600	6.87	1,240	8-6	2200	8.10	2,400
1-21	0830	7.61	1,920				

09498870. Rye Creek near Gisela, Ariz.

LOCATION.--Lat 34°02'00", long 111°17'30", in SW¼ sec. 13, T.8 N., R.10 E., Gila County, in Tonto National Forest, on right bank, 0.2 mi (0.3 km) upstream from mouth, 0.6 mi (1.0 km) downstream from bridge on county road, and 6 mi (10 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.--8 years, 16.6 ft^3/s (0.470 m^3/s), 12,030 acre-ft/yr (14.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,450 ft^3/s (41.1 m^3/s) July 7 (gage height, 4.25 ft or 1.295 m); minimum daily, 1.0 ft^3/s (0.028 m^3/s) Sept. 6-18, 23, 24, 27-30.
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 fair except those for May and June, which are poor.

REVISIONS (WATER YEARS).--WRD Ariz. 1969: 1967.

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	1.9	1.8	1.5	1.5	3.7	3.1	3.4	3.2	2.5	2.0	1.9	1.1
2	1.9	1.8	1.5	1.5	3.7	3.1	3.4	3.2	2.5	1.9	43	1.1
3	2.0	1.8	1.4	1.5	3.7	3.1	3.4	3.2	2.5	1.9	4.8	1.1
4	2.0	1.8	1.4	1.5	3.5	3.0	3.4	3.1	2.5	1.9	3.4	1.1
5	1.9	1.8	1.4	2.2	3.5	3.1	3.4	3.1	2.5	1.9	2.6	1.1
6	1.8	1.8	1.4	1.8	3.5	3.1	3.4	3.1	2.5	1.9	12	1.0
7	1.8	1.8	1.4	1.8	3.5	3.2	3.2	3.1	2.5	82	17	1.0
8	1.8	1.8	1.4	2.1	3.5	3.4	3.2	3.1	2.5	2.0	2.3	1.0
9	1.9	1.7	1.4	51	3.5	3.7	3.2	3.0	2.3	1.9	1.8	1.0
10	2.0	1.7	1.4	16	3.4	3.5	3.4	3.0	2.3	1.9	1.8	1.0
11	2.0	1.7	1.4	6.0	3.4	3.4	3.4	3.0	2.3	1.9	1.8	1.0
12	2.0	1.7	1.4	3.2	3.4	3.4	3.4	3.0	2.3	1.9	1.6	1.0
13	2.0	1.7	1.4	2.1	3.4	3.4	3.4	3.0	2.2	1.9	1.5	1.0
14	1.9	1.7	1.4	2.2	3.4	3.4	3.4	3.0	2.2	70	1.5	1.0
15	1.9	1.7	1.4	2.5	3.4	3.4	3.4	3.0	2.1	6.1	1.5	1.0
16	1.9	1.7	1.4	2.6	3.2	3.4	3.4	3.0	2.1	2.0	1.5	1.0
17	1.8	1.7	1.4	3.4	3.2	3.4	3.4	3.0	2.1	2.0	1.4	1.0
18	1.8	1.7	1.4	4.7	3.2	3.4	3.4	2.8	2.1	2.1	1.4	1.0
19	1.8	1.7	1.5	4.9	3.2	3.2	3.4	2.8	2.1	11	1.4	1.1
20	1.8	1.7	1.5	3.9	3.4	3.5	3.4	2.8	2.1	2.1	1.3	1.0
21	1.8	1.7	1.5	8.2	3.4	3.4	3.4	2.7	2.1	1.9	1.2	1.8
22	1.8	5.3	1.5	17	3.2	3.2	3.2	2.7	2.1	1.9	1.2	3.3
23	1.8	1.9	1.5	11	3.2	3.2	3.2	2.7	2.1	1.9	1.2	1.0
24	1.8	1.8	1.5	7.1	3.2	3.1	3.2	2.7	2.1	1.9	1.2	1.0
25	1.9	1.7	1.5	5.3	3.2	3.2	3.2	2.7	2.1	1.9	1.1	1.1
26	1.9	1.7	1.5	4.3	3.2	3.2	3.2	2.6	2.0	1.8	1.1	1.1
27	1.8	1.6	1.5	4.1	3.2	3.2	3.2	2.5	1.9	1.8	1.1	1.0
28	1.8	1.6	1.5	3.9	3.1	3.2	3.2	2.5	1.9	1.8	1.1	1.0
29	1.8	1.6	1.5	3.5	------	3.2	3.2	2.5	1.9	1.8	1.1	1.0
30	1.8	1.5	1.5	3.5	------	3.2	3.2	2.5	1.9	1.8	1.1	1.0
31	1.8	------	1.5	3.7	------	3.2	------	2.5	------	1.8	1.1	------
TOTAL	57.9	55.2	44.9	188.0	94.4	101.5	99.6	89.1	66.3	220.6	118.0	33.9
MEAN	1.87	1.84	1.45	6.06	3.37	3.27	3.32	2.87	2.21	7.12	3.81	1.13
MAX	2.0	5.3	1.5	51	3.7	3.7	3.4	3.2	2.5	82	43	3.3
MIN	1.8	1.5	1.4	1.5	3.1	3.0	3.2	2.5	1.9	1.8	1.1	1.0
AC-FT	115	109	89	373	187	201	198	177	132	438	234	67

CAL YR 1973 TOTAL 16,719.8 MEAN 45.8 MAX 590 MIN 1.4 AC-FT 33,160
WTR YR 1974 TOTAL 1,169.4 MEAN 3.20 MAX 82 MIN 1.0 AC-FT 2,320

PEAK DISCHARGE (BASE, 600 CFS).--July 7 (1330) 1,450 cfs (4.25 ft); July 14 (2115) 980 cfs (3.70 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.--33 years (1941-74), 116 ft^3/s (3.285 m^3/s), 84,040 acre-ft/yr (104 hm^3/yr); median of yearly mean discharges, 80 ft^3/s (2.27 m^3/s), 58,000 acre-ft/yr (72 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,800 ft^3/s (108 m^3/s) Aug. 6 (gage height, 8.20 ft or 2.499 m); no flow June 25 to July 6.
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 fair. Small diversions above station for irrigation.

REVISIONS.--WSP 1283: Drainage area.

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	13	15	29	22	51	35	55	25	2.6	0	9.4	1.4
2	13	15	29	23	49	37	55	25	2.6	0	47	1.6
3	13	15	29	26	48	47	59	24	2.3	0	72	2.3
4	14	16	28	25	46	51	53	22	2.0	0	48	2.9
5	14	16	26	63	45	51	52	21	2.0	0	33	3.5
6	13	17	25	100	45	51	51	21	1.8	0	136	4.1
7	12	18	25	59	44	54	48	20	1.4	80	647	3.5
8	12	17	24	190	42	60	45	19	1.3	5.4	78	3.2
9	12	17	24	1,120	40	78	44	17	1.3	.70	49	2.3
10	11	20	23	469	40	74	42	17	1.4	.60	33	1.4
11	13	21	23	216	39	65	40	13	1.2	.40	25	1.3
12	14	21	23	131	38	59	40	13	1.0	.30	21	1.3
13	15	21	22	105	37	63	40	10	1.0	.30	16	1.3
14	15	21	22	90	36	75	37	10	.90	113	8.8	6.5
15	16	19	23	87	36	80	33	10	.80	46	6.4	7.6
16	16	18	23	84	34	86	33	8.8	.80	30	5.6	4.7
17	15	17	22	88	34	93	33	10	.80	20	5.0	3.5
18	15	20	22	90	33	94	32	9.4	.80	47	4.1	2.9
19	15	29	21	82	34	98	32	9.4	.70	81	4.1	8.8
20	15	38	21	71	36	104	31	8.8	.70	31	3.8	5.6
21	15	26	21	878	40	139	31	8.8	.70	31	2.9	5.3
22	14	32	21	403	37	139	29	10	.60	29	2.6	11
23	15	58	20	175	34	113	28	13	.20	22	2.9	5.6
24	15	48	21	111	34	98	27	13	.10	16	2.6	5.3
25	15	38	21	88	33	84	28	12	0	12	2.6	5.3
26	15	36	21	74	33	76	27	11	0	8.2	2.3	47
27	15	37	21	70	33	68	26	11	0	7.6	2.3	29
28	15	34	22	63	33	65	25	8.2	0	6.8	2.3	21
29	15	29	23	60	------	61	25	5.0	0	4.7	1.8	17
30	15	29	22	56	------	58	25	3.8	0	4.7	1.6	15
31	15	------	23	52	------	57	------	2.6	------	7.6	1.4	------
TOTAL	440	758	720	5,171	1,084	2,313	1,126	411.8	29.00	605.30	1,277.5	231.2
MEAN	14.2	25.3	23.2	167	38.7	74.6	37.5	13.3	.97	19.5	41.2	7.71
MAX	16	58	29	1,120	51	139	59	25	2.6	113	647	47
MIN	11	15	20	22	33	35	25	2.6	0	0	1.4	1.3
AC-FT	873	1,500	1,430	10,260	2,150	4,590	2,230	817	58	1,200	2,530	459

CAL YR 1973 TOTAL 123,808.80 MEAN 339 MAX 4,420 MIN 8.6 AC-FT 245,600
WTR YR 1974 TOTAL 14,166.80 MEAN 38.8 MAX 1,120 MIN 0 AC-FT 28,100

PEAK DISCHARGE (BASE, 1,700 CFS).--Jan. 21 (1130) 2,940 cfs (7.98 ft); Aug. 6 (2400) 3,800 cfs (8.20 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 mi² (16,086 km²), 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.--Current year: Maximum contents of system, 1,447,000 acre-ft (1,780 hm³) Oct. 1; minimum, 927,900 acre-ft (1,140 hm³) Sept. 30.
Period of record: Maximum contents of system, 1,764,000 acre-ft (2,180 hm²) May 22, 1941; minimum, 20,680 acre-ft (25.5 hm³) Sept. 16, 1940.

REMARKS.--Total capacity of the four reservoirs is 1,755,000 acre-ft (2,160 hm²), divided as follows: Roosevelt Lake, 1,382,000 acre-ft (1,700 hm³); Apache Lake, 245,000 acre-ft (302 hm³); Canyon Lake, 58,000 acre-ft (71.5 hm³); Saguaro Lake, 70,000 acre-ft (86.3 hm³). 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.

CONTENTS, IN THOUSANDS OF 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	1,447	1,380	1,385	1,394	1,427	1,437	1,415	1,366	1,289	1,190	1,096	1,005
2	1,444	1,378	1,385	1,394	1,427	1,438	1,414	1,363	1,286	1,186	1,094	1,000
3	1,441	1,377	1,385	1,395	1,428	1,429	1,413	1,361	1,283	1,182	1,090	996.6
4	1,438	1,377	1,386	1,395	1,428	1,434	1,412	1,359	1,281	1,178	1,087	992.8
5	1,435	1,378	1,386	1,396	1,429	1,433	1,411	1,355	1,278	1,175	1,085	989.4
6	1,432	1,378	1,386	1,396	1,429	1,430	1,410	1,354	1,276	1,171	1,082	988.3
7	1,430	1,378	1,387	1,397	1,430	1,428	1,411	1,352	1,271	1,167	1,080	984.8
8	1,427	1,378	1,387	1,398	1,430	1,426	1,407	1,350	1,268	1,164	1,078	981.7
9	1,424	1,378	1,387	1,401	1,431	1,425	1,406	1,347	1,265	1,161	1,077	978.1
10	1,422	1,377	1,388	1,403	1,432	1,424	1,406	1,345	1,261	1,158	1,075	975.6
11	1,420	1,379	1,388	1,406	1,431	1,423	1,404	1,342	1,259	1,155	1,073	972.9
12	1,417	1,379	1,388	1,409	1,431	1,423	1,402	1,340	1,256	1,151	1,071	965.1
13	1,415	1,379	1,388	1,409	1,432	1,422	1,401	1,337	1,252	1,148	1,068	962.2
14	1,413	1,379	1,389	1,410	1,432	1,421	1,399	1,336	1,249	1,145	1,066	958.5
15	1,412	1,380	1,390	1,411	1,433	1,422	1,399	1,334	1,246	1,142	1,060	955.3
16	1,409	1,379	1,390	1,412	1,433	1,419	1,396	1,331	1,242	1,140	1,060	952.9
17	1,407	1,380	1,390	1,413	1,434	1,418	1,395	1,329	1,239	1,138	1,056	949.9
18	1,405	1,380	1,390	1,414	1,434	1,414	1,393	1,326	1,236	1,135	1,051	947.9
19	1,403	1,380	1,391	1,414	1,435	1,413	1,390	1,324	1,233	1,132	1,047	945.2
20	1,400	1,380	1,391	1,415	1,435	1,414	1,387	1,322	1,229	1,129	1,044	942.8
21	1,398	1,381	1,391	1,416	1,435	1,413	1,385	1,318	1,225	1,125	1,040	940.5
22	1,396	1,381	1,391	1,417	1,436	1,412	1,382	1,316	1,222	1,125	1,036	938.4
23	1,394	1,382	1,392	1,418	1,436	1,412	1,381	1,314	1,219	1,122	1,032	939.6
24	1,392	1,382	1,392	1,420	1,436	1,412	1,378	1,312	1,215	1,121	1,030	935.8
25	1,390	1,382	1,392	1,420	1,436	1,413	1,376	1,310	1,212	1,119	1,027	935.3
26	1,389	1,383	1,392	1,421	1,437	1,415	1,374	1,310	1,208	1,115	1,023	932.8
27	1,388	1,384	1,393	1,423	1,437	1,415	1,372	1,306	1,205	1,113	1,020	931.4
28	1,387	1,384	1,393	1,424	1,437	1,415	1,371	1,304	1,202	1,110	1,016	930.5
29	1,386	1,384	1,393	1,424	------	1,415	1,369	1,301	1,198	1,107	1,013	928.5
30	1,384	1,384	1,394	1,425	------	1,415	1,367	1,297	1,193	1,104	1,009	927.9
31	1,382	------	1,394	1,426	------	1,416	------	1,293	------	1,100	1,006	------
MAX	1,447	1,384	1,394	1,426	1,437	1,438	1,415	1,366	1,289	1,190	1,096	1,005
MIN	1,382	1,377	1,385	1,394	1,427	1,412	1,367	1,293	1,193	1,100	1,006	927.9
(†)	-67,000	+5,000	+9,000	+33,000	+10,000	-22,000	-49,000	-77,000	-99,000	-94,000	-91,000	-77,800

CAL YR 1973 MAX 1,749 MIN 1,132 † +262,000
WTR YR 1974 MAX 1,447 MIN 927.9 † -519,800

* 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, 927,200 acre-feet.

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 mi² (16,141 km²) of which 21 mi² (54 km²) 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.--44 years, 836 ft³/s (23.68 m³/s), 605,700 acre-ft/yr (747 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 2,020 ft³/s (57.2 m³/s) Aug. 16; minimum daily, 0.52 ft³/s (0.015 m³/s) Jan. 21. Period of record: Maximum discharge, 51,600 ft³/s (1,460 m³/s) Jan. 1, 1966 (gage height, 22.4 ft or 6.83 m, from floodmarks); maximum daily discharge, 38,600 ft³/s (1,090 m³/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 in Part 2 of this report.

REVISIONS.--WSP 1343: Drainage area.

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	1,360	1,180	14	2.9	1.0	481	1,010	1,420	1,620	1,970	1,690	1,690
2	1,460	830	15	3.2	1.1	1,240	1,170	1,480	1,580	1,980	1,610	1,670
3	1,530	124	15	3.2	1.0	1,220	1,250	1,540	1,520	1,980	1,590	1,720
4	1,520	26	16	2.8	1.0	1,280	1,200	1,530	1,620	1,950	1,630	1,740
5	1,480	19	16	4.0	1.0	1,280	1,150	1,410	1,670	1,920	1,620	1,750
6	1,420	17	16	3.1	1.1	1,220	1,170	1,370	1,660	1,910	1,460	1,780
7	1,290	15	16	2.7	1.1	1,240	1,190	1,410	1,690	1,900	1,380	1,750
8	1,220	14	16	3.4	1.1	1,330	1,250	1,390	1,670	1,790	1,380	1,670
9	1,200	13	16	2.8	1.1	1,190	1,270	1,430	1,540	1,660	1,420	1,590
10	1,320	13	16	2.2	1.0	780	1,330	1,380	1,620	1,540	1,440	1,600
11	1,310	13	16	1.9	1.7	726	1,350	1,280	1,730	1,520	1,450	1,660
12	1,270	13	16	1.7	1.6	738	1,230	1,200	1,820	1,470	1,660	1,680
13	1,200	13	16	1.4	1.1	852	1,210	1,290	1,810	1,450	1,910	1,690
14	1,120	12	16	1.1	1.1	888	1,180	1,360	1,820	1,440	1,980	1,600
15	1,100	12	15	.91	1.1	966	1,280	1,490	1,790	1,430	2,010	1,490
16	1,190	12	7.9	.95	1.1	1,020	1,490	1,480	1,790	1,400	2,020	1,400
17	1,130	13	5.8	.88	1.2	1,030	1,660	1,470	1,840	1,450	1,960	1,320
18	1,180	13	4.8	.78	1.3	1,100	1,700	1,430	1,840	1,560	1,950	1,320
19	1,260	14	4.4	.72	1.3	1,190	1,670	1,260	1,830	1,660	1,920	1,300
20	1,210	14	4.1	.59	1.3	1,220	1,540	1,180	1,810	1,590	1,920	1,190
21	1,060	14	3.7	.52	1.3	839	1,390	1,260	1,800	1,540	1,910	978
22	1,030	15	3.7	1.0	1.3	730	1,330	1,310	1,810	1,500	1,920	798
23	1,070	15	3.7	1.3	1.4	665	1,390	1,320	1,770	1,340	1,920	809
24	1,100	14	3.7	1.2	1.3	538	1,350	1,370	1,810	1,290	1,860	764
25	1,120	15	3.5	1.4	1.2	599	1,330	1,360	1,800	1,390	1,870	839
26	1,090	15	3.5	1.4	1.2	619	1,370	1,320	1,770	1,590	1,810	883
27	1,040	15	3.5	1.2	1.4	676	1,360	1,370	1,940	1,640	1,850	855
28	930	15	3.3	1.1	1.4	833	1,200	1,600	1,970	1,610	1,820	691
29	924	14	3.1	1.2	------	893	1,130	1,710	1,950	1,690	1,780	554
30	1,130	14	3.0	1.1	------	912	1,250	1,730	1,970	1,700	1,750	508
31	1,150	------	2.9	1.0	------	918	------	1,670	------	1,730	1,740	------
TOTAL	37,414	2,526	299.6	53.65	33.8	29,213	39,400	43,820	52,860	50,590	54,230	39,289
MEAN	1,207	84.2	9.66	1.73	1.21	942	1,313	1,414	1,762	1,632	1,749	1,310
MAX	1,530	1,180	16	4.0	1.7	1,330	1,700	1,730	1,970	1,980	2,020	1,780
MIN	924	12	2.9	.52	1.0	481	1,010	1,180	1,520	1,290	1,380	508
AC-FT	74,210	5,010	594	106	67	57,940	78,150	86,920	104,800	100,300	107,600	77,930

CAL YR 1973 TOTAL 728,818.70 MEAN 1,997 MAX 14,800 MIN 2.9 AC-FT 1,446,000
WTR YR 1974 TOTAL 349,729.05 MEAN 958 MAX 2,020 MIN .52 AC-FT 693,700

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.--9 years, 9.03 ft^3/s (0.256 m^3/s), 6,540 acre-ft/yr (8.06 hm^3/yr).

EXTREMES.--Current year: Maximum discharge 570 ft^3/s (16.1 m^3/s) Sept. 27 (gage height, 4.35 ft or 1.326 m, from high-water mark in gage well); minimum daily, 0.39 ft^3/s (0.011 m^3/s) Aug. 29 to Sept. 1.
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 (14.2 m^3/s) on basis of slope-area measurement of peak flow; no flow at times in most years.

REMARKS.--Records fair.

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	2.6	3.5	3.2	6.1	3.3	1.8	3.1	2.0	2.1	.81	26	.39
2	2.6	3.4	3.1	5.7	3.1	1.8	3.7	1.9	2.1	.78	4.3	.45
3	2.7	3.4	3.2	4.8	2.8	1.7	3.6	1.8	2.1	.88	1.8	.45
4	2.8	3.4	3.3	5.1	2.8	1.8	3.5	1.7	1.9	1.0	1.8	24
5	2.9	3.3	3.6	7.1	2.9	1.8	3.6	1.6	1.9	.96	1.6	1.5
6	2.8	3.4	3.4	7.1	2.7	1.9	3.6	1.6	1.8	.93	1.9	1.5
7	2.9	3.4	3.7	6.1	2.5	1.9	3.5	1.6	1.8	1.1	1.6	1.0
8	3.1	3.4	4.1	9.1	2.3	2.1	3.4	1.6	1.6	1.6	1.5	1.0
9	3.2	3.4	4.0	6.0	2.6	3.2	3.3	1.4	1.9	1.4	1.3	.90
10	3.1	3.4	4.2	5.6	2.6	2.3	3.3	1.3	1.9	1.2	1.2	.90
11	3.2	3.5	4.3	5.1	2.4	2.1	3.5	1.3	2.2	1.2	.96	.90
12	3.2	3.4	4.7	5.0	2.5	2.1	3.4	1.2	1.9	.98	.96	.70
13	3.3	3.3	4.6	5.2	2.5	2.1	3.2	1.2	1.9	1.0	.87	.70
14	3.3	3.1	4.5	5.0	2.3	2.1	3.4	1.3	1.8	1.1	.78	.70
15	3.4	2.6	4.7	5.0	2.4	2.1	3.5	1.4	1.7	1.3	.78	.70
16	3.4	2.2	4.6	5.0	2.3	2.0	3.5	1.5	1.8	1.4	.78	.70
17	3.5	2.3	4.7	5.0	2.3	2.0	3.4	1.4	2.1	1.5	.78	.70
18	3.3	2.6	4.7	4.7	2.2	2.1	3.0	1.5	2.0	1.5	.78	.50
19	3.2	2.7	4.5	4.6	2.2	2.3	2.8	1.5	1.8	1.6	.71	.50
20	3.2	2.2	4.5	4.5	2.3	2.4	2.9	1.8	1.7	1.6	.57	.50
21	3.2	2.4	4.5	4.5	1.8	3.0	3.0	1.9	1.7	1.8	.64	.50
22	3.2	2.4	5.2	3.9	1.9	3.1	2.8	2.1	1.6	1.8	.64	.50
23	3.2	2.6	4.9	3.8	1.9	2.8	2.6	2.1	1.5	1.6	.64	.50
24	3.3	2.4	5.0	3.7	1.8	2.8	2.5	2.2	1.5	1.6	.64	.50
25	3.4	2.6	4.7	3.8	1.8	2.9	2.3	2.4	1.4	1.6	.57	.50
26	3.5	2.8	5.3	3.7	1.9	2.9	2.2	2.2	1.3	1.5	.57	.50
27	3.5	2.4	5.1	3.6	1.9	3.0	2.2	2.2	1.2	1.5	.51	100
28	3.5	2.6	5.7	3.4	1.8	3.1	2.1	1.9	1.1	1.3	.45	10
29	3.6	2.8	5.6	3.5	------	3.1	2.2	1.9	1.1	1.2	.39	2.0
30	3.5	3.1	5.6	3.3	------	3.1	2.1	1.9	.93	1.2	.39	1.0
31	3.6	------	5.0	3.2	------	3.1	------	2.1	------	1.3	.39	------
TOTAL	99.2	88.0	138.2	154.2	65.8	74.5	91.2	53.5	51.33	40.24	56.80	154.69
MEAN	3.20	2.93	4.46	4.97	2.35	2.40	3.04	1.73	1.71	1.30	1.83	5.16
MAX	3.6	3.5	5.7	9.1	3.3	3.2	3.7	2.4	2.2	1.8	26	100
MIN	2.6	2.2	3.1	3.2	1.8	1.7	2.1	1.2	.93	.78	.39	.39
AC-FT	197	175	274	306	131	148	181	106	102	80	113	307

CAL YR 1973 TOTAL 10,103.76 MEAN 27.7 MAX 515 MIN .56 AC-FT 20,040
WTR YR 1974 TOTAL 1,067.66 MEAN 2.93 MAX 100 MIN .39 AC-FT 2,120

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-1	1815	3.40	165	9-27	unknown	4.35	570
9-4	1730	4.18	480				

NOTE.--No gage-height record Sept. 6-30.

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.--11 years, 33.7 ft^3/s (0.954 m^3/s), 24,420 acre-ft/yr (30.1 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, 270 ft^3/s (7.65 m^3/s) Sept. 5 (gage height, 3.31 ft or 1.009 m); minimum daily, 22 ft^3/s (0.62 m^3/s) May 15, 27, 28.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	24	26	25	24	23	24	23	23	23	25	25
2	23	24	26	25	24	23	24	23	23	23	26	25
3	23	24	26	25	24	23	24	23	23	23	40	25
4	23	24	26	25	24	24	24	23	23	23	27	26
5	23	24	26	26	24	24	24	23	23	23	26	115
6	23	24	26	25	25	24	24	23	23	23	25	39
7	23	25	26	25	24	24	24	23	23	26	25	28
8	23	25	26	27	25	24	24	23	23	25	25	26
9	23	25	26	26	25	25	24	23	23	24	24	25
10	23	25	26	25	25	25	24	23	23	24	24	25
11	23	25	26	25	25	24	24	23	23	24	24	25
12	23	25	26	25	25	24	24	23	23	24	24	25
13	23	25	26	25	24	24	24	23	23	24	24	25
14	23	25	26	25	23	24	24	23	23	24	24	25
15	23	25	26	25	23	24	24	22	23	25	24	25
16	24	26	26	25	23	24	24	23	23	24	23	25
17	23	26	26	25	23	24	24	23	23	24	24	25
18	23	26	25	25	23	24	24	23	23	24	23	25
19	23	26	25	25	23	24	24	23	23	43	23	25
20	23	26	25	25	23	25	24	23	23	59	23	25
21	23	26	25	25	23	25	24	23	23	52	24	25
22	23	26	25	25	23	25	24	23	23	37	24	25
23	24	26	25	25	23	25	24	23	23	28	24	27
24	24	26	25	25	23	25	24	23	23	25	24	25
25	24	26	25	25	23	25	24	23	23	24	24	25
26	24	26	25	25	23	24	24	23	23	24	24	30
27	24	26	25	25	23	24	24	22	23	24	24	84
28	24	26	25	25	23	24	24	22	23	24	24	32
29	24	26	25	25	------	24	24	23	23	24	24	26
30	24	26	25	24	------	24	24	23	23	24	24	25
31	24	------	25	24	------	24	------	23	------	24	25	------
TOTAL	723	759	792	777	663	749	720	710	690	842	768	933
MEAN	23.3	25.3	25.5	25.1	23.7	24.2	24.0	22.9	23.0	27.2	24.8	31.1
MAX	24	26	26	27	25	25	24	23	23	59	40	115
MIN	23	24	25	24	23	23	24	22	23	23	23	25
AC-FT	1,430	1,510	1,570	1,540	1,320	1,490	1,430	1,410	1,370	1,670	1,520	1,850

CAL YR 1973 TOTAL 22,303 MEAN 61.1 MAX 682 MIN 21 AC-FT 44,240
WTR YR 1974 TOTAL 9,126 MEAN 25.0 MAX 115 MIN 22 AC-FT 18,100

PEAK DISCHARGE (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.--13 years (1915-16, 1917-20, 1965-74), 193 ft^3/s (5.466 m^3/s), 139,800 acre-ft/yr (172 hm^3/yr); median of yearly mean discharges, 160 ft^3/s (4.53 m^3/s), 116,000 acre-ft/yr (140 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,960 ft^3/s (112 m^3/s) Sept. 26 (gage height, 6.70 ft or 2.042 m); minimum daily, 59 ft^3/s (1.67 m^3/s) June 28 to July 3.
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 good.

REVISIONS (WATER YEARS).--WSP 1213: 1917, 1920.

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	73	75	82	93	91	84	80	80	66	59	100	75
2	72	75	84	93	91	82	81	80	66	59	80	76
3	72	75	84	94	91	82	81	78	65	59	90	76
4	71	75	84	94	90	83	82	78	65	60	90	75
5	71	75	84	99	90	83	82	78	64	60	150	89
6	70	75	84	96	90	82	82	78	64	60	120	119
7	70	80	84	96	90	81	82	78	63	444	110	89
8	69	80	84	101	90	83	83	77	63	300	100	78
9	69	80	84	100	90	86	83	76	63	90	95	76
10	69	80	84	97	88	84	83	76	63	80	90	75
11	68	80	84	97	88	82	85	76	62	80	90	74
12	68	80	84	97	88	80	85	75	61	80	90	72
13	67	80	84	96	89	80	84	74	62	80	85	72
14	66	80	86	96	89	79	84	74	61	80	85	73
15	65	85	85	97	87	79	86	73	60	80	84	74
16	66	85	85	97	87	79	86	73	60	80	82	72
17	65	85	85	98	87	77	86	72	60	80	82	72
18	65	85	87	97	88	77	85	72	60	79	81	71
19	66	85	87	95	87	77	84	72	62	338	81	72
20	66	85	87	95	87	78	84	71	62	190	79	72
21	66	85	87	95	85	79	84	72	60	170	80	72
22	66	84	89	94	86	78	83	70	60	110	80	72
23	68	83	89	94	86	78	83	71	60	100	80	72
24	68	82	89	94	85	78	82	71	60	90	79	72
25	68	83	89	93	84	79	82	70	60	90	79	100
26	69	83	90	93	84	79	82	68	60	85	79	300
27	70	82	90	93	84	79	82	68	60	85	79	200
28	70	82	90	93	84	80	82	67	59	85	77	150
29	70	82	90	93	------	80	80	67	59	80	76	100
30	70	82	92	92	------	80	80	66.	59	80	77	90
31	75	------	92	91	------	79	------	66	------	80	75	------
TOTAL	2,128	2,428	2,679	2,953	2,456	2,487	2,488	2,267	1,849	3,493	2,725	2,780
MEAN	68.6	80.9	86.4	95.3	87.7	80.2	82.9	73.1	61.6	113	87.9	92.7
MAX	75	85	92	101	91	86	86	80	66	444	150	300
MIN	65	75	82	91	84	77	80	66	59	59	75	71
AC-FT	4,220	4,820	5,310	5,860	4,870	4,930	4,930	4,500	3,670	6,930	5,410	5,510

CAL YR 1973 TOTAL 116,191 MEAN 318 MAX 3,000 MIN 65 AC-FT 230,500
WTR YR 1974 TOTAL 30,733 MEAN 84.2 MAX 444 MIN 59 AC-FT 60,960

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 7	2115	6.10	3,160	9-26	(†)	6.70	3,960
7-19	2045	5.98	3,020				

† Time unknown.

