

1971

**Water Resources Data
for
New Mexico**

Part 1. Surface Water Records

Best Wishes to C. P. Penick

Pat Borland



**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

Prepared in cooperation with the State of New Mexico
and with other agencies

Prepared in cooperation with

- ✓Office of the State Engineer
- ✓Interstate Stream Commission
 - ✓Pecos River Commission
 - ✓State Highway Department
- ✓Costilla Creek Compact Commission
- ✓Albuquerque Metropolitan Arroyo Flood Control Authority
- ✓Bureau of Reclamation, U.S. Department of the Interior
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 - ✓White Sands Missile Range, Department of the Army
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- ✓Bureau of Indian Affairs, U.S. Department of the Interior
- Fish and Wildlife Service, U.S. Department of the Interior
- ✓Soil Conservation Service, U.S. Department of Agriculture

Water resources records, 1971, for New Mexico are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for New Mexico
Part 1: Surface Water Records
2. Water Resources Data for New Mexico
Part 2: Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
P.O. Box 4369
Albuquerque, New Mexico 87106

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WATER RESOURCES DATA FOR NEW MEXICO, 1971

PART 1. SURFACE-WATER RECORDS

INTRODUCTION

Surface-water records for the 1970 water and calendar years for New Mexico, 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, 2. 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 W. E. Hale, 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 New Mexico.

Through September 30, 1960, the records of discharge and stage of streams and canals and contents and stage of lakes or reservoirs were published in an annual series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States."

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. The discharge and reservoir storage records for 1961-65 also are published in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States 1961-65." There will be a similar series of water-supply papers for the water years 1966-70.

COOPERATION

The first gaging station established by the Geological Survey in the United States was on the Rio Grande at Embudo on Jan. 1, 1889. Cooperation with the Territory of New Mexico began about 1907, and Territory or State cooperation in varying amounts continued until 1915, the work being directed from the Denver office. From 1916 to 1930 the State conducted its own stream-gaging program. In 1931 a new State cooperative program was begun and a Geological Survey district office established in Santa Fe. Agreements have also existed with county, municipal, and private organizations, and with other Federal agencies. Organizations that supplied data are acknowledged in station descriptions.

Organizations that assisted in collecting data through cooperative agreements with the Survey in 1971 are:

Office of the State Engineer, S. E. Reynolds.

Interstate Stream Commission, S. E. Reynolds, secretary.

Pecos River Commission, J. W. Odell succeeded by H. M. Babcock, federal representative and chairman, R. E. Pritchett succeeded by J. B. Walker, commissioner for New Mexico, R. M. McGowen, commissioner for Texas.

State Highway Department, L. G. Boles, State Highway Engineer.

Costilla Creek Compact Commission, S. E. Reynolds, commissioner for New Mexico, C. J. Kuiper, commissioner for Colorado.

Albuquerque Metropolitan Arroyo Flood Control Authority, J. B. Robert, executive engineer.

Assistance in the form of funds or services was furnished by the following Federal Agencies:

Corps of Engineers, U. S. Army in the operation of 21 gaging stations.

White Sands Missile Range, Department of the Army in the operation of 2 gaging stations.

Bureau of Reclamation, U. S. Department of the Interior in the operation of 11 gaging stations.

Federal Highway Administration, U. S. Department of Transportation for research study on small drainage areas.

Bureau of Indian Affairs, U. S. Department of the Interior in the operation of 6 gaging stations.

Fish and Wildlife Service, U. S. Department of the Interior in the operation of 4 gaging stations.

Soil Conservation Service, U. S. Department of Agriculture in the operation of 2 gaging stations.

Assistance in the form of funds or services was also given by the following organizations:

Forest Service, U. S. Department of Agriculture; National Weather Service, U. S. Department of Commerce; the city of Ruidoso; Carlsbad Irrigation District; Public Service Company of New Mexico; State Department of Game and Fish.

DEFINITION OF TERMS

Definition of terms related to streamflow and other hydrologic data, as used in this report, are defined as follows:

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 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.

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.

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 08314500, includes the part number "08" and a 6-digit station number. In this report the complete number 08314500 appears just to the left of the station name. In this report, the records are listed in downstream order by parts. 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 with a current meter, 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. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

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

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, 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 gage heights or elevations at, 0800 hours, are included for some reservoir stations. Records are published for both the water year, which begins on October 1 and ends on September 30 and the calendar year. A calendar for the 1971 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. 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. In the first paragraph headed "Current year:" the data given are for the complete current water year unless otherwise specified. In the second paragraph usually headed "Period of record:" the data given are for the period of record given in the PERIOD OF RECORD paragraph otherwise the data given are for a shorter period and the heading shows the period for which extremes are available. 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."

Previous 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.

Skeleton capacity tables are published for all reservoirs for which records of contents are published on a daily basis, except those reservoirs for which a table of daily elevations (or gage heights) is published.

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.

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 is expressed in acre-feet (line headed "AC-FT").

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, except for those stations for which a table of daily elevations (or gage heights) is published.

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.

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, or 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 explain the use of new capacity tables or for other special conditions.

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 of some stations, as indicated by the monthly mean, may vary widely from natural runoff, due to the effects of diversions, consumptive use, regulation by storage, increases or decreases in evaporation due to artificial causes or other factors. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents.

Publications

Each volume of the 1960 series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data were published for the area covered by the individual volumes. Each volume also contains a list of water-supply papers that give detailed information on major floods for the area. A new series of water-supply papers containing surface-water records for the 5-year period October 1, 1960 to September 30, 1965, also include lists of annual and special reports published as water-supply papers. Records for this period for the area covered by this report are published in Water-Supply Paper 1921(7), 1923(8), 1925(9).

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Papers 1311(7), 1312(8), and 1313(9); records for October 1950 to September 1960 have been compiled and published in Water-Supply Papers 1731(7), 1732(8), and 1733(9). 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.

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

Data collected at partial-record stations and at miscellaneous sites are given in three tables at the end of the surface-water records in this report. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

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. Many gaging-station records in New Mexico through 1968 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment and bed material. 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 New Mexico, streamflow varied greatly in the 1971 water year. This holds true with respect to both time and geographic location. The variations are related to differences in precipitation, temperature, topography and geology. The yearly mean discharge for the calendar year at four key gaging stations ranged from 48 to 117 percent of the medians for the base period, 1931-60.

For the water year streamflow was deficient except in the upper Rio Grande Basin where it was considerably below the median. For the calendar streamflow was deficient in the Canadian and Pecos River basins and near median in the upper Rio Grande and Gila River basins. During the last three months of the calendar year streamflow in the upper Rio Grande and the Gila River was excessive.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE
GEOLOGICAL SURVEY

Records of discharge not published by the Geological Survey were collected at 76 sites in New Mexico during the 1970 water year by the following agencies: Records at 73 sites (in Pecos River basin) were collected by the office of the State Engineer; at 2 sites by the International Boundary and Water Commission, U.S. Department of State and at 1 site by the Bureau of Reclamation, U.S. Department of Interior. The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, Washington, D. C., 20242, maintains an index of these sites. Information on records at specific sites can be obtained from that office upon request.

SELECTED REFERENCES

- Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, chap. A6, 13 p.
- Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.
- Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

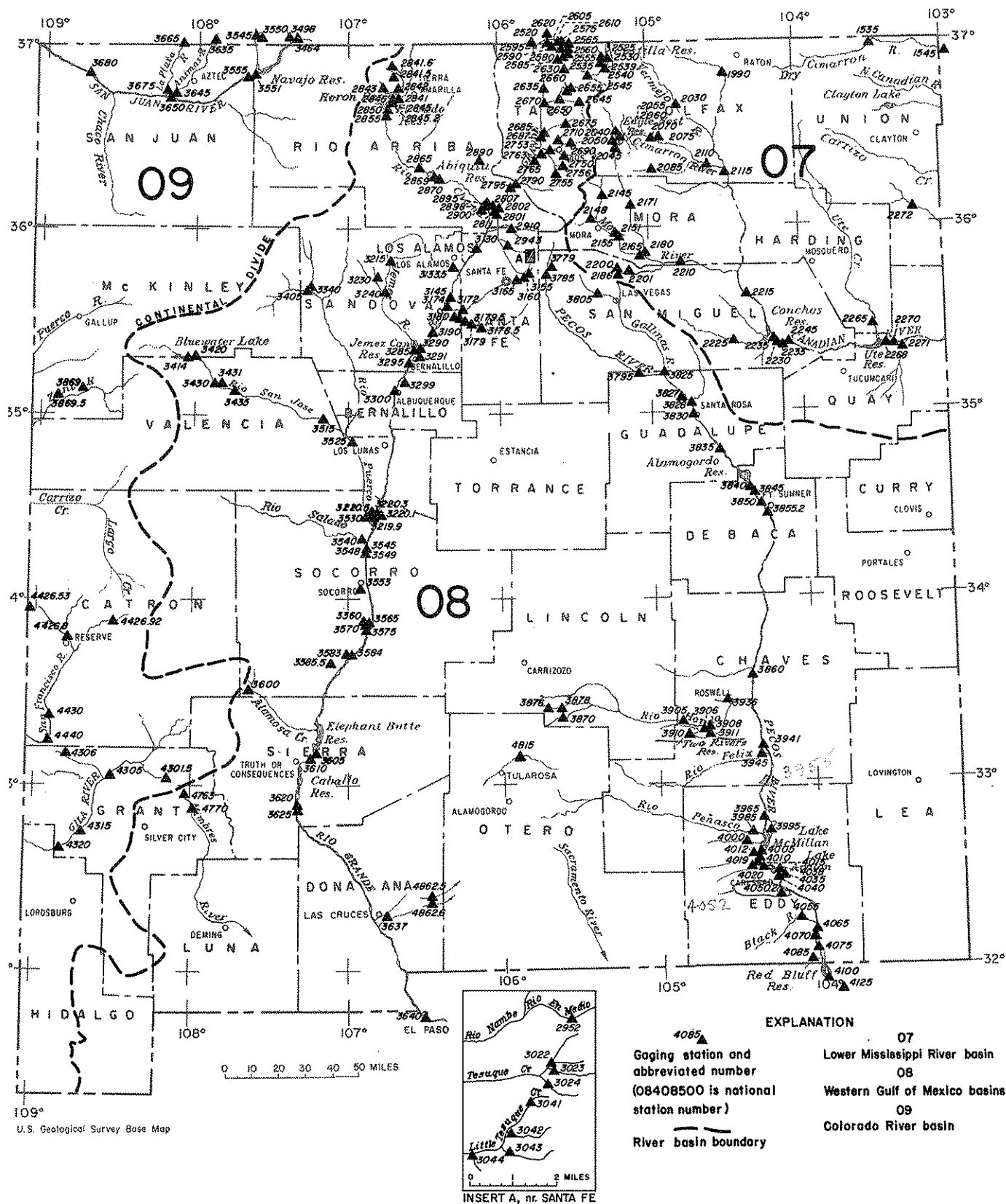


Figure 1.—Map of New Mexico showing location of active gaging stations.

GAGING-STATION RECORDS

LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

07153500 Dry Cimarron River near Guy, N. Mex.

LOCATION.--Lat 36°59'15", long 103°25'25", in SE¼ sec.21, T.32 N., R.33 E., Union County, on right bank 1.5 miles upstream from Baker damsite, 1.7 miles northwest of Valley, 3.0 miles upstream from Travesser Creek, 12 miles north of Guy, and 26 miles northwest of Kenton, Okla.

DRAINAGE AREA.--545 sq mi.

PERIOD OF RECORD.--April 1942 to current year. Prior to October 1965, published as Cimarron River near Guy.

GAGE.--Water-stage recorder. Altitude of gage is 4,900 ft (from topographic map). Prior to Oct. 1, 1943, at datum 0.44 ft higher.

AVERAGE DISCHARGE.--29 years, 10.9 cfs (7,900 acre-ft per year); 20 calendar years (1951-70), 10.5 cfs (7,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,890 cfs July 15 (gage height, 10.10 ft); no flow July 14-15.

Period of record: Maximum discharge, 46,100 cfs Aug. 21, 1965 (gage height, 22.00 ft), from rating curve extended above 3,000 cfs on basis of slope-area measurements at gage heights 15.7 and 22.00 ft; no flow at times.