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.--31 years, 83.4 ft^3/s (2.362 m^3/s), 60,420 acre-ft/yr (74.5 hm^3/yr); median of yearly mean discharges, 71 ft^3/s (2.01 m^3/s), 51,400 acre-ft/yr (63 hm^3/yr).

EXTREMES.--Water year 1973: Maximum discharge (revised), 8,790 ft^3/s (249 m^3/s) Oct. 19 (gage height, 10.61 ft or 3.234 m); minimum daily (revised) 16 ft^3/s (0.45 m^3/s) July 6.
Water year 1974: Maximum discharge, 3,220 ft^3/s (91.2 m^3/s) July 7 (gage height, 7.44 ft or 2.268 m); minimum daily, 12 ft^3/s (0.34 m^3/s) July 4, 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). Revised figures of discharge for the water year 1973, superseding those published in WRD Ariz. 1973, are given herein.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	99	64	137	43	357	608	1,150	35	18	26	23
2	23	79	59	104	43	304	413	840	39	18	18	24
3	23	70	58	94	43	332	259	556	40	17	18	22
4	98	62	57	84	42	345	277	649	36	17	22	21
5	57	56	737	75	42	214	334	584	32	17	25	21
6	90	51	363	65	53	169	543	428	29	16	27	20
7	800	47	178	62	162	166	967	259	27	21	24	20
8	139	47	122	59	191	163	932	251	26	25	21	18
9	60	45	103	55	171	165	701	256	26	26	20	19
10	40	43	86	55	156	175	958	235	22	24	20	20
11	33	57	81	52	137	217	1,490	190	22	23	20	19
12	29	115	72	50	144	451	1,720	149	23	25	20	20
13	29	62	63	48	128	369	1,900	120	27	26	28	21
14	26	55	62	49	118	384	1,920	112	29	39	41	19
15	26	96	57	70	96	279	1,250	107	26	27	26	20
16	27	148	53	107	95	296	1,250	103	22	27	26	21
17	85	870	51	142	88	393	1,420	93	24	37	27	23
18	2,010	574	50	137	90	538	1,690	75	24	31	26	22
19	6,040	307	53	104	102	397	942	64	22	29	24	21
20	3,990	283	72	87	99	530	577	57	20	26	24	23
21	1,080	209	93	73	90	593	418	53	19	24	32	22
22	317	136	96	66	194	409	570	52	19	23	26	21
23	156	110	92	58	125	282	1,230	49	19	21	24	23
24	107	96	82	53	175	229	1,450	41	20	20	22	24
25	564	82	73	51	194	287	1,520	38	22	20	20	23
26	601	74	66	50	221	354	1,730	39	21	19	20	22
27	275	77	58	49	299	329	1,690	36	21	20	19	23
28	361	99	1,840	47	316	602	1,570	31	19	21	19	22
29	207	92	994	45	------	578	1,390	30	18	22	19	23
30	251	75	370	45	------	491	1,190	29	19	41	20	24
31	144	------	199	44	------	442	------	29	------	36	23	------
TOTAL	17,712	4,216	6,404	2,217	3,657	10,840	32,909	6,705	748	756	727	644
MEAN	571	141	207	71.5	131	350	1,097	216	24.9	24.4	23.5	21.5
MAX	6,040	870	1,840	142	316	602	1,920	1,150	40	41	41	24
MIN	23	43	50	44	42	163	259	29	18	16	18	18
AC-FT	35,130	8,360	12,700	4,400	7,250	21,500	65,280	13,300	1,480	1,500	1,440	1,280

CAL YR 1972 TOTAL 36,625 MEAN 100 MAX 6,040 MIN 15 AC-FT 72,650
WTR YR 1973 TOTAL 87,535 MEAN 240 MAX 6,040 MIN 16 AC-FT 173,600

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10- 7	(a)	b5.6	1,480	12- 5	0630	6.13	1,870
10-19	2400	10.61	8,790	12-28	1315	8.07	4,160
10-25	1245	5.27	1,130	4-13	2300	7.42	3,270
11-17	0800	5.92	1,670	4-26	0030	6.83	2,570

a About 0500-0600.
b About.

09504500. Oak Creek near Cornville, Ariz.--Continued

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	23	30	37	37	37	34	37	27	18	14	20	20
2	23	30	38	40	36	36	59	25	18	14	250	21
3	24	30	38	38	36	41	213	25	19	14	100	22
4	23	31	38	37	36	44	86	27	17	12	50	28
5	25	31	37	60	37	42	60	29	17	12	35	25
6	25	29	37	46	37	40	47	29	16	13	30	24
7	25	30	36	43	37	41	42	26	16	357	28	21
8	26	32	37	52	37	41	37	26	16	116	26	22
9	27	33	37	67	37	49	34	26	17	39	25	21
10	27	31	37	50	36	47	34	24	16	32	25	22
11	28	29	37	43	36	43	35	24	16	27	24	21
12	28	31	37	40	36	43	32	24	16	24	24	20
13	29	34	37	39	36	103	33	24	16	23	24	20
14	30	32	37	39	36	87	33	21	16	23	24	20
15	28	32	37	38	36	70	33	20	14	26	23	26
16	27	33	37	37	36	66	34	18	14	25	23	26
17	26	34	38	38	36	87	33	20	15	28	20	22
18	25	34	37	38	36	98	28	22	14	30	20	21
19	25	41	37	38	36	92	28	22	14	70	20	28
20	26	43	37	38	36	85	30	23	15	45	20	29
21	27	38	37	41	36	95	31	23	17	30	20	28
22	27	39	36	52	36	86	30	22	16	23	20	28
23	26	41	36	44	35	88	31	21	16	23	21	29
24	25	38	38	40	35	68	31	22	16	23	22	60
25	27	38	37	39	35	58	30	22	18	20	20	32
26	28	41	38	38	34	49	29	21	15	20	21	37
27	29	39	37	38	34	44	29	20	14	20	21	59
28	29	38	37	37	34	43	28	20	14	20	20	32
29	30	38	37	37	------	40	28	19	13	20	19	30
30	29	38	36	37	------	38	26	18	14	20	17	29
31	30	------	37	37	------	35	------	18	------	20	18	------
TOTAL	827	1,038	1,149	1,298	1,005	1,833	1,261	708	473	1,183	1,030	823
MEAN	26.7	34.6	37.1	41.9	35.9	59.1	42.0	22.8	15.8	38.2	33.2	27.4
MAX	30	43	38	67	37	103	213	29	19	357	250	60
MIN	23	29	36	37	34	34	26	18	13	12	17	20
AC-FT	1,640	2,060	2,280	2,570	1,990	3,640	2,500	1,400	938	2,350	2,040	1,630

CAL YR 1973 TOTAL 62,217 MEAN 170 MAX 1,920 MIN 16 AC-FT 123,400
WTR YR 1974 TOTAL 12,628 MEAN 34.6 MAX 357 MIN 12 AC-FT 25,050

PEAK DISCHARGE (BASE, 1,300 CFS).--July 7 (2000) 3,220 cfs (7.44 ft); about Aug. 2, 1,310 cfs (5.5 ft, from high-water marks in well).

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 mi^2 (287 km^2).

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.--13 years, 32.6 ft^3/s (0.923 m^3/s), 23,620 acre-ft/yr (29.1 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, 119 ft^3/s (3.37 m^3/s) Mar. 18 (gage height, 4.47 ft or 1.362 m); minimum, 6.7 ft^3/s (0.19 m^3/s) June 25, 28-30.
Period of record: Maximum discharge, 7,670 ft^3/s (217 m^3/s) Sept. 5, 1970 (gage height, 12.41 ft or 3.783 m); minimum, 5.4 ft^3/s (0.15 m^3/s) Aug. 14, 1962, July 1, 2, 5, 8, 9, 12, 21, 1967.

REMARKS.--Records good. No known diversion or regulation above station.

REVISIONS.--WRD Ariz. 1969: Drainage area.

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	6.9	7.1	7.6	7.9	7.6	7.6	7.6	7.6	7.9	6.9	7.6	7.1
2	6.9	7.1	7.9	8.1	7.6	7.6	8.1	7.6	7.9	6.9	7.6	7.1
3	7.1	7.1	7.6	7.6	7.6	21	19	7.6	7.9	6.9	7.3	7.1
4	6.9	7.3	7.6	7.6	7.6	21	30	7.6	7.9	6.9	7.3	7.3
5	6.9	7.3	7.6	9.6	7.6	16	19	7.6	7.9	6.9	7.3	7.3
6	7.1	7.3	7.6	8.1	7.6	13	12	7.6	7.6	6.9	7.9	7.3
7	7.1	7.3	7.6	7.9	7.6	13	9.3	7.6	7.9	7.1	7.9	7.3
8	7.1	7.3	7.6	9.0	7.6	13	8.1	7.6	8.1	7.1	7.3	7.1
9	7.3	7.3	7.6	9.0	7.6	13	7.9	7.6	8.0	6.9	7.1	7.1
10	7.6	7.3	7.6	8.1	7.6	12	7.6	7.6	7.9	6.9	7.1	7.1
11	7.1	7.3	7.6	7.9	7.6	9.6	7.6	7.6	7.8	6.9	7.1	7.1
12	7.1	7.3	7.6	7.6	7.6	12	7.6	7.6	7.7	6.9	7.1	7.1
13	7.1	7.3	7.6	7.6	7.6	33	7.6	7.6	7.6	6.9	7.1	7.1
14	7.1	7.3	7.6	7.6	7.6	27	7.6	7.6	7.5	7.1	7.1	7.1
15	7.1	7.3	7.6	7.6	7.6	27	7.6	7.6	7.4	7.3	7.1	7.1
16	7.1	7.3	7.6	7.6	7.6	50	7.3	7.6	7.3	7.1	7.1	7.1
17	7.1	7.3	7.6	7.6	7.6	73	7.3	7.6	7.2	7.1	7.1	7.1
18	7.1	7.6	7.6	7.9	7.6	83	7.3	7.6	7.1	7.1	6.9	7.3
19	7.1	9.0	7.6	7.9	7.6	62	7.3	7.6	7.0	7.6	7.1	7.9
20	7.1	7.6	7.6	8.4	7.6	59	7.6	7.6	6.9	7.6	6.9	7.3
21	7.1	7.6	7.6	25	7.6	75	7.6	7.6	6.8	7.9	6.9	7.1
22	7.1	7.6	7.6	19	7.6	61	7.6	7.3	6.8	7.6	7.1	7.1
23	7.1	7.6	7.6	13	7.6	78	7.3	7.3	6.8	7.3	7.1	7.6
24	7.1	7.6	7.6	9.6	7.3	36	7.6	7.9	6.8	7.1	7.1	7.6
25	7.1	7.6	7.6	8.7	7.3	22	7.6	7.9	6.7	7.1	7.1	7.3
26	7.1	8.1	7.6	8.1	7.6	15	7.6	7.6	6.9	6.9	7.1	7.3
27	7.1	7.9	7.6	8.1	7.6	11	7.3	7.6	6.9	6.9	7.1	7.3
28	7.1	7.6	7.6	7.9	7.6	9.0	7.3	7.6	6.7	6.9	7.1	7.1
29	7.1	7.6	7.6	7.9	------	8.1	7.3	7.6	6.7	7.1	7.1	7.1
30	7.1	7.6	7.6	7.6	------	7.9	7.3	7.9	6.7	7.1	6.9	7.1
31	7.1	------	7.6	7.6	------	7.6	------	7.9	------	7.1	7.1	------
TOTAL	220.0	224.5	235.9	283.1	212.2	903.4	277.9	236.2	220.3	220.0	222.7	216.6
MEAN	7.10	7.48	7.61	9.13	7.58	29.1	9.26	7.62	7.34	7.10	7.18	7.22
MAX	7.6	9.0	7.9	25	7.6	83	30	7.9	8.1	7.9	7.9	7.9
MIN	6.9	7.1	7.6	7.6	7.3	7.6	7.3	7.3	6.7	6.9	6.9	7.1
AC-FT	436	445	468	562	421	1,790	551	469	437	436	442	430

CAL YR 1973 TOTAL 26,602.8 MEAN 72.9 MAX 680 MIN 6.8 AC-FT 52,770
WTR YR 1974 TOTAL 3,472.8 MEAN 9.51 MAX 83 MIN 6.7 AC-FT 6,890

PEAK DISCHARGE (BASE, 600 CFS).--No peak above base.

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.--17 years, 7.18 ft^3/s (0.203 m^3/s), 5,200 acre-ft/yr (6.41 hm^3/yr); median of yearly mean discharges, 4.7 ft^3/s (0.13 m^3/s), 3,400 acre-ft/yr (4.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 34 ft^3/s (0.96 m^3/s) Jan. 21 (gage height, 3.58 ft or 1.091 m); no flow Oct. 1 to Dec. 11, May 8 to Sept. 30.
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 measurement of peak flow; no flow for many days in each year.

REMARKS.--Records fair.

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	.09	.25	.10	.06	.05				
2			0	.09	.23	.10	.06	.04				
3			0	.09	.21	.10	.06	.03				
4			0	.09	.20	.10	.06	.02				
5			0	.13	.19	.10	.06	.01				
6			0	.11	.18	.10	.05	.02				
7			0	.11	.17	.09	.05	.01				
8			0	.16	.16	.10	.06	0				
9			0	10	.16	.10	.05	0				
10			0	2.5	.15	.09	.06	0				
11			0	.90	.15	.09	.09	0				
12			.04	.50	.14	.09	.09	0				
13			.07	.40	.14	.09	.10	0				
14			.07	.34	.14	.09	.10	0				
15			.08	.25	.13	.09	.09	0				
16			.08	.20	.13	.09	.09	0				
17			.09	.15	.13	.09	.09	0				
18			.09	.14	.12	.08	.08	0				
19			.09	.14	.12	.08	.09	0				
20			.08	.13	.12	.09	.08	0				
21			.08	6.7	.12	.08	.08	0				
22			.08	11	.12	.07	.08	0				
23			.09	1.9	.11	.07	.07	0				
24			.09	.87	.11	.07	.07	0				
25			.09	.64	.11	.06	.07	0				
26			.09	.50	.11	.06	.07	0				
27			.08	.42	.11	.06	.06	0				
28			.09	.35	.10	.06	.06	0				
29			.09	.32	------	.06	.06	0				
30			.09	.29	------	.07	.06	0				
31		------	.09	.27	------	.06	------	0	------			------
TOTAL	0	0	1.65	39.78	4.11	2.58	2.15	.18	0	0	0	0
MEAN	0	0	.053	1.28	.15	.083	.072	.006	0	0	0	0
MAX	0	0	.09	11	.25	.10	.10	.05	0	0	0	0
MIN	0	0	0	.09	.10	.06	.05	0	0	0	0	0
AC-FT	0	0	3.3	79	8.2	5.1	4.3	.4	0	0	0	0

CAL YR 1973 TOTAL 8,630.36 MEAN 23.6 MAX 316 MIN 0 AC-FT 17,120
WTR YR 1974 TOTAL 50.45 MEAN .14 MAX 11 MIN 0 AC-FT 100

PEAK DISCHARGE (BASE, 200 CFS).--No peak above base.

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.--17 years, 7.29 ft^3/s (0.206 m^3/s), 5,280 acre-ft/yr (6.51 hm^3/yr); median of yearly mean discharges, 4.7 ft^3/s (0.13 m^3/s), 3,400 acre-ft/yr (4.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 52 ft^3/s (1.47 m^3/s) probably Apr. 3 (gage height, 3.20 ft or 0.975 m, from peak-stage indicator); 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	.01	0	.05					
2				0	0	0	.01					
3				0	0	0	42					
4				0	0	0	10					
5				0	0	0	2.8					
6				0	.03	.40	.90					
7				0	0	.84	.30					
8				0	0	1.9	.10					
9				.02	0	1.8	.05					
10				.01	0	.85	.03					
11				.01	0	.22	.02					
12				.01	0	3.6	.01					
13				.01	0	18	.01					
14				.73	.01	17	.01					
15				.82	0	14	.01					
16				.73	0	18	.01					
17				.89	0	20	.01					
18				2.1	0	30	.01					
19				.82	0	15	0					
20				.18	0	27	0					
21				28	0	15	0					
22				12	.01	40	0					
23				3.2	0	32	0					
24				1.1	0	13	0					
25				.35	0	4.0	0					
26				.15	0	1.8	0					
27				.08	0	.70	0					
28				.04	0	.35	0					
29				.03	------	.07	0					
30				.02	------	.02	0					
31		------		.02	------	.01	------		------			------
TOTAL	0	0	0	51.32	.06	275.56	56.33	0	0	0	0	0
MEAN	0	0	0	1.66	.002	8.89	1.88	0	0	0	0	0
MAX	0	0	0	28	.03	40	42	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	102	.1	547	112	0	0	0	0	0

CAL YR 1973 TOTAL 7,584.27 MEAN 20.8 MAX 174 MIN 0 AC-FT 15,040
WTR YR 1974 TOTAL 383.27 MEAN 1.05 MAX 42 MIN 0 AC-FT 760

PEAK DISCHARGE (BASE, 100 CFS).--No peak above base.

NOTE.--No gage-height record Mar. 16 to Apr. 29.

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 abutment on upstream side of abandoned highway bridge, 400 ft (122 m) upstream from present County 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.--14 years, 37.4 ft^3/s (1.059 m^3/s), 27,100 acre-ft/yr (33.4 hm^3/yr); median of yearly mean discharges, 28 ft^3/s (0.79 m^3/s), 20,290 acre-ft/yr (25 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 253 ft^3/s (7.16 m^3/s) Apr. 3 (gage height, 3.68 ft or 1.122 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0	.94			0		
2						0	56			0		
3						13	134			0		
4						21	56			0		
5						14	28			0		
6						12	14			0		
7						12	6.4			0		
8						16	3.5			0		
9						17	1.9			0		
10						8.6	.91			0		
11						5.8	.41			0		
12						29	.16			0		
13						108	.08			0		
14						73	.06			0		
15						69	.04			0		
16						84	.04			0		
17						100	.03			0		
18						132	.02			0		
19						120	.01			0		
20						125	0			0		
21						120	0			0		
22						138	0			0		
23						138	0			0		
24						69	0			0		
25						41	0			0		
26						24	0			0		
27						15	0			0		
28						8.8	0			0		
29					------	5.0	0			0		
30					------	3.1	0			9.8		
31		------			------	1.8	------		------	.39		------
TOTAL	0	0	0	0	0	1,523.1	302.50	0	0	10.19	0	0
MEAN	0	0	0	0	0	49.1	10.1	0	0	.33	0	0
MAX	0	0	0	0	0	138	134	0	0	9.8	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	3,020	600	0	0	20	0	0

CAL YR 1973 TOTAL 34,844.91 MEAN 95.5 MAX 975 MIN 0 AC-FT 69,110
WTR YR 1974 TOTAL 1,835.79 MEAN 5.03 MAX 138 MIN 0 AC-FT 3,640

PEAK DISCHARGE (BASE, 600 CFS).--No peak above base.

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 m^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, 2,200 ft^3/s (62.3 m^3/s) July 8 (gage height, 6.62 ft or 2.018 m); minimum daily, 15 ft^3/s (0.42 m^3/s) Aug. 31, Sept. 1.

Period of record: Maximum discharge, 40,600 ft^3/s (1,150 m^3/s) Oct. 20 (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.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	75	140	143	141	100	88	66	24	20	85	15
2	58	80	140	155	136	104	92	71	25	20	88	17
3	59	78	140	158	131	110	258	66	31	20	121	17
4	65	80	140	158	129	108	262	62	32	21	125	19
5	68	78	135	176	129	111	174	65	29	21	119	19
6	72	82	135	191	129	110	125	69	30	20	330	22
7	76	78	135	174	125	108	99	60	30	20	155	37
8	85	80	135	179	127	117	99	56	30	807	121	37
9	88	82	135	191	125	134	97	58	28	202	106	37
10	95	87	135	198	125	143	106	50	30	107	77	38
11	72	87	138	176	125	143	113	46	28	73	68	30
12	78	88	138	171	117	136	121	35	31	64	58	29
13	75	99	138	166	119	160	121	41	32	60	49	24
14	77	108	141	166	117	258	119	37	29	42	49	22
15	76	108	138	166	110	218	125	36	28	43	44	23
16	77	106	138	160	106	215	119	35	30	50	40	26
17	74	106	138	160	104	254	123	30	31	64	36	30
18	72	106	134	158	110	305	97	30	31	52	36	26
19	72	123	131	158	110	321	69	31	31	54	30	34
20	71	131	136	158	111	262	66	41	32	309	30	55
21	66	129	134	155	108	352	64	42	30	182	30	60
22	72	129	136	150	104	313	68	48	27	176	29	80
23	77	131	138	166	97	412	69	43	26	143	20	74
24	75	131	136	155	93	293	64	37	26	125	16	72
25	80	134	141	153	100	211	65	31	27	82	18	79
26	85	138	141	145	100	158	64	29	26	57	19	307
27	82	143	138	145	102	134	61	29	31	49	18	233
28	76	138	143	145	100	123	61	27	28	45	17	142
29	75	140	143	143	------	108	65	27	26	51	17	108
30	72	140	143	143	------	99	64	26	22	44	17	92
31	72	------	141	143	------	90	------	25	------	136	15	------
TOTAL	2,309	3,217	4,274	5,005	3,230	5,710	3,118	1,349	861	3,159	1,983	1,809
MEAN	74.5	107	138	161	115	184	104	43.5	28.7	102	64.0	60.3
MAX	95	143	143	198	141	412	262	71	32	807	330	307
MIN	58	75	131	143	93	90	61	25	22	20	15	15
AC-FT	4,580	6,380	8,480	9,930	6,410	11,330	6,180	2,680	1,710	6,270	3,930	3,590

CAL YR 1973 TOTAL 266,166 MEAN 729 MAX 9,990 MIN 36 AC-FT 527,900
WTR YR 1974 TOTAL 36,024 MEAN 98.7 MAX 807 MIN 15 AC-FT 71,450

PEAK DISCHARGE (BASE, 3,000 CFS).--No peak above base.

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.--9 years, 59.8 ft^3/s (1.694 m^3/s), 43,300 acre-ft/yr (53.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 308 ft^3/s (8.72 m^3/s) Jan. 21 (gage height, 4.20 ft or 1.280 m); minimum daily, 12 ft^3/s (0.34 m^3/s) July 1-5.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	18	21	21	14	16	21	16	15	12	15	15
2	16	18	23	24	14	16	21	16	15	12	20	15
3	17	18	22	22	14	17	21	16	15	12	18	15
4	16	19	22	21	14	18	20	16	15	12	16	15
5	17	19	22	31	14	18	19	16	15	12	18	18
6	17	19	22	23	14	17	18	17	15	13	21	17
7	17	18	21	21	14	17	18	16	15	14	27	16
8	17	18	21	24	14	20	17	16	15	14	28	15
9	18	18	21	27	13	22	17	16	14	14	19	15
10	17	18	21	24	15	20	16	16	14	14	16	15
11	17	18	21	21	15	18	18	16	14	14	15	15
12	17	17	21	19	15	18	18	15	14	13	14	15
13	17	18	21	19	15	24	18	15	14	13	14	15
14	17	19	21	19	15	25	17	15	14	14	14	15
15	17	18	21	19	15	21	17	15	14	18	14	15
16	17	18	21	19	15	19	17	15	14	16	14	15
17	17	19	21	19	15	22	17	16	14	17	14	15
18	17	19	21	20	15	22	17	16	14	16	14	16
19	17	19	21	19	15	28	17	16	14	16	14	20
20	17	19	21	19	16	37	17	17	13	17	14	18
21	17	19	20	147	16	45	17	16	13	19	14	17
22	17	20	21	96	16	60	17	16	13	19	14	17
23	17	20	21	29	15	68	17	15	13	17	14	17
24	17	20	20	20	15	61	17	16	13	16	14	17
25	17	20	20	17	14	53	18	15	13	15	14	18
26	17	20	20	16	15	40	18	15	13	15	14	17
27	17	21	20	16	15	32	18	15	13	15	14	17
28	17	21	20	15	16	29	17	15	13	15	15	16
29	17	22	20	14	------	26	17	15	13	15	15	16
30	18	22	20	14	------	24	17	15	13	15	15	16
31	18	------	20	14	------	23	------	15	------	15	15	------
TOTAL	527	572	648	829	413	876	536	485	417	459	497	483
MEAN	17.0	19.1	20.9	26.7	14.8	28.3	17.9	15.6	13.9	14.8	16.0	16.1
MAX	18	22	23	147	16	68	21	17	15	19	28	20
MIN	16	17	20	14	13	16	17	15	13	12	14	15
AC-FT	1,050	1,130	1,290	1,640	819	1,740	1,060	962	827	910	986	958

CAL YR 1973 TOTAL 52,553 MEAN 144 MAX 2,300 MIN 16 AC-FT 104,200
WTR YR 1974 TOTAL 6,742 MEAN 18.5 MAX 147 MIN 12 AC-FT 13,370

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

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.--22 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. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	44	45	46	44	44	41	42	37	46	42	46
2	.04	45	45	45	45	44	41	42	45	47	40	46
3	0	45	45	44	45	44	41	42	45	47	24	46
4	15	45	45	44	45	44	39	42	45	47	44	46
5	42	45	45	42	45	44	41	42	45	46	44	46
6	42	45	45	42	45	44	42	42	45	43	45	46
7	43	45	44	43	45	44	42	.10	45	46	44	45
8	43	45	44	45	45	43	42	20	45	46	44	46
9	43	45	44	45	45	44	42	43	45	46	45	46
10	43	46	44	44	45	44	42	44	45	46	45	46
11	43	46	44	44	44	43	42	44	45	46	45	46
12	43	46	44	44	44	43	42	43	45	46	45	46
13	43	46	44	43	44	43	41	43	45	46	45	46
14	43	47	44	43	44	43	41	43	45	46	45	46
15	44	47	44	43	44	42	41	43	45	46	45	46
16	44	47	43	45	44	42	41	43	46	46	45	46
17	43	47	43	43	44	42	42	43	46	46	45	46
18	43	47	43	42	44	43	42	43	46	37	44	46
19	43	46	43	40	43	43	41	35	46	36	44	46
20	43	46	41	40	43	43	42	44	46	46	42	46
21	43	46	46	28	44	43	42	44	46	46	46	47
22	43	46	46	45	43	43	42	44	46	46	46	47
23	43	46	46	42	44	43	42	41	46	44	46	47
24	44	46	46	45	44	42	42	40	46	44	46	47
25	44	46	45	45	44	43	42	42	45	45	47	47
26	44	46	45	44	43	43	42	42	47	45	46	47
27	44	46	45	45	44	43	42	43	47	45	46	47
28	44	45	45	45	44	43	42	43	47	44	46	47
29	44	45	45	45	------	43	42	43	46	43	46	47
30	44	45	45	44	------	43	42	43	47	44	46	47
31	44	------	44	43	------	42	------	43	------	43	46	------
TOTAL	1,197.04	1,372	1,377	1,338	1,237	1,337	1,248	1,251.10	1,360	1,390	1,369	1,389
MEAN	38.6	45.7	44.4	43.2	44.2	43.1	41.6	40.4	45.3	44.8	44.2	46.3
MAX	44	47	46	46	45	44	42	44	47	47	47	47
MIN	0	44	41	28	43	42	39	.10	37	36	24	45
AC-FT	2,370	2,720	2,730	2,650	2,450	2,650	2,480	2,480	2,700	2,760	2,720	2,760

CAL YR 1973 TOTAL 15,367.04 MEAN 42.1 MAX 47 MIN 0 AC-FT 30,480
WTR YR 1974 TOTAL 15,865.14 MEAN 43.5 MAX 47 MIN 0 AC-FT 31,470

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	29	28			0	29	30	31	28		
2	29	28	28			0	30	30	31	28		
3	29	29	28			0	29	29	25	26		
4	28	29	28			0	30	30	31	27		
5	29	29	28			0	29	30	31	27		
6	29	29	28			0	30	29	31	28		
7	29	28	27			0	29	30	31	28		
8	29	28	28			0	30	29	31	21		
9	29	28	27			0	29	30	31	9.6		
10	29	29	21			0	30	30	31	6.4		
11	29	29	15			0	30	30	31	3.1		
12	29	28	14			0	30	28	25	1.1		
13	29	28	15			0	30	30	28	0		
14	29	28	14			0	29	30	29	0		
15	28	28	14			0	30	30	27	0		
16	29	29	15			0	29	30	29	0		
17	29	29	14			11	29	30	30	0		
18	29	29	15			29	29	30	29	0		
19	28	28	15			30	30	30	29	0		
20	29	28	15			30	29	31	29	0		
21	29	28	17			31	29	31	29	0		
22	28	28	12			29	30	31	28	0		
23	28	28	0			29	30	31	29	0		
24	29	28	0			29	30	31	29	0		
25	29	28	0			29	30	31	29	0		
26	29	28	0			30	30	31	28	0		
27	28	28	0			29	30	31	29	0		
28	28	28	0			30	30	31	28	0		
29	29	28	0		------	29	30	31	28	0		
30	29	25	0		------	29	30	31	29	0		
31	26	------	0		------	30	------	31	------	0		------
TOTAL	888	847	446	0	0	424	889	937	876	233.2	0	0
MEAN	28.6	28.2	14.4	0	0	13.7	29.6	30.2	29.2	7.52	0	0
MAX	29	29	28	0	0	31	30	31	31	28	0	0
MIN	26	25	0	0	0	0	29	28	25	0	0	0
AC-FT	1,760	1,680	885	0	0	841	1,760	1,860	1,740	463	0	0

CAL YR 1973 TOTAL 5,545 MEAN 15.2 MAX 30 MIN 0 AC-FT 11,000
WTR YR 1974 TOTAL 5,540 MEAN 15.2 MAX 31 MIN 0 AC-FT 10,990

09507700. Webber Creek above West Fork Webber Creek, near Pine, Ariz.

LOCATION.--Lat 34°24'40", long 111°22'20", in SW¼ sec.23, T.12 N., R.9 E. (unsurveyed), Gila County, in Tonto National Forest on left bank 0.2 mi (0.3 km) upstream from West Fork and 4.9 mi (7.9 km) northeast of Pine.