REMARKS.--Records poor. Diversions for irrigation of about 6,500 acres above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1177: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.9	2.3	3.4	2.4	2.8	1.1	1.7	.86	.82	1.8	.79
2	1.5	1.9	2.4	3.0	2.3	3.9	1.2	1.3	.72	.86	1.8	.72
3	1.4	1.8	2.4	3.0	2.4	3.7	1.4	1.2	.57	.43	1.7	.64
4	1.4	2.3	2.4	2.5	2.5	3.5	1.4	1.2	.52	.11	1.4	.57
5	1.5	2.3	2.4	2.0	2.5	3.4	1.5	.94	.43	.09	1.3	.52
6	1.3	2.0	2.5	1.5	2.7	3.4	1.5	.94	.38	.07	1.5	.57
7	1.3	1.9	2.8	1.0	3.0	3.5	1.3	.94	.30	.06	6.5	.57
8	1.7	2.0	2.7	2.0	3.2	3.4	1.1	7.6	.38	.06	3.5	.52
9	1.8	2.0	2.7	3.0	3.5	3.2	1.1	145	.79	.09	2.4	.57
10	1.9	2.3	2.5	4.0	3.2	2.8	1.1	9.2	1.0	.09	1.5	.64
11	2.1	2.4	2.7	5.0	2.8	2.7	1.1	6.5	.47	.09	1.3	.64
12	1.8	2.4	2.5	9.0	3.0	2.7	1.1	3.5	.43	.07	1.2	.64
13	1.8	2.5	2.5	8.0	2.7	2.4	1.1	3.2	.30	.04	1.3	.52
14	1.9	2.7	3.0	7.5	2.7	2.4	1.0	1.9	.27	.02	1.4	.47
15	2.1	2.8	2.7	7.0	2.3	2.5	1.0	1.3	.24	244	2.1	.43
16	2.3	2.7	2.7	7.1	2.7	1.9	1.2	1.5	.21	58	2.0	.57
17	2.1	2.5	2.5	6.3	2.8	1.2	1.0	2.0	.21	.94	1.4	.86
18	2.0	2.4	2.1	5.1	3.0	1.1	1.1	2.0	.21	.27	1.3	1.5
19	1.9	2.4	2.3	3.9	3.2	1.5	1.4	2.0	.21	25	1.2	1.4
20	1.7	2.4	3.0	3.2	3.2	1.4	1.2	1.9	.24	5.1	1.3	1.2
21	1.7	2.4	2.3	2.8	3.7	1.3	1.1	1.2	9.5	1.5	1.3	1.2
22	1.7	2.4	2.0	2.5	3.9	1.2	1.3	1.0	2.3	.30	1.3	1.4
23	1.7	2.7	2.5	3.0	4.0	1.3	3.2	1.1	1.0	5.8	1.2	1.5
24	1.7	2.7	3.5	2.7	3.7	1.3	2.3	1.2	.57	3.7	1.1	1.5
25	1.7	2.5	2.5	2.3	3.2	1.2	1.8	1.2	.34	2.4	1.0	1.5
26	1.7	2.5	3.5	2.5	2.8	1.2	1.4	1.0	.27	2.1	1.4	1.3
27	1.8	2.4	3.7	2.5	3.0	1.2	1.2	1.1	.21	2.4	1.0	1.1
28	1.9	2.3	3.4	2.5	3.2	1.2	1.3	1.0	.15	2.4	.86	1.0
29	1.9	2.3	2.5	2.5	-----	1.4	2.5	1.9	.15	1.9	.86	.94
30	1.8	2.3	2.5	2.4	-----	1.3	2.4	3.4	.18	1.9	.79	1.2
31	1.9	-----	2.0	2.4	-----	1.2	-----	1.7	-----	1.8	.79	-----
TOTAL	54.7	70.1	81.5	115.6	83.6	67.2	42.4	211.62	23.41	362.41	49.50	26.98
MEAN	1.76	2.34	2.63	3.73	2.99	2.17	1.41	6.83	.78	11.7	1.60	.90
MAX	2.3	2.8	3.7	9.0	4.0	3.9	3.2	145	9.5	244	6.5	1.5
MIN	1.3	1.8	2.0	1.0	2.3	1.1	1.0	.94	.15	.02	.79	.43
AC-FT	109	139	162	229	166	133	84	420	46	719	98	54

CAL YR 1970 TOTAL 1,084.44 MEAN 2.97 MAX 195 MIN .24 AC-FT 2,150
WTR YR 1971 TOTAL 1,189.02 MEAN 3.26 MAX 244 MIN .02 AC-FT 2,360

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE
7-15	2030	10.10	2,890

07153500 Dry Cimarron River near Guy, N. Mex.

LOCATION.--Lat 36°59'15", long 103°25'25", in SE¼ sec.21, T.32 N., R.33 E., Union County, on right bank 1.5 miles upstream from Baker damsite, 1.7 miles northwest of Valley, 3.0 miles upstream from Travesser Creek, 12 miles north of Guy, and 26 miles northwest of Kenton, Okla.

DRAINAGE AREA.--545 sq mi.

PERIOD OF RECORD.--April 1942 to current year. Prior to October 1965, published as Cimarron River near Guy.

GAGE.--Water-stage recorder. Altitude of gage is 4,900 ft (from topographic map). Prior to Oct. 1, 1943, at datum 0.44 ft higher.

AVERAGE DISCHARGE.--29 calendar years, 10.6 cfs (7,680 acre-ft per year); 20 calendar years (1952-71), 10.4 cfs (7,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,890 cfs July 15 (gage height, 10.10 ft); no flow July 14-15.

Period of record: Maximum discharge, 46,100 cfs Aug. 21, 1965 (gage height, 22.00 ft), from rating curve extended above 3,000 cfs on basis of slope-area measurements at gage heights 15.7 and 22.00 ft; no flow at times.

REMARKS.--Records poor. Diversions for irrigation of about 6,500 acres above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1177: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.4	2.4	2.8	1.1	1.7	.86	.82	1.8	.79	1.0	2.0	2.0
2	3.0	2.3	3.9	1.2	1.3	.72	.86	1.8	.72	.94	1.9	2.3
3	3.0	2.4	3.7	1.4	1.2	.57	.43	1.7	.64	.79	1.9	2.3
4	2.5	2.5	3.5	1.4	1.2	.52	.11	1.4	.57	.79	1.9	2.5
5	2.0	2.5	3.4	1.5	.94	.43	.09	1.3	.52	.79	1.8	2.4
6	1.5	2.7	3.4	1.5	.94	.38	.07	1.5	.57	.79	1.8	1.9
7	1.0	3.0	3.5	1.3	.94	.30	.06	6.5	.57	.79	1.8	1.8
8	2.0	3.2	3.4	1.1	7.6	.38	.06	3.5	.52	.79	1.8	2.0
9	3.0	3.5	3.2	1.1	145	.79	.09	2.4	.57	.72	1.7	2.0
10	4.0	3.2	2.8	1.1	9.2	1.0	.09	1.5	.64	.72	1.8	2.3
11	5.0	2.8	2.7	1.1	6.5	.47	.09	1.3	.64	.64	1.9	1.8
12	9.0	3.0	2.7	1.1	3.5	.43	.07	1.2	.64	.64	1.9	1.7
13	8.0	2.7	2.4	1.1	3.2	.30	.04	1.3	.52	.57	1.8	1.8
14	7.5	2.7	2.4	1.0	1.9	.27	.02	1.4	.47	.64	1.7	1.5
15	7.0	2.3	2.5	1.0	1.3	.24	244	2.1	.43	.57	1.7	1.5
16	7.1	2.7	1.9	1.2	1.5	.21	58	2.0	.57	.52	2.3	1.7
17	6.3	2.8	1.2	1.0	2.0	.21	.94	1.4	.86	4.3	3.5	2.1
18	5.1	3.0	1.1	1.1	2.0	.21	.27	1.3	1.5	28	2.7	2.3
19	3.9	3.2	1.5	1.4	2.0	.21	25	1.2	1.4	2.5	2.7	2.1
20	3.2	3.2	1.4	1.2	1.9	.24	5.1	1.3	1.2	1.8	2.4	1.9
21	2.8	3.7	1.3	1.1	1.2	9.5	1.5	1.3	1.2	1.7	2.4	2.1
22	2.5	3.9	1.2	1.3	1.0	2.3	.30	1.3	1.4	1.8	2.3	2.0
23	3.0	4.0	1.3	3.2	1.1	1.0	5.8	1.2	1.5	3.2	2.3	1.8
24	2.7	3.7	1.3	2.3	1.2	.57	3.7	1.1	1.5	2.1	2.3	1.8
25	2.3	3.2	1.2	1.8	1.2	.34	2.4	1.0	1.5	1.9	2.3	1.7
26	2.5	2.8	1.2	1.4	1.0	.27	2.1	1.4	1.3	2.4	2.1	1.4
27	2.5	3.0	1.2	1.2	1.1	.21	2.4	1.0	1.1	2.4	2.1	1.4
28	2.5	3.2	1.2	1.3	1.0	.15	2.4	.86	1.0	1.9	2.1	1.4
29	2.5	-----	1.4	2.5	1.9	.15	1.9	.86	.94	2.0	2.0	1.4
30	2.4	-----	1.3	2.4	3.4	.18	1.9	.79	1.2	2.7	2.0	1.5
31	2.4	-----	1.2	-----	1.7	-----	1.8	.79	-----	2.4	-----	1.5
TOTAL	115.6	83.6	67.2	42.4	211.62	23.41	362.41	49.50	26.98	72.80	62.9	57.9
MEAN	3.73	2.99	2.17	1.41	6.83	.78	11.7	1.60	.90	2.35	2.10	1.87
MAX	9.0	4.0	3.9	3.2	145	9.5	244	6.5	1.5	28	3.5	2.5
MIN	1.0	2.3	1.1	1.0	.94	.15	.02	.79	.43	.52	1.7	1.4
AC-FT	229	166	133	84	420	46	719	98	54	144	125	115

CAL YR 1971 TOTAL 1,176.32 MEAN 3.22 MAX 244 MIN .02 AC-FT 2,330

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE
7-15	2030	10.10	2,890

07154500 Cimarron River near Kenton, Okla.

LOCATION.--Lat 36°56'48", long 102°57'28", in SE¼ sec.4, T.5 N., R.1 E., Cimarron County, near right bank on downstream side of pier of county road bridge, 1.5 miles upstream from North Carrizo Creek, 1.7 miles northeast of Kenton, 2.2 miles downstream from Carrizozo Creek, and at mile 594.0.

DRAINAGE AREA.--1,106 sq mi, of which 68 sq mi is probably noncontributing.

PERIOD OF RECORD.--April 1904 to July 1905 (gage heights only), October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,262.08 ft above mean sea level, (levels by State Highway Department). April 1904 to July 1905 nonrecording gage at site 0.9 mile upstream at different datum. Oct. 1, 1950 to Sept. 19, 1967, water-stage recorder at same site and at datum 5.00 ft higher.

AVERAGE DISCHARGE.--21 years (1950-71), 24.9 cfs (18,040 acre-ft per year); 20 calendar years (1951-70), 25.9 cfs (18,760 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 960 cfs Aug. 7 (gage height, 9.16 ft); no flow at times. Period of record: Maximum discharge, 43,400 cfs Oct. 17, 1965 (gage height, 22.32 ft, present datum), from rating curve extended above 7,000 cfs on basis of contracted-opening measurement of peak flow; no flow at times in most years.

REMARKS.--Records fair. Extensive diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1711: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.25	.71	.17	.10	4.5	.70	1.9	1.4	0	0	
2	0	.35	.67	.25	.85	4.1	.30	1.2	.45	79	0	
3	0	.35	1.1	.17	2.9	3.5	.45	1.2	.21	4.1	0	
4	0	.30	1.1	.04	2.2	5.2	.35	.70	.45	.13	0	
5	0	.30	1.2	.01	2.4	4.5	.70	.25	.17	0	0	
6	0	.32	1.5	.02	2.9	3.5	.45	.21	.02	0	24	
7	0	.42	1.6	.04	2.4	2.9	.25	.45	0	0	283	
8	0	1.1	1.5	.05	2.2	4.5	.17	.85	.13	0	62	
9	.17	1.5	1.5	.07	2.0	4.1	.10	.55	9.1	0	13	
10	.25	.45	1.6	.10	2.0	2.4	.04	2.9	1.2	0	13	
11	.30	.30	1.5	.20	2.2	1.9	.02	2.4	.17	0	6.6	
12	.25	.24	1.9	.40	2.4	1.0	.07	1.9	.07	0	6.2	
13	.25	.92	1.6	.80	2.9	.35	0	1.0	.07	0	5.2	
14	.39	.91	1.6	1.6	3.2	.25	.07	.45	.10	0	4.8	
15	1.1	.52	2.1	3.5	3.2	.30	.07	.25	.02	0	181	
16	1.2	.42	1.9	5.8	3.2	.30	.10	.13	0	112	10	
17	1.5	.43	2.3	1.3	2.9	.35	.17	.04	0	4.8	7.0	
18	1.3	.42	2.6	1.4	4.1	.30	.25	.13	0	.45	4.8	
19	1.0	.52	2.6	.49	4.8	.25	4.1	1.0	0	6.6	2.7	
20	.84	.40	2.9	.30	5.2	.25	1.4	.35	0	1.2	1.0	
21	.65	.51	3.1	.25	2.4	.30	.45	.13	0	.35	.35	
22	.68	.49	2.2	.13	2.0	.25	.35	0	0	.17	.17	
23	.66	.33	1.4	.13	2.0	.25	1.2	0	.85	.04	.10	
24	.78	.43	1.5	.17	3.5	.35	.85	0	.13	5.2	.02	
25	.71	.89	2.0	.10	5.2	.30	.35	0	0	.45	0	
26	.75	.67	2.4	.21	4.5	.25	.30	0	0	.21	0	
27	.42	.51	2.7	.21	2.9	.25	1.2	0	0	.10	0	
28	.30	.49	.52	.10	4.1	.17	2.4	0	0	.02	0	
29	.17	.52	.17	.02	-----	1.0	3.2	3.2	0	0	0	
30	.13	.75	.10	.25	-----	1.0	3.2	75	0	0	0	
31	.10	-----	.07	.25	-----	1.2	-----	4.1	-----	0	0	-----
TOTAL	13.90	16.01	49.64	18.53	80.65	49.77	23.26	100.29	14.54	214.82	624.94	0
MEAN	.45	.53	1.60	.60	2.88	1.61	.78	3.24	.48	6.93	20.2	0
MAX	1.5	1.5	3.1	5.8	5.2	5.2	4.1	75	9.1	112	283	0
MIN	0	.24	.07	.01	.10	.17	0	0	0	0	0	0
AC-FT	28	32	98	37	160	99	46	199	29	426	1,240	0

CAL YR 1970 TOTAL 590.97 MEAN 1.62 MAX 53 MIN 0 AC-FT 1,170
WTR YR 1971 TOTAL 1,206.35 MEAN 3.31 MAX 283 MIN 0 AC-FT 2,390

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

07154500 Cimarron River near Kenton, Okla.

LOCATION.--Lat 36°56'48", long 102°57'28", in SE¼ sec.4, T.5 N., R.1 E., Cimarron County, near right bank on downstream side of pier of county road bridge, 1.5 miles upstream from North Carrizo Creek, 1.7 miles northeast of Kenton, 2.2 miles downstream from Carrizozo Creek, and at mile 594.0.

DRAINAGE AREA.--1,106 sq mi, of which 68 sq mi is probably noncontributing.