DRAINAGE AREA.--4.92 mi^2 (12.74 km^2).

PERIOD OF RECORD.--July 1959 to September 1974 (discontinued).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,589 ft (1,703.5 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 2.50 ft^3/s (0.0708 m^3/s), 1,810 acre-ft/yr (2.23 hm^3/yr); median of yearly mean discharges, 1.8 ft^3/s (0.051 m^3/s), 1,300 acre-ft/yr (1.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 12 ft^3/s (0.34 m^3/s) Jan. 21 (gage height, 1.37 ft or 0.418 m); minimum daily, 0.12 ft^3/s (0.003 m^3/s) June 29 to July 1.
Period of record: Maximum discharge, 1,220 ft^3/s (34.6 m^3/s) Sept. 5, 1970 (gage height, 4.36 ft or 1.329 m), from rating curve extended above 33 ft^3/s (0.93 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 0.10 ft^3/s (0.003 m^3/s) July 14-22, 26, 27, 1963.

REMARKS.--Records good.

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	.21	.25	.36	.44	.97	.94	2.6	.65	.26	.12	.40	.19
2	.23	.25	.41	.44	.98	1.2	3.0	.64	.24	.15	.22	.18
3	.24	.26	.37	.38	.98	1.9	2.7	.60	.23	.18	.18	.21
4	.24	.30	.33	.38	.98	1.8	2.4	.59	.23	.15	.32	.26
5	.26	.30	.32	4.0	.98	1.6	2.1	.57	.22	.15	.52	.23
6	.24	.29	.30	1.8	.98	1.5	2.0	.57	.22	.15	.60	.21
7	.24	.23	.30	.88	.98	1.7	1.9	.56	.22	.38	.52	.20
8	.28	.23	.30	1.6	.96	1.7	1.8	.54	.18	.27	.88	.19
9	.24	.21	.30	2.5	.94	1.6	1.7	.50	.18	.22	.60	.17
10	.25	.21	.32	.98	.93	1.4	1.7	.49	.18	.18	.47	.16
11	.25	.21	.32	.98	.82	1.3	1.6	.49	.18	.18	.43	.16
12	.25	.22	.32	.98	.77	1.3	1.4	.47	.18	.18	.37	.17
13	.25	.22	.32	1.1	.84	1.9	1.4	.47	.18	.18	.33	.18
14	.25	.24	.32	1.2	.86	2.6	1.3	.46	.15	.27	.31	.20
15	.25	.22	.32	1.5	.78	3.2	1.2	.43	.15	.38	.31	.20
16	.25	.24	.32	2.3	.81	4.6	1.2	.42	.15	.15	.28	.18
17	.25	.24	.32	3.4	.87	5.6	1.1	.42	.15	.15	.26	.19
18	.25	.26	.32	3.6	.77	6.0	1.1	.42	.15	.18	.23	.22
19	.25	.48	.32	3.1	.77	5.4	.98	.41	.15	.27	.22	.57
20	.25	.34	.32	3.6	.91	9.3	.95	.41	.15	.22	.21	.37
21	.25	.32	.32	6.6	.79	7.2	.93	.39	.15	.32	.20	.30
22	.25	.48	.32	3.8	.78	6.1	.87	.36	.15	.22	.19	.32
23	.25	.47	.32	2.5	.77	5.2	.84	.36	.15	.30	.23	.31
24	.25	.38	.32	2.1	.80	4.4	.85	.35	.15	.30	.50	1.1
25	.25	.43	.32	1.6	.71	4.0	.83	.33	.18	.30	.38	.59
26	.25	.53	.32	1.4	.71	3.8	.80	.31	.22	.30	.27	.47
27	.25	.41	.32	1.3	.77	3.4	.76	.28	.18	.30	.25	.42
28	.25	.42	.32	1.2	.85	3.2	.74	.28	.15	.30	.23	.39
29	.25	.36	.32	1.1	------	3.2	.69	.27	.12	.30	.21	.36
30	.25	.36	.32	.98	------	3.2	.68	.27	.12	.40	.19	.35
31	.25	------	.32	.98	------	3.0	------	.27	------	.40	.18	------
TOTAL	7.68	9.36	10.03	58.72	24.06	103.24	42.12	13.58	5.32	7.55	10.49	9.05
MEAN	.25	.31	.32	1.89	.86	3.33	1.40	.44	.18	.24	.34	.30
MAX	.28	.53	.41	6.6	.98	9.3	3.0	.65	.26	.40	.88	1.1
MIN	.21	.21	.30	.38	.71	.94	.68	.27	.12	.12	.18	.16
AC-FT	15	19	20	116	48	205	84	27	11	15	21	18

CAL YR 1973 TOTAL 2,239.61 MEAN 6.14 MAX 69 MIN .21 AC-FT 4,440
WTR YR 1974 TOTAL 301.20 MEAN .83 MAX 9.3 MIN .12 AC-FT 597
PEAK DISCHARGE (BASE, 20 CFS).--No peak above base.

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, 802 ft^3/s (22.7 m^3/s) Jan. 21 (gage height, 4.82 ft or 1.469 m; minimum daily, 0.69 ft^3/s (0.020 m^3/s) Sept. 1.
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. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	34	37	13	20	9.9	37	29	24	19	11	.69
2	32	33	36	15	19	9.9	38	29	24	20	34	.83
3	34	35	37	14	18	10	39	29	24	20	57	.79
4	34	35	37	13	17	9.6	36	29	24	20	24	.92
5	34	36	37	35	17	9.6	36	28	21	19	40	5.1
6	34	35	36	30	16	9.2	35	28	23	19	22	6.0
7	35	35	36	23	16	9.5	35	29	23	29	94	7.0
8	35	36	35	41	16	16	35	28	23	31	29	4.7
9	36	35	36	227	16	20	35	27	23	24	16	3.0
10	37	34	35	96	15	20	34	27	22	18	10	2.4
11	38	35	35	49	15	20	35	27	23	9.7	7.6	1.9
12	38	35	28	34	14	20	35	27	22	8.1	6.4	1.6
13	38	35	25	31	14	19	34	26	22	6.2	4.7	1.5
14	37	35	25	33	14	16	34	27	20	5.1	4.1	1.5
15	36	34	24	33	14	16	34	26	22	12	3.6	1.5
16	34	34	24	33	14	15	34	25	22	11	3.3	1.5
17	35	35	24	38	13	14	33	27	21	8.1	3.2	1.4
18	35	36	24	42	13	13	33	26	21	7.6	2.7	1.4
19	35	51	24	40	12	19	32	26	21	23	1.9	1.5
20	35	44	23	36	15	40	33	26	21	35	1.7	2.8
21	34	38	23	274	15	50	34	27	21	38	1.6	7.2
22	34	42	24	237	15	48	32	26	21	40	1.3	7.7
23	34	45	25	86	14	46	32	26	21	18	1.3	7.2
24	34	40	23	52	11	45	32	26	21	11	1.2	4.7
25	34	39	17	39	9.4	43	33	25	21	8.1	1.3	3.8
26	35	40	14	33	9.5	40	32	25	21	7.6	1.3	3.2
27	35	40	13	31	9.8	40	31	25	21	5.3	1.1	3.0
28	35	38	12	28	9.8	39	31	24	20	5.0	1.0	2.8
29	35	37	12	25	------	38	31	23	18	4.6	.94	2.2
30	35	37	13	22	------	38	30	24	18	4.6	.79	2.0
31	35	------	12	22	------	37	------	24	------	5.7	.71	------
TOTAL	1,085	1,118	806	1,725	401.5	779.7	1,015	821	649	492.7	388.74	91.83
MEAN	35.0	37.3	26.0	55.6	14.3	25.2	33.8	26.5	21.6	15.9	12.5	3.06
MAX	38	51	37	274	20	50	39	29	24	40	94	7.7
MIN	32	33	12	13	9.4	9.2	30	23	18	4.6	.71	.69
AC-FT	2,150	2,220	1,600	3,420	796	1,550	2,010	1,630	1,290	977	771	182

CAL YR 1973 TOTAL 51,917.00 MEAN 142 MAX 1,280 MIN 12 AC-FT 103,000
WTR YR 1974 TOTAL 9,373.47 MEAN 25.7 MAX 274 MIN .69 AC-FT 18,590

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1- 9	0900	4.04	370	8-2	2200	3.92	316
1-21	1700	4.82	802				

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.--7 years, 10.5 ft^3/s (0.297 m^3/s), 7,610 acre-ft/yr (9.38 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 744 ft^3/s (21.1 m^3/s) Jan. 9 (gage height, 6.64 ft or 2.024 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 in Part 2 of this report.

REVISIONS.--WRD Ariz. 1970: 1968(M).

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	.07	.32	.55	4.0	.60	1.9	.13				0
2	0	.09	.32	.51	3.5	.60	1.6	.13				0
3	0	.10	.32	.51	3.2	.60	1.4	.13				0
4	0	.11	.32	.51	2.9	.55	1.1	.12				0
5	0	.12	.32	23	2.7	.55	1.1	.12				0
6	0	.13	.32	26	2.2	.55	1.1	.11				0
7	0	.13	.37	13	1.9	.55	.86	.10				0
8	0	.13	.37	120	1.9	1.9	.60	.10				0
9	0	.13	.37	328	1.4	8.8	.60	.09				0
10	0	.13	.41	84	1.4	16	.60	.07				0
11	0	.13	.41	40	1.4	13	.55	.06				0
12	0	.13	.41	24	1.4	13	.55	.05				0
13	0	.13	.41	17	1.1	13	.51	.05				0
14	0	.13	.41	14	1.1	12	.51	.04				0
15	0	.13	.41	12	1.1	11	.46	.02				0
16	0	.13	.46	11	.86	9.6	.46	.01				0
17	0	.18	.46	10	.86	8.2	.41	0				0
18	0	.18	.46	9.9	.86	7.2	.41	0				0
19	0	.32	.46	9.3	.86	6.1	.41	0				0
20	0	.18	.46	8.2	1.1	6.1	.41	0				0
21	0	.22	.46	15	.60	6.9	.36	0				0
22	0	.41	.46	21	.60	6.9	.36	0				0
23	0	.37	.46	13	.86	6.3	.36	0				0
24	.01	.32	.51	9.9	.86	5.8	.36	0				0
25	.02	.32	.51	8.2	.86	5.0	.41	0				0
26	.04	.32	.51	7.2	.86	4.5	.36	0				.01
27	.04	.32	.51	6.6	.60	3.7	.32	0				.08
28	.04	.32	.51	6.1	.60	3.5	.32	0				.09
29	.05	.32	.51	5.3	------	2.9	.27	0				.09
30	.05	.32	.51	4.8	------	2.7	.18	0				.08
31	.05	------	.51	4.5	------	2.2	------	0	------			------
TOTAL	.30	6.02	13.25	853.08	41.58	180.30	18.84	1.33	0	0	0	.35
MEAN	.010	.20	.43	27.5	1.49	5.82	.63	.043	0	0	0	.012
MAX	.05	.41	.51	328	4.0	16	1.9	.13	0	0	0	.09
MIN	0	.07	.32	.51	.60	.55	.18	0	0	0	0	0
AC-FT	.6	12	26	1,690	82	358	37	2.6	0	0	0	.7

CAL YR 1973 TOTAL 7,844.53 MEAN 21.5 MAX 373 MIN 0 AC-FT 15,560
WTR YR 1974 TOTAL 1,115.05 MEAN 3.05 MAX 328 MIN 0 AC-FT 2,210

PEAK DISCHARGE (BASE, 100 CFS).--Jan. 9 (0315) 744 cfs (6.64 ft).

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.--29 years, 473 ft^3/s (13.4 m^3/s), 342,700 acre-ft/yr (423 hm^3/yr); median of yearly mean discharges, 360 ft^3/s (10.2 m^3/s), 261,000 acre-ft/yr (322 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,500 ft^3/s (42.5 m^3/s) Aug. 2 (gage height, 5.80 ft or 1.768 m); minimum daily, 93 ft^3/s (2.63 m^3/s) July 5, 6.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	214	322	263	300	236	244	180	125	100	178	102
2	178	208	316	267	295	238	234	180	117	99	372	102
3	189	214	319	267	288	233	234	180	116	96	446	101
4	178	215	322	277	284	233	330	184	115	95	353	107
5	187	231	314	339	280	238	394	178	117	93	276	107
6	185	234	307	383	269	240	334	182	118	93	298	121
7	184	225	302	345	265	236	278	180	117	99	432	124
8	185	231	300	445	265	252	242	182	118	120	417	126
9	197	229	295	936	265	300	223	168	120	544	348	138
10	201	225	291	591	269	314	223	174	118	348	269	136
11	210	229	300	455	269	314	234	178	120	240	214	131
12	208	231	300	383	267	298	229	170	124	196	184	125
13	197	234	295	353	265	297	240	159	124	165	175	124
14	208	234	293	332	261	316	244	151	121	160	150	128
15	206	246	293	324	267	403	238	151	116	146	139	116
16	201	254	284	319	263	374	244	151	115	135	140	120
17	199	263	280	316	250	353	240	159	110	136	136	125
18	199	265	284	329	248	374	234	148	112	138	126	120
19	195	300	276	334	248	417	229	144	113	146	117	126
20	190	309	273	326	250	446	204	142	110	151	120	139
21	199	312	271	484	259	477	192	154	110	286	116	164
22	194	327	284	920	257	528	185	156	112	344	112	177
23	195	329	280	545	246	510	187	150	107	322	112	180
24	204	329	286	417	242	566	192	154	104	254	129	213
25	214	324	278	366	236	480	197	150	104	238	105	199
26	204	327	275	342	236	405	197	146	107	192	104	227
27	212	332	274	332	238	351	189	144	104	173	111	320
28	214	329	274	324	238	317	187	142	101	148	105	342
29	217	326	271	309	------	286	182	131	104	139	101	284
30	215	324	269	304	------	267	184	128	101	139	100	250
31	206	------	265	298	------	252	------	128	------	151	101	------
TOTAL	6,149	8,050	8,993	12,225	7,320	10,551	6,964	4,924	3,400	5,686	6,086	4,774
MEAN	198	268	290	394	261	340	232	159	113	183	196	159
MAX	217	332	322	936	300	566	394	184	125	544	446	342
MIN	178	208	265	263	236	233	182	128	101	93	100	101
AC-FT	12,200	15,970	17,840	24,250	14,520	20,930	13,810	9,770	6,740	11,280	12,070	9,470

CAL YR 1973 TOTAL 441,872 MEAN 1,211 MAX 10,900 MIN 144 AC-FT 876,500
WTR YR 1974 TOTAL 85,122 MEAN 233 MAX 936 MIN 93 AC-FT 168,800

PEAK DISCHARGE (BASE, 4,000 CFS).--No peak above base.

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 mi^2 (16,019 km^2), 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, 161,700 acre-ft (199 hm^3) Nov. 1; minimum, 71,400 acre-ft (88.0 hm^3) July 7. Period of record: Maximum contents of system, 318,000 acre-ft (392 hm^3) 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 hm^3) divided as follows: Horseshoe Reservoir, 139,200 acre-ft (172 hm^3) 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 hm^3) 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154,500	161,600	141,600	103,100	125,900	74,080	92,350	101,100	99,750	75,120	77,790	74,360
2	154,500	160,100	141,600	103,600	125,200	73,490	92,800	101,200	99,550	74,140	77,460	75,250
3	154,800	158,400	141,300	103,800	124,600	73,610	93,080	101,500	99,240	73,430	78,280	74,170
4	155,000	156,600	140,300	104,600	123,600	74,040	93,810	101,700	97,600	72,720	78,800	74,170
5	155,200	154,200	141,000	105,800	121,900	74,240	94,660	101,800	98,990	72,090	79,220	74,050
6	155,400	151,800	140,600	106,700	120,100	74,450	95,360	102,000	98,900	71,570	79,730	73,990
7	155,600	149,500	140,300	107,600	118,200	74,870	95,940	102,100	98,620	71,660	80,610	74,060
8	155,800	147,100	139,500	108,600	116,400	75,400	96,460	102,200	98,240	71,630	81,300	74,230
9	155,800	145,500	138,400	110,500	114,900	75,920	96,790	102,400	98,150	72,660	81,880	74,450
10	155,900	145,000	137,300	112,400	113,600	76,510	97,240	102,300	97,900	73,220	82,230	74,810
11	156,200	144,500	135,600	113,300	112,100	76,890	97,690	102,500	97,570	73,600	82,500	74,830
12	156,600	143,800	134,000	114,000	110,300	77,320	98,060	102,600	96,850	73,850	82,610	74,930
13	156,900	143,000	132,300	114,700	108,300	77,790	98,450	102,600	95,180	74,010	82,600	74,980
14	157,300	142,200	130,500	115,300	106,400	78,220	98,960	102,600	93,980	74,340	82,250	75,070
15	157,700	141,400	129,000	116,000	104,400	78,760	99,190	102,500	93,520	74,560	81,790	75,060
16	158,000	140,500	127,600	116,600	102,600	76,460	99,640	102,600	93,020	74,740	81,570	75,160
17	158,600	140,100	126,200	117,100	100,600	79,710	99,690	102,900	92,320	74,940	80,600	75,180
18	158,800	140,000	124,200	117,800	98,680	80,150	99,970	103,000	91,290	75,130	80,160	75,270
19	158,800	140,000	122,100	118,400	96,650	80,740	99,890	102,900	89,990	75,500	79,600	75,350
20	159,100	139,800	120,700	119,100	94,320	81,440	99,760	103,000	88,640	75,750	78,700	75,510
21	159,400	140,000	119,700	120,000	92,010	81,980	99,680	102,900	87,280	76,490	77,510	75,680
22	159,600	140,100	118,800	121,700	89,870	83,460	99,600	103,100	86,210	77,030	77,000	75,920
23	159,800	140,500	118,000	122,700	87,830	84,870	99,450	103,200	85,310	77,410	76,720	76,070
24	160,000	140,900	117,600	123,300	85,680	86,370	99,370	103,400	84,360	77,840	76,700	76,320
25	160,100	141,600	117,200	123,800	83,620	87,450	99,600	103,500	83,000	78,210	76,760	76,600
26	160,500	141,500	115,700	124,300	81,130	88,420	99,830	103,700	81,520	78,560	76,530	77,010
27	160,700	141,600	112,100	124,700	78,510	89,210	100,100	103,500	79,740	78,820	76,070	77,500
28	160,900	141,800	108,400	125,200	75,850	89,960	100,400	103,400	77,630	79,050	75,430	78,110
29	161,200	141,900	106,100	125,600	------	90,620	100,600	102,900	76,620	79,120	74,760	78,480
30	161,200	141,800	104,100	126,000	------	91,260	100,900	101,800	75,940	78,760	74,390	78,530
31	161,300	------	103,400	126,400	------	91,830	------	100,200	------	78,530	74,450	------
MAX	161,300	161,600	141,600	126,400	125,900	91,830	100,900	103,700	99,750	79,120	82,610	78,530
MIN	154,500	139,800	103,400	103,100	75,850	73,490	92,350	100,200	75,940	71,570	74,390	73,990
(†)	+7,100	-19,500	-38,400	+23,000	-50,550	+15,980	+9,070	-700	-24,260	+2,590	-4,080	+4,080

CAL YR 1973 MAX 318,000 MIN 103,400 † -199,700
WTR YR 1974 MAX 161,600 MIN 71,570 † -75,670

† 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. 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 Oct. 1, 1973, and at present site and at datum 1.00 ft (0.305 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 Cave 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 (now used as supplementary gage).

AVERAGE DISCHARGE (adjusted for storage in Bartlett and Horseshoe Reservoirs).--86 years, 662 ft^3/s (18.75 m^3/s), 479,600 acre-ft/yr (591 hm^3/yr); median of yearly mean discharge, 550 ft^3/s (15.6 m^3/s), 398,000 acre-ft/yr (491 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,810 ft^3/s (51.3 m^3/s) Feb. 28 (gage height, 3.45 ft or 1.052 m); minimum daily, 13 ft^3/s (0.37 m^3/s) Mar. 28, Apr. 4-10.

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.

1939-74: 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 in Part 2 of this report.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	110	374	424	527	910	14	38	232	479	508	35
2	55	782	333	434	741	173	14	50	137	564	494	56
3	54	1,240	355	462	634	85	14	67	110	499	137	149
4	54	1,200	388	188	815	67	13	67	112	450	56	237
5	52	1,270	456	77	1,200	89	13	69	106	420	56	171
6	52	1,480	520	77	1,320	64	13	91	104	344	58	152
7	51	1,460	520	77	1,280	56	13	100	105	123	59	90
8	51	1,450	703	77	1,280	58	13	93	106	32	61	52
9	51	988	812	77	1,130	58	13	91	107	32	62	52
10	48	418	876	77	1,040	56	13	91	108	32	63	51
11	47	467	1,150	77	1,130	56	22	91	110	32	65	52
12	45	527	1,190	77	1,320	58	32	93	225	52	65	52
13	44	590	1,260	77	1,370	66	31	93	323	46	126	52
14	42	615	1,250	77	1,400	70	30	93	458	25	259	51
15	42	545	1,160	79	1,340	70	30	95	391	25	369	51
16	41	552	1,040	66	1,330	72	30	97	388	25	433	51
17	45	520	1,000	51	1,280	73	113	97	483	21	427	50
18	37	490	1,280	24	1,360	74	239	97	682	20	333	53
19	36	418	1,380	24	1,420	74	239	97	799	20	385	55
20	36	351	1,290	23	1,500	48	236	99	849	19	595	55
21	36	333	1,140	32	1,570	30	236	99	847	19	559	56
22	37	220	1,020	42	1,450	30	236	97	645	18	422	56
23	37	157	892	88	1,410	29	239	97	589	18	326	56
24	57	143	693	90	1,410	27	208	97	621	17	137	56
25	70	127	577	90	1,450	27	87	97	824	16	102	53
26	72	121	1,120	90	1,600	26	35	97	911	16	114	51
27	72	169	1,530	90	1,670	28	35	97	1,070	16	252	51
28	72	200	1,640	90	1,740	13	35	140	1,250	16	372	51
29	72	305	1,650	90	------	14	35	355	626	59	458	52
30	72	398	1,390	94	------	14	35	539	443	249	363	196
31	70	------	717	96	------	14	------	539	------	370	151	------
TOTAL	1,605	17,646	29,706	3,437	35,717	2,549	2,316	3,963	13,761	4,074	7,867	2,245
MEAN	51.8	588	958	111	1,276	82.2	77.2	128	459	131	254	74.8
MAX	72	1,480	1,650	462	1,740	910	239	539	1,250	564	595	237
MIN	36	110	333	23	527	13	13	38	104	16	56	35
AC-FT	3,180	35,000	58,920	6,820	70,840	5,060	4,590	7,860	27,290	8,080	15,600	4,450

CAL YR 1973 TOTAL 562,533.0 MEAN 1,541 MAX 11,200 MIN 3.0 AC-FT 1,116,000
WTR YR 1974 TOTAL 124,886.0 MEAN 342 MAX 1,740 MIN 13 AC-FT 247,700

09510070. West Fork Sycamore Creek above McFarland Canyon, near Sunflower, Ariz.

LOCATION.--Lat 33°57'38", long 111°29'12", in SE¼SW¼ sec.12, T.7 N., R.8 E. (unsurveyed), Maricopa County, in Tonto National Forest, on left bank 0.2 mi (0.3 km) upstream from McFarland Canyon and 6.8 mi (10.9 km) north of Sunflower.

DRAINAGE AREA.--4.58 mi^2 (11.86 km^2).

PERIOD OF RECORD.--October 1965 to September 1974 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,380 ft (1,335 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 0.977 ft^3/s (0.0277 m^3/s), 708 acre-ft/yr (873,000 m^3/yr).

EXTREMES.--Current year: Maximum discharge, 6.6 ft^3/s (0.19 m^3/s) Aug. 5 (gage height, 2.34 ft or 0.713 m); no flow many days.
Period of record: Maximum discharge, 1,700 ft^3/s (48.1 m^3/s) Sept. 5, 1970 (gage height, 5.50 ft or 1.676 m), from rating curve extended above 28 ft^3/s (0.79 m^3/s) on basis of weir and critical-depth measurements at gage height 4.45 ft (1.356 m) and slope-area measurement at gage height 5.50 ft (1.676 m); no flow for many days each year.

REMARKS.--Records good.

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	.01	.01	.03	.07	.32	.16	.42	.14	.02		0	
2	.01	.01	.03	.09	.30	.16	.51	.14	.02		0	
3	.01	.01	.03	.08	.28	.16	.39	.12	.02		0	
4	.01	.01	.03	.08	.25	.15	.35	.11	.02		0	
5	.01	.01	.03	.22	.25	.15	.35	.11	.02		.70	
6	.01	.01	.03	.20	.25	.14	.32	.10	.02		.17	
7	.01	.01	.03	.20	.24	.14	.30	.10	.02		.09	
8	.01	.01	.04	1.7	.22	.38	.28	.10	.02		0	
9	.01	.01	.04	3.5	.22	.42	.25	.09	.02		0	
10	.01	.01	.04	2.0	.22	.37	.25	.09	.02		0	
11	.01	.01	.04	1.7	.22	.32	.24	.08	.02		0	
12	.01	.01	.04	1.3	.22	.30	.22	.08	.02		0	
13	.01	.01	.04	1.1	.20	.28	.22	.07	.02		0	
14	.01	.01	.04	1.1	.19	.25	.20	.07	.01		0	
15	.01	.01	.04	1.2	.19	.39	.20	.06	.01		0	
16	.01	.01	.04	1.3	.19	.54	.19	.06	.01		0	
17	.01	.01	.04	1.2	.19	.54	.19	.05	.01		0	
18	.01	.02	.04	1.2	.19	.51	.17	.05	.01		0	
19	0	.04	.04	1.1	.19	.49	.17	.05	.01		0	
20	0	.02	.04	.93	.20	1.0	.17	.05	.01		0	
21	0	.02	.04	.81	.19	.74	.17	.05	.01		0	
22	0	.06	.04	.71	.19	1.1	.16	.04	0		0	
23	0	.04	.04	.68	.19	1.2	.16	.04	0		0	
24	0	.03	.05	.61	.19	1.1	.16	.04	0		0	
25	0	.03	.05	.54	.17	.98	.16	.04	0		0	
26	0	.03	.05	.51	.16	.81	.16	.03	0		0	
27	0	.03	.05	.46	.16	.71	.15	.03	0		0	
28	0	.03	.05	.42	.16	.64	.15	.03	0		0	
29	0	.03	.05	.37	------	.58	.14	.02	0		0	
30	.01	.03	.05	.35	------	.49	.14	.02	0		0	
31	.01	------	.05	.32	------	.44	------	.02	------		0	------
TOTAL	.20	.58	1.25	26.05	5.94	15.64	6.94	2.08	.34	0	.96	0
MEAN	.007	.019	.040	.84	.21	.50	.23	.067	.011	0	.031	0
MAX	.01	.06	.05	3.5	.32	1.2	.51	.14	.02	0	.70	0
MIN	0	.01	.03	.07	.16	.14	.14	.02	0	0	0	0
AC-FT	.4	1.2	2.5	52	12	31	14	4.1	.7	0	1.9	0

CAL YR 1973 TOTAL 958.52 MEAN 2.63 MAX 29 MIN 0 AC-FT 1,900
WTR YR 1974 TOTAL 59.98 MEAN .16 MAX 3.5 MIN 0 AC-FT 119

PEAK DISCHARGE (BASE, 10 CFS).-- No peak above base.

09510080. West Fork Sycamore Creek near Sunflower, Ariz.

LOCATION.--Lat 33°56'45", long 111°29'05", in SE¼ sec.13, T.7 N., R.8 E. (unsurveyed), Maricopa County, in Tonto National Forest, on right bank 1.2 mi (1.9 km) upstream from confluence with East Fork, and 5.7 mi (9.2 km) north of Sunflower.

DRAINAGE AREA.--9.8 mi^2 (25.4 km^2).

PERIOD OF RECORD.--July 1961 to September 1974 (discontinued). Prior to October 1964, published as Alder Creek near Sunflower.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,000 ft (1,219 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 2.04 ft^3/s (0.0578 m^3/s), 1,480 acre-ft/yr (1.82 hm^3/yr); median of yearly mean discharges, 1.1 ft^3/s (0.031 m^3/s), 800 acre-ft/yr (986,000 m^3/yr).

EXTREMES.--Current year: Maximum discharge, 30 ft^3/s (0.85 m^3/s) Jan. 9 (gage height, 1.43 ft or 0.436 m); no flow many days.
Period of record: Maximum discharge, 3,480 ft^3/s (98.6 m^3/s) Sept. 5, 1970 (gage height, 9.50 ft or 2.896 m), from rating curve extended above 420 ft^3/s (11.9 m^3/s) on basis of slope-area measurements at gage heights 6.75 and 9.50 ft (2.057 and 2.896 m); no flow at times each year.

REMARKS.--Records good.