PERIOD OF RECORD.--April 1904 to July 1905 (gage heights only), October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,262.08 ft above mean sea level, (levels by State Highway Department). April 1904 to July 1905 nonrecording gage at site 0.9 mile upstream at different datum. Oct. 1, 1950 to Sept. 19, 1967, water-stage recorder at same site and at datum 5.00 ft higher.

AVERAGE DISCHARGE.--21 calendar years, 24.8 cfs (17,970 acre-ft per year); 20 calendar years (1952-71), 25.1 cfs (18,180 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 960 cfs Aug. 7 (gage height, 9.16 ft); no flow at times. Period of record: Maximum discharge, 43,400 cfs Oct. 17, 1965 (gage height, 22.32 ft, present datum), from rating curve extended above 7,000 cfs on basis of contracted-opening measurement of peak flow; no flow at times in most years.

REMARKS.--Records fair. Extensive diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1711: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.17	.10	4.5	.70	1.9	1.4	0	0		0	0	.35
2	.25	.85	4.1	.30	1.2	.45	79	0		0	0	1.0
3	.17	2.9	3.5	.45	1.2	.21	4.1	0		0	0	1.2
4	.04	2.2	5.2	.35	.70	.45	.13	0		0	0	1.4
5	.01	2.4	4.5	.70	.25	.17	0	0		0	0	1.4
6	.02	2.9	3.5	.45	.21	.02	0	24		0	0	2.4
7	.04	2.4	2.9	.25	.45	0	0	283		0	0	1.7
8	.05	2.2	4.5	.17	.85	.13	0	62		0	0	1.7
9	.07	2.0	4.1	.10	.55	9.1	0	13		0	0	1.9
10	.10	2.0	2.4	.04	2.9	1.2	0	13		0	0	3.2
11	.20	2.2	1.9	.02	2.4	.17	0	6.6		0	0	3.5
12	.40	2.4	1.0	.07	1.9	.07	0	6.2		0	0	4.0
13	.80	2.9	.35	0	1.0	.07	0	5.2		0	0	4.4
14	1.6	3.2	.25	.07	.45	.10	0	4.8		0	0	4.5
15	3.5	3.2	.30	.07	.25	.02	0	181		0	.25	4.7
16	5.8	3.2	.30	.10	.13	0	112	10		0	2.2	4.7
17	1.3	2.9	.35	.17	.04	0	4.8	7.0		0	5.5	5.3
18	1.4	4.1	.30	.25	.13	0	.45	4.8		0	5.2	5.5
19	.49	4.8	.25	4.1	1.0	0	6.6	2.7		0	2.7	3.5
20	.30	5.2	.25	1.4	.35	0	1.2	1.0		0	1.0	2.2
21	.25	2.4	.30	.45	.13	0	.35	.35		0	.45	1.0
22	.13	2.0	.25	.35	0	0	.17	.17		0	.35	.70
23	.13	2.0	.25	1.2	0	.85	.04	.10		0	.35	.80
24	.17	3.5	.35	.85	0	.13	5.2	.02		0	.30	.85
25	.10	5.2	.30	.35	0	0	.45	0		0	.30	.88
26	.21	4.5	.25	.30	0	0	.21	0		0	.30	.83
27	.21	2.9	.25	1.2	0	0	.10	0		0	.25	.85
28	.10	4.1	.17	2.4	0	0	.02	0		0	.25	.80
29	.02	-----	1.0	3.2	3.2	0	0	0		0	.25	.82
30	.25	-----	1.0	3.2	75	0	0	0		.05	.25	.61
31	.25	-----	1.2	-----	4.1	-----	0	0	-----	.01	-----	.44
TOTAL	18.53	80.65	49.77	23.26	100.29	14.54	214.82	624.94	0	.06	19.90	67.13
MEAN	.60	2.88	1.61	.78	3.24	.48	6.93	20.2	0	.002	.66	2.17
MAX	5.8	5.2	5.2	4.1	75	9.1	112	283	0	.05	5.5	5.5
MIN	.01	.10	.17	0	0	0	0	0	0	0	0	.35
AC-FT	37	160	99	46	199	29	426	1,240	0	.1	39	133

CAL YR 1971 TOTAL 1,213.89 MEAN 3.33 MAX 283 MIN 0 AC-FT 2,410

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

ARKANSAS RIVER BASIN

07199000 Canadian River near Hebron, N. Mex.

LOCATION.--Lat 36°47'14", long 104°27'42", Colfax County, in Maxwell Grant, near right bank at downstream end of bridge pier on U.S. Highways 64 and 85, 3.1 miles north of Hebron, 5.0 miles upstream from Chicorica Creek, and 8.0 miles south of Raton.

DRAINAGE AREA.--229 sq mi.

PERIOD OF RECORD.--June 1946 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,248 ft (from topographic map). See WSP 1921 for history of changes prior to Aug. 18, 1965.

AVERAGE DISCHARGE.--25 years, 8.08 cfs (5,850 acre-ft per year); 20 calendar years (1951-70), 9.36 cfs (6,780 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,510 cfs Aug. 5 (gage height, 6.20 ft), from rating curve extended above 5 cfs as explained below; no flow at times.

Period of record: Maximum discharge, 62,400 cfs June 17, 1965 (gage height, 28.2 ft, from floodmarks, present datum), from rating curve extended above 1,300 cfs on basis of slope-area measurement of peak flow; no flow for many days most years.

Flood in 1942 reached a stage of about 28 ft (present datum) at site 150 ft upstream, from information by local residents.

REMARKS.--Records poor. Diversions above station for irrigation of a few hundred acres. Part or all of low flow can be diverted to left bank a few hundred yards above station for stock water, off-channel storage and irrigation. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1281: 1946, 1947-48(P), 1949. WSP 1921: 1960(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	1.7	1.4	2.5	3.0	2.1	.86	.19	.06	.12	.04	.03
2	.02	1.7	1.4	2.5	4.9	2.1	.33	.16	.06	.12	.04	.03
3	.04	1.8	1.4	2.0	3.9	1.0	.33	.16	.06	.10	.04	.03
4	.04	1.8	1.4	1.8	3.0	1.5	.29	.16	.06	.10	.04	.02
5	.04	1.8	1.7	1.5	3.4	3.0	.22	.14	.06	.10	112	.03
6	.04	1.9	1.4	1.2	3.0	1.8	.22	.14	.06	.08	26	.02
7	.04	1.9	1.4	.50	3.0	1.5	.19	.16	.06	.08	15	.02
8	.40	1.9	2.1	.50	2.7	1.3	.16	.16	7.6	.08	.72	.02
9	1.2	2.0	2.7	1.5	2.4	1.3	.16	.14	.60	.08	.72	.02
10	.96	2.2	3.0	2.4	2.7	1.5	.14	.16	.50	.08	.72	.03
11	.87	2.3	2.8	2.0	3.0	1.4	.16	.16	.45	.08	.60	.02
12	.78	2.3	2.3	2.7	2.7	.94	.22	.14	.45	.06	.50	.01
13	.67	2.1	2.1	2.7	2.4	1.1	.29	.14	.45	.03	79	.01
14	.07	2.1	2.3	2.7	3.0	1.3	.29	.12	.45	.03	.53	.01
15	.34	2.0	2.5	2.7	2.7	1.8	.41	.12	.45	.05	.14	.01
16	.78	1.4	2.3	3.0	3.0	1.8	.41	.12	.37	.06	.10	.01
17	.78	.70	3.6	3.0	2.7	2.2	.41	.12	.33	.03	.10	.06
18	.78	.70	3.2	2.7	3.0	2.4	.37	.12	.29	30	2.4	.06
19	.87	.70	2.1	2.4	3.0	2.7	.33	.12	.33	14	11	.04
20	.87	.87	3.6	2.7	2.7	2.2	.25	.12	8.4	16	.08	.03
21	.96	.87	3.8	3.0	2.4	1.6	.29	.12	.10	.04	.05	.03
22	.96	.78	3.6	3.0	1.5	1.5	.25	.10	.08	.04	.03	.04
23	1.1	.70	2.5	2.4	1.8	1.4	.22	.12	.06	21	.02	.05
24	1.1	1.2	2.1	2.7	2.0	1.4	.22	.12	.05	.35	.26	.05
25	1.3	2.6	2.3	3.0	2.4	1.4	.22	.12	.05	.04	.05	.03
26	1.3	2.5	2.3	2.7	2.7	1.3	.22	.12	4.9	.04	.02	.02
27	1.3	2.1	2.3	2.4	2.7	1.2	.19	.12	.22	.15	.02	.02
28	1.4	1.5	2.5	2.2	2.7	1.1	.19	.12	.14	.04	.02	.02
29	1.5	1.5	2.1	3.0	-----	.41	.19	17	.12	.04	.02	.03
30	1.5	1.4	2.3	3.2	-----	.29	.19	.33	.12	.04	.03	28
31	1.5	-----	2.1	2.7	-----	.37	-----	.25	-----	3.7	.03	-----
TOTAL	22.93	49.02	72.6	73.30	78.4	46.91	8.22	21.37	26.93	86.76	250.32	28.80
MEAN	.74	1.63	2.34	2.36	2.80	1.51	.27	.69	.90	2.80	8.07	.96
MAX	1.5	2.6	3.8	3.2	4.9	3.0	.86	.17	8.4	30	112	.28
MIN	.02	.70	1.4	.50	1.5	.29	.14	.10	.05	.03	.02	.01
AC-FT	45	97	144	145	156	93	16	42	53	172	497	57

CAL YR 1970 TOTAL 1,928.37 MEAN 5.28 MAX 137 MIN 0 AC-FT 3,820
WTR YR 1971 TOTAL 765.56 MEAN 2.10 MAX 112 MIN .01 AC-FT 1,520

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8- 5	1630	6.20	4,510	8-13	2030	5.72	3,410
8- 6	2400	4.80	1,530				

NOTE.--No gage-height record Feb. 8 to Mar. 8.

07199000 Canadian River near Hebron, N. Mex.

LOCATION---Lat 36°47'14", long 104°27'42", Colfax County, in Maxwell Grant, near right bank at downstream end of bridge pier on U.S. Highways 64 and 85, 3.1 miles north of Hebron, 5.0 miles upstream from Chicorica Creek, and 8.0 miles south of Raton.

DRAINAGE AREA---229 sq mi.

PERIOD OF RECORD---June 1946 to current year.

GAGE---Water-stage recorder. Altitude of gage is 6,248 ft (from topographic map). See WSP 1921 for history of changes prior to Aug. 18, 1965.

AVERAGE DISCHARGE---25 calendar years, 8.07 cfs (5,850 acre-ft per year); 20 calendar years (1952-71), 9.38 cfs (6,800 acre-ft per year).

EXTREMES---Current year: Maximum discharge, 4,510 cfs Aug. 5 (gage height, 6.20 ft), from rating curve extended above 5 cfs as explained below; no flow at times.

Period of record: Maximum discharge, 62,400 cfs June 17, 1965 (gage height, 28.2 ft, from floodmarks, present datum), from rating curve extended above 1,300 cfs on basis of slope-area measurement of peak flow; no flow for many days most years.

Flood in 1942 reached a stage of about 28 ft (present datum) at site 150 ft upstream, from information by local residents.

REMARKS---Records poor. Diversions above station for irrigation of a few hundred acres. Part or all of low flow can be diverted to left bank a few hundred yards above station for stock water, off-channel storage and irrigation. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS)---WSP 1281: 1946, 1947-48(P), 1949. WSP 1921: 1960(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.5	3.0	2.1	.86	.19	.06	.12	.04	.03	.12	.16	.12
2	2.5	4.9	2.1	.33	.16	.06	.12	.04	.03	.08	.16	.10
3	2.0	3.9	1.0	.33	.16	.06	.10	.04	.03	.08	.19	.10
4	1.8	3.0	1.5	.29	.16	.06	.10	.04	.02	.08	.19	.10
5	1.5	3.4	3.0	.22	.14	.06	.10	112	.03	.08	.19	.12
6	1.2	3.0	1.8	.22	.14	.06	.08	26	.02	.08	.16	.16
7	.50	3.0	1.5	.19	.16	.06	.08	15	.02	.08	.19	.18
8	.50	2.7	1.3	.16	.16	7.6	.08	.72	.02	.08	.25	.16
9	1.5	2.4	1.3	.16	.14	.60	.08	.72	.02	.08	.19	.14
10	2.4	2.7	1.5	.14	.16	.50	.08	.72	.03	.08	.19	.16
11	2.0	3.0	1.4	.16	.16	.45	.08	.60	.02	.08	.13	.18
12	2.7	2.7	.94	.22	.14	.45	.06	.50	.01	.08	.12	.20
13	2.7	2.4	1.1	.29	.14	.45	.03	79	.01	.08	.10	.20
14	2.7	3.0	1.3	.29	.12	.45	.03	.53	.01	.10	.12	.20
15	2.7	2.7	1.8	.41	.12	.45	.05	.14	.01	.10	.16	.20
16	3.0	3.0	1.8	.41	.12	.37	.06	.10	.01	.10	.89	.18
17	3.0	2.7	2.2	.41	.12	.33	.03	.10	.06	.65	.41	.16
18	2.7	3.0	2.4	.37	.12	.29	30	2.4	.06	.22	.22	.17
19	2.4	3.0	2.7	.33	.12	.33	14	11	.04	.08	.16	.18
20	2.7	2.7	2.2	.25	.12	8.4	16	.08	.03	.06	.12	.19
21	3.0	2.4	1.6	.29	.12	.10	.04	.05	.03	.05	.10	.20
22	3.0	1.5	1.5	.25	.10	.08	.04	.03	.04	.06	.10	.20
23	2.4	1.8	1.4	.22	.12	.06	21	.02	.05	.06	.10	.22
24	2.7	2.0	1.4	.22	.12	.05	.35	.26	.05	.05	.10	.24
25	3.0	2.4	1.4	.22	.12	.05	.04	.05	.03	1.5	.08	.26
26	2.7	2.7	1.3	.22	.12	4.9	.04	.02	.02	3.8	.08	.28
27	2.4	2.7	1.2	.19	.12	.22	.15	.02	.02	.60	.10	.30
28	2.2	2.7	1.1	.19	.12	.14	.04	.02	.02	.55	.10	.30
29	3.0	-----	.41	.19	17	.12	.04	.02	.03	.79	.08	.30
30	3.2	-----	.29	.19	.33	.12	.04	.03	28	.66	.08	.30
31	2.7	-----	.37	-----	.25	-----	3.7	.03	-----	.41	-----	.30
TOTAL	73.30	78.4	46.91	8.22	21.37	26.93	86.76	250.32	28.80	10.92	5.22	6.10
MEAN	2.36	2.80	1.51	.27	.69	.90	2.80	8.07	.96	.35	.17	.20
MAX	3.2	4.9	3.0	.86	.17	8.4	30	112	.28	3.8	.89	.30
MIN	.50	1.5	.29	.14	.10	.05	.03	.02	.01	.05	.08	.10
AC-FT	145	156	93	16	42	53	172	497	57	22	10	12

CAL YR 1971 TOTAL 643.25 MEAN 1.76 MAX 112 MIN .01 AC-FT 1,280

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8- 5	1630	6.20	4,510	8-13	2030	5.72	3,410
8- 6	2400	4.80	1,530				

NOTE---No gage-height record Feb. 8 to Mar. 8.