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	.01	.01	.10	.14	.44	.26	.52	.21	.02	0	.01	
2	.01	.01	.08	.18	.37	.26	.63	.21	.02	0	.01	
3	.01	.01	.08	.18	.37	.26	.52	.19	.02	0	.03	
4	.01	.01	.08	.16	.37	.26	.48	.19	.02	0	.02	
5	.01	.01	.08	1.2	.37	.26	.44	.18	.02	0	.93	
6	.01	.01	.08	.72	.37	.26	.44	.18	.02	0	.70	
7	.01	.02	.09	.63	.34	.26	.40	.16	.02	.01	.80	
8	.01	.02	.10	7.8	.34	.76	.37	.14	.02	.01	.18	
9	.01	.02	.10	17	.34	1.0	.34	.13	.02	0	.10	
10	.01	.02	.10	4.6	.34	.72	.31	.11	.02	0	.08	
11	.01	.02	.10	2.7	.31	.52	.31	.11	.02	0	.06	
12	.01	.02	.10	2.1	.31	.52	.31	.10	.02	0	.05	
13	.01	.02	.10	1.6	.31	.48	.31	.10	.01	0	.04	
14	.01	.02	.10	1.5	.31	.44	.28	.10	.01	0	.03	
15	.01	.02	.11	1.6	.31	.48	.28	.09	.01	.01	.03	
16	.01	.02	.11	1.6	.31	.52	.28	.08	.01	.01	.02	
17	.01	.02	.11	1.6	.31	.52	.26	.08	.01	.01	.02	
18	.01	.03	.11	1.5	.31	.52	.26	.08	.01	.01	.01	
19	.01	.04	.11	1.3	.31	.52	.24	.07	.01	.01	.01	
20	.01	.02	.11	1.2	.37	2.8	.24	.07	.01	.02	.01	
21	.01	.02	.11	1.0	.31	2.2	.24	.06	.01	.01	.01	
22	.01	.17	.11	.84	.31	1.6	.24	.06	.01	.01	.01	
23	.01	.18	.11	.72	.28	1.5	.24	.05	.01	.01	.01	
24	.01	.13	.11	.63	.28	1.3	.24	.05	.01	.01	.01	
25	.01	.10	.11	.63	.26	1.2	.24	.05	.01	.01	.01	
26	.01	.10	.11	.57	.26	.84	.24	.04	0	0	.01	
27	.01	.10	.11	.63	.26	.84	.24	.04	0	0	0	
28	.01	.10	.11	.52	.26	.72	.21	.03	0	0	0	
29	.01	.10	.11	.48	------	.63	.21	.03	0	0	0	
30	.01	.10	.11	.48	------	.63	.21	.03	0	0	0	
31	.01	------	.11	.48	------	.57	------	.03	------	.03	0	------
TOTAL	.31	1.47	3.16	56.29	9.03	23.65	9.53	3.05	.37	.17	3.20	0
MEAN	.010	.049	.10	1.82	.32	.76	.32	.098	.012	.006	.10	0
MAX	.01	.18	.11	17	.44	2.8	.63	.21	.02	.03	.93	0
MIN	.01	.01	.08	.14	.26	.26	.21	.03	0	0	0	0
AC-FT	.6	2.9	6.3	112	18	47	19	6.0	.7	.3	6.3	0

CAL YR 1973 TOTAL 2,268.56 MEAN 6.22 MAX 86 MIN .01 AC-FT 4,500
WTR YR 1974 TOTAL 110.23 MEAN .30 MAX 17 MIN 0 AC-FT 219

PEAK DISCHARGE (BASE, 40 CFS).--No peak above base.

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.--13 years, 0.652 ft^3/s (0.0185 m^3/s), 472 acre-ft/yr (582,000 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, 6.1 ft^3/s (0.17 m^3/s) Jan. 9 (gage height, 1.71 ft or 0.521 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.01	.02	.02	.14	.12	.20	.08	.01	0	0	
2	.01	.01	.02	.02	.13	.12	.30	.07	.01	0	0	
3	.01	.01	.02	.02	.13	.12	.24	.06	0	0	0	
4	.01	.01	.02	.02	.12	.12	.20	.06	0	0	.01	
5	.01	.01	.02	.28	.12	.12	.16	.06	0	0	.01	
6	.01	.01	.02	.09	.13	.12	.16	.06	0	0	.01	
7	.01	.01	.02	.08	.13	.12	.15	.06	0	.01	.02	
8	.01	.01	.02	1.9	.13	.39	.15	.06	0	.01	.01	
9	.01	.01	.02	3.2	.13	.51	.14	.06	0	0	.01	
10	.01	.01	.02	.75	.13	.39	.14	.05	0	0	0	
11	.01	.01	.02	.43	.13	.28	.14	.05	0	0	0	
12	.01	.01	.02	.28	.13	.20	.14	.05	0	0	0	
13	.01	.01	.02	.20	.12	.20	.13	.04	0	0	0	
14	.01	.01	.02	.16	.12	.16	.13	.04	0	0	0	
15	.01	.01	.02	.16	.12	.16	.13	.04	0	.01	0	
16	.01	.01	.02	.16	.12	.16	.12	.04	0	.01	0	
17	.01	.01	.02	.16	.12	.16	.12	.03	0	.01	0	
18	.01	.02	.02	.16	.12	.16	.12	.03	0	.01	0	
19	.01	.03	.02	.15	.12	.20	.11	.03	0	.01	0	
20	.01	.02	.02	.15	.15	.70	.11	.03	0	.01	0	
21	.01	.02	.02	.15	.13	.51	.11	.02	0	.01	0	
22	.01	.05	.02	.15	.13	.43	.11	.02	0	0	0	
23	.01	.02	.02	.14	.12	.39	.11	.02	0	0	0	
24	.01	.02	.02	.14	.12	.32	.11	.02	0	0	0	
25	.01	.02	.02	.13	.12	.28	.11	.02	0	0	0	
26	.01	.02	.02	.13	.12	.24	.11	.02	0	0	0	
27	.01	.02	.02	.14	.12	.24	.10	.01	0	0	0	
28	.01	.02	.02	.14	.12	.24	.10	.01	0	0	0	
29	.01	.02	.02	.13	------	.20	.09	.01	0	0	0	
30	.01	.02	.02	.13	------	.20	.09	.01	0	0	0	
31	.01	------	.02	.13	------	.20	------	.01	------	0	0	------
TOTAL	.31	.47	.62	9.90	3.52	7.76	4.13	1.17	.02	.09	.07	0
MEAN	.010	.016	.020	.32	.13	.25	.14	.038	.0007	.003	.002	0
MAX	.01	.05	.02	3.2	.15	.70	.30	.08	.01	.01	.02	0
MIN	.01	.01	.02	.02	.12	.12	.09	.01	0	0	0	0
AC-FT	.6	.9	1.2	20	7.0	15	8.2	2.3	.04	.2	.1	0

CAL YR 1973 TOTAL 794.71 MEAN 2.18 MAX 30 MIN .01 AC-FT 1,580
WTR YR 1974 TOTAL 28.06 MEAN .077 MAX 3.2 MIN 0 AC-FT 56

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.--13 years, 8.07 ft^3/s (0.229 m^3/s), 5,850 acre-ft/yr (7.21 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, 355 ft^3/s (10.1 m^3/s) Aug. 5 (gage height, 3.09 ft or 0.942 m); minimum daily, 0.02 ft^3/s (0.001 m^3/s) July 5.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.69	.43	1.4	.77	2.7	2.1	2.4	1.6	.42	.04	.57	.23
2	.62	.43	1.5	.77	2.9	2.1	3.2	1.6	.44	.04	.16	.16
3	.57	.47	1.4	.77	2.9	1.7	2.7	1.5	.40	.03	.21	.15
4	.52	.47	1.5	.85	2.8	1.7	2.3	1.5	.41	.03	2.0	.15
5	.47	.57	1.5	2.2	2.8	1.8	2.2	1.4	.42	.02	29	.13
6	.43	.57	1.4	1.1	2.8	1.7	2.2	1.4	.42	.03	.64	.13
7	.38	.57	1.2	.85	3.1	1.7	2.2	1.3	.37	1.2	.38	.12
8	.38	.62	1.2	32	3.1	3.5	2.1	1.2	.38	.08	.22	.11
9	.38	.69	1.2	80	3.1	6.8	2.0	1.2	.37	.06	.24	.11
10	.33	.69	1.4	15	2.9	4.2	2.0	1.1	.36	.06	.24	.11
11	.38	.69	1.2	8.5	2.7	3.2	1.8	1.0	.29	.06	.23	.13
12	.33	.69	1.1	6.3	3.0	2.8	1.9	1.0	.28	.07	.21	.13
13	.33	.62	.97	5.0	3.0	2.7	1.8	1.0	.24	.09	.24	.14
14	.33	.62	.97	4.4	3.0	2.7	2.0	.90	.21	.15	.23	.14
15	.33	.69	.85	2.1	3.0	2.6	2.1	.91	.20	.17	.23	.13
16	.33	.69	.85	3.8	3.1	2.5	2.0	.76	.17	.14	.26	.13
17	.33	.77	.85	4.0	3.0	2.5	2.0	.75	.15	.13	.25	.14
18	.28	1.1	.97	3.6	2.7	2.2	1.9	.70	.15	.14	.24	.16
19	.28	1.4	.85	3.4	2.7	2.3	1.9	.70	.13	.16	.28	.17
20	.28	1.1	.85	3.3	2.8	15	1.9	.70	.12	.16	.28	.17
21	.33	1.2	.85	3.2	2.7	7.4	1.9	.70	.11	.14	.29	.17
22	.33	1.6	.85	3.1	2.7	4.8	1.9	.70	.10	.11	.29	.17
23	.33	1.4	.85	2.8	2.6	4.4	1.9	.64	.09	.09	.31	.17
24	.23	1.2	.85	2.6	2.5	4.1	1.9	.56	.08	.07	.29	.19
25	.28	1.1	.85	2.6	2.2	3.8	1.9	.54	.08	.07	.27	.17
26	.38	1.4	.85	2.7	2.2	3.4	1.8	.52	.08	.07	.26	.19
27	.43	1.4	.77	2.9	2.1	3.0	1.8	.45	.06	.07	.25	.19
28	.43	1.4	.77	2.8	2.1	3.1	1.7	.44	.05	.07	.29	.18
29	.43	1.4	.77	2.7	------	2.9	1.7	.44	.05	.07	.28	.18
30	.47	1.4	.77	2.7	------	2.7	1.7	.45	.04	.07	.31	.18
31	.47	------	.77	2.7	------	2.6	------	.43	------	.16	.30	------
TOTAL	12.08	27.38	32.11	209.51	77.2	108.0	60.8	28.09	6.67	3.85	39.25	4.63
MEAN	.39	.91	1.04	6.76	2.76	3.48	2.03	.91	.22	.12	1.27	.15
MAX	.69	1.6	1.5	80	3.1	15	3.2	1.6	.44	1.2	29	.23
MIN	.23	.43	.77	.77	2.1	1.7	1.7	.43	.04	.02	.16	.11
AC-FT	24	54	64	416	153	214	121	56	13	7.6	78	9.2

CAL YR 1973 TOTAL 8,454.40 MEAN 23.2 MAX 500 MIN .15 AC-FT 16,770
WTR YR 1974 TOTAL 609.57 MEAN 1.67 MAX 80 MIN .02 AC-FT 1,210

PEAK DISCHARGE (BASE, 200 CFS).--Aug. 5 (1400) 355 cfs (3.09 ft).

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.--13 years (1961-74), 20.1 ft^3/s (0.569 m^3/s), 14,560 acre-ft/yr (18.0 hm^3/yr); median of yearly mean discharges, 8.5 ft^3/s (0.24 m^3/s), 6,200 acre-ft/yr (7.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,030 ft^3/s (29.2 m^3/s) Aug. 5 (gage height, 3.35 ft or 1.021 m); minimum daily, 0.07 ft^3/s (0.002 m^3/s) July 29, 30.
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 except those for period of no gage-height record, which are poor.

REVISIONS.--WRD Ariz. 1970: Drainage area.

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	.78	.78	1.0	1.5	5.2	4.2	4.6	1.9	.40	.11	5.0	.16
2	.66	.78	1.0	1.7	5.3	4.2	5.8	1.8	.33	.11	.20	.16
3	.78	.78	1.0	1.3	5.0	4.1	5.3	1.8	.33	.11	9.7	.16
4	.78	.92	1.0	1.3	5.0	3.9	4.9	1.7	.28	.11	4.4	.16
5	.55	1.0	1.0	3.0	5.2	3.9	4.7	1.7	.25	.09	90	.15
6	.55	1.0	1.0	1.7	5.2	4.0	4.4	1.7	.25	.09	30	.16
7	.55	1.0	1.0	1.7	5.0	3.9	4.2	1.5	.25	7.0	19	.16
8	.66	1.0	1.0	11	5.0	5.7	4.2	1.4	.20	4.9	16	.16
9	.92	1.0	1.0	189	5.0	8.0	3.7	1.3	.20	.13	5.0	.16
10	1.1	1.0	1.0	45	5.2	7.9	3.3	1.2	.20	.10	4.1	.16
11	.92	1.0	1.0	24	5.2	6.2	3.6	1.2	.20	.10	2.7	.19
12	.92	1.0	1.0	11	5.2	5.0	3.7	1.1	.20	.10	2.0	.19
13	.92	1.0	1.3	10	5.4	4.8	3.6	1.0	.16	.10	1.5	.19
14	.78	1.0	1.3	7.8	5.5	4.2	3.7	.94	.16	.10	1.5	.19
15	.78	1.0	1.3	6.8	5.6	3.8	3.3	.87	.13	.10	1.3	.22
16	.78	1.0	1.3	6.4	5.5	3.7	3.4	.94	.13	.10	1.0	.21
17	.66	1.0	1.3	6.3	5.4	3.4	3.3	.85	.13	.10	.71	.19
18	.66	1.0	1.3	5.7	5.6	3.4	3.1	.80	.13	.10	.56	.22
19	.66	1.0	1.3	5.5	5.0	3.7	3.0	.75	.13	.10	.48	.23
20	.66	1.0	1.1	5.3	5.0	12	3.1	.70	.13	.10	.32	.17
21	.66	1.0	1.3	5.4	4.9	20	3.1	.65	.13	.10	.24	.16
22	.66	1.0	1.3	4.9	4.7	12	3.1	.60	.13	.10	.20	.17
23	.66	1.0	1.3	4.6	4.4	9.7	2.8	.60	.11	.10	.21	.15
24	.66	1.0	1.3	4.4	4.3	8.5	2.9	.55	.11	.09	.20	.15
25	.66	1.0	1.3	4.4	4.2	7.4	3.1	.50	.09	.07	.17	.15
26	.66	1.0	1.3	4.4	4.5	6.9	2.6	.45	.09	.09	.16	.12
27	.47	1.0	1.3	4.8	4.8	6.1	2.6	.40	.09	.09	.15	.12
28	.47	1.0	1.3	4.5	4.0	5.7	2.5	.33	.09	.09	.16	.12
29	.55	1.0	1.3	4.6	------	5.5	2.2	.33	.09	.07	.16	.11
30	.47	1.0	1.3	4.8	------	4.8	2.0	.33	.11	.07	.15	.10
31	.66	------	1.1	5.2	------	4.8	------	.33	------	12	.13	------
TOTAL	21.65	29.26	36.3	398.0	140.3	191.4	105.8	30.22	5.23	26.62	197.40	4.94
MEAN	.70	.98	1.17	12.8	5.01	6.17	3.53	.97	.17	.86	6.37	.16
MAX	1.1	1.0	1.3	189	5.6	20	5.8	1.9	.40	12	90	.23
MIN	.47	.78	1.0	1.3	4.0	3.4	2.0	.33	.09	.07	.13	.10
AC-FT	43	58	72	789	278	380	210	60	10	53	392	9.8

CAL YR 1973 TOTAL 24,789.55 MEAN 67.9 MAX 1,530 MIN .47 AC-FT 49,170
WTR YR 1974 TOTAL 1,187.12 MEAN 3.25 MAX 189 MIN .07 AC-FT 2,350

PEAK DISCHARGE (BASE, 400 CFS).--Jan. 9 (0645) 521 cfs (2.52 ft); Aug. 5 (1515) 1,030 cfs (3.35 ft).

NOTE.--No gage-height record Nov. 5 to Dec. 12.

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.--13 years, 5.52 ft^3/s (15.63 m^3/s), 399,900 acre-ft/yr (493 hm^3/yr); median of yearly mean discharges, 440 ft^3/s (12.5 m^3/s), 319,000 acre-ft/yr (390 hm^3/yr). The average discharge, 572 ft^3/s, published in WRD Ariz. 1973, was for 12 years, not 11 years as shown.

EXTREMES.--Current year: Maximum discharge, 1,540 ft^3/s (43.6 m^3/s) Feb. 28 (gage height, 4.76 ft or 1.451 m); no flow Apr. 2-15.
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 fair. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	36	370	513	197	1,220	1.4	27	305	423	386	88
2	42	321	327	463	668	473	0	20	149	488	489	42
3	46	1,060	322	479	566	189	0	18	92	448	416	38
4	44	1,110	358	413	663	144	0	29	67	403	160	145
5	41	1,170	411	163	934	124	0	32	61	382	104	142
6	39	1,320	484	129	1,150	110	0	36	52	327	100	128
7	38	1,340	494	113	1,110	84	0	51	48	238	80	94
8	36	1,340	556	115	1,160	75	0	59	48	93	62	55
9	36	1,160	728	106	1,060	78	0	52	48	47	57	29
10	36	552	759	97	968	68	0	51	46	33	51	22
11	35	479	936	92	986	63	0	49	46	22	50	20
12	34	527	1,040	88	1,160	58	0	49	45	16	42	18
13	32	545	1,100	84	1,210	54	0	48	181	14	34	17
14	29	604	1,130	82	1,260	59	0	48	337	32	132	20
15	27	521	1,070	80	1,200	59	0	47	356	25	302	21
16	25	551	1,010	71	1,220	58	3.2	49	300	14	410	21
17	23	514	927	73	1,160	58	7.0	50	372	11	422	21
18	22	510	1,080	56	1,200	58	75	50	500	6.9	365	22
19	17	473	1,230	37	1,250	59	214	50	612	6.3	345	30
20	15	384	1,200	30	1,300	66	230	52	662	54	468	48
21	14	366	1,080	25	1,380	45	239	56	713	28	503	33
22	13	307	993	25	1,300	32	246	55	586	22	410	30
23	13	157	880	44	1,260	28	261	48	522	19	345	30
24	13	115	760	71	1,250	22	276	47	513	15	210	29
25	21	101	568	78	1,270	19	188	42	638	5.4	96	39
26	33	73	839	80	1,380	16	86	41	711	4.6	65	27
27	36	88	1,270	80	1,440	14	55	44	847	4.3	106	25
28	37	115	1,390	82	1,500	15	43	41	1,050	4.1	250	24
29	37	185	1,430	82	------	10	35	153	703	4.1	360	22
30	37	356	1,330	84	------	5.8	30	361	483	33	370	22
31	38	------	870	86	------	3.4	------	475	------	280	238	------
TOTAL	967	16,380	26,942	4,021	31,202	3,367.2	1,989.6	2,230	11,093	3,502.7	7,428	1,302
MEAN	31.2	546	869	130	1,114	109	66.3	71.9	370	113	240	43.4
MAX	58	1,340	1,430	513	1,500	1,220	276	475	1,050	488	503	145
MIN	13	36	322	25	197	3.4	0	18	45	4.1	34	17
AC-FT	1,920	32,490	53,440	7,980	61,890	6,680	3,950	4,420	22,000	6,950	14,730	2,580

CAL YR 1973 TOTAL 581,673.0 MEAN 1,594 MAX 10,700 MIN 13 AC-FT 1,154,000
WTR YR 1974 TOTAL 110,424.5 MEAN 303 MAX 1,500 MIN 0 AC-FT 219,000

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 RECORD.--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.--13 years, 2.87 ft^3/s (0.0813 m^3/s), 2,080 acre-ft/yr (2.56 hm^3/yr); median of yearly mean discharges, 0.38 ft^3/s (0.011 m^3/s) 280 acre-ft/yr (0.35 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9.4 ft^3/s (0.27 m^3/s) July 31 (gage height, 1.01 ft or 0.308 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.

REVISIONS.--WRD Ariz., 1972: 1968, 1970.

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	.30	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	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	.90
19										0	0	.20
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					------					0	0	0
30					------					0	0	0
31		------			------		------		------	.60	0	------
TOTAL	0	0	0	0	0	0	0	0	0	.60	.30	1.10
MEAN	0	0	0	0	0	0	0	0	0	.019	.010	.037
MAX	0	0	0	0	0	0	0	0	0	.60	.30	.90
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	1.2	.6	2.2

CAL YR 1973 TOTAL 15.30 MEAN .042 MAX 5.8 MIN 0 AC-FT 30
WTR YR 1974 TOTAL 2.00 MEAN .005 MAX .90 MIN 0 AC-FT 4.0

PEAK DISCHARGE (BASE, 20 CFS).--No peak above base.

NOTE.--No gage-height record Oct. 18 to Dec. 26.

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.--13 years, 0.012 ft^3/s (0.0003 m^3/s), 8.7 acre-ft/yr (10,700 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, 114 ft^3/s (3.23 m^3/s) Mar. 20 (gage height, 4.83 ft or 1.472 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 1973 TO SEPTEMBER 1974

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				0		
7						0				0		
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						2.3				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	------		------	.07		------
TOTAL	0	0	0	0	0	2.3	0	0	0	.07	0	0
MEAN	0	0	0	0	0	.074	0	0	0	.002	0	0
MAX	0	0	0	0	0	2.3	0	0	0	.07	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	4.6	0	0	0	.1	0	0

CAL YR 1973 TOTAL 0 MEAN 0 MAX 0 MIN 0 AC-FT 0
WTR YR 1974 TOTAL 2.37 MEAN .007 MAX 2.3 MIN 0 AC-FT 4.7

PEAK DISCHARGE (BASE, 20 CFS).-- Mar. 20 (0700) 114 cfs (4.83 ft).

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. Prior to July 31, 1974, at site 60 ft (18 m) upstream.

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.--17 years, 3.18 ft^3/s (0.0901 m^3/s), 2,300 acre-ft/yr (2.84 hm^3/yr); median of yearly mean discharges, 1.3 ft^3/s (0.037 m^3/s), 940 acre-ft/yr (1.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,460 ft^3/s (98.0 m^3/s) Aug. 5 (gage height, 9.3 ft or 2.83 m, from profile past gage) from rating curve extended above 170 ft^3/s (4.8 m^3/s) on basis of slope-area measurement at gage height 9.3 ft (2.83 m); 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 1973 TO SEPTEMBER 1974

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	230	
6										0	0	
7										0	0	
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										0	0	
29					------					0	0	
30					------					0	0	
31		------			------		------		------	.30	0	------
TOTAL	0	0	0	0	0	0	0	0	0	.30	230	0
MEAN	0	0	0	0	0	0	0	0	0	.010	7.42	0
MAX	0	0	0	0	0	0	0	0	0	.30	230	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	.6	456	0

CAL YR 1973 TOTAL 1,493.70 MEAN 4.09 MAX 296 MIN 0 AC-FT 2,960
WTR YR 1974 TOTAL 230.30 MEAN .63 MAX 230 MIN 0 AC-FT 457

NOTE.--No gage-height record Feb. 7 to July 30.

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) dowstream 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.--34 years (unadjusted for diversions to Perry Canal), 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, 12 ft^3/s (0.34 m^3/s), 8,700 acre-ft/yr (11 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 740 ft^3/s (21.0 m^3/s) July 20 (gage height, 4.49 ft or 1.369 m); minimum daily, 0.40 ft^3/s (0.011 m^3/s) Sept. 28-30.
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 estimated at 1.7 ft^3/s (0.048 m^3/s) Mar. 19, 1.5 ft^3/s (0.042 m^3/s) Apr. 16, and measured at 0.80 ft^3/s (0.023 m^3/s) May 14.

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	1.0	1.1	3.3	3.9	5.4	1.5	.80	.70	.70	.60	.70	11
2	1.0	1.2	3.3	3.9	5.4	1.5	.80	.70	.70	.60	40	1.2
3	1.0	1.5	3.9	3.9	5.4	1.5	.80	.70	.70	.60	1.0	.70
4	.90	1.5	3.6	3.9	5.0	1.5	.80	.70	.70	.60	.80	.70
5	.80	1.5	3.3	11	5.0	1.4	.80	.70	.70	.60	.70	.70
6	.70	1.5	3.6	5.8	5.0	1.4	.80	.70	.70	.60	15	12
7	.70	1.5	3.3	5.8	4.6	1.4	.80	.70	.70	.60	1.0	1.2
8	.60	1.9	3.0	8.3	4.6	1.5	.80	.70	.70	.60	.90	.70
9	.60	1.9	2.8	8.8	4.6	1.4	.80	.70	.70	.60	.80	.70
10	.60	1.9	3.0	6.8	5.0	1.2	.70	.70	.70	.60	.70	.70
11	.70	2.3	3.3	6.3	5.0	1.4	.70	.70	.70	.60	.70	.70
12	.60	2.3	3.6	5.8	5.0	1.2	.70	.70	.70	.60	.70	.70
13	.60	2.5	3.6	5.8	5.0	1.2	.70	.70	.70	.60	.70	.70
14	.50	2.5	3.6	5.8	5.0	1.2	.70	.70	.70	.60	.70	3.0
15	.50	2.5	3.3	5.8	4.2	1.1	.70	.70	.70	.60	.70	1.5
16	.50	2.3	3.3	5.8	4.0	1.1	.70	.70	.70	.60	.70	.90
17	.50	2.3	3.6	5.8	3.9	1.1	.70	.70	.70	.60	.70	.90
18	.50	2.3	3.6	5.8	3.3	1.0	.70	.70	.70	29	.70	.90
19	.50	2.8	3.6	5.8	1.9	1.0	.70	.60	.70	25	.60	1.0
20	.60	2.5	3.3	6.3	1.9	1.0	.70	.60	.70	80	.60	.90
21	.60	2.5	3.0	6.3	2.1	1.0	.70	.50	.70	140	.60	.80
22	.60	2.8	2.8	6.3	1.9	1.0	.70	.50	.70	.70	.60	.70
23	.60	2.8	2.5	6.3	1.9	.90	.70	.50	.70	.70	.60	.60
24	.70	2.5	2.5	6.3	1.9	.90	.70	.50	.70	.70	11	1.4
25	.70	2.8	2.8	6.3	1.9	.90	.70	.50	.70	.70	7.1	.70
26	.70	3.0	3.0	6.8	1.7	.80	.70	.50	.70	.70	.80	1.9
27	.70	3.0	3.3	6.8	1.7	.80	.70	.50	.70	.70	.70	.80
28	.70	2.8	3.9	6.3	1.7	.80	.70	.50	.70	10	.70	.40
29	.90	3.0	4.2	5.8	------	.80	.70	.70	.60	5.0	.70	.40
30	1.0	3.0	4.2	5.4	------	.80	.70	.70	.60	15	.70	.40
31	1.1	------	3.9	5.4	------	.80	------	.70	------	2.5	.70	------
TOTAL	21.70	68.0	104.0	189.1	104.0	35.10	21.90	19.90	20.80	320.90	92.60	48.90
MEAN	.70	2.27	3.35	6.10	3.71	1.13	.73	.64	.69	10.4	2.99	1.63
MAX	1.1	3.0	4.2	11	5.4	1.5	.80	.70	.70	140	40	12
MIN	.50	1.1	2.5	3.9	1.7	.80	.70	.50	.60	.60	.60	.40
AC-FT	43	135	206	375	206	70	43	39	41	637	184	97

CAL YR 1973 TOTAL 15,809.70 MEAN 43.3 MAX 1,190 MIN .50 AC-FT 31,360
WTR YR 1974 TOTAL 1,046.90 MEAN 2.87 MAX 140 MIN .40 AC-FT 2,080

PEAK DISCHARGE (BASE, 2,300 CFS).-- No peak above base.

09512800. Agua Fria River near Rock Springs, Ariz.

LOCATION.--Lat 34°00'50", long 112°10'02", in NW¼NW¼ sec.28, T.8 N., R.2 E., Maricopa County, on left bank 2.5 mi (4.0 km) southwest of Rock Springs and 10 mi (16 km) upstream from Lake Pleasant.

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).

GAGE.--Water-stage recorder. Altitude of gage is 1,800 ft (549 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,900 ft^3/s (53.8 m^3/s) Aug. 2 (gage height, 2.46 ft or 0.750 m); no flow for many days.
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, from profile past gage), from rating curve extended above 21,000 ft^3/s (590 m^3/s) on basis of slope-area measurement of peak flow; no flow at times in each year except 1973.

REMARKS.--Records poor.

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

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October	-	-	0.6	40
November	-	-	.8	50
December	-	-	1.2	80
CAL YR 1973	3,820	-	155	112,300
January	-	-	1.6	100
February	-	-	1.4	80
March	-	-	4.2	260
April	-	-	1.3	80
May	-	-	.1	6.0
June	-	0	0	0
July	-	0	4.8	300
August	160	-	7.7	480
September	-	0	.4	24
WTR YR 1974	160	0	2.1	1,500

PEAK DISCHARGE (BASE, 1,800 CFS).--Aug. 2 (1730) 1,900 cfs (2.46 ft).

NOTE.--No gage-height record for entire year except for part of Aug. 2 (monthly mean discharges are estimated on basis of nine discharge measurements, records for upstream station, and computed daily inflow to Lake Pleasant).

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.--46 years (1914-19, 1933-74), 81.8 ft^3/s (2.317 m^3/s), 59,260 acre-ft/yr (73.1 hm^3/yr); median of yearly mean discharges, 40 ft^3/s (1.13 m^3/s), 29,000 acre-ft/yr (36 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 1973 TO SEPTEMBER 1974

Month	Inflow to Lake Pleasant		Diversions in acre-feet	Spill in acre-feet
	Mean (cfs)	Runoff in acre-feet		
October	3.04	187	69	0
November	0	0	0	0
December	0	0	0	0
CAL YR 1973	156	112,700	52,640	0
January	9.47	582	0	0
February	3.73	207	91	0
March	19.7	1,210	4,400	0
April	20.0	1,190	4,720	0
May	24.1	1,480	3,860	0
June	28.1	1,670	7,000	0
July	45.5	2,800	10,190	0
August	53.5	3,290	11,460	0
September	17.1	1,020	6,350	0
WTR YR 1974	18.8	13,640	48,140	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 mi² (3,779 km²).