07203000 Vermejo River near Dawson, N. Mex.

LOCATION.--Lat 36°40'50", long 104°47'08", Colfax County, in Maxwell Grant, on left bank 1.3 miles north of Dawson, and 2.3 miles upstream from Rail Canyon.

DRAINAGE AREA.--301 sq mi.

PERIOD OF RECORD.--October 1915 to July 1918, April 1919 to May 1921, January 1927 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 6,365 ft (from topographic map). See WSP 1311 or 1731 for history of changes prior to Sept. 24, 1953.

AVERAGE DISCHARGE.--47 years (1915-17, 1919-20, 1927-71), 19.0 cfs (13,770 acre-ft per year); 20 calendar years (1951-70), 15.5 cfs (11,230 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,330 cfs July 15 (gage height, 6.10 ft), from rating curve extended above 42 cfs as explained below; minimum, 0.25 cfs Apr. 3, 6.

1927-71: Maximum discharge, 12,600 cfs June 17, 1965 (gage height, 15.25 ft), from rating curve extended above 400 cfs on basis of slope-area measurement of peak flow; no flow at times.

A major flood occurred Aug. 2, 1921, when discharge probably exceeded 10,000 cfs.

REMARKS.--Records poor. Diversions for irrigation of small acreage and mountain meadows above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS): WSP 1117: 1947, drainage area. WSP 1281: 1932(M), 1934(M), 1936-38(M), 1941-42(F), 1944-46(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	9.4	4.0	2.8	6.0	5.0	1.5	2.9	3.5	2.1	15	12
2	6.4	10	3.3	2.5	5.5	4.5	1.1	3.8	2.3	2.4	14	11
3	6.4	8.7	3.1	2.2	5.0	5.0	.80	4.2	1.5	2.4	14	10
4	6.8	6.1	3.8	1.9	4.5	6.0	.80	3.3	1.2	1.8	11	7.9
5	7.5	7.2	4.2	1.6	4.0	7.0	.80	1.9	1.3	1.4	13	7.2
6	7.5	9.8	5.0	1.4	3.5	6.5	.73	3.1	1.4	1.4	18	6.4
7	5.5	9.4	6.0	1.2	3.0	6.0	.73	5.8	1.3	1.4	17	9.4
8	6.4	9.1	8.0	1.0	3.0	7.0	1.0	7.2	1.3	1.4	26	9.1
9	6.1	7.5	12	.80	3.0	7.0	1.0	7.2	1.3	19	20	6.1
10	7.2	8.3	6.8	.87	3.5	5.0	.87	7.2	1.3	17	16	5.8
11	9.1	9.4	5.0	1.2	4.0	4.5	.87	6.1	1.3	5.8	14	5.0
12	9.1	9.1	4.0	1.5	4.5	5.8	1.4	4.4	1.6	4.0	12	5.0
13	6.4	10	3.5	1.6	5.0	5.2	1.2	4.4	1.8	3.1	10	5.0
14	7.2	9.1	3.5	1.5	5.5	5.0	1.0	3.8	1.9	2.0	9.8	4.7
15	9.8	5.2	4.0	2.0	6.5	3.3	1.8	4.4	1.9	164	11	4.4
16	13	5.8	4.0	2.8	7.2	3.3	2.1	4.2	1.8	25	12	4.4
17	13	9.1	3.5	3.8	6.1	3.5	1.9	5.8	1.8	12	11	6.8
18	12	7.9	3.5	5.0	6.4	3.5	1.8	6.1	1.8	10	10	9.8
19	11	7.9	4.0	5.0	5.5	3.1	2.4	5.0	1.6	90	29	9.8
20	10	6.0	4.0	6.0	5.0	3.5	2.9	4.2	1.5	56	32	8.7
21	9.8	6.1	3.0	6.5	4.5	4.0	2.1	3.8	2.0	20	20	8.7
22	9.4	8.3	3.5	7.0	4.0	3.1	2.3	3.3	2.0	16	25	9.1
23	7.2	5.5	4.0	7.0	4.5	2.8	2.6	3.3	1.8	13	22	11
24	7.2	6.0	4.0	7.0	5.0	2.4	2.8	4.2	1.9	11	21	12
25	8.3	12	3.0	7.0	6.0	2.1	2.1	2.6	2.0	10	20	14
26	9.4	8.3	2.5	6.5	5.5	2.3	2.6	2.1	2.6	44	17	10
27	9.4	7.9	3.5	6.0	5.0	1.9	2.3	1.8	2.4	20	15	8.7
28	6.8	5.5	4.0	6.0	5.0	1.5	1.6	2.1	2.0	25	17	7.2
29	6.4	7.5	4.0	6.5	-----	3.5	1.8	7.2	1.8	20	29	6.8
30	7.9	6.8	3.0	7.0	-----	3.5	2.0	5.0	1.5	16	45	169
31	8.7	-----	3.0	6.5	-----	2.8	-----	4.7	-----	18	17	-----
TOTAL	257.3	238.9	132.7	119.67	136.2	129.6	48.90	135.1	53.4	635.2	562.8	405.0
MEAN	8.30	7.96	4.28	3.86	4.86	4.18	1.63	4.36	1.78	20.5	18.2	13.5
MAX	13	12	12	7.0	7.2	7.0	2.9	7.2	3.5	164	45	169
MIN	5.5	5.2	2.5	.80	3.0	1.5	.73	1.8	1.2	1.4	9.8	4.4
AC-FT	510	474	263	237	270	257	97	268	106	1,260	1,120	803

CAL YR 1970 TOTAL 6,182.90 MEAN 16.9 MAX 176 MIN .73 AC-FT 12,260
WTR YR 1971 TOTAL 2,854.77 MEAN 7.82 MAX 169 MIN .73 AC-FT 5,660

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-15	1900	6.10	1,330	9-30	0330	5.97	1,240
7-19	2200	5.40	860				

07203000 Vermejo River near Dawson, N. Mex.

LOCATION.--Lat 36°40'50", long 104°47'08", Colfax County, in Maxwell Grant, on left bank 1.3 miles north of Dawson, and 2.3 miles upstream from Rail Canyon.

DRAINAGE AREA.--301 sq mi.

PERIOD OF RECORD.--October 1915 to July 1918, April 1919 to May 1921, January 1927 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 6,365 ft (from topographic map). See WSP 1311 or 1731 for history of changes prior to Sept. 24, 1953.

AVERAGE DISCHARGE.--48 calendar years (1916-17, 1920, 1927-71), 19.0 cfs (13,770 acre-ft per year); 20 calendar years (1952-71), 15.8 cfs (11,450 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,330 cfs July 15 (gage height, 6.10 ft), from rating curve extended above 42 cfs as explained below; minimum, 0.25 cfs Apr. 3, 6.

1927-71: Maximum discharge, 12,600 cfs June 17, 1965 (gage height, 15.25 ft), from rating curve extended above 400 cfs on basis of slope-area measurement of peak flow; no flow at times.

A major flood occurred Aug. 2, 1921, when discharge probably exceeded 10,000 cfs.

REMARKS.--Records poor. Diversions for irrigation of small acreage and mountain meadows above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS): WSP 1117: 1947, drainage area. WSP 1281: 1932(M), 1934(M), 1936-38(M), 1941-42(P), 1944-46(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.8	6.0	5.0	1.5	2.9	3.5	2.1	15	12	15	7.5	5.8
2	2.5	5.5	4.5	1.1	3.8	2.3	2.4	14	11	12	7.5	4.7
3	2.2	5.0	5.0	.80	4.2	1.5	2.4	14	10	12	7.2	4.7
4	1.9	4.5	6.0	.80	3.3	1.2	1.8	11	7.9	10	7.2	5.0
5	1.6	4.0	7.0	.80	1.9	1.3	1.4	13	7.2	9.4	6.8	5.0
6	1.4	3.5	6.5	.73	3.1	1.4	1.4	18	6.4	9.1	6.4	5.0
7	1.2	3.0	6.0	.73	5.8	1.3	1.4	17	9.4	8.3	5.8	5.2
8	1.0	3.0	7.0	1.0	7.2	1.3	1.4	26	9.1	7.9	7.2	5.0
9	.80	3.0	7.0	1.0	7.2	1.3	1.9	20	6.1	7.5	6.8	5.0
10	.87	3.5	5.0	.87	7.2	1.3	1.7	16	5.8	7.5	6.4	5.0
11	1.2	4.0	4.5	.87	6.1	1.3	5.8	14	5.0	6.8	6.4	5.0
12	1.5	4.5	5.8	1.4	4.4	1.6	4.0	12	5.0	5.5	6.4	5.0
13	1.6	5.0	5.2	1.2	4.4	1.8	3.1	10	5.0	4.4	6.1	5.0
14	1.5	5.5	5.0	1.0	3.8	1.9	2.0	9.8	4.7	4.2	5.5	5.0
15	2.0	6.5	3.3	1.8	4.4	1.9	1.64	11	4.4	3.5	6.1	5.0
16	2.8	7.2	3.3	2.1	4.2	1.8	25	12	4.4	3.8	7.5	5.0
17	3.8	6.1	3.5	1.9	5.8	1.8	12	11	6.8	5.8	7.9	5.0
18	5.0	6.4	3.5	1.8	6.1	1.8	10	10	9.8	6.8	5.8	5.0
19	5.0	5.5	3.1	2.4	5.0	1.6	90	29	9.8	7.2	5.0	5.0
20	6.0	5.0	3.5	2.9	4.2	1.5	56	32	8.7	6.1	5.0	5.0
21	6.5	4.5	4.0	2.1	3.8	2.0	20	20	8.7	6.1	6.4	5.5
22	7.0	4.0	3.1	2.3	3.3	2.0	16	25	9.1	6.1	8.7	5.5
23	7.0	4.5	2.8	2.6	3.3	1.8	13	22	11	6.1	7.2	5.5
24	7.0	5.0	2.4	2.8	4.2	1.9	11	21	12	6.1	7.9	6.0
25	7.0	6.0	2.1	2.1	2.6	2.0	10	20	14	7.2	6.8	6.0
26	6.5	5.5	2.3	2.6	2.1	2.6	44	17	10	7.2	6.8	6.0
27	6.0	5.0	1.9	2.3	1.8	2.4	20	15	8.7	6.8	6.8	6.0
28	6.0	5.0	1.5	1.6	2.1	2.0	25	17	7.2	6.4	7.9	6.0
29	6.5	-----	3.5	1.8	7.2	1.8	20	29	6.8	9.4	7.9	5.5
30	7.0	-----	3.5	2.0	5.0	1.5	16	45	169	10	5.2	5.5
31	6.5	-----	2.8	-----	4.7	-----	18	17	-----	7.2	-----	5.0
TOTAL	119.67	136.2	129.6	48.90	135.1	53.4	635.2	562.8	405.0	231.4	202.1	162.9
MEAN	3.86	4.86	4.18	1.63	4.36	1.78	20.5	18.2	13.5	7.46	6.74	5.25
MAX	7.0	7.2	7.0	2.9	7.2	3.5	164	45	169	15	8.7	6.0
MIN	.80	3.0	1.5	.73	1.8	1.2	1.4	9.8	4.4	3.5	5.0	4.7
AC-FT	237	270	257	97	268	106	1,260	1,120	803	459	401	323

CAL YR 1971 TOTAL 2,822.27 MEAN 7.73 MAX 169 MIN .73 AC-FT 5,600

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-15	1900	6.10	1,330	9-30	0330	5.97	1,240
7-19	2200	5.40	860				

07204000 Moreno Creek at Eagle Nest, N. Mex.

LOCATION.--Lat 36°33'12", long 105°16'03", Colfax County, in Maxwell Grant, on left upstream wingwall of a multi-barrel culvert under U.S. Highway 64, 200 ft west of intersection of U.S. Highway 64 and State Highway 38, about 800 ft upstream from high-water line of Eagle Nest Reservoir, and 1,000 ft west of Eagle Nest.

DRAINAGE AREA.--73.8 sq mi.

PERIOD OF RECORD.--April 1928 to October 1955, June 1964 to current year. No winter records except 1932. Monthly discharge only for some periods, published in WSP 1311. Records for December 1930 to March 1931, published in WSP 732, are unreliable and should not be used. Published as "near Therma" 1928-34.

GAGE.--Water-stage recorder. Concrete control since Oct. 3, 1952. Datum of gage is 8,195.98 ft above mean sea level. See WSP 1921 for history of changes prior to Oct. 26, 1955.

EXTREMES.--Current year: Maximum discharge, 8.0 cfs Aug. 28 (gage height, 2.05 ft); maximum gage height, 3.35 ft May 19 (backwater from construction); no flow at times.