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, 109,600 acre-ft (135 hm³) Oct. 1 (gage height, 154.87 ft or 47.204 m); minimum, 57,370 acre-ft (70.7 hm³) Sept. 30 (gage height, 131.66 ft or 40.130 m).
Period of record: Maximum contents, 178,500 acre-ft (220 hm³) Apr. 19, 1941, of which 500 acre-ft (616,000 m³) 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 hm³), of which 86,870 acre-ft (107 hm³) 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 hm³) 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)

130	54,440	150	96,660
140	73,530	160	124,500

CONTENTS, IN ACRE-FEET, AT 1700, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109,600	107,700	106,600	105,600	105,800	104,800	100,700	95,320	90,600	82,460	73,470	63,350
2	109,500	107,700	106,600	105,600	105,700	104,800	100,400	95,140	90,410	82,050	73,030	62,860
3	109,400	107,700	106,600	105,600	105,700	104,800	100,200	94,970	90,190	81,640	73,180	62,560
4	109,400	107,600	106,500	105,600	105,600	104,700	100,100	94,770	90,000	81,310	73,030	62,140
5	109,400	107,600	106,500	105,700	105,600	104,600	99,880	94,590	89,830	80,990	73,100	61,730
6	109,200	107,500	106,400	105,700	105,600	104,500	99,640	94,370	89,610	80,630	73,010	61,390
7	109,200	107,500	106,400	105,700	105,600	104,400	99,430	94,120	89,390	80,280	72,870	61,060
8	109,100	107,400	106,300	105,800	105,600	104,300	99,270	93,940	89,150	79,900	72,580	60,650
9	109,000	107,400	106,300	106,100	105,500	104,300	99,040	93,820	88,940	79,610	72,290	60,230
10	108,900	107,400	106,300	106,300	105,500	104,200	98,760	93,720	88,770	79,320	71,940	59,880
11	108,900	107,300	106,300	106,300	105,400	104,000	98,600	93,700	88,580	79,060	71,590	59,550
12	108,800	107,300	106,200	106,300	105,400	103,900	98,400	93,620	88,340	78,720	71,280	59,180
13	108,800	107,300	106,200	106,200	105,300	103,700	98,290	93,550	88,080	78,420	70,990	58,820
14	108,700	107,200	106,200	106,300	105,300	103,600	98,060	93,500	87,820	78,180	70,480	58,430
15	108,600	107,200	106,100	106,200	105,300	103,500	97,940	93,440	87,480	77,940	70,090	58,110
16	108,600	107,200	106,100	106,200	105,300	103,400	97,780	93,370	87,230	77,630	69,720	58,050
17	108,600	107,100	106,100	106,200	105,300	103,200	97,550	93,200	86,940	77,300	69,420	57,910
18	108,500	107,000	106,100	106,200	105,200	103,000	97,400	93,000	86,590	76,980	69,040	57,800
19	108,500	107,100	106,000	106,100	105,200	102,800	97,200	92,780	86,280	77,520	68,640	57,710
20	108,400	107,000	105,900	106,100	105,200	102,800	96,960	92,630	86,000	77,420	68,200	57,680
21	108,400	107,000	105,900	106,100	105,200	102,600	96,740	92,430	85,680	77,130	67,780	57,640
22	108,300	107,000	105,900	106,100	105,100	102,500	96,580	92,210	85,400	76,890	67,320	57,580
23	108,300	106,900	105,900	106,100	105,100	102,300	96,540	92,040	85,070	76,550	66,970	57,550
24	108,300	106,900	105,800	106,000	105,000	102,200	96,410	91,920	84,770	76,200	66,520	57,520
25	108,200	106,900	105,800	106,000	104,900	102,000	96,250	91,820	84,420	75,820	66,090	57,500
26	108,100	106,900	105,800	106,000	104,900	101,800	96,100	91,670	84,150	75,410	65,720	57,460
27	108,100	106,900	105,700	105,900	104,800	101,600	95,930	91,550	83,800	75,110	65,320	57,480
28	108,000	106,800	105,700	105,900	104,900	101,500	95,780	91,380	83,440	74,770	64,920	57,460
29	108,000	106,700	105,700	105,800	------	101,300	95,650	91,210	83,090	74,390	64,540	57,410
30	107,900	106,700	105,600	105,800	------	101,100	95,470	90,990	82,780	74,060	64,080	57,370
31	107,800	------	105,600	105,800	------	100,900	------	90,770	------	73,720	63,730	------
MAX	109,600	107,700	106,600	106,300	105,800	104,800	100,700	95,320	90,600	82,460	73,470	63,350
MIN	107,800	106,700	105,600	105,600	104,800	100,900	95,470	90,770	82,780	73,720	63,730	57,370
(†)	154.21	153.81	153.41	153.49	153.12	151.64	149.53	147.63	144.23	140.09	135.10	131.66
(‡)	-1,900	-1,100	-1,100	+200	-1,000	-3,900	-5,430	-4,700	-7,990	-9,060	-9,990	-6,360

CAL YR 1973 MAX 157,200 MIN 67,920 ‡ +38,060
WTR YR 1974 MAX 109,600 MIN 57,370 ‡ -52,330

† 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.--9 years, 8.38 ft^3/s (0.237 m^3/s), 6,070 acre-ft/yr (7.48 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 68 ft^3/s (1.93 m^3/s) Aug. 5 (gage height, 1.62 ft or 0.494 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 (10.8 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	.40	.40	.20				0	
2				0	.40	.40	.40				0	
3				0	.40	.40	.30				0	
4				0	.40	.40	.10				0	
5				0	.40	.40	.10				8.9	
6				0	.40	.50	.10				5.9	
7				0	.40	.50	.10				0	
8				0	.40	.70	.10				0	
9				14	.40	1.0	.10				0	
10				6.4	.30	1.6	.10				0	
11				1.6	.30	.70	.10				0	
12				.70	.30	.70	.10				0	
13				.50	.30	.60	.10				0	
14				.20	.30	.60	.10				0	
15				.20	.30	.60	.10				0	
16				.20	.30	.60	.10				0	
17				.30	.20	.60	.10				0	
18				.40	.20	.60	.10				0	
19				.50	.20	.60	.10				0	
20				.50	.20	1.0	.10				0	
21				.60	.20	2.8	.10				0	
22				.80	.20	2.2	0				0	
23				.70	.20	.90	0				0	
24				.70	.30	.80	0				0	
25				.60	.40	.70	0				0	
26				.60	.40	.60	0				0	
27				.50	.40	.60	0				0	
28				.50	.40	.50	0				0	
29				.40	------	.50	0				0	
30				.40	------	.30	0				0	
31		------		.40	------	.30	------		------		0	------
TOTAL	0	0	0	31.70	9.00	23.10	2.70	0	0	0	14.8	0
MEAN	0	0	0	1.02	.32	.75	.090	0	0	0	.48	0
MAX	0	0	0	14	.40	2.8	.40	0	0	0	8.9	0
MIN	0	0	0	0	.20	.30	0	0	0	0	0	0
AC-FT	0	0	0	63	18	46	5.4	0	0	0	29	0

CAL YR 1973 TOTAL 5,952.70 MEAN 16.3 MAX 409 MIN 0 AC-FT 11,810
WTR YR 1974 TOTAL 81.30 MEAN .22 MAX 14 MIN 0 AC-FT 161

PEAK DISCHARGE (BASE, 200 CFS).--No peak above base.

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.--13 years (1961-74), 7.62 ft^3/s (0.216 m^3/s), 5,520 acre-ft/yr (6.81 hm^3/yr); median of yearly mean discharges, 4.1 ft^3/s (0.12 m^3/s), 3,000 acre-ft/yr (3.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 49 ft^3/s (1.39 m^3/s) Aug. 5 (gage height, 3.09 ft or 0.942 m); maximum gage height, 4.67 ft or 1.423 m Jan. 5 (backwater from temporary dam downstream); 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 poor. 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 1973 TO SEPTEMBER 1974

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				1.0							2.2	
6				0							0	
7				0							0	
8				0							0	
9				.20							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				0							0	
29				0	------						0	
30				0	------						0	
31		------		0	------		------		------		0	------
TOTAL	0	0	0	1.20	0	0	0	0	0	0	2.2	0
MEAN	0	0	0	.039	0	0	0	0	0	0	.071	0
MAX	0	0	0	1.0	0	0	0	0	0	0	2.2	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	2.4	0	0	0	0	0	0	4.4	0

CAL YR 1973 TOTAL 7,018.30 MEAN 19.2 MAX 496 MIN 0 AC-FT 13,920
WTR YR 1974 TOTAL 3.40 MEAN 0.009 MAX 2.2 MIN 0 AC-FT 6.7

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

NOTE.--No gage-height record Apr. 13 to May 14, June 14 to July 10.

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 sea 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.--7 years, 6.65 ft^3/s (0.188 m^3/s), 4,820 acre-ft/yr (5.94 hm^3/yr).

EXTREMES.--Current year: No flow for entire 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.--No flow since Apr. 5, 1973. Figures of discharge for calendar year 1973 are as follows: Total, 4,479.80 ft^3/s-days; mean, 12.3 ft^3/s; maximum, 745 ft^3/s; minimum, 0; runoff, 8,890 acre-ft.

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.--7 years, 1.57 ft^3/s (0.0445 m^3/s), 1,140 acre-ft/yr (1.41 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 300 ft^3/s (8.50 m^3/s) July 21 (gage height, 8.00 ft or 2.438 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 (176 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	5.6	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	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	.40
20										0	0	0
21										9.7	0	0
22										2.0	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					------					0	0	0
30					------					0	0	0
31		------			------		------		------	11	0	------
TOTAL	0	0	0	0	0	0	0	0	0	22.7	5.6	.40
MEAN	0	0	0	0	0	0	0	0	0	.73	.18	.013
MAX	0	0	0	0	0	0	0	0	0	11	5.6	.40
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	45	11	.8

CAL YR 1973 TOTAL 56.80 MEAN .16 MAX 23 MIN 0 AC-FT 113
WTR YR 1974 TOTAL 28.70 MEAN .079 MAX 11 MIN 0 AC-FT 57

PEAK DISCHARGE (BASE, 100 CFS).--July 21 (1845) 300 cfs (8.00 ft); July 31 (2230) 198 cfs (7.64 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 (annual maximums only), October 1967 to September 1972; water year 1973 (annual maximum only), October 1973 to September 1974.

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.--6 years (1968-72, 1973-74), 5.72 ft^3/s (0.162 m^3/s), 4,140 acre-ft/yr (5.10 hm^3/yr).

EXTREMES.--Water year 1973: Maximum discharge about 5,000 ft^3/s (140 m^3/s) Oct. 7, 1972 (gage height, 10.36 ft or 3.158 m).
Water year 1974: 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 Trilby Wash may enter Agua Fria River basin above station; this amount generally is negligible.

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.--28 years (1946-74), 14.8 ft^3/s (0.419 m^3/s), 10,720 acre-ft/yr (13.2 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, 5,560 ft^3/s (157 m^3/s) July 20 (gage height, 10.1 ft or 3.078 m, from high-water marks in gage well and recorded range-in-stage); minimum daily, 0.50 ft^3/s (0.014 m^3/s) Sept. 25, 26, 29, 30.
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.1	1.9	2.1	2.6	4.3	3.5	2.5	2.0	1.8	1.5	1.0
2	2.1	2.1	1.9	2.1	2.9	3.9	3.5	2.3	2.0	1.8	1.5	1.0
3	2.1	1.9	1.9	2.1	3.2	3.9	3.5	2.3	2.0	1.8	1.5	14
4	1.9	1.9	1.9	2.1	3.2	3.9	3.5	2.3	1.9	1.8	1.5	10
5	1.9	2.1	1.9	5.5	3.2	3.6	3.5	2.3	1.9	1.8	300	1.2
6	1.9	2.1	1.9	4.7	3.2	3.2	3.5	2.3	1.9	1.8	220	3.0
7	1.9	1.9	1.9	3.2	3.6	3.2	3.5	2.3	1.9	1.8	10	1.2
8	2.1	2.1	1.9	6.9	3.9	3.2	3.5	2.3	1.9	1.8	2.1	1.0
9	2.1	2.1	1.9	25	4.3	3.2	3.5	2.3	1.9	1.8	1.9	1.0
10	2.1	1.9	1.9	16	4.3	3.2	3.5	2.3	1.9	1.8	1.7	.90
11	1.9	1.9	1.9	9.7	4.7	3.2	3.0	2.3	1.9	1.8	1.3	.90
12	2.1	1.7	1.9	6.0	4.3	3.2	3.0	2.3	1.9	1.8	1.0	.90
13	1.9	1.7	1.9	4.3	4.7	3.3	3.0	2.2	1.9	1.8	1.0	.90
14	1.9	1.9	1.9	4.7	4.3	3.3	3.0	2.2	1.9	1.8	1.0	.80
15	1.9	1.9	1.9	3.9	4.3	3.3	3.0	2.2	1.9	1.8	1.0	.80
16	1.9	1.9	1.9	3.9	4.7	3.3	3.0	2.2	1.9	1.8	1.0	5.0
17	1.9	1.9	1.9	3.9	4.7	3.3	3.0	2.2	1.8	1.8	1.1	1.0
18	1.9	1.9	1.9	3.9	4.7	3.3	3.0	2.2	1.8	1.8	1.3	.80
19	2.1	1.9	1.9	3.9	5.1	3.4	3.0	2.2	1.8	1.8	1.3	.80
20	2.1	1.9	2.1	3.9	5.1	3.4	3.0	2.1	1.8	700	1.5	.80
21	2.3	1.9	2.1	3.9	5.1	3.4	2.5	2.1	1.8	130	1.5	.70
22	2.1	1.9	2.1	3.6	6.0	3.4	2.5	2.1	1.8	5.0	1.5	.70
23	2.1	1.9	2.1	3.9	6.0	3.4	2.5	2.1	1.8	2.0	1.5	.60
24	2.1	1.9	2.1	3.6	6.0	3.4	2.5	2.1	1.8	2.0	1.5	.60
25	2.1	1.9	2.1	3.2	6.0	3.4	2.5	2.1	1.8	2.0	1.7	.50
26	2.3	1.9	2.1	3.2	5.5	3.5	2.5	2.1	1.8	1.5	1.5	.50
27	2.1	1.9	2.1	3.2	4.7	3.5	2.5	2.1	1.8	1.5	1.3	15
28	1.9	1.9	2.1	3.2	4.3	3.5	2.5	2.1	1.8	1.5	1.5	1.0
29	1.9	1.9	2.1	2.9	------	3.5	2.5	2.0	1.8	1.5	1.5	.50
30	1.9	1.9	2.1	2.6	------	3.5	2.5	2.0	1.8	1.5	1.1	.50
31	1.9	------	2.1	2.6	------	3.5	------	2.0	------	1.5	1.1	------
TOTAL	62.5	57.8	61.3	153.7	124.6	106.6	90.0	68.1	55.9	884.2	568.9	67.60
MEAN	2.02	1.93	1.98	4.96	4.45	3.44	3.00	2.20	1.86	28.5	18.4	2.25
MAX	2.3	2.1	2.1	25	6.0	4.3	3.5	2.5	2.0	700	300	15
MIN	1.9	1.7	1.9	2.1	2.6	3.2	2.5	2.0	1.8	1.5	1.0	.50
AC-FT	124	115	122	305	247	211	179	135	111	1,750	1,130	134

CAL YR 1973 TOTAL 27,778.5 MEAN 76.1 MAX 846 MIN 1.1 AC-FT 55,100
WTR YR 1974 TOTAL 2,301.20 MEAN 6.30 MAX 700 MIN .50 AC-FT 4,560

PEAK DISCHARGE (BASE, 500 CFS).--July 20 (time unknown) 5,560 cfs (10.1 ft); Aug. 5 (time unknown) 2,480 cfs (8.4 ft). Peak gage heights were from high-water marks in gage well or from recorded range-in-stage.

NOTE.--No gage-height record Mar. 7 to Apr. 30, May 5 to June 3, June 7 to Aug. 6 (staff-gage readings were made Apr. 1 and July 1).

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.--13 years, 3.53 ft^3/s (0.100 m^3/s), 2,560 acre-ft/yr (3.16 hm^3/yr); median of yearly mean discharges, 2.0 ft^3/s (0.057 m^3/s), 1,400 acre-ft/yr (1.73 hm^3/yr).

EXTREMES.--Current year: Maximum discharge,105 ft^3/s (2.97 m^3/s) Aug. 4 (gage height, 2.93 ft or 0.893 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											0	
2											1.8	
3											0	
4											23	
5											29	
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		------			------		------		------		0	------
TOTAL	0	0	0	0	0	0	0	0	0	0	53.8	0
MEAN	0	0	0	0	0	0	0	0	0	0	1.74	0
MAX	0	0	0	0	0	0	0	0	0	0	29	0
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	107	0

CAL YR 1973 TOTAL 750.00 MEAN 2.05 MAX 750 MIN 0 AC-FT 1,490
WTR YR 1974 TOTAL 53.80 MEAN .15 MAX 29 MIN 0 AC-FT 107

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 September 1939 (monthly discharge only published in WSP 1313), October 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 1974. 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 1974 (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 to September 1974 (since October 1941, monthly discharge only).

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 apron of dam.

AVERAGE DISCHARGE.--39 years, 183 ft^3/s (5.183 m^3/s), 132,600 acre-ft/yr (163 hm^3/yr); median of yearly mean discharges, 71 ft^3/s (2.01 m^3/s), 51,400 acre-ft/yr (63 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 74 ft^3/s (2.09 m^3/s) Apr. 3; minimum daily, 10 ft^3/s (0.28 m^3/s) Aug. 19.
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 poor prior to April and good thereafter. 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 on following page). For period October to March, 10 ft^3/s (0.28 m^3/s) per day was added prior to obtaining the Enterprise Canal record.
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).

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	20	25	30	40	50	60	72	46	28	23	22	29
2	20	25	30	40	50	60	72	51	28	22	46	31
3	20	25	30	40	50	60	74	59	28	27	30	39
4	20	25	30	40	50	60	71	57	29	35	41	34
5	20	25	30	40	50	60	69	57	31	27	57	31
6	20	25	30	40	50	60	65	57	31	24	50	31
7	20	25	30	40	50	60	59	57	32	27	56	31
8	20	25	30	40	50	60	58	52	36	30	46	36
9	20	25	30	40	50	60	59	52	32	34	35	51
10	20	25	30	40	50	60	62	52	42	28	24	55
11	20	25	30	40	50	60	58	52	43	28	30	30
12	20	25	30	40	50	65	52	52	42	34	38	23
13	20	25	30	40	50	65	45	53	36	32	36	23
14	20	25	30	40	50	65	49	43	35	27	28	27
15	20	25	30	40	50	65	47	43	34	25	28	30
16	20	25	30	40	50	64	46	42	40	23	27	41
17	20	25	30	40	50	64	48	42	40	26	25	60
18	20	25	30	40	50	64	50	43	38	24	21	45
19	20	25	30	40	50	65	51	43	24	22	10	50
20	20	25	30	40	50	66	49	43	23	24	20	49
21	20	25	30	40	50	67	47	34	24	26	24	47
22	20	25	30	40	50	66	46	34	27	26	23	48
23	20	25	30	40	50	66	46	34	30	23	29	44
24	20	25	30	40	50	66	44	34	26	25	24	42
25	20	25	30	40	50	66	43	34	19	22	28	35
26	20	25	30	40	50	66	43	36	26	27	27	31
27	20	25	30	40	50	66	45	37	24	30	29	40
28	20	25	30	40	50	66	48	37	25	28	25	49
29	20	25	30	40	------	66	49	37	29	33	28	49
30	20	25	30	40	------	66	45	37	26	26	27	48
31	20	------	30	40	------	67	------	37	------	23	26	------
TOTAL	620	750	930	1,240	1,400	1,971	1,612	1,387	928	831	960	1,179
MEAN	20.0	25.0	30.0	40.0	50.0	63.6	53.7	44.7	30.9	26.8	31.0	39.3
MAX	20	25	30	40	50	67	74	59	43	35	57	60
MIN	20	25	30	40	50	60	43	34	19	22	10	23
AC-FT	1,230	1,490	1,840	2,460	2,780	3,910	3,200	2,750	1,840	1,650	1,900	2,340
(†)	0	0	0	0	0	0	0	0	0	0	0	0
(‡)	-	-	-	-	-	-	799	829	1,210	1,100	1,080	1,380

CAL YR 1973 TOTAL - MEAN - MAX - MIN - AC-FT - † - ‡ -
WTR YR 1974 TOTAL 13,808 MEAN 37.8 MAX 74 MIN 10 AC-FT 27,390 † 0 ‡ -

† Diversions, in acre-feet, to Gila Bend Canal (sta 09518500). For records prior to 1972, see sta 09519500.
‡ Diversions, in acre-feet, to Enterprise Canal (sta 09519000). For records prior to 1972, see sta 09519500.

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 observed (assumed to be maximum for year), 59 ft^3/s (1.67 m^3/s) Apr. 3 (gage height, 1.62 ft or 0.49 m, at supplementary gage), with no flow over dam; minimum daily, 2.9 ft^3/s (0.082 m^3/s) Aug. 19.
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 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 periods of no gage-height record, 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. Records of flow reaching dam and of diversions to Gila Bend and Enterprise Canals, formerly published with this station, are now published separately as sta 09518000, Gila River above diversions, at Gillespie Dam (see preceding page).
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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	15	20	30	40	50	55	36	10	5.5	5.3	9.6
2	10	15	20	30	40	50	55	38	10	4.2	27	11
3	10	15	20	30	40	50	57	45	10	8.4	12	18
4	10	15	20	30	40	50	54	45	10	15	23	13
5	10	15	20	30	40	50	52	45	10	9.3	38	9.7
6	10	15	20	30	40	50	48	45	10	6.2	31	9.7
7	10	15	20	30	40	50	43	45	10	7.8	37	10
8	10	15	20	30	40	50	44	40	14	9.5	27	15
9	10	15	20	30	40	50	45	40	10	14	17	29
10	10	15	20	30	40	50	47	40	19	8.1	7.3	33
11	10	15	20	30	40	50	44	40	19	8.7	12	9.7
12	10	15	20	30	40	50	38	40	18	15	20	4.8
13	10	15	20	30	40	50	31	40	13	13	18	5.2
14	10	15	20	30	40	50	35	30	11	8.8	11	4.4
15	10	15	20	30	40	50	34	30	9.7	7.1	11	5.6
16	10	15	20	30	40	50	33	30	17	6.1	9.7	16
17	10	15	20	30	40	50	35	30	28	7.8	8.3	33
18	10	15	20	30	40	50	37	30	17	6.7	7.0	20
19	10	15	20	30	40	50	39	30	5.2	5.5	2.9	24
20	10	15	20	30	40	50	37	30	4.8	6.6	4.3	23
21	10	15	20	30	40	50	35	20	4.8	8.9	6.9	21
22	10	15	20	30	40	50	36	20	7.7	9.2	5.6	22
23	10	15	20	30	40	50	35	20	11	6.4	11	18
24	10	15	20	30	40	50	33	20	7.1	7.8	6.5	17
25	10	15	20	30	40	50	32	20	3.8	5.7	9.0	11
26	10	15	20	30	40	50	32	20	7.7	9.9	7.7	7.1
27	10	15	20	30	40	50	34	20	6.1	13	10	14
28	10	15	20	30	40	50	37	20	6.1	11	5.8	23
29	10	15	20	30	------	50	38	20	9.7	15	7.9	24
30	10	15	20	30	------	50	34	20	7.7	9.1	8.4	23
31	10	------	20	30	------	50	------	20	------	5.8	6.9	------
TOTAL	310	450	620	930	1,120	1,550	1,209	969	327.4	275.1	414.5	483.8
MEAN	10.0	15.0	20.0	30.0	40.0	50.0	40.3	31.3	10.9	8.87	13.4	16.1
MAX	10	15	20	30	40	50	57	45	28	15	38	33
MIN	10	15	20	30	40	50	31	20	3.8	4.2	2.9	4.4
AC-FT	615	893	1,230	1,840	2,220	3,070	2,400	1,920	649	546	822	960

CAL YR 1973 TOTAL - MEAN - MAX 17,000 MIN - AC-FT -
WTR YR 1974 TOTAL 8,658.8 MEAN 23.7 MAX 57 MIN 2.9 AC-FT 17,170

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

NOTE.--No gage-height record at supplementary gage Oct. 1 to Apr. 1, May 4 to June 6.

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, 856 ft^3/s (24.2 m^3/s) Dec. 2 (gage height, 7.42 ft or 2.262 m); minimum daily, 0.40 ft^3/s (0.011 m^3/s) Nov. 22.
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 good. 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	4.0	851	4.0	412	286	70	128	232	257	352	253
2	328	4.0	845	4.0	356	280	78	121	226	268	344	250
3	312	4.0	648	3.0	298	271	78	124	217	262	328	250
4	362	4.0	416	3.0	360	274	73	133	226	256	265	247
5	417	3.4	400	4.0	405	283	67	128	226	244	258	241
6	371	2.8	388	4.0	334	283	61	118	217	232	240	232
7	303	2.3	380	4.0	304	274	52	121	205	226	253	226
8	263	2.0	372	4.0	292	265	63	158	196	243	244	223
9	401	1.7	364	4.0	286	262	75	168	188	265	244	223
10	441	1.5	378	3.0	280	259	78	165	212	256	244	220
11	435	1.4	417	3.0	271	262	75	160	229	247	253	217
12	423	1.2	428	3.0	265	277	73	145	223	245	247	211
13	374	1.1	420	3.0	265	274	83	161	217	190	226	202
14	385	1.0	242	3.0	280	268	81	170	227	185	211	220
15	375	.90	51	3.0	133	199	76	165	235	162	223	235
16	300	.70	23	62	38	34	68	158	226	180	223	235
17	217	.60	19	428	25	24	182	173	217	190	223	232
18	138	.60	13	432	15	13	274	190	217	162	196	226
19	126	.60	9.8	408	10	9.2	280	190	223	181	223	223
20	110	.50	7.7	356	8.0	7.5	277	185	217	196	223	223
21	99	.50	6.9	377	120	6.7	271	180	224	180	223	220
22	92	.40	6.0	422	285	5.4	280	172	238	214	223	214
23	113	13	6.0	465	292	4.7	292	182	229	238	223	211
24	134	44	5.5	444	292	4.1	268	193	220	223	214	214
25	126	44	5.0	458	289	37	188	190	229	217	226	220
26	114	259	5.0	456	286	63	124	185	238	214	235	223
27	107	400	4.0	376	286	73	112	172	241	211	223	220
28	96	470	4.0	428	295	72	98	162	253	208	238	220
29	103	684	4.0	456	------	75	109	181	250	226	250	217
30	138	849	4.0	436	------	68	126	190	235	206	253	214
31	54	------	4.0	410	------	64	------	218	------	290	253	------
TOTAL	7,524	2,802.20	6,726.9	6,466.0	6,782.0	4,577.6	4,032	5,086	6,733	6,874	7,581	6,762
MEAN	243	93.4	217	209	242	148	134	164	224	222	245	225
MAX	441	849	851	465	412	286	292	218	253	290	352	253
MIN	54	.40	4.0	3.0	8.0	4.1	52	118	188	162	196	202
AC-FT	14,920	5,560	13,340	12,830	13,450	9,080	8,000	10,090	13,350	13,630	15,040	13,410

CAL YR 1973 TOTAL 224,521.10 MEAN 615 MAX 2,830 MIN 0 AC-FT 445,300
WTR YR 1974 TOTAL 71,946.70 MEAN 197 MAX 851 MIN .40 AC-FT 142,700

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.--7 years, 3.13 ft^3/s (0.0886 m^3/s), 2,270 acre-ft/yr (2.80 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,000 ft^3/s (170 m^3/s) Aug. 2 (gage height, 9.70 ft or 2.957 m), from rating curve extended above 520 ft^3/s (15 m^3/s) on basis of slope-area measurement of peak flow; 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 fair.

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	299	0
2										0	1,050	0
3										0	.50	0
4										0	380	0
5										0	0	0
6										300	0	0
7										100	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										3.8	0	0
20										37	0	0
21										0	0	0
22										0	0	0
23										0	0	25
24										0	0	50
25										0	0	76
26										0	0	439
27										0	0	88
28										0	0	0
29					------					0	0	0
30					------					0	0	0
31		------			------		------		------	0	0	------
TOTAL	0	0	0	0	0	0	0	0	0	440.8	1,729.50	678
MEAN	0	0	0	0	0	0	0	0	0	14.2	55.8	22.6
MAX	0	0	0	0	0	0	0	0	0	300	1,050	439
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	874	3,430	1,340

CAL YR 1973 TOTAL 525.10 MEAN 1.44 MAX 220 MIN 0 AC-FT 1,040
WTR YR 1974 TOTAL 2,848.30 MEAN 7.80 MAX 1,050 MIN 0 AC-FT 5,650

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
(a)	Unknown	b8.54	3,230	8- 4	0515	7.77	1,980
8- 2	0200	9.70	6,000	9-26	1615	8.27	2,710

a Occurred July 6 or 7; probably July 6.
b From high-water mark in gage well.
NOTE.--No gage-height record May 23 to July 10.

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 Avenue 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.--April to September 1973: Maximum discharge, 1,730 ft^3/s (49.0 m^3/s) June 2 (gage height, 7.44 ft or 2.268 m); no flow Apr. 1-11.
Water year 1974: Maximum discharge, 160 ft^3/s (4.53 m^3/s) Dec. 16, 17 (gage height, 3.83 ft or 1.167 m); maximum gage height, 4.11 ft (1.253 m) Feb. 4, 5; no flow for most of year.

REMARKS.--Records good. Flow regulated by Painted Rock Dam. Nearly all flow for periods 1966, 1973, and 1974 was release flow from Painted Rock Dam (see sta 09519800).

DISCHARGE, IN CUBIC FEET PER SECOND, APRIL TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	990	1,660	260	31	17
2							0	1,120	1,680	155	31	15
3							0	1,230	1,680	93	26	18
4							0	1,360	1,450	63	23	24
5							0	1,440	906	45	37	27
6							0	1,490	760	31	31	28
7							0	1,470	466	21	27	27
8							0	1,470	265	14	27	21
9							0	1,460	161	10	23	15
10							0	1,490	113	7.2	53	13
11							0	1,550	123	5.5	54	13
12							12	1,550	332	4.3	47	15
13							40	1,550	454	25	39	33
14							57	1,520	635	86	78	40
15							85	1,540	1,070	94	97	42
16							105	1,550	1,180	71	91	44
17							121	1,560	1,270	57	82	46
18							137	1,590	1,310	52	75	50
19							158	1,590	1,310	51	71	52
20							178	1,590	1,310	51	260	54
21							176	1,600	1,350	50	468	56
22							213	1,630	1,370	50	129	57
23							251	1,630	1,370	48	93	58
24							293	1,630	972	45	73	59
25							330	1,630	584	44	61	61
26							360	1,650	457	43	49	63
27							434	1,640	372	41	38	65
28							538	1,630	367	40	29	65
29					------		665	1,660	365	38	24	67
30					------		840	1,650	352	33	23	67
31		------			------		------	1,630	------	31	20	------
TOTAL							4,993	47,090	25,694	1,659.0	2,210	1,212
MEAN							166	1,519	856	53.5	71.3	40.4
MAX							840	1,660	1,680	260	468	67
MIN							0	990	113	4.3	20	13
AC-FT							9,900	93,400	50,960	3,290	4,380	2,400

09520360. Gila River near Mohawk, Ariz.--Continued

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	68	5.4	0	0	99	64					0	
2	68	6.4	0	0	107	70					0	
3	55	6.0	0	0	109	76					0	
4	45	2.2	14	0	115	79					0	
5	60	.30	93	0	113	81					0	
6	65	0	149	0	88	83					18	
7	70	0	141	0	83	84					27	
8	86	0	128	0	114	89					14	
9	92	0	124	0	114	90					4.5	
10	90	0	121	0	103	90					0	
11	80	0	120	0	97	89					0	
12	96	0	119	0	96	89					0	
13	114	0	124	0	94	88					0	
14	127	0	139	0	91	88					0	
15	132	0	152	0	88	91					0	
16	135	0	158	0	88	90					0	
17	132	0	128	0	92	90					0	
18	138	0	66	0	81	85					0	
19	119	0	36	0	61	61					0	
20	94	0	20	0	48	47					0	
21	65	0	12	0	38	37					0	
22	46	0	7.7	0	29	29					0	
23	34	0	4.8	0	20	22					0	
24	26	0	2.7	0	7.5	16					0	
25	22	0	1.3	0	2.6	12					0	
26	18	0	.53	0	13	8.0					0	
27	14	0	.02	0	45	5.0					0	
28	14	0	0	17	57	3.0					0	
29	12	0	0	57	------	.66					0	
30	8.8	0	0	72	------	.29					0	
31	6.4	------	0	80	------	0	------		------		0	------
TOTAL	2,132.2	20.30	1,861.05	226	2,093.1	1,756.95	0	0	0	0	63.5	0
MEAN	68.8	.68	60.0	7.29	74.8	56.7	0	0	0	0	2.05	0
MAX	138	6.4	158	80	115	91	0	0	0	0	27	0
MIN	6.4	0	0	0	2.6	0	0	0	0	0	0	0
AC-FT	4,230	40	3,690	448	4,150	3,480	0	0	0	0	126	0

WTR YR 1974 TOTAL 8,153.10 MEAN 22.3 MAX 158 MIN 0 AC-FT 16,170

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 mi² (149,800 km²), approximately—includes 373 mi² (966 km²) 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, 334 ft³/s (9.46 m³/s) Sept. 15 (gage height, 6.83 ft or 2.082 m); no flow July 8-15.
Period of record: Maximum discharge, 20,700 ft³/s (586 m³/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 water years.
Maximum daily discharge, 200,000 ft³/s (5,700 m³/s), roughly estimated, Jan. 22, 1916.

REMARKS.--Records fair. Most low flow 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).

REVISIONS (WATER YEARS).--WSP 918: 1905. WSP 1733: July 1942. WSP 1926: Drainage area.

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	.11	2.2	5.5	1.3	2.6	1.2	.19	.24	.15	.06	.70	3.8
2	.12	1.8	7.4	1.1	2.0	1.2	16	.22	.15	.05	.50	1.9
3	.11	2.8	13	1.1	1.4	1.2	5.6	.22	.13	.04	.40	1.8
4	.10	3.6	13	1.9	1.4	1.0	1.5	.33	.13	.03	8.9	.93
5	.08	3.0	12	3.6	1.5	.91	1.1	.29	.12	.03	19	.55
6	.09	2.3	3.0	3.3	1.3	.89	1.0	.26	.11	.02	2.1	.47
7	.14	2.1	1.1	2.4	1.1	.86	11	.22	.10	.01	1.4	.43
8	97	1.7	1.8	3.4	.93	1.1	75	.20	.09	0	.94	.38
9	3.2	1.4	1.8	3.3	1.0	1.1	1.8	.19	.08	0	.73	13
10	2.2	1.4	.92	2.5	1.1	.87	1.1	.19	.08	0	.59	1.7
11	2.0	1.3	.74	1.7	.88	.81	1.0	.20	.08	0	.52	1.3
12	1.9	1.2	.74	1.3	.93	.83	.82	.20	.09	0	.44	1.5
13	1.8	1.2	.74	1.2	1.0	.86	.76	.19	.09	0	.42	14
14	1.9	1.1	.92	1.0	1.0	.91	.70	.19	.10	0	.42	78
15	1.9	1.7	1.0	.92	1.0	.80	.66	.19	.15	0	1.3	137
16	2.0	1.7	1.0	.92	1.1	.62	.66	.19	.17	.02	1.6	2.8
17	1.9	2.0	1.3	1.0	1.2	.62	.63	.20	.33	.03	1.8	1.6
18	1.9	2.2	2.2	.83	1.1	.69	.55	.28	.57	.03	1.2	1.2
19	2.5	2.5	2.5	.83	2.3	.54	.48	.26	.50	.03	.87	.98
20	2.5	1.8	2.4	.74	2.7	.47	.51	.24	.29	.04	1.8	.75
21	3.2	2.4	1.9	.74	1.9	.38	.63	.22	.22	.05	1.5	.79
22	3.0	3.1	2.1	.65	1.4	.29	.50	.22	.18	38	1.2	1.3
23	2.2	2.2	2.0	.74	1.4	.29	.40	.20	.15	3.3	1.1	1.0
24	2.4	1.5	1.3	.83	1.2	.29	.30	.19	.13	2.6	.91	.90
25	2.4	1.4	1.1	1.7	1.5	.26	.31	.19	.13	2.4	4.6	.74
26	2.0	1.8	1.8	2.2	1.7	.20	.29	.20	.13	2.0	6.5	.63
27	1.7	2.1	3.6	2.0	2.1	.20	.29	.22	.13	1.8	1.4	.53
28	1.8	14	2.4	2.4	1.7	.18	.28	.19	.12	1.5	.55	.65
29	1.8	31	1.5	2.9	------	.18	.26	.14	.09	1.3	.33	1.1
30	1.5	3.4	1.5	1.9	------	.40	.24	.12	.07	1.0	.21	1.2
31	2.8	------	1.3	1.4	------	.41	------	.13	------	.80	5.0	------
TOTAL	148.25	101.9	93.56	51.80	40.44	20.56	124.56	6.52	4.86	55.14	68.93	272.93
MEAN	4.78	3.40	3.02	1.67	1.44	.66	4.15	.21	.16	1.78	2.22	9.10
MAX	97	31	13	3.6	2.7	1.2	75	.33	.57	38	19	137
MIN	.08	1.1	.74	.65	.88	.18	.19	.12	.07	0	.21	.38
AC-FT	294	202	186	103	80	41	247	13	9.6	109	137	541

CAL YR 1973 TOTAL 52,726.52 MEAN 144 MAX 1,380 MIN .08 AC-FT 104,600
WTR YR 1974 TOTAL 989.45 MEAN 2.7 MAX 137 MIN 0 AC-FT 1,960

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 mi^2 (629,100 km^2), 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.--11 years, 845 ft^3/s (23.93 m^3/s), 612,200 acre-ft/yr (755 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,280 ft^3/s (64.6 m^3/s) May 5 (gage height, 12.69 ft or 3.868 m); minimum daily, 299 ft^3/s (8.47 m^3/s) Jan. 30.
Period of record: Maximum discharge, 5,040 ft^3/s (143 m^3/s) Mar. 3, 1970 (gage height, 15.05 ft or 4.587 m); minimum daily, 260 ft^3/s (7.36 m^3/s) Jan. 17, 1970.
Maximum gage height since at least 1878, 34.0 ft (10.4 m) Jan. 22, 1916 (discharge, 250,000 ft^3/s or 7,080 m^3/s), at former gaging station at Yuma.

REMARKS.--Records excellent above 1,000 ft^3/s (28.3 m^3/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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,100	587	1,290	552	1,100	476	615	684	1,300	563	585	1,130
2	1,120	642	1,240	1,190	1,100	492	606	687	606	571	578	1,230
3	1,130	583	1,380	928	1,100	650	529	672	475	592	583	1,170
4	1,080	673	991	707	922	655	496	769	475	583	613	1,180
5	1,080	508	456	761	952	631	503	1,830	482	652	676	1,180
6	1,090	559	469	798	950	610	519	1,280	589	1,140	1,020	1,160
7	1,080	539	460	814	948	596	523	1,220	571	680	760	1,150
8	1,080	563	460	1,020	935	653	664	1,230	458	604	781	1,170
9	1,060	553	447	1,460	932	596	619	1,240	421	561	814	1,160
10	1,110	563	432	1,750	940	596	539	1,260	383	550	774	1,150
11	1,080	661	437	1,360	1,170	619	519	1,250	493	559	714	1,190
12	1,100	731	450	924	1,190	685	518	1,230	558	570	558	1,210
13	1,090	723	459	1,090	1,270	1,020	523	1,240	569	636	546	1,200
14	1,080	741	469	882	1,310	783	542	1,220	555	769	603	1,170
15	1,090	731	456	784	1,200	611	553	1,160	499	725	594	1,170
16	1,080	729	459	684	499	601	551	911	498	578	604	1,150
17	1,100	721	479	861	499	583	546	1,250	672	561	627	1,160
18	1,070	713	475	1,140	485	576	536	1,240	679	552	633	1,150
19	1,070	740	463	1,130	486	582	534	1,220	640	589	625	1,150
20	1,010	769	468	1,150	491	570	518	1,240	600	592	583	1,150
21	737	1,010	445	1,150	468	556	509	1,230	577	582	594	1,130
22	536	976	448	1,080	484	547	659	1,230	560	554	606	1,130
23	558	968	460	1,110	436	556	647	1,250	564	700	782	1,130
24	615	929	483	1,110	468	570	568	1,310	544	1,060	793	1,130
25	592	943	497	1,090	472	556	539	1,270	541	738	735	1,120
26	580	939	449	1,130	480	534	526	1,310	548	611	645	1,110
27	571	963	434	1,140	480	542	538	1,290	560	593	583	1,180
28	584	978	434	1,180	464	630	590	1,320	547	578	596	1,160
29	607	980	452	387	------	620	725	1,330	552	564	565	1,200
30	638	1,010	447	299	------	610	730	1,380	553	562	610	1,100
31	654	------	455	409	------	620	------	1,340	------	570	1,750	------
TOTAL	28,372	22,725	17,244	30,070	22,231	18,926	16,984	37,093	17,069	19,739	21,530	34,770
MEAN	915	758	556	970	794	611	566	1,197	569	637	695	1,159
MAX	1,130	1,010	1,380	1,750	1,310	1,020	730	1,830	1,300	1,140	1,750	1,230
MIN	536	508	432	299	436	476	496	672	383	550	546	1,100
AC-FT	56,280	45,080	34,200	59,640	44,100	37,540	33,690	73,570	33,860	39,150	42,700	68,970

CAL YR 1973 TOTAL 320,340 MEAN 878 MAX 1,900 MIN 432 AC-FT 635,400
WTR YR 1974 TOTAL 286,753 MEAN 786 MAX 1,830 MIN 299 AC-FT 568,800

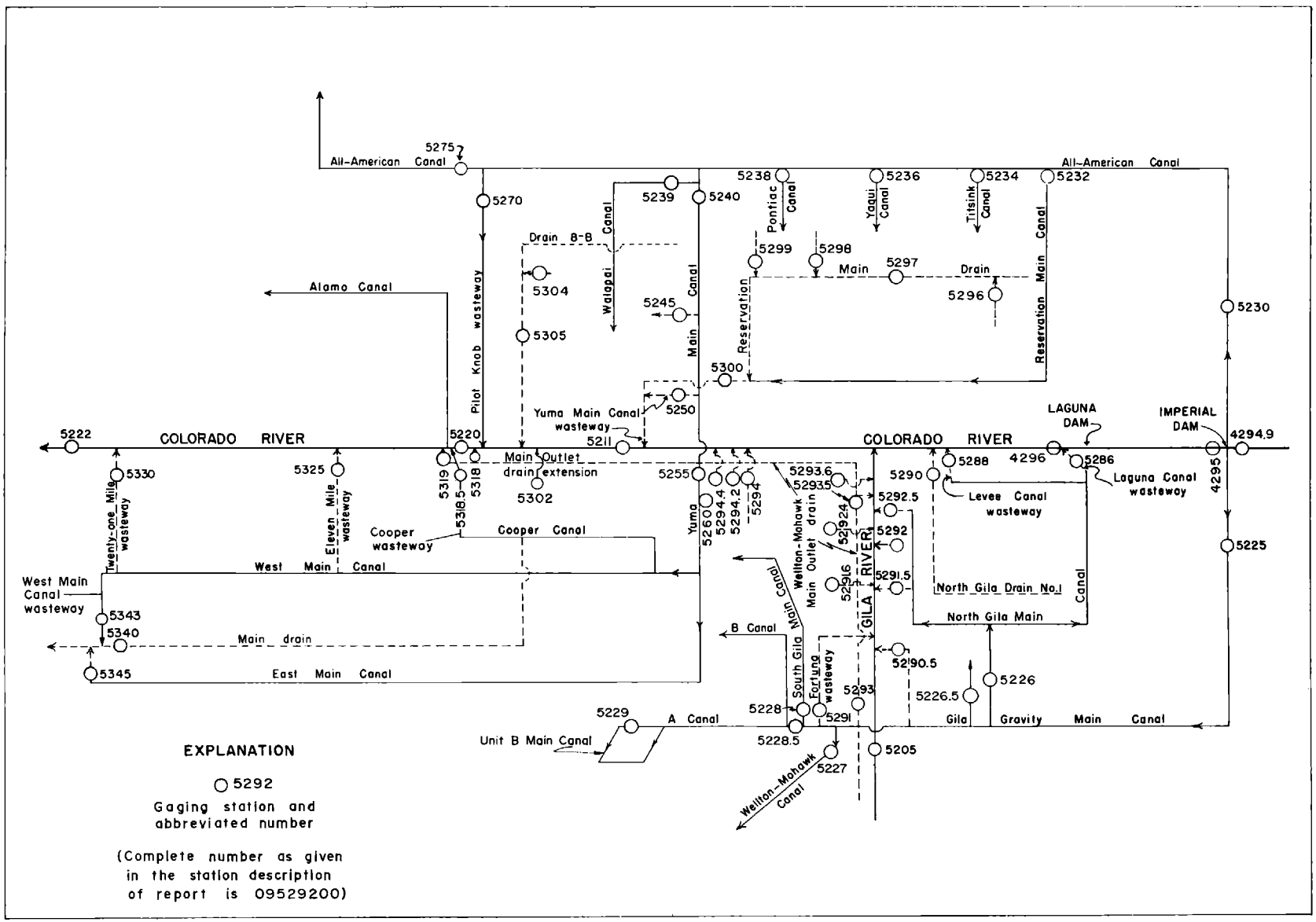

Figure 3.--Schematic diagram showing gaging stations on streams, diversions, and return flows between Imperial Dam and the southerly international boundary.

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, 3,590 ft^3/s (102 m^3/s) Apr. 9; maximum elevation, 104.90 ft (31.974 m) Apr. 9; minimum discharge, 645 ft^3/s (18.3 m^3/s) Nov. 5; minimum elevation, 102.07 ft (31.111 m) Nov. 5.
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.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,280	740	1,410	1,820	1,280	1,920	3,270	1,930	1,350	2,840	3,040	1,360
2	1,290	809	1,390	1,400	1,250	2,190	3,320	1,910	1,790	2,840	3,280	1,350
3	1,290	755	1,540	1,190	1,240	2,470	3,360	1,830	1,830	2,840	3,300	1,320
4	1,280	836	1,590	920	1,100	2,200	3,330	1,830	1,880	2,860	3,260	1,340
5	1,260	655	1,600	931	1,100	2,260	3,350	1,660	1,910	2,840	3,300	1,310
6	1,280	715	1,610	1,000	1,120	2,220	3,350	1,440	1,890	2,830	3,320	1,350
7	1,280	705	1,610	1,000	1,100	2,250	3,350	1,300	1,900	2,830	3,320	1,340
8	1,280	720	1,610	1,110	1,100	2,350	3,300	1,290	1,780	3,100	3,320	1,340
9	1,270	695	1,600	1,510	1,100	2,270	3,310	1,300	1,710	3,110	3,310	1,320
10	1,280	705	1,770	1,790	1,090	2,300	3,350	1,330	1,670	3,100	3,300	1,300
11	1,280	785	1,790	1,590	1,310	2,580	3,360	1,320	1,910	3,080	3,320	1,350
12	1,290	874	1,830	1,070	1,330	2,570	3,360	1,290	1,870	3,110	3,010	1,380
13	1,280	852	1,870	1,210	1,390	2,730	3,350	1,300	1,910	3,120	2,860	1,390
14	1,290	885	1,870	1,020	1,470	2,720	3,360	1,300	1,800	3,100	2,810	1,350
15	1,290	863	1,860	890	1,440	2,720	3,370	1,280	1,730	3,100	2,820	1,340
16	1,290	852	1,860	845	1,750	2,720	3,370	1,060	1,730	3,120	2,820	1,340
17	1,290	841	1,990	958	1,770	2,980	3,100	1,290	1,890	3,110	2,800	1,350
18	1,280	852	1,970	1,220	1,770	3,030	2,820	1,330	1,900	3,120	2,800	1,350
19	1,280	852	1,940	1,230	1,750	3,030	2,620	1,320	1,920	3,120	2,800	1,340
20	1,270	896	1,740	1,250	1,750	3,060	2,610	1,300	1,920	2,930	2,820	1,340
21	993	1,120	1,920	1,280	1,920	3,030	2,580	1,330	2,130	2,930	2,830	1,320
22	715	1,130	1,960	1,220	1,860	3,210	2,450	1,320	2,130	2,930	2,830	1,310
23	690	1,120	1,950	1,240	1,640	3,230	2,450	1,290	2,160	2,940	2,840	1,320
24	730	1,090	2,080	1,250	1,660	3,220	2,450	1,350	2,270	2,930	2,860	1,310
25	726	1,090	2,060	1,250	1,680	3,320	2,420	1,330	2,570	2,870	2,780	1,310
26	700	1,090	2,060	1,280	1,690	3,300	2,360	1,340	2,720	2,780	2,770	1,300
27	690	1,120	2,040	1,290	1,690	3,320	2,360	1,340	3,040	2,820	2,750	1,320
28	700	1,130	2,060	1,410	1,650	3,290	2,360	1,340	3,040	2,850	2,520	1,360
29	720	1,130	2,080	1,590	------	3,270	2,330	1,360	3,050	2,870	2,260	1,350
30	762	1,150	2,080	1,490	------	3,290	2,370	1,390	3,030	2,870	1,980	1,310
31	770	------	2,090	1,530	------	3,270	------	1,410	------	2,850	1,670	------
TOTAL	33,926	27,057	56,830	38,784	41,000	86,320	88,740	43,410	62,430	91,740	89,700	40,070
MEAN	1,091	902	1,833	1,251	1,464	2,785	2,958	1,400	2,081	2,959	2,894	1,336
MAX	1,290	1,150	2,090	1,820	1,920	3,320	3,370	1,930	3,050	3,120	3,320	1,390
MIN	690	655	1,390	845	1,090	1,920	2,330	1,060	1,350	2,780	1,670	1,300
AC-FT	67,090	53,670	112,700	76,930	81,320	171,200	176,000	86,100	123,800	182,000	177,900	79,480

CAL YR 1973 TOTAL 645,870 MEAN 1,770 MAX 3,130 MIN 655 AC-FT 1,281,000
WTR YR 1974 TOTAL 699,907 MEAN 1,918 MAX 3,370 MIN 655 AC-FT 1,388,000

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 19.4 mi (31.2 km) 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, 579 ft^3/s (16.4 m^3/s) Jan. 11; maximum elevation, 77.06 ft (23.488 m) Jan. 11; minimum discharge, 8.0 ft^3/s (0.23 m^3/s) June 8; minimum elevation, 73.92 ft (22.531 m) June 8.
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.

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 flows from irrigated areas.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	224	234	230	239	228	250	217	213	211	196	173
2	207	228	234	226	239	226	232	215	126	213	192	171
3	207	176	264	224	232	226	220	213	67	213	190	171
4	209	215	254	224	145	243	207	215	43	211	186	171
5	211	234	243	230	75	239	209	220	32	205	204	171
6	209	245	241	237	58	232	211	224	25	207	198	171
7	207	234	241	243	50	228	211	230	18	207	190	173
8	205	230	241	252	44	223	215	230	14	205	188	173
9	207	232	237	252	40	183	217	228	82	202	188	171
10	215	232	232	319	103	222	215	226	110	200	192	167
11	213	234	234	523	167	217	217	226	112	204	190	169
12	213	234	232	437	200	213	217	224	95	198	190	173
13	213	239	228	264	209	215	215	220	95	204	188	173
14	215	239	224	248	217	215	220	213	108	200	188	171
15	215	239	226	245	224	213	217	211	166	204	186	169
16	213	237	232	245	226	215	217	209	184	202	186	167
17	213	237	239	245	226	220	220	207	190	204	186	157
18	217	237	243	243	228	220	220	207	196	200	186	155
19	220	232	241	245	230	222	217	209	194	198	182	169
20	217	232	241	243	224	217	222	207	196	200	182	166
21	220	232	241	241	224	222	217	207	204	198	184	169
22	222	232	245	237	226	224	215	209	205	196	188	175
23	224	232	243	237	228	224	217	211	204	204	186	173
24	226	239	241	234	226	228	220	209	204	200	188	169
25	226	237	234	234	224	230	222	209	205	198	186	175
26	228	234	234	237	224	230	222	209	205	198	184	177
27	226	234	232	234	226	228	222	209	204	198	182	182
28	226	232	232	232	226	228	220	213	205	200	182	190
29	228	232	232	232	------	230	220	211	205	198	184	192
30	224	237	232	232	------	228	215	211	209	200	184	192
31	224	------	228	232	------	224	------	213	------	196	184	------
TOTAL	6,707	6,951	7,355	7,957	5,180	6,913	6,559	6,662	4,316	6,274	5,820	5,175
MEAN	216	232	237	257	185	223	219	215	144	202	188	173
MAX	228	245	264	523	239	243	250	230	213	213	204	192
MIN	205	176	224	224	40	183	207	207	14	196	182	155
AC-FT	13,300	13,790	14,590	15,780	10,270	13,710	13,010	13,210	8,560	12,440	11,540	10,260

CAL YR 1973 TOTAL 81,713 MEAN 224 MAX 601 MIN 73 AC-FT 162,100
WTR YR 1974 TOTAL 75,869 MEAN 208 MAX 523 MIN 14 AC-FT 150,500

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. 218 for records of return surface flows below Imperial Dam.

See figure 3 on p. 205 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.--October 1965 to current year.

REMARKS.--Record shows water available for irrigation of 6,026 acres (24.4 km^2) in 1973, 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.--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.--October 1965 to current year.

REMARKS.--Record shows water available for irrigation of 63,973 acres (259 km^2) in 1973, 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. Prior to June 4, 1974, Sparling flowmeter 150 ft (46 m) upstream.

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

REMARKS.--Record shows water available for irrigation of a portion of the 10,208 acres (41.3 km^2) in 1973, 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.--October 1965 to current year.

REMARKS.--Record shows water available for irrigation of 18,372 acres (74.4 km^2) in 1973, 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.--October 1965 to current year.

REMARKS.--Record shows water available for irrigation of 3,196 acres (12.9 km^2) in 1973, 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 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.--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 gates 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.--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.--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.--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.--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.--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.--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).

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 1973 TO SEPTEMBER 1974

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	3,380	574	31,700	3,600	20,990
November	2,360	517	21,080	1,540	13,970
December	2,220	273	14,640	670	12,010
CAL YR 1973	47,500	8,050	486,800	33,730	267,800
January	1,600	438	16,930	966	10,600
February	6,230	345	31,960	2,560	11,920
March	3,070	702	41,480	2,640	14,770
April	4,210	852	60,710	3,200	21,920
May	6,120	810	61,970	2,820	28,700
June	5,150	823	61,850	2,940	32,550
July	5,880	868	59,720	3,920	35,090
August	5,550	1,040	65,320	3,360	34,400
September	3,820	716	54,260	4,710	29,120
WTR YR 1974	49,580	7,960	521,600	32,930	266,000

Month	Unit B Main Canal 09522900	Reservation Main Canal 09523200	Titsink Canal 09523400	Yaqui Canal 09523600	Pontiac Canal 09523800
October	3,250	4,670	0	1,320	713
November	1,960	3,300	5.2	570	236
December	1,800	1,830	6.2	535	195
CAL YR 1973	37,480	51,920	108	10,270	6,080
January	1,580	1,940	5.6	430	298
February	1,630	3,950	12	637	351
March	2,040	4,310	8.9	899	808
April	3,000	4,960	16	1,230	700
May	4,100	5,970	19	1,180	868
June	4,720	6,040	5.4	862	779
July	5,220	6,310	13	1,250	839
August	5,210	4,850	8.4	1,110	746
September	4,080	4,090	7.1	881	635
WTR YR 1974	38,590	52,220	106	10,900	7,170

Month	Walapai Canal 09523900	Diversions from Yuma Main Canal 09524500	Diversions from Yuma Main Canal for Yuma supply 09526000
October	1,870	181	1,004
November	1,260	41	770
December	590	31	696
CAL YR 1973	15,220	4,270	12,068
January	504	99	650
February	1,290	494	670
March	1,140	501	828
April	983	437	976
May	1,160	381	1,188
June	1,160	434	1,487
July	1,840	352	1,477
August	1,510	557	1,347
September	864	447	1,354
WTR YR 1974	14,180	3,960	12,447

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.--15 years (1959-74), 1,211 ft^3/s (34.30 m^3/s), 877,400 acre-ft/yr (1,080 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 1973 calendar year, water was used for irrigation of 101,775 acres (412 km^2) divided as follows: North and South Gila Valleys, 16,234 acres (65.7 km^2): Yuma Mesa Division, 18,372 acres (74.4 km^2); Wellton-Mohawk Division, 63,973 acres (259 km^2); Yuma Mesa Auxiliary Division, 3,196 acres (12.9 km^2). Records of water temperatures for the current water year are published in Part 2 of this report.