Period of record: Maximum discharge, 240 cfs Sept. 1, 1946 (gage height, 3.10 ft, site and datum then in use); maximum gage height, 3.45 ft July 13, 1969; no flow at times.

REMARKS.--Records good through Apr. 26, poor thereafter. Diversions for irrigation of about 1,200 acres above station.

REVISIONS (WATER YEARS).--WSP 1281: 1931(M), 1932, 1935(M), 1939-41(M), 1946-47(M). WSP 1921: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.6				-	2.0	.90	.60	.23	.20	.74
2	1.6	2.8				-	1.8	.98	.60	.25	.20	.48
3	1.5	2.6				-	1.8	1.2	.48	.27	.23	.42
4	1.5	2.5				-	1.6	1.4	.42	.27	.25	.32
5	1.6	2.1				-	1.1	1.4	.37	.23	.42	.27
6	1.6	2.6				-	.90	2.2	.37	.33	.74	.23
7	1.5	2.6				-	.82	2.9	.32	.37	1.5	.19
8	1.7	2.9				-	.67	3.2	.27	.42	1.2	.19
9	2.2	2.5				-	.74	3.1	.19	.35	.67	.15
10	2.1	2.3				-	.67	2.8	.19	.42	.60	.11
11	2.1	2.8				-	.60	3.7	.19	.32	.60	.07
12	2.0	2.5				-	.60	3.7	.23	.15	.48	.03
13	2.0	2.6				-	.54	3.4	.23	.10	.48	.03
14	1.8	2.0				-	.42	3.2	.23	.10	.42	.03
15	2.6	1.2				-	.42	2.9	.23	.10	.37	.03
16	3.2	1.3				-	.48	2.8	.23	.10	.32	0
17	3.2	1.2				-	.42	2.5	.23	.10	.27	.18
18	2.9	.98				-	.27	2.6	.23	.10	.37	.60
19	2.8	.98				-	.37	2.6	.23	.15	.19	.67
20	2.6	.90				-	.37	2.6	.23	.23	.27	.90
21	2.5	1.1				-	.37	2.6	.27	.23	.32	.90
22	2.5	1.2				-	.42	2.3	.27	.23	.60	.74
23	2.6	1.3				3.7	.37	2.3	.27	.19	.54	.90
24	2.5	-				4.4	.42	2.3	.32	.32	1.2	.98
25	2.5	-				3.2	.42	2.3	.23	.19	1.3	.74
26	2.5	-				2.9	.42	2.2	.23	.19	1.1	.60
27	2.6	-				4.1	.50	2.2	.19	.23	1.4	.42
28	2.2	-				3.4	.60	2.2	.23	.23	2.4	.37
29	2.2	-			-----	2.9	.70	2.3	.19	.23	2.3	.42
30	2.2	-			-----	2.1	.80	1.6	.23	.20	1.4	.90
31	2.3	-----			-----	2.1	-----	.82	-----	.23	1.1	-----
TOTAL	68.7	-	-	-	-	-	21.61	73.20	8.50	7.06	23.44	12.61
MEAN	2.22	-	-	-	-	-	.72	2.36	.28	.23	.76	.42
MAX	3.2	-	-	-	-	-	2.0	3.7	.60	.42	2.4	.98
MIN	1.5	-	-	-	-	-	.27	.82	.19	.10	.19	0
AC-FT	136	-	-	-	-	-	43	145	17	14	46	25

PEAK DISCHARGE (BASE, 35 CFS, REVISED).--No peak above base.

07204000 Moreno Creek at Eagle Nest, N. Mex.

LOCATION.--Lat 36°33'12", long 105°16'03", Colfax County, in Maxwell Grant, on left upstream wingwall of a multi-barrel culvert under U.S. Highway 64, 200 ft west of intersection of U.S. Highway 64 and State Highway 38, about 800 ft upstream from high-water line of Eagle Nest Reservoir, and 1,000 ft west of Eagle Nest.

DRAINAGE AREA.--73.8 sq mi.

PERIOD OF RECORD.--April 1928 to October 1955, June 1964 to current year. No winter records except 1932. Monthly discharge only for some periods, published in WSP 1311. Records for December 1930 to March 1931, published in WSP 732, are unreliable and should not be used. Published as "near Therma" 1928-34.

GAGE.--Water-stage recorder. Concrete control since Oct. 3, 1952. Datum of gage is 8,195.98 ft above mean sea level. See WSP 1921 for history of changes prior to Oct. 26, 1955.

EXTREMES.--Current year: Maximum discharge, 8.0 cfs Aug. 28 (gage height, 2.05 ft); maximum gage height, 3.35 ft May 19 (backwater from construction); no flow at times.

Period of record: Maximum discharge, 240 cfs Sept. 1, 1946 (gage height, 3.10 ft, site and datum then in use); maximum gage height, 3.45 ft July 13, 1969; no flow at times.

REMARKS.--Records good through Apr. 26, poor thereafter. Diversions for irrigation of about 1,200 acres above station.

REVISIONS (WATER YEARS).--WSP 1281: 1931(M), 1932, 1935(M), 1939-41(M), 1946-47(M). WSP 1921: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			-	2.0	.90	.60	.23	.20	.74	.82	2.2	
2			-	1.8	.98	.60	.25	.20	.48	.74	1.8	
3			-	1.8	1.2	.48	.27	.23	.42	.67	1.7	
4			-	1.6	1.4	.42	.27	.25	.32	.60	1.7	
5			-	1.1	1.4	.37	.23	.42	.27	.54	1.6	
6			-	.90	2.2	.37	.33	.74	.23	.54	1.5	
7			-	.82	2.9	.32	.37	1.5	.19	.48	1.3	
8			-	.67	3.2	.27	.42	1.2	.19	.48	1.3	
9			-	.74	3.1	.19	.35	.67	.15	.48	1.3	
10			-	.67	2.8	.19	.42	.60	.11	.54	1.2	
11			-	.60	3.7	.19	.32	.60	.07	.60	1.3	
12			-	.60	3.7	.23	.15	.48	.03	.60	1.2	
13			-	.54	3.4	.23	.10	.48	.03	.54	1.3	
14			-	.42	3.2	.23	.10	.42	.03	.54	1.1	
15			-	.42	2.9	.23	.10	.37	.03	.54	1.3	
16			-	.48	2.8	.23	.10	.32	0	.54	1.5	
17			-	.42	2.5	.23	.10	.27	.18	.60	1.5	
18			-	.27	2.6	.23	.10	.37	.60	.67	1.2	
19			-	.37	2.6	.23	.15	.19	.67	.67	-	
20			-	.37	2.6	.23	.23	.27	.90	.67	-	
21			-	.37	2.6	.27	.23	.32	.90	1.1	-	
22			-	.42	2.3	.27	.23	.60	.74	1.2	-	
23			3.7	.37	2.3	.27	.19	.54	.90	1.1	-	
24			4.4	.42	2.3	.32	.32	1.2	.98	1.2	-	
25			3.2	.42	2.3	.23	.19	1.3	.74	2.8	-	
26			2.9	.42	2.2	.23	.19	1.1	.60	3.2	-	
27			4.1	.50	2.2	.19	.23	1.4	.42	2.6	-	
28			3.4	.60	2.2	.23	.23	2.4	.37	2.2	-	
29		-----	2.9	.70	2.3	.19	.23	2.3	.42	2.6	-	
30		-----	2.1	.80	1.6	.23	.20	1.4	.90	2.3	-	
31		-----	2.1	-----	.82	-----	.23	1.1	-----	2.1	-----	
TOTAL	-	-	-	21.61	73.20	8.50	7.06	23.44	12.61	34.26	-	-
MEAN	-	-	-	.72	2.36	.28	.23	.76	.42	1.11	-	-
MAX	-	-	-	2.0	3.7	.60	.42	2.4	.98	3.2	-	-
MIN	-	-	-	.27	.82	.19	.10	.19	0	.48	-	-
AC-FT	-	-	-	43	145	17	14	46	25	68	-	-

PEAK DISCHARGE (BASE, 35 CFS).--No peak above base.

07204500 Cieneguilla Creek near Eagle Nest, N. Mex.

LOCATION.--Lat 36°29'07", long 105°15'54", Colfax County, in Maxwell Grant, on right bank 0.1 mile downstream from Schoolhouse Draw, 0.5 mile east of U.S. Highway 64, about 2,000 ft upstream from high-water line of Eagle Nest Reservoir, and 4.7 miles south of Eagle Nest.

DRAINAGE AREA.--56 sq mi.

PERIOD OF RECORD.--April 1928 to September 1955, June 1964 to current year. No winter records except in water years 1932, 1948, 1951. Monthly discharge only for some periods, published in WSP 1311 and 1731. Records for December 1930 to March 1931, published in WSP 732, are unreliable and should not be used. Published as "near Therma" 1928-34.

GAGE.--Water-stage recorder. Concrete control since Sept. 25, 1947. Altitude of gage is 8,195 ft (from topographic map). Prior to May 8, 1928, nonrecording gage, and May 8, 1928 to Sept. 1, 1934, water-stage recorder at site 0.2 mile downstream at different datums.

EXTREMES.--Current year: Maximum discharge, 45 cfs Apr. 5 (gage height, 3.66 ft); minimum determined, 0.01 cfs June 29.

Period of record: Maximum discharge, 505 cfs June 16, 1965 (gage height, 5.61 ft), from rating curve extended above 97 cfs; no flow at times.

REMARKS.--Records good except those below 1.0 cfs, which are fair. Diversions for irrigation of about 1,000 acres above station.

REVISIONS (WATER YEARS).--WSP 957: 1941. WSP 1281: Drainage area. WSP 1311: 1932(M), 1935(M), 1937(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	3.4				-	4.7	1.9	.50	.02	.52	.49
2	2.2	3.4				-	4.7	1.8	.45	.02	.60	.37
3	2.2	3.2				-	4.3	1.6	.37	.03	.88	.32
4	2.2	3.0				-	4.2	1.4	.18	.02	.88	.24
5	2.2	-				-	3.7	1.4	.16	.02	4.0	.10
6	2.2	-				-	3.5	2.1	.14	.02	1.7	.06
7	2.2	-				-	3.5	3.5	.14	.02	2.3	.04
8	2.8	-				-	3.3	3.8	.22	.02	2.3	.03
9	3.0	-				-	3.3	3.1	.22	.02	2.5	.04
10	2.8	-				-	3.5	2.6	.20	.02	2.3	.12
11	3.0	-				-	3.5	3.1	.16	.02	1.7	.14
12	3.0	-				-	3.3	2.8	.12	.02	1.1	.09
13	2.7	-				-	3.5	2.8	.10	.02	.74	.30
14	2.8	-				-	3.0	2.3	.08	.02	.49	.35
15	3.5	-				-	2.3	2.1	.08	.02	.40	.16
16	3.6	-				-	2.7	1.9	.08	.02	.49	.14
17	3.5	-				-	2.3	1.4	.08	.02	.52	.53
18	3.5	-				-	2.2	1.0	.05	.02	.46	.97
19	3.5	-				-	2.5	.90	.04	.15	.37	1.5
20	3.3	-				-	2.1	.80	.04	.35	5.9	2.9
21	3.2	-				5.8	4.3	.75	.07	.10	2.3	3.0
22	3.2	-				6.8	4.1	.70	.07	.09	2.0	2.9
23	3.4	-				8.2	3.3	.70	.07	.19	1.7	3.1
24	3.3	-				8.4	3.5	.65	.06	.26	3.2	2.8
25	3.2	-				6.3	3.0	.60	.05	.14	2.5	2.4
26	3.5	-				6.3	2.4	.60	.04	.63	1.4	1.8
27	3.4	-				7.5	2.1	.60	.03	.70	1.2	1.3
28	2.8	-				7.1	2.0	.60	.02	.49	1.2	1.1
29	2.8	-			-----	6.1	2.0	.60	.01	.49	1.1	1.1
30	2.8	-			-----	5.3	2.0	.55	.02	.40	.85	3.2
31	3.0	-----			-----	5.3	-----	.50	-----	.35	.66	-----
TOTAL	91.1	-	-	-	-	-	94.8	49.15	3.85	4.71	48.26	31.59
MEAN	2.94	-	-	-	-	-	3.16	1.59	.13	.15	1.56	1.05
MAX	3.6	-	-	-	-	-	4.7	3.8	.50	.70	5.9	3.2
MIN	2.2	-	-	-	-	-	2.0	.50	.01	.02	.37	.03
AC-FT	181	-	-	-	-	-	188	97	7.6	9.3	96	63

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

07204500 Cieneguilla Creek near Eagle Nest, N. Mex.

LOCATION.--Lat 36°29'07", long 105°15'54", Colfax County, in Maxwell Grant, on right bank 0.1 mile downstream from Schoolhouse Draw, 0.5 mile east of U.S. Highway 64, about 2,000 ft upstream from high-water line of Eagle Nest Reservoir, and 4.7 miles south of Eagle Nest.

DRAINAGE AREA.--56 sq mi.

PERIOD OF RECORD.--April 1928 to September 1955, June 1964 to current year. No winter records except in water years 1932, 1948, 1951. Monthly discharge only for some periods, published in WSP 1311 and 1731. Records for December 1930 to March 1931, published in WSP 732, are unreliable and should not be used. Published as "near Therma" 1928-34.

GAGE.--Water-stage recorder. Concrete control since Sept. 25, 1947. Altitude of gage is 8,195 ft (from topographic map). Prior to May 8, 1928, nonrecording gage, and May 8, 1928 to Sept. 1, 1934, water-stage recorder at site 0.2 mile downstream at different datums.

EXTREMES.--Current year: Maximum discharge, 45 cfs Apr. 5 (gage height, 3.66 ft); minimum determined, 0.01 cfs June 29.
Period of record: Maximum discharge, 505 cfs June 16, 1965 (gage height, 5.61 ft), from rating curve extended above 97 cfs; no flow at times.

REMARKS.--Records good except those below 1.0 cfs, which are fair. Diversions for irrigation of about 1,000 acres above station.

REVISIONS (WATER YEARS).--WSP 957: 1941. WSP 1281: Drainage area. WSP 1311: 1932(M), 1935(M), 1937(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			-	4.7	1.9	.50	.02	.52	.49	4.8	4.7	
2			-	4.7	1.8	.45	.02	.60	.37	4.5	4.4	
3			-	4.3	1.6	.37	.03	.88	.32	3.3	3.5	
4			-	4.2	1.4	.18	.02	.88	.24	2.7	3.3	
5			-	3.7	1.4	.16	.02	4.0	.10	2.4	3.2	
6			-	3.5	2.1	.14	.02	1.7	.06	2.2	3.1	
7			-	3.5	3.5	.14	.02	2.3	.04	2.4	3.1	
8			-	3.3	3.8	.22	.02	2.3	.03	2.2	3.2	
9			-	3.3	3.1	.22	.02	2.5	.04	2.2	2.9	
10			-	3.5	2.6	.20	.02	2.3	.12	2.0	2.7	
11			-	3.5	3.1	.16	.02	1.7	.14	2.0	2.8	
12			-	3.3	2.8	.12	.02	1.1	.09	1.9	3.0	
13			-	3.5	2.8	.10	.02	.74	.30	1.8	3.0	
14			-	3.0	2.3	.08	.02	.49	.35	1.8	2.4	
15			-	2.3	2.1	.08	.02	.40	.16	1.8	2.5	
16			-	2.7	1.9	.08	.02	.49	.14	1.8	2.9	
17			-	2.3	1.4	.08	.02	.52	.53	2.0	-	
18			-	2.2	1.0	.05	.02	.46	.97	3.3	-	
19			-	2.5	.90	.04	.15	.37	1.5	2.9	-	
20			-	2.1	.80	.04	.35	5.9	2.9	2.4	-	
21			5.8	4.3	.75	.07	.10	2.3	3.0	2.2	-	
22			6.8	4.1	.70	.07	.09	2.0	2.9	2.4	-	
23			8.2	3.3	.70	.07	.19	1.7	3.1	2.3	-	
24			8.4	3.5	.65	.06	.26	3.2	2.8	2.4	-	
25			6.3	3.0	.60	.05	.14	2.5	2.4	5.2	-	
26			6.3	2.4	.60	.04	.63	1.4	1.8	7.1	-	
27			7.5	2.1	.60	.03	.70	1.2	1.3	6.3	-	
28			7.1	2.0	.60	.02	.49	1.2	1.1	5.1	-	
29		-----	6.1	2.0	.60	.01	.49	1.1	1.1	6.7	-	
30		-----	5.3	2.0	.55	.02	.40	.85	3.2	7.5	-	
31		-----	5.3	-----	.50	-----	.35	.66	-----	5.0	-----	
TOTAL	-	-	-	94.8	49.15	3.85	4.71	48.26	31.59	102.6	-	-
MEAN	-	-	-	3.16	1.59	.13	.15	1.56	1.05	3.31	-	-
MAX	-	-	-	4.7	3.8	.50	.70	5.9	3.2	7.5	-	-
MIN	-	-	-	2.0	.50	.01	.02	.37	.03	1.8	-	-
AC-FT	-	-	-	188	97	7.6	9.3	96	63	204	-	-

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

07205000 Sixmile Creek near Eagle Nest, N. Mex.

LOCATION.--Lat 36°31'07", long 105°16'29", Colfax County, in Maxwell Grant, on left upstream wingwall of concrete control, 250 ft downstream from concrete box culvert on U.S. Highway 64, and 2.6 miles southwest of Eagle Nest.

DRAINAGE AREA.--10.5 sq mi.

PERIOD OF RECORD.--April 1928 to September 1955 (no winter records in water years 1928-31, 1933-55), July 1958 to current year. Prior to October 1930 monthly discharge only, published in WSP 1311. Records for December 1930 to March 1931, published in WSP 732, are unreliable and should not be used. Published as "near Therma" 1928-34.

GAGE.--Water-stage recorder. Concrete control Sept. 11, 1931 to May 1933, and since Sept. 13, 1934. Datum of gage is 8,195.16 ft above mean sea level. Prior to May 18, 1928, nonrecording gage at site 88 ft upstream at datum 0.98 ft higher. May 18, 1928 to Sept. 11, 1938, water-stage recorder at site 88 ft upstream at datum 0.43 ft higher.

AVERAGE DISCHARGE.--14 years (1931-32, 1958-71), 2.56 cfs (1,850 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7.6 cfs Mar. 11 (gage-height, 1.05 ft); minimum, 0.05 cfs July 15. 1930-55, 1958-71: Maximum discharge, 128 cfs Aug. 5, 1969 (gage height, 2.86 ft), from rating curve extended above 26 cfs; maximum gage height recorded, 3.38 ft Apr. 2, 1937 (ice jam), site and datum then in use; no flow at times.

REMARKS.--Records good except those for April, which are poor. Diversions for irrigation of about 300 acres above station.

REVISIONS (WATER YEARS).--WSP 1311: 1932-33(M), 1935(M), 1943(M). WSP 1681: 1937(M). WSP 1921: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.0	1.3	1.8	2.2	1.2	1.8	2.1	.54	.85	.12	.38
2	1.8	2.0	1.6	1.9	2.1	1.3	1.9	2.1	.54	.97	.14	.10
3	1.8	2.0	1.6	1.9	1.5	1.4	1.7	2.1	.54	.85	.14	.09
4	1.8	1.9	1.6	1.8	1.7	1.6	1.8	1.9	.50	.69	.14	.08
5	1.8	1.9	1.7	1.8	1.7	1.6	1.7	1.9	.50	.64	.24	.09
6	1.8	1.9	1.7	1.8	1.7	1.5	1.7	1.9	.50	.64	.24	.08
7	1.8	2.0	1.8	1.9	1.4	1.5	1.8	1.8	.50	.64	.45	.09
8	1.9	2.1	1.9	1.9	1.4	1.6	1.7	1.8	.50	.74	.30	.34
9	1.8	1.8	1.8	1.8	1.6	2.4	1.5	1.8	.54	.74	.27	.34
10	1.8	1.8	1.8	1.7	1.8	3.1	1.4	1.8	.50	.64	.24	.34
11	1.8	1.8	1.6	1.7	1.9	3.3	1.3	2.0	.50	.59	.14	.34
12	1.8	1.8	1.6	1.8	1.7	2.3	1.4	1.8	.50	.59	.12	.34
13	1.8	1.8	1.4	1.8	1.9	2.2	1.4	1.8	.50	.59	.10	.34
14	1.8	1.4	1.3	1.8	1.9	1.9	1.4	1.7	.50	.41	.12	.34
15	2.0	1.3	1.4	2.0	2.0	1.6	1.3	1.7	.50	.06	.14	.34
16	2.0	2.2	1.1	1.8	1.8	1.6	1.4	1.7	.79	.21	.12	.30
17	2.0	2.5	1.2	1.8	1.6	1.4	1.3	1.6	1.2	.38	.14	.57
18	1.9	2.8	1.1	2.0	1.7	1.3	1.2	1.8	1.2	.34	.10	.69
19	1.9	2.3	1.0	2.4	1.8	1.3	1.2	1.8	1.2	.74	.10	.79
20	1.8	2.1	1.2	2.6	1.3	1.4	1.0	1.8	1.2	1.2	.10	.85
21	1.8	2.1	1.3	3.1	1.4	1.4	2.3	1.6	1.2	.97	.22	.64
22	1.8	2.4	1.4	2.3	1.4	1.4	2.2	1.5	1.2	.97	.46	.69
23	1.9	1.8	1.8	1.8	1.3	1.7	2.2	1.5	1.2	.64	.27	.64
24	1.8	1.9	1.9	1.4	1.2	1.8	2.3	1.5	1.2	.27	.38	.74
25	1.8	2.0	1.9	1.8	1.4	1.4	2.3	1.4	1.2	.14	.74	.59
26	2.0	2.0	1.8	1.9	1.3	1.4	2.3	1.4	1.1	.16	.69	.50
27	1.9	1.9	1.8	1.9	1.4	1.8	2.2	1.4	.91	.16	.64	.38
28	1.9	1.7	1.9	1.8	1.4	1.8	2.2	1.4	.85	.16	.64	.34
29	1.9	1.9	1.9	1.9	-----	1.9	2.2	1.7	.79	.18	.59	.38
30	1.9	1.6	1.9	2.2	-----	1.8	2.2	1.2	.79	.21	.54	.97
31	1.8	-----	1.8	2.4	-----	1.8	-----	.64	-----	.21	.50	-----
TOTAL	57.4	58.7	49.1	60.5	45.5	53.7	52.3	52.14	23.69	16.58	9.13	12.70
MEAN	1.85	1.96	1.58	1.95	1.63	1.73	1.74	1.68	.79	.53	.29	.42
MAX	2.0	2.8	1.9	3.1	2.2	3.3	2.3	2.1	1.2	1.2	.74	.97
MIN	1.8	1.3	1.0	1.4	1.2	1.2	1.0	.64	.50	.06	.10	.08
AC-FT	114	116	97	120	90	107	104	103	47	33	18	25

CAL YR 1970 TOTAL 1,523.50 MEAN 4.17 MAX 28 MIN 1.0 AC-FT 3,020
WTR YR 1971 TOTAL 491.44 MEAN 1.35 MAX 3.3 MIN .06 AC-FT 975

PEAK DISCHARGE (BASE, 15 CFS).--No peak above base.

07205000 Sixmile Creek near Eagle Nest, N. Mex.

LOCATION.--Lat 36°31'07", long 105°16'29", Colfax County, in Maxwell Grant, on left upstream wingwall of concrete control, 250 ft downstream from concrete box culvert on U.S. Highway 64, and 2.6 miles southwest of Eagle Nest.

DRAINAGE AREA.--10.5 sq mi.

PERIOD OF RECORD.--April 1928 to September 1955 (no winter records in water years 1928-31, 1933-55), July 1958 to current year. Prior to October 1930 monthly discharge only, published in WSP 1311. Records for December 1930 to March 1931, published in WSP 732, are unreliable and should not be used. Published as "near Therma" 1928-34.

GAGE.--Water-stage recorder. Concrete control Sept. 11, 1931 to May 1933, and since Sept. 13, 1934. Datum of gage is 8,195.16 ft above mean sea level. Prior to May 18, 1928, nonrecording gage at site 88 ft upstream at datum 0.98 ft higher. May 18, 1928 to Sept. 11, 1938, water-stage recorder at site 88 ft upstream at datum 0.43 ft higher.

AVERAGE DISCHARGE.--13 calendar years (1959-71), 2.51 cfs (1,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7.6 cfs Mar. 11 (gage height, 1.05 ft); minimum, 0.05 cfs July 15. 1930-55, 1958-71: Maximum discharge, 128 cfs Aug. 5, 1969 (gage height, 2.86 ft), from rating curve extended above 26 cfs; maximum gage height recorded, 3.38 ft Apr. 2, 1937 (ice jam), site and datum then in use; no flow at times.

REMARKS.--Records good except those for April, which are poor. Diversions for irrigation of about 300 acres above station.

REVISIONS (WATER YEARS).--WSP 1311: 1932-33(M), 1935(M), 1943(M). WSP 1681: 1937(M). WSP 1921: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.8	2.2	1.2	1.8	2.1	.54	.85	.12	.38	1.2	1.0	.85
2	1.9	2.1	1.3	1.9	2.1	.54	.97	.14	.10	.97	.89	.97
3	1.9	1.5	1.4	1.7	2.1	.54	.85	.14	.09	.74	.89	1.0
4	1.8	1.7	1.6	1.8	1.9	.50	.69	.14	.08	.64	.91	.97
5	1.8	1.7	1.6	1.7	1.9	.50	.64	.24	.09	.59	.97	.85
6	1.8	1.7	1.5	1.7	1.9	.50	.64	.24	.08	.59	.87	.85
7	1.9	1.4	1.5	1.8	1.8	.50	.64	.45	.09	.64	.83	.85
8	1.9	1.4	1.6	1.7	1.8	.50	.74	.30	.34	.64	.91	.91
9	1.8	1.6	2.4	1.5	1.8	.54	.74	.27	.34	.59	.84	.91
10	1.7	1.8	3.1	1.4	1.8	.50	.64	.24	.34	.54	.82	.85
11	1.7	1.9	3.3	1.3	2.0	.50	.59	.14	.34	.54	.88	.85
12	1.8	1.7	2.3	1.4	1.8	.50	.59	.12	.34	.54	.97	.97
13	1.8	1.9	2.2	1.4	1.8	.50	.59	.10	.34	.54	.91	.91
14	1.8	1.9	1.9	1.4	1.7	.50	.41	.12	.34	.54	.98	.97
15	2.0	2.0	1.6	1.3	1.7	.50	.06	.14	.34	.54	1.1	.91
16	1.8	1.8	1.6	1.4	1.7	.79	.21	.12	.30	.54	1.2	.79
17	1.8	1.6	1.4	1.3	1.6	1.2	.38	.14	.57	.69	.97	.79
18	2.0	1.7	1.3	1.2	1.8	1.2	.34	.10	.69	.91	.95	.79
19	2.4	1.8	1.3	1.2	1.8	1.2	.74	.10	.79	.69	.90	.79
20	2.6	1.3	1.4	1.0	1.8	1.2	1.2	.10	.85	.85	.90	.74
21	3.1	1.4	1.4	2.3	1.6	1.2	.97	.22	.64	.85	.90	.74
22	2.3	1.4	1.4	2.2	1.5	1.2	.97	.46	.69	.85	.90	.74
23	1.8	1.3	1.7	2.2	1.5	1.2	.64	.27	.64	.85	.91	1.6
24	1.4	1.2	1.8	2.3	1.5	1.2	.27	.38	.74	.85	.97	2.0
25	1.8	1.4	1.4	2.3	1.4	1.2	.14	.74	.59	2.1	.97	1.8
26	1.9	1.3	1.4	2.3	1.4	1.1	.16	.69	.50	1.4	1.0	1.8
27	1.9	1.4	1.8	2.2	1.4	.91	.16	.64	.38	1.2	1.0	1.6
28	1.8	1.4	1.8	2.2	1.4	.85	.16	.64	.34	1.0	.97	1.7
29	1.9	-----	1.9	2.2	1.7	.79	.18	.59	.38	1.3	.97	1.8
30	2.2	-----	1.8	2.2	1.2	.79	.21	.54	.97	.90	.79	1.4
31	2.4	-----	1.8	-----	.64	-----	.21	.50	-----	.89	-----	1.5
TOTAL	60.5	45.5	53.7	52.3	52.14	23.69	16.58	9.13	12.70	25.71	28.07	34.20
MEAN	1.95	1.63	1.73	1.74	1.68	.79	.53	.29	.42	.83	.94	1.10
MAX	3.1	2.2	3.3	2.3	2.1	1.2	1.2	.74	.97	2.1	1.2	2.0
MIN	1.4	1.2	1.2	1.0	.64	.50	.06	.10	.08	.54	.79	.74
AC-FT	120	90	107	104	103	47	33	18	25	51	56	68

CAL YR 1971 TOTAL 414.22 MEAN 1.13 MAX 3.3 MIN .06 AC-FT 822

PEAK DISCHARGE (BASE, 15 CFS).--No peak above base.