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	1,180	1,120	262	449	752	1,100	1,430	1,700	1,660	1,980	2,170	1,300
2	1,450	877	84	908	707	867	1,480	1,760	1,460	2,050	2,130	1,800
3	1,400	745	98	1,130	476	711	1,640	1,590	1,600	2,110	2,030	1,980
4	1,440	566	169	797	1,170	1,050	1,600	1,130	1,540	1,910	1,690	2,040
5	1,250	865	202	430	966	1,250	1,600	883	1,760	1,750	1,970	2,030
6	873	1,070	516	221	1,050	1,360	1,450	1,750	1,700	1,750	2,100	1,840
7	818	1,120	736	472	1,070	1,170	1,500	1,920	1,590	1,300	2,040	2,010
8	1,090	619	560	348	1,080	811	1,720	1,870	1,280	1,780	2,060	1,660
9	1,170	1,020	524	183	893	682	1,710	2,050	1,400	1,890	2,040	1,930
10	1,140	700	843	89	586	431	1,750	1,850	1,630	2,110	2,050	2,090
11	1,180	419	1,050	89	1,060	1,180	1,560	1,490	1,850	2,100	1,760	2,040
12	1,000	1,000	979	103	1,040	1,380	1,330	928	2,000	2,090	2,040	2,060
13	877	1,080	865	108	1,170	1,260	925	1,880	1,930	1,960	2,040	2,030
14	566	1,220	748	328	1,010	1,250	639	1,990	1,870	1,820	2,050	1,530
15	886	1,070	327	270	964	1,090	1,410	2,020	1,760	2,080	2,050	938
16	1,080	1,220	309	301	867	945	1,610	1,890	1,550	2,060	2,040	1,610
17	1,160	888	736	319	539	797	1,790	1,830	2,000	2,050	1,840	1,470
18	1,170	920	969	191	903	1,070	1,740	1,280	2,050	1,930	1,640	1,620
19	1,040	1,330	989	324	974	1,300	1,710	1,490	2,040	1,840	1,980	1,770
20	825	1,540	881	345	1,130	1,260	1,510	1,610	2,070	1,290	2,030	1,440
21	325	1,080	877	588	1,080	1,280	1,460	1,760	1,920	1,080	2,030	1,130
22	1,160	365	506	780	1,170	1,150	1,920	1,920	1,680	1,440	2,100	936
23	954	312	252	836	1,060	1,070	1,950	1,800	1,470	1,510	2,070	1,270
24	1,320	20	53	646	712	872	2,000	1,690	1,820	1,600	1,960	983
25	959	8.4	21	560	1,240	1,170	1,960	1,400	2,100	1,800	1,640	1,850
26	830	3.8	888	556	1,410	1,340	1,780	1,110	2,120	1,760	1,800	1,580
27	697	2.6	728	408	1,390	1,390	1,530	1,980	2,140	1,710	2,060	1,590
28	363	1.9	828	1,020	1,280	1,210	1,220	1,750	2,110	1,630	2,070	1,260
29	1,090	1.4	649	1,210	------	1,120	1,680	2,010	1,920	1,910	2,080	1,080
30	1,080	97	514	1,160	------	968	1,730	1,920	1,920	2,080	2,080	1,110
31	976	------	372	1,120	------	882	------	1,920	------	2,180	1,570	------
TOTAL	31,349	21,281.1	17,535	16,289	27,749	33,416	47,334	52,171	53,940	56,550	61,210	47,977
MEAN	1,011	709	566	525	991	1,078	1,578	1,683	1,798	1,824	1,975	1,599
MAX	1,450	1,540	1,050	1,210	1,410	1,390	2,000	2,050	2,140	2,180	2,170	2,090
MIN	325	1.4	21	89	476	431	639	883	1,280	1,080	1,570	936
AC-FT	62,180	42,210	34,780	32,310	55,040	66,280	93,890	103,500	107,000	112,200	121,400	95,160

CAL YR 1973 TOTAL 446,167.1 MEAN 1,222 MAX 2,200 MIN 1.4 AC-FT 885,000
WTR YR 1974 TOTAL 466,801.1 MEAN 1,279 MAX 2,180 MIN 1.4 AC-FT 925,900

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.--33 years (1941-74), 6,956 ft^3/s (197.0 m^3/s), 5,040,000 acre-ft/yr (6,210 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,190	5,340	4,330	4,330	6,010	6,810	9,140	9,360	7,290	9,430	10,400	7,070
2	7,220	5,060	4,120	4,640	6,450	6,900	9,460	9,470	7,700	9,580	10,300	7,070
3	7,400	4,470	3,880	5,210	5,900	6,510	9,710	9,140	7,920	9,590	10,100	7,100
4	7,450	3,520	4,360	5,090	6,000	6,560	9,860	8,980	8,030	9,860	9,770	7,010
5	7,340	3,820	4,830	4,670	6,170	6,720	9,970	8,180	8,430	9,540	9,790	6,830
6	6,690	4,080	5,150	3,140	6,300	7,340	9,920	7,560	7,870	9,320	9,800	6,740
7	6,550	4,640	5,320	2,810	6,500	7,650	9,910	7,700	7,830	9,630	10,100	6,600
8	6,530	5,080	4,880	1,580	6,350	7,800	10,100	7,790	7,780	10,100	10,300	6,710
9	6,460	4,980	3,610	1,500	5,760	6,840	10,400	7,620	7,770	10,300	10,400	7,070
10	6,620	4,670	3,810	1,420	5,040	5,670	10,500	7,470	7,900	10,300	10,300	7,070
11	6,750	4,150	4,190	1,420	5,280	6,820	10,500	7,110	7,950	10,300	10,200	7,280
12	6,560	4,220	4,320	1,500	5,510	6,550	10,500	6,830	8,080	10,300	10,300	7,340
13	6,210	4,370	4,840	1,290	5,460	6,560	10,200	7,110	7,980	10,200	10,400	7,050
14	6,060	4,580	4,850	1,380	5,560	7,300	10,100	7,320	7,840	9,780	10,300	7,100
15	5,990	4,490	4,610	1,820	5,580	7,040	10,100	7,550	7,640	9,850	10,200	7,150
16	6,100	4,210	4,590	1,980	5,930	7,030	10,300	7,500	7,190	10,100	9,920	7,310
17	6,220	4,300	4,990	2,190	5,950	7,110	10,100	7,380	7,610	10,400	9,830	7,310
18	6,080	4,000	4,890	2,400	5,760	7,820	10,100	7,200	7,660	10,300	9,080	7,620
19	6,000	4,190	5,210	2,360	6,170	8,470	10,000	6,570	7,990	9,950	8,940	7,440
20	5,850	4,200	5,270	2,360	6,450	8,970	10,200	6,580	8,310	9,480	9,210	7,240
21	5,370	4,460	5,110	2,620	6,800	9,620	10,200	6,840	8,510	9,190	8,900	7,240
22	5,220	4,560	4,900	2,640	6,710	9,670	9,960	7,180	8,650	8,580	9,300	7,200
23	5,430	4,030	4,090	3,180	6,390	9,220	10,000	7,250	8,180	9,050	9,150	7,290
24	5,460	3,840	3,350	3,360	5,870	8,630	10,000	7,020	8,640	8,610	9,030	7,300
25	5,120	3,350	2,990	3,490	6,510	9,170	9,950	6,770	9,160	8,290	8,550	7,290
26	5,190	3,750	4,010	3,940	6,580	9,470	9,850	6,630	9,480	8,440	8,740	7,150
27	5,220	3,540	4,890	4,110	6,810	9,660	9,670	6,900	9,930	8,660	8,970	6,900
28	4,980	3,850	5,150	4,690	7,230	9,500	9,520	7,470	9,980	8,670	8,920	6,730
29	5,090	3,910	4,910	5,600	------	8,960	9,430	7,760	9,790	9,280	8,560	6,290
30	5,290	4,000	4,810	6,020	------	8,850	9,480	8,010	9,390	9,760	8,400	6,190
31	5,370	------	4,780	6,120	------	8,500	------	7,650	------	10,100	7,570	------
TOTAL	189,010	127,660	141,040	98,860	171,030	243,720	299,130	233,900	248,480	296,940	295,730	211,690
MEAN	6,097	4,255	4,550	3,189	6,108	7,862	9,971	7,545	8,283	9,579	9,540	7,056
MAX	7,450	5,340	5,320	6,120	7,230	9,670	10,500	9,470	9,980	10,400	10,400	7,620
MIN	4,980	3,350	2,990	1,290	5,040	5,670	9,140	6,570	7,190	8,290	7,570	6,190
AC-FT	374,900	253,200	279,800	196,100	339,200	483,400	593,300	463,900	492,900	589,000	586,600	419,900

CAL YR 1973 TOTAL 2,390,930 MEAN 6,550 MAX 9,680 MIN 2,990 AC-FT 4,742,000
WTR YR 1974 TOTAL 2,557,190 MEAN 7,006 MAX 10,500 MIN 1,290 AC-FT 5,072,000

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, with supplementary bypass gate-opening readings. 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 constant 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,260	677	1,080	152	1,200	613	202	771	985	573	871	1,030
2	1,330	476	948	812	1,190	544	251	835	275	678	821	1,080
3	1,340	334	1,060	892	1,080	218	351	767	227	718	718	814
4	1,260	54	657	619	929	202	763	703	315	767	336	800
5	1,240	54	179	563	998	235	861	1,040	408	769	246	794
6	1,210	54	332	574	1,010	356	795	642	456	706	257	679
7	1,150	246	358	706	1,030	757	723	783	787	695	346	579
8	1,180	728	271	691	970	785	735	890	813	742	723	570
9	1,220	705	186	524	912	533	831	914	708	806	813	639
10	1,330	485	253	348	849	318	862	855	733	832	775	756
11	1,290	466	405	134	1,080	274	870	679	807	851	755	818
12	1,270	510	430	162	1,130	423	771	528	810	823	731	804
13	1,170	596	341	137	1,200	550	543	614	775	730	794	780
14	1,140	662	283	244	1,230	577	190	823	770	598	801	677
15	1,270	631	239	599	1,080	512	160	883	699	541	761	521
16	1,360	579	127	626	445	398	295	783	409	618	731	548
17	1,380	558	102	807	373	188	462	843	414	676	622	697
18	1,310	394	165	1,030	337	215	833	662	509	757	270	722
19	1,180	478	258	979	521	336	887	421	524	740	258	695
20	1,010	599	433	979	598	489	869	466	571	605	358	674
21	613	842	454	949	610	769	774	634	842	500	437	614
22	416	789	375	764	600	761	732	719	821	607	742	576
23	588	678	212	957	482	585	799	759	637	710	794	610
24	634	553	85	1,080	346	382	830	759	603	677	650	635
25	554	569	50	1,070	380	403	768	699	791	661	444	676
26	429	714	127	1,090	515	527	703	614	890	719	474	816
27	403	793	260	998	609	602	612	589	893	694	649	1,080
28	395	784	371	998	654	610	500	823	816	582	711	1,120
29	446	778	341	324	------	587	524	953	731	625	797	1,130
30	672	862	260	391	------	568	649	1,130	587	749	895	1,090
31	798	------	128	536	------	258	------	1,080	------	860	1,610	------
TOTAL	30,848	16,648	10,770	20,735	22,358	14,575	19,145	23,661	19,606	21,609	20,190	23,024
MEAN	995	555	347	669	799	470	638	763	654	697	651	767
MAX	1,380	862	1,080	1,090	1,230	785	887	1,130	985	860	1,610	1,130
MIN	395	54	50	134	337	188	160	421	227	500	246	521
AC-FT	61,190	33,020	21,360	41,130	44,350	28,910	37,970	46,930	38,890	42,860	40,050	45,670

CAL YR 1973 TOTAL 262,349 MEAN 719 MAX 1,640 MIN 50 AC-FT 520,400
WTR YR 1974 TOTAL 243,169 MEAN 666 MAX 1,610 MIN 50 AC-FT 482,300

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	736	144	849	36	771	16	16	15	361	19	18	627
2	767	16	841	418	757	16	17	15	17	19	18	620
3	768	17	958	341	748	16	16	15	22	19	18	233
4	693	60	486	265	586	16	16	40	18	19	18	230
5	727	3.0	15	359	610	16	16	549	21	19	18	212
6	726	3.0	15	416	584	16	17	88	22	19	18	148
7	705	11	15	445	529	16	17	141	20	19	18	130
8	665	37	15	507	509	16	17	168	21	19	18	147
9	676	81	15	454	486	16	17	167	21	19	18	150
10	743	101	15	190	510	16	17	187	20	19	18	178
11	729	244	15	8.4	729	16	17	163	20	19	20	205
12	755	266	15	13	742	16	17	178	20	19	18	222
13	743	270	15	11	789	16	17	192	21	19	18	189
14	733	300	15	13	817	16	17	186	21	19	28	125
15	743	277	15	385	689	16	17	172	20	19	18	111
16	758	265	15	363	16	16	17	76	19	19	18	72
17	755	275	15	538	16	16	17	164	19	19	18	125
18	743	246	15	805	16	16	17	112	19	19	18	92
19	754	276	15	803	16	16	17	92	25	19	18	84
20	672	306	15	860	16	16	17	87	19	19	18	102
21	350	516	15	739	16	16	17	48	19	19	18	99
22	98	472	15	414	16	16	17	69	19	19	18	110
23	156	487	15	557	16	16	17	112	19	19	18	101
24	212	449	15	722	16	16	17	123	19	19	18	106
25	177	480	15	734	16	16	17	98	19	19	18	145
26	173	516	15	759	16	16	16	115	19	19	18	257
27	178	537	15	787	16	16	15	90	19	19	18	542
28	206	534	15	777	16	16	15	139	19	19	18	634
29	215	553	15	17	------	16	15	189	19	19	23	688
30	259	612	15	17	------	16	15	352	19	19	218	583
31	273	------	15	110	------	16	------	384	------	19	1,060	------
TOTAL	16,888	8,354.0	3,539	12,863.4	10,064	496	497	4,526	936	589	1,817	7,267
MEAN	545	278	114	415	359	16.0	16.6	146	31.2	19.0	58.6	242
MAX	768	612	958	860	817	16	17	549	361	19	1,060	688
MIN	98	3.0	15	8.4	16	16	15	15	17	19	18	72
AC-FT	33,500	16,570	7,020	25,510	19,960	984	986	8,980	1,860	1,170	3,600	14,410

CAL YR 1973 TOTAL 86,646.4 MEAN 237 MAX 1,020 MIN 3.0 AC-FT 171,900
WTR YR 1974 TOTAL 67,836.4 MEAN 186 MAX 1,060 MIN 3.0 AC-FT 134,600

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.--50 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 45,372 acres (184 km^2) in 1973, in the Valley Division of the Yuma Project and for supplementary municipal supply for city of Yuma (see sta 09526000). Prior to October 1970, records of chemical analyses and water temperatures were published in Part 2 of this series of reports.

REVISIONS (WATER YEARS).--WSP 1713: 1958, 1959 (Yuma municipal supply).

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	524	527	231	114	415	566	180	705	624	539	811	388
2	563	448	107	387	418	515	231	766	214	644	766	440
3	565	336	102	547	319	182	330	691	169	665	682	563
4	561	56	171	354	342	186	731	619	242	722	322	555
5	513	34	187	204	388	209	804	476	299	729	224	567
6	484	34	331	158	415	317	746	544	390	674	211	516
7	445	34	354	261	486	686	691	642	764	672	293	434
8	515	652	275	184	452	724	689	722	800	710	680	423
9	544	590	180	62	426	498	776	732	691	768	768	489
10	587	345	254	89	333	299	806	648	701	784	724	570
11	561	218	394	102	346	253	817	499	757	798	682	598
12	515	244	415	89	384	407	725	350	768	775	665	572
13	427	326	336	76	411	527	513	422	727	694	719	591
14	407	362	275	177	407	547	180	629	720	571	726	552
15	527	354	207	211	388	485	162	708	642	521	682	406
16	602	312	114	263	396	376	281	703	369	582	640	476
17	625	283	102	269	337	189	417	674	367	629	567	572
18	563	148	162	225	299	194	781	547	463	701	258	630
19	417	202	241	176	480	317	832	323	483	701	224	611
20	333	293	415	119	542	454	821	376	542	576	316	572
21	258	326	430	210	555	715	720	582	817	469	403	513
22	313	317	349	345	539	722	679	650	780	579	682	464
23	427	187	182	400	418	561	765	644	606	677	709	504
24	417	102	66	358	314	376	792	636	552	650	575	525
25	372	89	20	336	358	388	736	601	734	642	384	531
26	251	198	120	331	499	504	674	496	832	684	391	552
27	220	256	244	211	566	582	577	499	845	658	549	528
28	184	250	331	218	587	580	468	684	789	552	603	470
29	226	225	293	307	------	566	501	764	686	571	682	427
30	408	250	225	376	------	520	609	778	544	706	657	492
31	515	------	124	419	------	230	------	696	------	828	534	------
TOTAL	13,869	7,998	7,237	7,578	11,820	13,675	18,034	18,806	17,917	20,471	17,129	15,531
MEAN	447	267	233	244	422	441	601	607	597	660	553	518
MAX	625	652	430	547	587	724	832	778	845	828	811	630
MIN	184	34	20	62	299	182	162	323	169	469	211	388
AC-FT	27,510	15,860	14,350	15,030	23,440	27,120	35,770	37,300	35,540	40,600	33,980	30,810

CAL YR 1973 TOTAL 171,338 MEAN 469 MAX 884 MIN 20 AC-FT 339,800
WTR YR 1974 TOTAL 170,065 MEAN 466 MAX 845 MIN 20 AC-FT 337,300

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 forebay 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. 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 elevations and gate openings furnished by Imperial Irrigation District.

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	1,010	0	1,250	2,460	1,160	0	2,070	2,260	
2			0	0	0	1,530	2,500	1,140	1,010	2,080	2,460	
3			0	0	0	1,650	2,600	1,090	1,270	2,060	2,460	
4			363	0	0	1,370	2,590	1,060	1,310	2,050	2,410	
5			960	0	0	1,450	2,610	0	1,350	1,990	2,480	
6			968	0	0	1,430	2,610	0	1,190	1,610	2,210	
7			968	0	0	1,470	2,570	0	1,120	1,870	2,350	
8			966	0	0	1,540	2,440	0	1,150	2,250	2,340	
9			974	0	0	1,510	2,450	0	1,140	2,260	2,300	
10			1,160	0	0	1,560	2,530	0	1,100	2,250	2,320	
11			1,180	0	0	1,800	2,590	0	1,150	2,260	2,370	
12			1,190	0	0	1,770	2,610	0	1,160	2,380	2,240	
13			1,220	0	0	1,560	2,640	0	1,200	2,320	2,140	
14			1,180	0	0	1,720	2,640	0	1,090	2,140	2,040	
15			1,190	0	0	1,890	2,590	0	1,070	2,190	2,060	
16			1,190	0	1,010	1,950	2,630	0	1,080	2,320	2,050	
17			1,330	0	1,050	2,170	2,400	0	1,080	2,360	2,020	
18			1,280	0	1,050	2,240	2,180	0	1,010	2,380	2,000	
19			1,240	0	1,020	2,260	1,990	0	1,100	2,340	2,020	
20			1,060	0	1,040	2,310	2,000	0	1,150	2,180	2,080	
21			1,250	0	1,250	2,260	2,000	0	1,400	2,170	2,090	
22			1,270	0	1,160	2,450	1,690	0	1,420	2,200	2,080	
23			1,260	0	998	2,460	1,680	0	1,420	2,110	1,950	
24			1,370	0	998	2,440	1,750	0	1,570	1,760	1,870	
25			1,320	0	1,000	2,540	1,750	0	1,870	1,900	1,870	
26			1,370	0	999	2,580	1,740	0	1,960	1,990	1,930	
27			1,380	0	998	2,600	1,720	0	2,230	2,060	1,990	
28			1,420	0	1,000	2,470	1,680	0	2,240	2,090	1,750	
29			1,380	995	------	2,480	1,520	0	2,240	2,140	1,450	
30			1,400	1,000	------	2,520	1,550	0	2,220	2,130	1,250	
31		------	1,370	1,000	------	2,460	------	0	------	2,100	0	------
TOTAL	0	0	33,209	4,005	13,573	61,690	66,710	4,450	40,300	66,010	62,840	0
MEAN	0	0	1,071	129	485	1,990	2,224	144	1,343	2,129	2,027	0
MAX	0	0	1,420	1,010	1,250	2,600	2,640	1,160	2,240	2,380	2,480	0
MIN	0	0	0	0	0	1,250	1,520	0	0	1,610	0	0
AC-FT	0	0	65,870	7,940	26,920	122,400	132,300	8,830	79,940	130,900	124,600	0
(*)	0	0	0	0	0	0	0	0	0	0	0	0

CAL YR 1973 TOTAL 271,090.00 MEAN 743 MAX 2,350 MIN 0 AC-FT 537,700 *2,240
WTR YR 1974 TOTAL 352,787.00 MEAN 967 MAX 2,640 MIN 0 AC-FT 699,800 *0

*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.--13 years, 4,709 ft^3/s (133.4 m^3/s), 3,412,000 acre-ft/yr (4,210 hm^3/yr).

EXTREMES.--Period of record: Maximum daily discharge, 7,290 ft^3/s (206 m^3/s) Apr. 23, 1974; 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,710	4,300	3,250	2,880	4,620	4,880	6,070	7,190	6,190	6,700	6,890	5,980
2	5,660	4,150	3,140	3,700	5,100	4,670	6,240	7,220	6,170	6,750	6,650	5,950
3	5,780	3,790	2,790	4,300	4,740	4,490	6,440	7,060	6,170	6,680	6,600	6,120
4	5,900	3,290	3,220	4,410	4,950	4,760	6,280	7,020	6,140	6,790	6,640	6,090
5	5,870	3,510	3,440	4,020	5,070	4,790	6,390	7,030	6,300	6,610	6,680	5,920
6	5,350	3,730	3,710	2,670	5,140	5,300	6,480	6,810	6,000	6,790	6,840	5,900
7	5,240	4,080	3,860	2,090	5,320	5,340	6,560	6,760	5,750	6,840	6,880	5,870
8	5,060	4,200	3,470	810	5,230	5,320	6,720	6,720	5,710	6,780	6,770	5,970
9	4,990	4,160	2,290	815	4,720	4,790	6,770	6,630	5,750	6,990	6,880	6,190
10	5,040	4,020	2,180	895	4,120	3,790	6,840	6,540	5,860	7,010	6,870	6,150
11	5,210	3,570	2,450	1,100	4,090	4,560	6,860	6,340	5,830	6,940	6,800	6,230
12	5,120	3,580	2,560	1,190	4,210	4,290	6,880	6,210	5,880	6,830	6,860	6,310
13	4,880	3,580	3,160	1,060	4,060	4,440	6,870	6,230	5,760	6,800	6,960	6,150
14	4,720	3,770	3,240	1,000	4,200	4,920	7,020	6,280	5,750	6,780	6,970	6,290
15	4,480	3,710	3,090	1,040	4,320	4,630	6,990	6,450	5,660	6,800	6,880	6,390
16	4,510	3,440	3,120	1,170	4,290	4,680	7,050	6,490	5,620	6,810	6,730	6,460
17	4,620	3,560	3,350	1,140	4,200	4,730	7,020	6,390	5,880	7,010	6,790	6,380
18	4,550	3,340	3,280	1,220	4,170	5,180	6,930	6,350	5,910	6,840	6,480	6,610
19	4,570	3,420	3,520	1,230	4,300	5,680	6,990	5,940	6,140	6,650	6,330	6,470
20	4,540	3,420	3,640	1,200	4,530	5,960	7,140	5,930	6,330	6,550	6,390	6,310
21	4,440	3,480	3,350	1,470	4,690	6,360	7,210	6,010	6,180	6,270	6,110	6,350
22	4,390	3,660	3,120	1,690	4,720	6,310	7,280	6,230	6,310	5,690	6,230	6,380
23	4,420	3,360	2,420	2,040	4,700	5,990	7,290	6,250	6,100	6,000	6,200	6,380
24	4,470	3,220	1,740	2,180	4,360	5,710	7,250	6,190	6,250	5,980	6,290	6,340
25	4,230	2,720	1,420	2,310	4,840	6,020	7,210	6,080	6,360	5,560	6,060	6,350
26	4,330	2,940	2,330	2,630	4,770	6,180	7,160	5,940	6,490	5,500	6,050	6,110
27	4,410	2,730	3,000	2,930	4,930	6,290	7,130	6,090	6,600	5,700	6,080	5,710
28	4,230	3,000	3,240	3,410	5,360	6,220	7,090	6,360	6,640	5,730	6,230	5,570
29	4,260	3,070	3,090	3,960	------	5,900	7,100	6,550	6,570	6,160	6,080	5,170
30	4,240	3,100	3,070	4,330	------	5,620	7,050	6,610	6,430	6,470	6,120	5,070
31	4,240	------	3,120	4,370	------	5,660	------	6,340	------	6,710	5,930	------
TOTAL	149,460	105,900	92,660	69,260	129,750	163,460	206,310	200,240	182,730	201,720	202,270	183,170
MEAN	4,821	3,530	2,989	2,234	4,634	5,273	6,877	6,459	6,091	6,507	6,525	6,106
MAX	5,900	4,300	3,860	4,410	5,360	6,360	7,290	7,220	6,640	7,010	6,970	6,610
MIN	4,230	2,720	1,420	810	4,060	3,790	6,070	5,930	5,620	5,500	5,930	5,070
AC-FT	296,500	210,100	183,800	137,400	257,400	324,200	409,200	397,200	362,400	400,100	401,200	363,300

CAL YR 1973 TOTAL 1,774,180 MEAN 4,861 MAX 6,770 MIN 1,420 AC-FT 3,519,000
WTR YR 1974 TOTAL 1,886,930 MEAN 5,170 MAX 7,290 MIN 810 AC-FT 3,743,000

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. 208 for records of diversions.

See figure 3 on p. 205 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.

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.--Enters Colorado River in NE¼NW¼ sec.9, T.8 S., R.22 W., 5.6 mi (9.0 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.

09529200. BRUCE CHURCH DRAIN.
LOCATION.--Pump 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.

Return surface flows below Imperial Dam, Ariz.-Calif.--Continued

09529240. SOUTH GILA PUMP OUTLET CHANNEL NO. 2.
LOCATION.--Water-stage recorder in NW¼SW¼ 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 in NW¼NE¼ sec.17, T.8 S., R.21 W., 8 mi (13 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.

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.

09529350. MAIN OUTLET DRAIN ABOVE GILA RIVER.
LOCATION.--Water-stage recorder in NE¼NE¼ sec.30, T.8 S., R.22 W., about 1,000 ft (300 m) 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, and 8 mi (13 km) downstream from sta 09529300.

PERIOD OF RECORD.--Monthly discharge October 1965 to May 1974 (discontinued).

REMARKS.--Water pumped from numerous drainage wells in Wellton-Mohawk Irrigation and Drainage District, which normally would flow past this gage, was diverted to Gila River below sta 09529300 and pumped back into conveyance channel below this station while the earthen channel between the two stations was being concrete lined. Flow shown this year resulted entirely from ground-water inflow into unlined channel. Upon completion of lining of channel in May 1974, channel was put back into use for drainage flow and this station was discontinued since the flow would be expected to be equivalent to that at sta 09529300.

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 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 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 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 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 in NW¼SE¼ sec.26, T.16 S., R.22 E., San Bernardino meridian, 1,000 ft (300 m) upstream from railroad culvert. Prior to Dec. 16, 1971, at culvert 1,000 ft (300 m) upstream. Drainage canal enters Yuma Main Canal wasteway 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, 09529350, 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, 09529350, 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 in SE¼NE¼ sec.11, T.11 S., R.25 W., 150 ft (46 m) upstream from outlet to Main drain, which is 175 ft (53 m) upstream from East Main Canal wasteway and 0.4 mi (0.6 km) west of San Luis, Ariz.

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, in NW¼SW¼ sec.12, T.11 S., R.25 W., 0.2 mi (0.3 km) east of Main drain pumping plant 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 1973 TO SEPTEMBER 1974

Month	Laguna Canal wasteway 09528600	Levee Canal wasteway 09528800	North Gila Drain No. 1 09529000	North Gila Drain No. 3 09529050	Fortuna wasteway 09529100
October	0	167	417	28	69
November	0	170	247	21	93
December	0	88	208	15	47
CAL YR 1973	0	1,530	4,030	296	650
January	0	42	153	12	63
February	.3	117	254	3.4	52
March	0	110	284	0	47
April	0	150	294	0	36
May	0	159	420	5.4	33
June	0	168	354	3.6	34
July	0	190	496	0	36
August	0	216	520	0	49
September	0	168	559	0	48
WTR YR 1974	0.3	1,740	4,210	88	607

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	0	3.9	43	0	21
November	0	2.6	67	8.0	27
December	0	1.8	57	5.1	99
CAL YR 1973	83	6,310	541	10,740	545
January	8.0	.5	43	.6	51
February	7.4	2.0	33	27	30
March	11	2.9	65	6.4	68
April	7.6	.9	69	26	4.6
May	33	.4	84	4.2	0
June	33	699	131	1,420	39
July	35	1,740	127	2,420	29
August	53	1,390	72	2,260	12
September	74	6.0	92	2,190	60
WTR YR 1974	261	3,850	883	8,360	442

Month	Wellton-Mohawk Main Outlet Drain 09529300	Main Outlet Drain above Gila River 09529350	South Gila Pump Outlet Channel No. 1 09529360	South Gila Drain No. 2 09529400	South Gila Terminal wasteway 09529420
October	17,450	1,310	3,100	0	73
November	17,740	1,000	2,820	5.6	32
December	17,930	334	3,050	6.1	134
CAL YR 1973	207,600	125,400	31,840	245	881
January	18,480	.6	2,240	6.1	95
February	12,870	0	2,800	8.1	30
March	18,210	0	3,060	4.4	44
April	18,030	0	2,780	12	22
May	18,720	0	2,830	46	30
June	12,220	-	2,690	25	28
July	18,620	-	2,590	0	18
August	18,330	-	2,380	0	31
September	16,790	-	2,260	0	54
WTR YR 1974	205,400	-	32,590	113	591

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 1973 TO SEPTEMBER 1974

Month	South Gila Pump Outlet Channel No. 4 09529440	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
October	1,190	106	1,150	12	319	3,580
November	768	101	992	19	246	3,420
December	1,260	91	922	12	212	3,040
CAL YR 1973	7,410	1,020	11,540	138	2,950	37,820
January	79	68	843	12	239	2,760
February	1,080	56	744	7.7	235	2,650
March	1,430	61	861	6.1	236	3,230
April	1,450	74	928	8.5	251	3,180
May	.3	98	1,020	12	267	3,340
June	353	102	1,010	12	290	3,240
July	.9	101	1,160	15	297	3,490
August	0	93	1,180	19	286	3,410
September	.6	86	1,070	15	257	3,320
WTR YR 1974	7,620	1,040	11,880	150	3,140	38,660

Month	Yuma Mesa Outlet Drain 09530200	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	5,240	42	212	0	42	18,410
November	4,920	32	216	0	132	18,000
December	5,650	15	141	0	65	18,410
CAL YR 1973	58,670	233	1,650	8.5	700	214,800
January	3,710	11	112	0	63	18,410
February	4,830	5.6	74	0	45	13,510
March	5,430	6.1	106	0	81	18,510
April	4,430	6.0	96	0	28	18,060
May	4,920	6.1	103	0	99	18,980
June	4,770	6.0	106	0	56	13,270
July	4,180	6.9	118	0	102	18,920
August	4,850	21	162	0	19	18,570
September	5,180	30	167	0	45	17,110
WTR YR 1974	58,110	188	1,610	0	777	210,200

Month	Eleven Mile wasteway 09532500	Twenty-one Mile wasteway 09533000	Main Drain 09534000	West Main Canal wasteway 09534300	East Main Canal wasteway 09534500
October	37	0	10,090	354	699
November	178	0	9,050	515	821
December	205	0	8,270	188	674
CAL YR 1973	1,350	9.4	106,500	5,000	6,380
January	20	0	7,240	252	351
February	14	2.2	6,730	462	512
March	182	1.8	8,060	537	458
April	63	0	8,330	268	402
May	11	0	8,760	302	453
June	81	.4	8,220	480	416
July	28	.4	8,660	556	529
August	120	0	8,370	510	349
September	6.0	0	8,080	442	503
WTR YR 1974	945	4.8	99,860	4,870	6,170

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.

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.--February to September 1972: Maximum discharge during period, 1,080 ft^3/s (30.6 m^3/s) Aug. 9 (gage height, 8.02 ft or 2.444 m); no flow for most of period.
Water year 1973: Maximum discharge, 1,930 ft^3/s (54.7 m^3/s) Oct. 19 (gage height, 8.46 ft or 2.579 m); no flow for most of year.
Water year 1974: Maximum discharge, 1,370 ft^3/s (38.8 m^3/s) July 29 (gage height, 9.00 ft or 2.743 m); no flow for most of year.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, FEBRUARY TO SEPTEMBER 1972

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	36	
7									9.2	0	2.4	
8									2.8	0	39	
9									0	0	252	
10									0	0	0	
11									0	0	0	
12									0	0	0	
13									.06	0	0	
14									11	0	0	
15									.61	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	.06	0	
29									0	.33	0	
30					------				0	0	0	
31		------			------		------		------	0	0	------
TOTAL					0	0	0	0	23.67	.39	329.4	0
MEAN					0	0	0	0	.79	.013	10.6	0
MAX					0	0	0	0	11	.33	252	0
MIN					0	0	0	0	0	0	0	0
AC-FT					0	0	0	0	47	.8	653	0

PEAK DISCHARGE (BASE, 500 CFS).--Aug. 9 (0115) 1,080 cfs (8.02 ft).