07205500 Eagle Nest Reservoir near Eagle Nest, N. Mex.

LOCATION.--Lat 36°31'53", long 105°13'44", Colfax County, in Maxwell Grant, at upstream face of Eagle Nest Dam on Cimarron River, 2.5 miles southeast of Eagle Nest, and 6.7 miles west of Ute Park.

DRAINAGE AREA.--167 sq mi.

PERIOD OF RECORD.--December 1927 to December 1944 (monthend contents only, published in WSP 1311), May 1950 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Nonrecording gage read one to six times a month at random intervals. Datum of gage is 8,056.8 ft above mean sea level. Prior to October 1964 gage heights were raised by addition of 8,000 ft and called elevations.

EXTREMES.--Current year: Maximum contents observed, 33,010 acre-ft Mar. 8, 9 (gage height, 113.00 ft); minimum observed, 25,500 acre-ft Sept. 21, 28 (gage height, 107.30 ft).
Period of record: Maximum contents observed, 78,800 acre-ft May 31, 1942 (gage height, 136.9 ft); minimum observed, 635 acre-ft Dec. 14, 1954 (gage height, 61.33 ft).

REMARKS.--Reservoir is formed by concrete dam with spillway cut in natural rock, completed June 30, 1918; storage began in June 1917. Capacity, 79,120 acre-ft between gage heights 35.0 (sill of outlet gate) and 137.0 ft (crest of ungated spillway). Dead storage negligible. Records given herein represent usable contents. Water released is used for irrigation. Lake is recreational area. Diversions for irrigation of about 2,500 acres above reservoir.

COOPERATION.--Supplemental gage readings furnished by employee of Springer Land and Cattle Co. and by Cimarron River watermaster.

REVISIONS.--WSP 1281: Drainage area.

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

106.0	23,970	112.0	31,600
108.0	26,350	114.0	34,450
110.0	28,900		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	31,880	32,170	32,310	-	-	-	29,570	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	29,500	-	26,600	-
4	-	31,590	-	-	-	-	-	30,710	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-
6	32,170	-	-	-	-	-	32,310	-	-	27,230	-	-
7	-	-	-	-	-	-	-	30,510	-	-	-	25,990
8	-	-	-	-	-	33,010	-	-	29,030	-	-	-
9	-	-	-	-	-	33,010	-	-	-	26,980	-	-
10	-	-	-	-	-	-	-	-	-	-	26,600	-
11	-	-	-	-	-	-	-	30,370	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	32,100	-	-	26,780	-	-
14	-	-	32,020	-	-	-	31,880	-	-	-	-	25,860
15	-	-	-	-	-	-	-	-	28,380	-	-	-
16	-	-	-	-	-	32,870	-	-	-	-	-	-
17	-	-	-	32,310	32,730	-	-	-	-	-	26,350	-
18	-	-	-	-	-	-	-	30,100	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	31,670	-	-	26,470	26,350	-
21	-	-	-	-	-	-	-	-	-	-	-	25,500
22	-	-	-	-	-	-	-	-	27,990	-	-	-
23	-	-	-	-	-	32,660	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	26,350	-
25	-	-	-	-	-	-	-	29,830	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	31,400	-	-	26,470	-	-
28	-	-	-	-	32,900	-	-	-	-	-	-	25,500
29	-	-	-	-	-	-	-	-	27,540	-	-	-
30	-	31,870	-	-	-	32,450	31,100	-	27,500	-	-	25,500
31	31,500	-	32,160	32,310	-	32,430	-	29,530	-	26,560	26,290	-
(+)	-	-	-	-	-	-	-	-	-	-	107.95	-
(#)	-900	+370	+290	+150	+590	-470	-1,330	-1,570	-2,030	-940	-270	-790

CAL YR 1970..... † +4,160

WTR YR 1971..... † -6,900

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

Change in contents, in acre-feet.

NOTE.--Monthend contents interpolated or estimated of basis of releases from reservoir except Aug. 31.

07205500 Eagle Nest Reservoir near Eagle Nest, N. Mex.

LOCATION.--Lat 36°31'53", long 105°13'44", Colfax County, in Maxwell Grant, at upstream face of Eagle Nest Dam on Cimarron River, 2.5 miles southeast of Eagle Nest, and 6.7 miles west of Ute Park.

DRAINAGE AREA.--167 sq mi.

PERIOD OF RECORD.--December 1927 to December 1944 (monthend contents only, published in WSP 1311), May 1950 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Nonrecording gage read one to six times a month at random intervals. Datum of gage is 8,056.8 ft above mean sea level. Prior to October 1964 gage heights were raised by addition of 8,000 ft and called elevations.

EXTREMES.--Current year: Maximum contents observed, 33,010 acre-ft Mar. 8, 9 (gage height, 113.00 ft); minimum observed, 24,560 acre-ft Nov. 9, 17 (gage height, 106.50 ft).

Period of record: Maximum contents observed, 78,800 acre-ft May 31, 1942 (gage height, 136.9 ft); minimum observed, 635 acre-ft Dec. 14, 1954 (gage height, 61.33 ft).

REMARKS.--Reservoir is formed by concrete dam with spillway cut in natural rock, completed June 30, 1918; storage began in June 1917. Capacity, 79,120 acre-ft between gage heights 35.0 (sill of outlet gate) and 137.0 ft (crest of ungated spillway). Dead storage negligible. Records given herein represent usable contents. Water released is used for irrigation. Lake is recreational area. Diversions for irrigation of about 2,500 acres above reservoir.

COOPERATION.--Supplemental gage readings furnished by employee of Springer Land and Cattle Co. and by Cimarron River watermaster.

REVISIONS.--WSP 1281: Drainage area.

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

106.0	23,970	112.0	31,600
108.0	26,350	114.0	34,450
110.0	28,900		

CONTENTS, IN ACRE-FEET, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	32,170	32,310	-	-	-	29,570	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	24,790	-
3	-	-	-	-	-	29,500	-	26,600	-	-	-	-
4	-	-	-	-	30,710	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	25,500	-	-
6	-	-	-	32,310	-	-	27,230	-	-	25,340	-	-
7	-	-	-	-	30,510	-	-	-	25,990	-	-	24,790
8	-	-	33,010	-	-	29,030	-	-	-	-	-	-
9	-	-	33,010	-	-	-	26,980	-	-	-	24,560	-
10	-	-	-	-	-	-	-	26,600	-	-	-	-
11	-	-	-	-	30,370	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	25,380	-	-
13	-	-	-	32,100	-	-	26,780	-	-	-	-	-
14	-	-	-	31,880	-	-	-	-	25,860	-	-	-
15	-	-	-	-	-	28,380	-	-	-	-	-	-
16	-	-	32,870	-	-	-	-	-	-	-	-	-
17	32,310	32,730	-	-	-	-	-	26,350	-	-	24,560	-
18	-	-	-	-	30,100	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	25,020	-	-
20	-	-	-	31,670	-	-	26,470	26,350	-	-	-	-
21	-	-	-	-	-	-	-	-	25,500	-	-	24,860
22	-	-	-	-	-	27,990	-	-	-	-	-	-
23	-	-	32,660	-	-	-	-	-	-	-	24,600	-
24	-	-	-	-	-	-	-	26,350	-	-	-	-
25	-	-	-	-	29,830	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	24,790	-	-
27	-	-	-	31,400	-	-	26,470	-	-	-	-	-
28	-	32,900	-	-	-	-	-	-	25,500	-	-	-
29	-	-----	-	-	-	27,540	-	-	-	-	-	-
30	-	-----	32,450	31,100	-	27,500	-	-	25,500	-	24,700	-
31	32,310	-----	32,430	-----	29,530	-----	26,560	26,290	-----	24,790	-----	25,200
(+)								107.95				
(#)	+150	+590	-470	-1,330	-1,570	-2,030	-940	-270	-790	-710	-90	+500

CAL YR 1971..... ± -6,960

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

Change in contents, in acre-feet.

NOTE.--Monthend contents interpolated or estimated on basis of releases from reservoir except Aug. 31.

LOCATION.--Lat 36°31'55", long 105°13'43", Colfax County, in Maxwell Grant, on left bank 300 ft downstream from Eagle Nest Dam, 2.5 miles southeast of Eagle Nest, and 6.7 miles west of Ute Park.

PERIOD OF RECORD.--May 1950 to current year. Published as Cimarron Creek below Eagle Nest Dam October 1952 to September 1965.

GAGE.--Water-stage recorder. Parshall flume since May 15, 1951. Altitude of gage is 8,080 ft (from topographic map). Prior to May 15, 1951, at datum 0.81 ft higher.

AVERAGE DISCHARGE.--21 years, 13.1 cfs (9,490 acre-ft per year); 20 calendar years (1951-70), 13.1 cfs (9,490 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 49 cfs June 6-10; maximum gage height, 1.23 ft June 6; no flow at times.

Period of record: Maximum discharge, 205 cfs June 14, 1955 (gage height, 2.79 ft); no flow at times most years.

REMARKS.—Records good except those below 2 cfs, which are poor. Flow regulated by Eagle Nest Reservoir (see sta 07205500).
Divisions for irrigation of about 2,500 acres above station.

REVISIONS.--WSP 1281: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	.05	0		0	.02	23	43	4.4	19	.37	15
2	12	.05	0		0	.02	23	38	10	18	.37	15
3	12	.05	0		0	.02	23	35	26	13	9.6	15
4	12	0	0		0	.01	23	35	30	12	14	16
5	17	0	0		0	.01	23	35	30	12	14	19
6	19	.02	0		0	.01	25	35	44	18	14	20
7	19	.05	0		0	.01	26	34	49	21	14	20
8	19	0	0		0	.01	26	4.1	49	21	14	19
9	19	0	0		0	2.6	26	26	49	21	14	19
10	19	0	.01		0	5.5	26	30	45	16	13	19
11	19	0	.01		0	5.8	25	30	42	16	13	20
12	20	0	0		0	5.5	25	28	42	17	13	18
13	20	0	0		0	13	26	27	42	19	13	19
14	20	0	0		0	16	25	27	41	20	13	18
15	20	0	0		0	17	24	4.0	40	22	13	18
16	17	0	0		.01	20	24	21	38	27	13	22
17	10	0	0		.02	20	24	27	33	28	7.3	21
18	10	0	0		.03	19	24	22	32	30	4.1	18
19	14	0	0		.03	19	24	20	28	27	4.1	17
20	24	0	0		.03	19	28	20	28	17	3.8	10
21	24	0	0		.03	19	33	20	28	2.3	3.8	.10
22	24	0	0		.03	19	32	4.1	37	1.3	3.8	.10
23	24	0	0		.03	16	32	20	40	.66	3.8	.10
24	22	0	0		.03	15	32	25	40	.66	4.1	.10
25	21	0	0		.03	20	32	27	38	.37	4.1	.05
26	21	0	0		.03	21	32	32	30	.50	4.1	.10
27	21	0	0		.02	21	42	33	30	.66	4.8	.10
28	21	0	0		.02	21	46	28	30	.66	9.8	.10
29	21	0	0		-----	21	44	14	27	.50	14	.10
30	21	0	0		-----	22	44	.10	24	.37	15	.10
31	11	-----	0		-----	23	-----	.05	-----	.50	15	-----
TOTAL	565	.22	.02	0	.34	380.51	862	744.35	1,026.4	402.48	286.94	358.95
MEAN	18.2	.007	.0006	0	.012	12.3	28.7	24.0	34.2	13.0	9.26	12.0
MAX	24	.05	.01	0	.03	23	46	43	49	30	15	22
MIN	10	0	0	0	0	.01	23	.05	4.4	.37	.37	.05
AC-FT	1,120	.4	.04	0	.7	.755	1,710	1,480	2,040	798	569	701

CAL YR 1970	TOTAL 4,502.90	MEAN 12.3	MAX 50	MIN 0	AC-FT 8,930
WTR YR 1971	TOTAL 4,627.21	MEAN 12.7	MAX 49	MIN 0	AC-FT 9,180

07206000 Cimarron River below Eagle Nest Dam, N. Mex.

LOCATION.--Lat 36°31'55", long 105°13'43", Colfax County, in Maxwell Grant, on left bank 300 ft downstream from Eagle Nest Dam, 2.5 miles southeast of Eagle Nest, and 6.7 miles west of Ute Park.

DRAINAGE AREA.--167 sq mi.

PERIOD OF RECORD.--May 1950 to current year. Published as Cimarron Creek below Eagle Nest Dam October 1952 to September 1965.