09535100. San Simon Wash near Pisinimo, Ariz.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0			0	0				0	0	
2	0	0			0	0				0	3.5	
3	0	0			0	0				0	7.0	
4	0	0			0	0				0	0	
5	0	0			0	0				0	0	
6	0	0			0	0				0	.05	
7	15	0			0	0				0	0	
8	0	0			0	0				0	0	
9	0	0			0	3.1				0	0	
10	0	0			0	0				0	0	
11	0	0			0	0				3.5	0	
12	0	0			0	6.0				0	0	
13	0	0			0	0				288	0	
14	0	0			0	0				.86	0	
15	0	0			0	0				0	18	
16	0	0			0	0				0	14	
17	.26	139			0	0				0	0	
18	0	2.0			0	0				0	0	
19	733	0			0	0				0	10	
20	185	0			0	0				0	7.2	
21	.49	0			6.9	0				0	.12	
22	0	0			3.5	0				0	0	
23	0	0			0	0				0	0	
24	0	0			0	0				0	0	
25	0	0			0	0				0	0	
26	0	0			0	0				0	0	
27	0	0			0	0				.09	0	
28	0	0			0	0				3.0	0	
29	0	0			------	0				0	0	
30	0	0			------	0				0	0	
31	0	------			------	0	------		------	0	0	------
TOTAL	933.75	141.0	0	0	10.4	9.1	0	0	0	295.45	59.87	0
MEAN	30.1	4.70	0	0	.37	.29	0	0	0	9.53	1.93	0
MAX	733	139	0	0	6.9	6.0	0	0	0	288	18	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1,850	280	0	0	21	18	0	0	0	586	119	0

WTR YR 1973 TOTAL 1,449.57 MEAN 3.97 MAX 733 MIN 0 AC-FT 2,880

PEAK DISCHARGE (BASE, 500 CFS).--Oct. 19 (2015) 1,930 cfs (8.46 ft); July 13 (1015) 913 cfs (7.88 ft).

09535100. San Simon Wash near Pisinimo, Ariz.--Continued

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		0		0				0	0	0
2		0		0		0				0	1.4	0
3		0		0		0				0	16	0
4		0		0		0				0	.57	0
5		0		.09		0				0	0	0
6		0		0		0				0	.40	166
7		0		0		0				3.3	.17	0
8		0		0		0				9.4	0	0
9		0		0		0				0	0	0
10		0		0		.04				0	0	0
11		0		0		0				0	0	0
12		0		0		0				0	0	0
13		0		0		0				0	0	0
14		0		0		0				0	0	0
15		0		0		0				11	0	0
16		0		0		0				13	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				.50	0	.90
22		0		0		0				0	0	84
23		0		0		0				0	0	63
24		0		0		0				0	0	29
25		1.5		0		0				0	0	96
26		0		0		0				0	0	0
27		0		0		0				0	0	0
28		0		0		0				81	0	0
29		0		0	------	0				191	0	0
30		0		0	------	0				0	0	0
31		------		0	------	0	------		------	0	0	------
TOTAL	0	1.5	0	.09	0	.04	0	0	0	309.20	18.54	438.90
MEAN	0	.050	0	.003	0	.001	0	0	0	9.97	.60	14.6
MAX	0	1.5	0	.09	0	.04	0	0	0	191	16	166
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	3.0	0	.2	0	.08	0	0	0	613	37	871

CAL YR 1973 TOTAL 376.32 MEAN 1.03 MAX 288 MIN 0 AC-FT 746
WTR YR 1974 TOTAL 768.27 MEAN 2.10 MAX 191 MIN 0 AC-FT 1,520

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-29	0015	9.00	1,370	9-22	2400	7.48	531
9- 6	0930	7.44	524				

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, 689 ft^3/s (19.5 m^3/s) Sept. 22 (gage height, 7.73 ft or 2.356 m), from rating curve extended above 110 ft^3/s (3.1 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 110 ft^3/s (3.1 m^3/s); no flow for most of each year.

REMARKS.--Records poor.

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	.50	0
2										0	1.8	0
3										0	37	0
4										0	53	0
5										0	240	0
6										0	14	121
7										1.7	7.0	7.8
8										.40	1.2	16
9										.50	0	4.8
10										0	0	1.1
11										0	0	0
12										0	0	0
13										63	0	0
14										69	0	0
15										62	0	0
16										17	0	0
17										0	0	0
18										0	0	0
19										0	0	0
20										9.9	0	0
21										150	0	0
22										62	0	179
23										9.8	0	78
24										1.3	0	78
25										0	0	50
26										0	0	10
27										0	0	7.4
28										11	0	37
29					------					178	0	0
30					------					120	0	0
31		------			------		------		------	7.0	0	------
TOTAL	0	0	0	0	0	0	0	0	0	762.60	354.50	590.1
MEAN	0	0	0	0	0	0	0	0	0	24.6	11.4	19.7
MAX	0	0	0	0	0	0	0	0	0	178	240	179
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	1,510	703	1,170

CAL YR 1973 TOTAL 473.50 MEAN 1.30 MAX 123 MIN 0 AC-FT 939
WTR YR 1974 TOTAL 1,707.20 MEAN 4.68 MAX 240 MIN 0 AC-FT 3,390

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-13	2300	6.98	494	8- 3	2200	5.46	202
7-15	2230	6.29	345	8- 5	1300	6.62	413
7-21	1930	6.53	394	9- 6	0430	5.99	288
7-30	0030	6.67	424	9-22	1730	7.73	689

WHITEWATER DRAW BASIN

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.--5 years, 1.06 ft^3/s (0.0300 m^3/s) 768 acre-ft/yr (947,000 m^3/yr).

EXTREMES.--Current year: Maximum discharge, 162 ft^3/s (4.59 m^3/s) July 20 (gage height, 4.23 ft or 1.289 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, 0.04 ft^3/s (0.001 m^3/s) June 23.
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, 0.03 ft^3/s (0.001 m^3/s) July 11-14, 1971.

REMARKS.--Records fair except those for January, April, and May, which are poor.

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	.82	.69	.58	.60	.45	.43	.25	.22	.10	.06	.49	.06
2	.82	.69	.62	.60	.46	.43	.25	.17	.10	.07	.47	.06
3	.82	.69	.62	.60	.43	.44	.25	.21	.11	.08	.49	.06
4	.82	.68	.62	.60	.43	.68	.25	.21	.10	.07	.51	.06
5	.83	.72	.62	.60	.43	.78	.25	.18	.09	.07	.53	.07
6	.84	.76	.62	.60	.43	.82	.20	.20	.11	3.2	.60	.07
7	.82	.71	.62	.60	.41	.82	.20	.21	.11	.55	.58	.07
8	.83	.71	.61	.50	.40	.86	.20	.20	.07	.76	.58	.07
9	.83	.71	.59	.50	.40	.93	.20	.18	.10	.17	.46	.07
10	.84	.71	.59	.50	.40	.76	.20	.18	.09	.16	.40	.07
11	.85	.71	.59	.50	.40	.30	.20	.18	.07	.19	.35	.07
12	.84	.71	.62	.50	.40	.30	.20	.18	.06	.13	.36	.07
13	.83	.71	.62	.50	.40	.30	.20	.17	.08	.18	.44	.08
14	.81	.69	.62	.50	.40	.30	.20	.17	.08	.24	.45	.08
15	.81	.58	.62	.50	.40	.30	.20	.17	.09	.18	.47	.08
16	.79	.58	.62	.50	.40	.30	.20	.17	.09	.16	.15	.08
17	.79	.56	.62	.50	.40	.30	.20	.16	.11	.11	.06	.08
18	.79	.56	.62	.50	.40	.30	.20	.16	.17	.11	.07	2.8
19	.78	.59	.61	.50	.40	.30	.20	.16	.15	.24	.07	.12
20	.78	.58	.59	.50	.39	.30	.20	.18	.14	5.3	.07	.28
21	.78	.59	.58	.50	.38	.30	.20	.15	.12	.22	.07	.14
22	.77	.60	.58	.50	.39	.30	.20	.14	.05	.18	.07	.13
23	.75	.58	.58	.50	.39	.30	.20	.14	.04	.20	.07	.14
24	.75	.58	.58	.49	.43	.30	.22	.13	.05	.20	.07	.12
25	.75	.57	.58	.49	.43	.29	.23	.12	.07	.11	.06	.12
26	.75	.61	.57	.48	.43	.28	.23	.11	.06	.10	.06	.12
27	.75	.62	.57	.49	.43	.28	.23	.12	.06	.14	.08	.14
28	.75	.59	.57	.47	.43	.28	.23	.11	.07	.23	.06	.14
29	.75	.59	.57	.46	------	.28	.22	.10	.05	.31	.06	.14
30	.71	.59	.57	.46	------	.28	.20	.10	.06	.36	.06	.13
31	.70	------	.57	.46	------	.28	------	.10	------	.44	.06	------
TOTAL	24.55	19.26	18.54	16.00	11.54	13.12	6.41	4.98	2.65	14.52	8.32	5.72
MEAN	.79	.64	.60	.52	.41	.42	.21	.16	.088	.47	.27	.19
MAX	.85	.76	.62	.60	.46	.93	.25	.22	.17	5.3	.60	2.8
MIN	.70	.56	.57	.46	.38	.28	.20	.10	.04	.06	.06	.06
AC-FT	49	38	37	32	23	26	13	9.9	5.3	29	17	11

CAL YR 1973 TOTAL 322.89 MEAN .88 MAX 15 MIN .40 AC-FT 640
WTR YR 1974 TOTAL 145.61 MEAN .40 MAX 5.3 MIN .04 AC-FT 289

PEAK DISCHARGE (BASE, 100 CFS).--July 20 (0200) 162 cfs (4.23 ft).
NOTE.--No gage-height record Dec. 22 to Jan. 24.

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.--45 years (1915-19, 1930-33, 1935-46, 1947-74), 10.3 ft^3/s (0.292 m^3/s), 7,460 acre-ft/yr (9.20 hm^3/yr); median of yearly mean discharges, 8.3 ft^3/s (0.235 m^3/s), 6,010 acre-ft/yr (7.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 936 ft^3/s (26.5 m^3/s) Aug. 2 (gage height, 7.84 ft or 2.390 m); maximum gage height, 8.48 ft (2.585 m) July 20 (backwater from debris on fence below gage); 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	0	.79
2										0	373	.56
3										1.4	52	.28
4										.01	36	.07
5										0	56	0
6										0	24	.05
7										19	3.6	.09
8										9.2	.95	0
9										1.3	.50	0
10										.20	.20	0
11										0	.10	0
12										0	0	0
13										0	0	0
14										1.1	9.0	0
15										9.2	3.0	5.8
16										2.4	.50	1.2
17										.10	0	.37
18										2.2	0	.02
19										16	2.0	0
20										587	.20	23
21										131	0	175
22										42	0	14
23										17	0	1.5
24										4.7	0	2.5
25										0	0	1.2
26										0	9.0	.75
27										0	2.0	60
28										0	1.8	2.1
29					------					0	1.7	.97
30					------					44	1.4	.61
31		------			------		------		------	1.1	1.1	------
TOTAL	0	0	0	0	0	0	0	0	0	888.91	578.05	290.86
MEAN	0	0	0	0	0	0	0	0	0	28.7	18.6	9.70
MAX	0	0	0	0	0	0	0	0	0	587	373	175
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	1,760	1,150	577

CAL YR 1973 TOTAL 497.90 MEAN 1.36 MAX 200 MIN 0 AC-FT 988
WTR YR 1974 TOTAL 1,757.82 MEAN 4.82 MAX 587 MIN 0 AC-FT 3,490

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

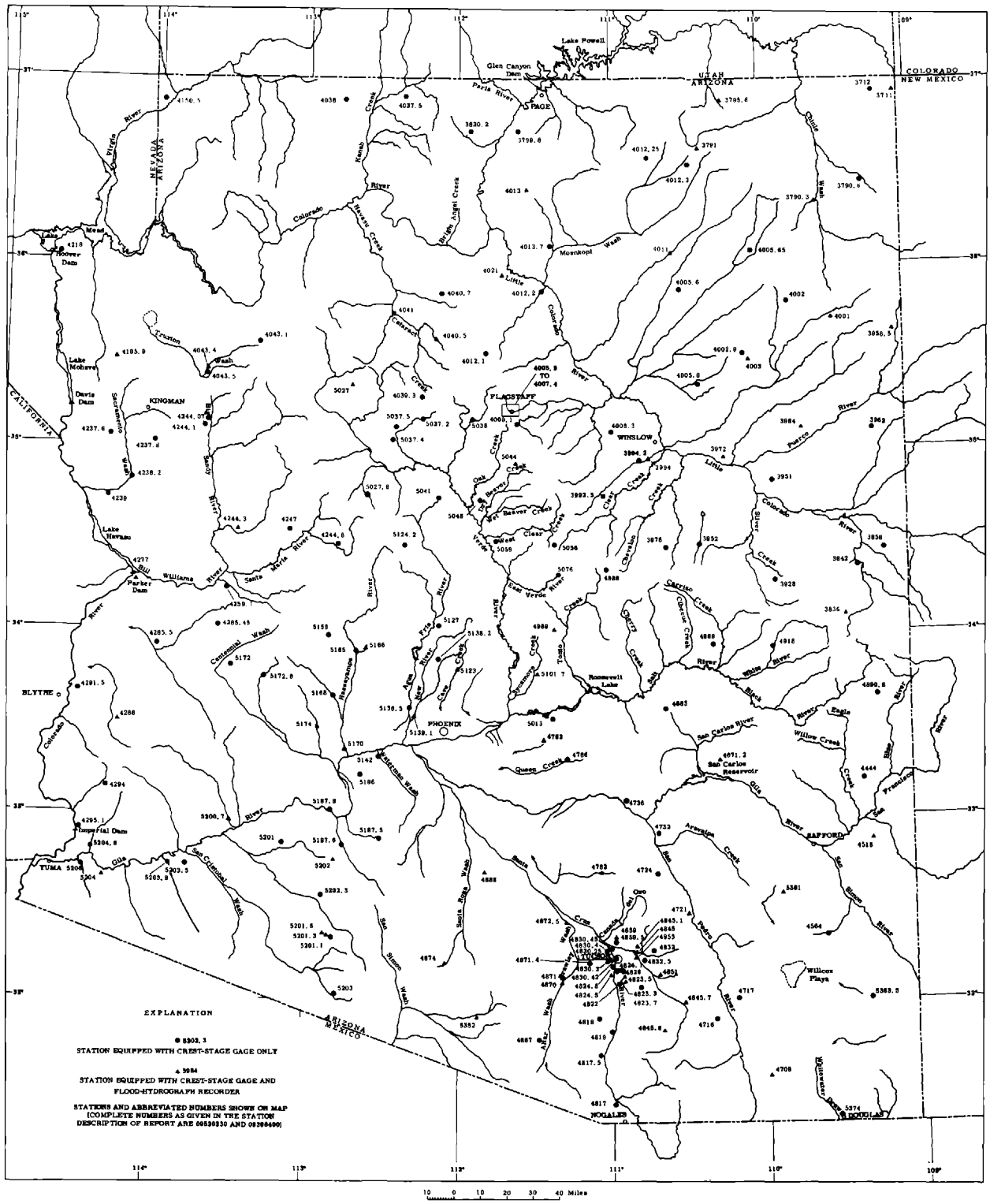

Figure 4.--Map of Arizona showing location of partial-record gaging stations.

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 1974

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	1967-74	7-22-74	3.90	100
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	1968-74	7-22-74	2.91	60
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	1963-74	7- -74	3.32	100
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	1963-74	2-21-74	3.01	10
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	1963-74	7- -74	5.38	123
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	1963-74	7-20-74	4.21	145
		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	1962-74	11-19-73	8.18	125
		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	1963-74	1974	----	(a)
		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.	b17.2 (1.3)	1963-74	1974	----	c3
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	1963-74	1974	----	(a)
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	1963-74	1974	----	(a)
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	1965-74	1974	----	(a)
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	1964-74	1974	----	(a)
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	1964-74	1974	----	(a)
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 miles south of State Highway 264, and 2.75 miles southwest of Window Rock.	.28	1963-74	8- 5-74	5.98	109

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 1974--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	1971-74	1974	----	(a)
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	1963-74	d1974	----	c30
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	1963-74	8- -74	4.72	c20
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	1964-74	7-15-74	----	c <1
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	1963-74	1974	----	(a)
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‡, 1973-74	1974	----	(a)
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.	e.25	1970-74	9- -74	3.42	6
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	1963-74	7-16-74	5.74	548
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	1963-74	8- -74	3.98	c5
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	1963-74	8- -74	8.74	370
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	1963-74	8- -74	5.96	256
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.	b7.49 (3.96)	1962-74	1974	----	(a)
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	1963-74	7-19-74	4.59	90
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.	b6.45 (.28)	1964-74	7-21-74	10.03	900
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	1964-74	7-17-74	----	c2
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	1970-74	1974	----	(a)
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	1970-74	1974	----	(a)
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	1970-74	4- 3-74	6.09	<3
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	1970-74	8- 1-74	----	<1
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	1969-74	8- 2-74	4.80	12
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	1969-74	8-10-74	2.83	18

Annual maximum discharge at crest-stage partial-record stations during water year 1974--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					
09400700	Switzer Canyon tributary at Flagstaff, Ariz.	Lat 35°12'01", long 111°36'57", 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.	f7.31	1968-74	8- 6-74	4.79	100
09400730	Lockett Panning 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	1969-74	8- 6-74	----	c 2
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	1969-74	8- 6-74	6.23	120
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.	b3.32 (.56)	1964-74	8- 6-74	2.62	<3
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	1963-74	1974	----	(a)
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	1967-74	9- 5-74	4.74	50
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	1968-74	2-17-74	5.10	140
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	1963-74	7-22-74	5.88	114
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	1963-74	1974	----	(a)
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	1963-74	1974	----	(a)
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	1963-74	1974	----	(a)
		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	1963-74	1974	----	(a)
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	1963-74	1974	----	(a)
		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	1964-74	d1974	----	c <1
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.	b5.00 (1.07)	1963-74	1974	----	(a)
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 miles south of road to old Grand Canyon airport, and 15 miles south of Grand Canyon Village.	21.8	1963-74	1974	----	(a)
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	1968-74	1974	----	(a)

Annual maximum discharge at crest-stage partial-record stations during water year 1974--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Hualapai Wash basin					
09404310	Yempai 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.	0.20	1964-74	7-21-74	3.78	c25
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	1965-74	7-20-74	8.95	6,500
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	1964-74	1974	----	(a)
		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	1964-74	1974	----	(a)
		Tributaries between Virgin River and Bill Williams River					
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	1963-74	7-21-74	2.19	46
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	1964-74	7-19-74	----	<1
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	1965-74	7-19-74	5.02	182
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	1965-74	9- -74	4.18	360
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	1965-74	7-19-74	6.75	4,260
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	1963-74	1- -74	----	c1
		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	1968-74	1974	----	(a)
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	1963-74	1974	----	(a)
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	1963-74	9- -74	8.79	e50
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	1963-74	d1974	----	c15
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	1964-74	8- 5-74	4.86	c4
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	1968-74	8- 4-74	6.37	55
		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	1963-74	1974	----	(a)
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	1964-74	7-20-74	6.75	85
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	1963-74	8- 3-74	2.02	120

Annual maximum discharge at crest-stage partial-record stations during water year 1974--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--continued					
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	1963-74	8- 3-74	4.11	980
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	1965-74	g1974	----	<5
09429400	Indian Wash tributary near Yuma, Ariz.	Lat 33°06'33", 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	1963-74	7-21-74	4.10	57
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	1965-74	1974	---	(a)
		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	1963-74	1974	----	(a)
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	1963-74	8-23-74	7.35	56
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	1963-74	8-24-74	2.68	147
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.	b35.2 (4.92)	1964-74	1974	----	(a)
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	1962-74	10-19-72 7-19-74	6.14 3.09	h245 4
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.	b7.12 (1.87)	1963-74	d1974	11.09	1,000
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	1963-74	7-19-74	3.2	c2
09471700	Fenner Wash near Benson, Ariz.	Lat 31°58'49", 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	1963-74	7-19-74	7.25	225
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‡, 1973-74	d1974	7.42	120
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	1963-74	9- -74	6.23	236
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	1964-74	7- -74	----	100
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	1963-74	8- 2-74	14.28	1,570
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, 1963-74	8- 2-74	2.47	550
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	1966-74	1974	----	(a)
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‡, 1969-74	7- 7-74	1.94	22
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	1963-74	12-20-67 8- 2-74	3.15 3.82	h150 115
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	i1948-69, 1970-74	7-23-74	6.60	3,900

Annual maximum discharge at crest-stage partial-record stations during water year 1974--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					
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.	0.15	1963-74	d1974	5.99	63
09481900	Ocotillo Wash near Continental, Ariz.	Lat 31°50'00", long 111°00'00", in SE¼ sec.27, T.18 S., R.13 E. (unsurveyed), Pima County, in Spanish Land Grant of San Ignacio de la Canoa at U.S. Highway 89, 1.5 miles southwest of Continental.	j.40	1954-57, 1963-74	1974	----	(a)
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	1965-74	7- 7-74	5.23	1,170
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	1966-74	7- 7-74	4.29	210
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.	hb9.78 (5.40)	1966-74	7- 8-74	6.51	1,890
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.	hb6.65 (1.37)	1961, 1965-74	8-22-61 1965 7- 8-74	---- ---- 6.86	k1,350 m650 1,030
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	1970-74	7-21-74	2.88	125
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	1966-74	6-25-74	2.0	110
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	1966-74	1974	----	(a)
09482600	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	1970-74	7- 7-74	1.90	130
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	1969-74	7-20-74	2.2	<5
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	1965-74	1974	----	(a)
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	1965-74	9-14-74	2.74	15
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	1966-74	9- 6-74	4.67	580
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)	1971-74	8- -71 8-12-72 9- 6-74	8.5 7.0 7.85	1,250 870 1,150
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	1965-74	7- 7-74	4.24	<10

Annual maximum discharge at crest-stage partial-record stations during water year 1974--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					
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	1971-74	1- -74	1.96	200
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‡, 1966-74	9-21-74	3.02	420
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	1965-74	8- 2-74	5.92	131
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	1965-74	8-19-74	5.03	620
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	1962-74	9-21-74	5.64	1,350
09485100	Saguaro Corners Wash near Tucson, Ariz.	Lat 32°10'11", long 110°44'15", in SW¼NW¼ sec.32, T.14 S., R.16 E., Pima County, at Freeman Road, 0.9 mile south of Old Spanish Trail, and 4 miles southeast of Tucson city limits.	.17	p1965-74	1974	----	(a)
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, 1965-74	7-20-74	----	e 600
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	1964-74	9- 7-74	7.93	<5
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	1964-74	7-19-74	----	<10
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	1963-74	8- 4-74	7.55	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, 1966-74	8- 4-74	13.41	6,910
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	1968-74	d1974	9.68	335
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	1969-74	d1974	5.58	135
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, 1966-74	10-19-72 7- 8-74	7.84 6.15	1,910 630
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	1963-74	9-26-74	5.14	420
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	1963-74	9- -74	3.93	60
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.9/	1.61	1965-74	4-24-74	8.63	5
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	1965-74	1974	----	(a)

Annual maximum discharge at crest-stage partial-record stations during water year 1974--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					
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.	b4.63 (2.08)	1963-74	7-19-74	17.46	750
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	1966-74	8- 5-74	2.40	22
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	1963-74	1- 8-74	2.06	e50
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	1966-74	1- 8-74	4.29	150
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.	e6	1963-74	1974	----	(a)
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.	b57.0 (4.5)	1972-74	r1974	----	<1
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‡, 1973-74	h10-19-72 1974	4.6 ----	960 (a)
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	1969-74	1974	----	(a)
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	1969-74	7-20-74	3.19	70
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‡, 1973-74	h10-19-72 1974	5.38 ----	1,100 (a)
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	1963-74	1974	----	(a)
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	1964-74	4- 2-74	4.05	20
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	1963-74	8- -74	2.61	<1
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	1965-74	1974	----	(a)
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.	.64	1964-74	8- -74	3.80	15
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‡, 1972-74	7-21-74	2.42	120
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‡, 1967-74	8- 8-74	1.24	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‡, 1968-74	8- 5-74	4.66	1,390

Annual maximum discharge at crest-stage partial-record stations during water year 1974--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					
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.	0.95	1969-74	7-20-74	6.60	155
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	1963-74	8- 2-74	10.4	721
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.	a1,637	1963-74	8- 5-74	2.26	460
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	1960-74	9-19-74	2.72	150
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‡, 1971-74	8- 5-74	7.00	775
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	1964-74	9- 3-74	----	c100
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	1964-74	7-30-74	2.90	e35
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, 1964-74	7-20-74	7.30	c650
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	1963-74	1974	----	(a)
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	1964-74	7- 7-74	7.19	75
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	1961-74	1974	----	(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., Maricopa County, at U.S. Highway 60, 5 miles northeast of Wenden.	2.79	1963-74	7- -74	3.63	c330
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	1963-74	10-19-63 8- 3-74	---- 5.39	c400 e45
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	1962-74	3-20-74	4.90	900
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.	b3.45 (1.02)	1963-74	7- 7-74	4.18	390
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	1963-74	8- 3-74	5.01	1,000
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	1963-74	8- 3-74	2.43	250
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	1964-74	8- 3-74	7.70	c340
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 15.1 miles north and northeast of Dateland exit from Interstate 8.	v248	1971-74	h6- 7-72 h10- 7-72 8- 2-74	h2.32 h5.56 4.64	h240 2,300 1,280
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	1963-74	8-20-71 8- 2-74	h4.34 5.35	900 1,530
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	1966-74	9-23-74	6.37	215

Annual maximum discharge at crest-stage partial-record stations during water year 1974--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					
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	1966-74	9-26-74	7.08	470
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	1967-74	8- 2-74	5.56	254
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	1963-74	1974	----	(a)
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	1963-74	8- 4-74	----	c12
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	1963-74	1974	----	(a)
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	1963-74	d1974	----	<1
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	1971-74	1974	----	(a)
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	1963-74	9- 3-74	2.50	190
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, and 11.5 miles east of Yuma.	39.3	1971-74	1974	----	(a)
		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	1962-74	9-22-74	4.96	1,500
		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	1963-74	7-16-74	3.86	120
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	1963-74	7- 7-74	10.34	120
		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	1968-74	7-20-74	3.09	580

‡ Operated as a continuous-record gaging station.
a. No evidence of flow reported during the water year.
b. Portion of drainage basin is generally noncontributing because of a major stock pond. The noncontributing area is shown in parentheses.
c. Estimated.
d. July or August.
e. Approximate.
f. Peak flows originate in 1.2 square miles of urban area at the downstream end of the basin. Little flow has come from the upper 6.1 square miles since at least 1964.
g. August or September.
h. Revised.
i. Incomplete record from floodmarks prior to installation of gage.
j. Area below dam for Duval Mine tailings pond; prior to October 1969, drainage area was 3.6 square miles.
k. Maximum for period 1956-74.
m. Maximum for period 1962-73.
n. Not available at time of printing.
p. Discontinued.
q. At site 0.2 mile upstream prior to March 6, 1974.
r. Peak occurred either on Feb. 13 or Apr. 17, 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 asterisk (*); measurements of peak flow by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1974

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
San Juan River basin						
Laguna Creek	Chinle Wash	Lat 36°40'41", long 110°24'11", Navajo County, in Navajo Indian Reservation, 2.5 mi northeast of Tsegi.	—	—	5-28-71	0.43
					5-17-72	1.07
					8-24-72	.29
					9-26-72	.91
					9-26-72	.87
					5-10-74	.18
					6-14-74	.05
					8-14-74	0
					8-27-74	0
					9-17-74	.14
Little Colorado River basin						
Walnut Creek	San Francisco Wash	Lat 35°12'43", long 111°25'13", in SE¼ sec.10, T.21 N., R.9 E., Coconino County, at bridge on former U.S. Highway 66, 1.0 mi northwest of Winona.	—	—	4-28-73	†a821
Gila River basin						
Oak Creek	Verde River	Lat 34°59'54", long 111°44'18", Coconino County, in Coconino National Forest at road crossing to Cave Spring Campground, 9.5 mi north of Sedona.	—	—	7- 2-74	*4.37
Do	do	Lat 34°58'12", long 111°45'03", Coconino County, in Coconino National Forest at Bootlegger Campground, 7.5 mi north of Sedona.	—	—	7- 2-74	*9.21
Do	do	Lat 34°55'36", long 111°44'01", Coconino County, in Coconino National Forest at Encinoso Campground, 3.5 mi northeast of Sedona.	—	—	7- 2-74	*10.4
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.	—	—	7- 2-74	*28.4
Do	do	Lat 34°53'00", long 111°44'37", in SE¼NE¼ sec.5, T.17 N., R.6 E., Coconino County, in Coconino National Forest, 1.0 mi northeast of Sedona.	—	—	7- 2-74	*16.3
Do	do	Lat 34°52'21", long 111°45'35", in NW¼SW¼ sec.8, T.17 N., R.6 E., Coconino County, 0.4 mi above bridge on State Highway 179, at Sedona.	—	—	7- 2-74	*25.5
Do	do	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	7- 2-74	*23.2
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.	—	—	7- 2-74	*10.6
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.	—	—	7- 2-74	*10.8
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.	—	—	7- 2-74	*5.45
Do	do	Lat 34°46'51", long 111°53'40", in NE¼SW¼ sec.14, T.16 N., R.4 E., Yavapai County, in Coconino National Forest, 1 mi north of community of Page Springs.	—	—	7- 2-74	*3.68

See footnote at end of the table.

Discharge measurements made at miscellaneous sites during water year 1974--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Gila River basin--Continued				
Oak Creek	Verde River	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.	—	—	3-29-74 4-18-74 4-25-74 6- 4-74 6-24-74 7- 2-74 8-14-74 9- 9-74	*57.4 *53.2 *49.8 *34.2 *33.0 *30.0 44.8 37.5
Spring Creek	Oak Creek	Lat 34°45'51", long 111°54'57", in SE¼SW¼ sec.22, T.16 N., R.4 E., Yavapai County, in Coconino National Forest, at road crossing, 1.3 mi west of community of Page Springs and 1.8 mi upstream from mouth.	—	—	4-25-74	5.20
Dry Beaver Creek	Beaver Creek	Lat 34°42'51", long 111°47'01", in NE¼NE¼ sec.11, T.15 N., R.5 E., Yavapai County, in Coconino National Forest, 1.1 mi southwest of gaging station 09505350, Dry Beaver Creek near Rimrock, Ariz.	—	—	6- 4-74	*.19
Sweetwater Wash	Cave Creek	Lat 33°36'14", long 112°05'58", at east line of sec.13, T.3 N., R.2 E., Maricopa County, at bridge on 19th Avenue at Sweetwater Avenue, at Phoenix.	5.90	—	8- 5-74	†2,600

a Most of water was spillway flow from Lower Lake Mary with discharges of 700 cfs to possibly 1,200 cfs measured or computed at Lower Lake Mary spillway Apr. 27 and 28.

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