GAGE.--Water-stage recorder. Parshall flume since May 15, 1951. Altitude of gage is 8,080 ft (from topographic map). Prior to May 15, 1951, at datum 0.81 ft higher.

AVERAGE DISCHARGE.--21 calendar years, 13.1 cfs (9,490 acre-ft per year); 20 calendar years (1952-71), 13.0 cfs (9,420 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 49 cfs June 6-10; maximum gage height, 1.23 ft June 6; no flow at times.
Period of record: Maximum discharge, 205 cfs June 14, 1955 (gage height, 2.79 ft); no flow at times most years.

REMARKS.--Records good except those below 2 cfs, which are poor. Flow regulated by Eagle Nest Reservoir (see sta 07205500).
Diversion for irrigation of about 2,500 acres above station.

REVISIONS.--WSP 1281: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		0	.02	23	43	4.4	19	.37	15	.17	16	.04
2		0	.02	23	38	10	18	.37	15	.17	5.7	.04
3		0	.02	23	35	26	13	9.6	15	.17	.17	.04
4		0	.01	23	35	30	12	14	16	.17	.10	.04
5		0	.01	23	35	30	12	14	19	.17	.10	.04
6		0	.01	25	35	44	18	14	20	.17	.10	.04
7		0	.01	26	34	49	21	14	20	.17	.10	.04
8		0	.01	26	4.1	49	21	14	19	.17	.10	.04
9		0	2.6	26	26	49	21	14	19	3.4	7.0	.04
10		0	5.5	26	30	45	16	13	19	8.8	10	.04
11		0	5.8	25	30	42	16	13	20	8.8	9.6	.03
12		0	5.5	25	28	42	17	13	18	8.4	9.6	.03
13		0	13	26	27	42	19	13	19	8.4	9.6	.03
14		0	16	25	27	41	20	13	18	12	9.6	.03
15		0	17	24	4.0	40	22	13	18	26	9.6	.03
16		.01	20	24	21	38	27	13	22	26	10	.03
17		.02	20	24	27	33	28	7.3	21	27	10	.03
18		.03	19	24	22	32	30	4.1	18	27	10	.03
19		.03	19	24	20	28	27	4.1	17	27	10	.03
20		.03	19	28	20	28	17	3.8	10	27	9.2	.03
21		.03	19	33	20	28	2.3	3.8	.10	27	9.2	.03
22		.03	19	32	4.1	37	1.3	3.8	.10	27	9.2	.03
23		.03	16	32	20	40	.66	3.8	.10	27	5.2	.03
24		.03	15	32	25	40	.66	4.1	.10	32	.05	.03
25		.03	20	32	27	38	.37	4.1	.05	33	.10	.03
26		.03	21	32	32	30	.50	4.1	.10	34	.05	.03
27		.02	21	42	33	30	.66	4.8	.10	32	.05	.03
28		.02	21	46	28	30	.66	9.8	.10	26	.05	.03
29		-----	21	44	14	27	.50	14	.10	20	.05	.03
30		-----	22	44	.10	24	.37	15	.10	16	.05	.03
31		-----	23	-----	.05	-----	.50	15	-----	16	-----	.03
TOTAL	0	.34	380.51	862	744.35	1,026.4	402.48	286.94	358.95	501.16	160.57	1.03
MEAN	0	.012	12.3	28.7	24.0	34.2	13.0	9.26	12.0	16.2	5.35	.033
MAX	0	.03	23	46	43	49	30	15	22	34	16	.04
MIN	0	0	.01	23	.05	4.4	.37	.37	.05	.17	.05	.03
AC-FT	0	.7	755	1,710	1,480	2,040	798	569	712	994	318	2.0

CAL YR 1971 TOTAL 4,724.73 MEAN 12.9 MAX 49 MIN 0 AC-FT 9,370

07207000 Cimarron River near Cimarron, N. Mex.

LOCATION.--Lat 36°31'11", long 104°58'42", Colfax County, in Maxwell Grant, on right bank 1,200 ft downstream from Turkey Creek Canyon, and 3.6 miles west of Cimarron.

DRAINAGE AREA.--294 sq mi.

PERIOD OF RECORD.--May 1950 to current year. Published as Cimarron Creek near Cimarron, October 1952 to September 1965.

GAGE.--Water-stage recorder. Concrete control since Nov. 6, 1963. Datum of gage is 6,599.58 ft above mean sea level.

AVERAGE DISCHARGE.--21 years, 20.3 cfs (14,710 acre-ft per year); 20 calendar years (1951-70), 20.3 cfs (14,710 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 85 cfs July 31 (gage height, 1.96 ft); maximum gage height, 2.09 ft Jan. 14, backwater from ice; minimum discharge, 0.74 cfs Dec. 30, result of freezeup.

Period of record: Maximum discharge, 15,500 cfs June 17, 1965 (gage height, 12.42 ft, from floodmark), from rating curve extended above 800 cfs on basis of slope-area measurements at gage heights 4.88 and 12.42 ft; no flow at times.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Eagle Nest Reservoir (see sta 07205500). Diversions above station for irrigation of about 3,500 acres, part of which is below station. Philmont ditch (formerly known as Cimarroncito ditch) diverts from left bank 1.5 miles above station, flumes under creek 0.9 mile above and bypasses station for off-channel storage and irrigation below; see tabulation below for monthly diversions.

REVISIONS.--WSP 1281: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	14	4.5	3.0	4.4	4.0	18	40	7.6	23	5.3	13
2	18	9.4	4.2	2.8	4.0	4.0	18	40	9.8	23	4.5	13
3	17	6.6	4.2	2.6	4.0	4.0	18	35	15	19	4.2	13
4	16	6.0	4.5	2.4	4.0	4.0	10	34	29	15	10	13
5	17	5.5	4.5	2.2	3.5	4.5	18	33	31	13	14	14
6	20	5.2	4.5	2.0	3.0	4.0	18	35	35	13	16	16
7	21	5.1	4.5	2.0	3.0	4.0	21	35	41	18	16	17
8	23	5.3	4.5	2.0	3.0	4.0	21	27	43	20	18	17
9	22	5.1	4.6	2.1	3.0	4.2	21	15	46	21	17	17
10	22	4.9	4.6	2.2	3.5	4.2	21	30	44	20	17	17
11	22	4.8	4.0	2.3	3.5	5.0	21	31	40	15	16	17
12	22	4.8	4.0	2.6	3.5	6.4	21	31	40	15	16	17
13	22	4.9	4.0	3.0	3.5	6.9	21	29	40	15	16	17
14	23	4.9	4.0	3.5	4.0	12	20	29	40	17	19	17
15	25	4.8	4.0	4.0	4.4	13	20	24	38	18	16	17
16	24	4.5	4.0	4.0	4.3	16	20	13	39	23	16	18
17	19	4.6	4.0	4.2	4.1	17	10	26	34	25	15	21
18	16	4.5	4.0	4.2	4.2	17	19	28	34	28	10	21
19	15	4.5	4.0	4.0	4.0	19	19	23	29	29	7.7	20
20	20	4.5	4.0	4.0	4.0	20	20	23	27	21	7.3	20
21	25	4.5	4.0	4.5	3.5	19	27	22	27	14	6.6	13
22	26	4.5	4.0	4.0	3.0	19	32	19	28	13	6.6	7.1
23	25	4.5	4.0	3.5	3.5	19	32	12	35	9.2	6.5	6.5
24	25	4.5	3.5	3.5	4.0	17	32	23	35	7.5	7.1	6.0
25	23	4.6	3.5	3.5	4.0	18	32	25	35	5.9	7.7	5.2
26	23	4.6	3.5	3.5	4.0	18	31	30	32	5.6	6.6	4.6
27	23	4.6	3.5	3.5	4.0	16	34	33	28	5.3	6.2	4.2
28	22	4.6	3.5	3.5	4.0	16	40	32	26	5.1	6.3	4.0
29	22	4.4	3.5	4.0	-----	16	41	35	26	7.0	10	4.0
30	22	4.6	3.5	4.3	-----	17	41	15	30	6.6	12	6.1
31	21	-----	3.5	4.4	-----	18	-----	9.7	-----	7.8	13	-----
TOTAL	658	159.2	124.6	101.3	104.9	366.2	735	836.7	964.4	478.0	349.6	395.7
MEAN	21.2	5.31	4.02	3.27	3.75	11.8	24.5	27.0	32.1	15.4	11.3	13.2
MAX	26	14	4.6	4.5	4.4	20	41	40	46	29	19	21
MIN	15	4.4	3.5	2.0	3.0	4.0	18	9.7	7.6	5.1	4.2	4.0
AC-FT	1,710	316	247	201	208	726	1,460	1,660	1,910	948	693	785
(+)	0	0	0	0	0	72	252	0	284	24	0	0

CAL YR 1970 TOTAL 9,756.1 MEAN 24.0 MAX 100 MIN 2.6 AC-FT 17,370 + 1,380
 WTR YR 1971 TOTAL 5,273.6 MEAN 14.4 MAX 46 MIN 2.0 AC-FT 10,460 + 632

+ Diversion, in acre-feet, by Philmont ditch; data furnished by Cimarron River Watermaster.

07207000 Cimarron River near Cimarron, N. Mex.

LOCATION.--Lat 36°31'11", long 104°58'42", Colfax County, in Maxwell Grant, on right bank 1,200 ft downstream from Turkey Creek Canyon, and 3.6 miles west of Cimarron.

DRAINAGE AREA.--294 sq mi.

PERIOD OF RECORD.--May 1950 to current year. Published as Cimarron Creek near Cimarron, October 1952 to September 1965.

GAGE.--Water-stage recorder. Concrete control since Nov. 6, 1963. Datum of gage is 6,599.58 ft above mean sea level.

AVERAGE DISCHARGE.--21 calendar years, 20.0 cfs (14,490 acre-ft per year); 20 calendar years (1952-71), 20.2 cfs (14,630 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 85 cfs July 31 (gage height, 1.96 ft); maximum gage height, 2.09 ft Jan. 14, backwater from ice; minimum discharge, 1.2 cfs Jan. 1, result of freezeup.

Period of record: Maximum discharge, 15,500 cfs June 17, 1965 (gage height, 12.42 ft, from floodmark), from rating curve extended above 800 cfs on basis of slope-area measurements at gage heights 4.88 and 12.42 ft; no flow at times.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated by Eagle Nest Reservoir (see sta 07205500). Diversions above station for irrigation of about 3,500 acres, part of which is below station. Philmont ditch (formerly known as Cimarroncito ditch) diverts from left bank 1.5 miles above station, flumes under creek 0.9 mile above and bypasses station for off-channel storage and irrigation below; see tabulation below for monthly diversions.

REVISIONS.--WSP 1281: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.0	4.4	4.0	18	40	7.6	23	5.3	13	4.7	23	5.0
2	2.8	4.0	4.0	18	40	9.8	23	4.5	13	4.8	22	5.0
3	2.6	4.0	4.0	18	35	15	19	4.2	13	5.2	15	5.0
4	2.4	4.0	4.0	19	34	20	15	10	13	5.5	11	4.5
5	2.2	3.5	4.5	18	33	31	13	14	14	5.4	9.7	4.0
6	2.0	3.0	4.0	18	35	35	13	16	16	5.4	8.8	4.2
7	2.0	3.0	4.0	21	35	41	18	16	17	5.4	7.8	4.2
8	2.0	3.0	4.0	21	27	43	20	18	17	5.5	7.5	4.5
9	2.1	3.0	4.2	21	15	46	21	17	17	5.6	7.2	4.0
10	2.2	3.5	4.2	21	30	44	20	17	17	7.0	11	3.5
11	2.3	3.5	5.0	21	31	40	15	16	17	9.7	13	3.5
12	2.6	3.5	6.4	21	31	40	15	16	17	10	13	4.0
13	3.0	3.5	6.0	21	29	40	15	16	17	10	13	4.0
14	3.5	4.0	12	20	29	40	17	19	17	10	13	4.0
15	4.0	4.4	13	20	24	38	18	16	17	15	14	3.8
16	4.0	4.3	16	20	13	39	23	16	18	22	14	3.5
17	4.2	4.1	17	19	26	34	25	15	21	25	15	3.0
18	4.2	4.2	17	19	28	34	28	10	21	27	14	3.2
19	4.0	4.0	19	19	23	29	29	7.7	20	27	14	3.3
20	4.0	4.0	20	20	23	27	21	7.3	20	28	13	3.5
21	4.5	3.5	19	27	22	27	14	6.6	13	29	13	4.0
22	4.0	3.0	19	32	19	28	13	6.6	7.1	29	13	4.3
23	3.5	3.5	19	32	12	35	9.2	6.5	6.5	29	13	5.4
24	3.5	4.0	17	32	23	35	7.5	7.1	6.0	30	11	4.5
25	3.5	4.0	18	32	25	35	5.9	7.7	5.2	38	7.7	4.4
26	3.5	4.0	18	31	30	32	5.6	6.6	4.6	38	7.0	4.1
27	3.5	4.0	16	34	33	28	5.3	6.2	4.2	37	6.6	4.0
28	3.5	4.0	16	40	32	26	5.1	6.3	4.0	33	6.1	4.0
29	4.0	-----	16	41	35	26	7.0	10	4.0	34	5.9	3.8
30	4.3	-----	17	41	15	30	6.6	12	6.1	25	5.5	3.5
31	4.4	-----	18	-----	9.7	-----	7.8	13	-----	23	-----	3.0
TOTAL	101.3	104.9	366.2	735	836.7	964.4	478.0	349.6	395.7	583.2	347.8	124.7
MEAN	3.27	3.75	11.8	24.5	27.0	32.1	15.4	11.3	13.2	18.8	11.6	4.02
MAX	4.5	4.4	20	41	40	46	29	19	21	38	23	5.4
MIN	2.0	3.0	4.0	18	9.7	7.6	5.1	4.2	4.0	4.7	5.5	3.0
AC-FT	201	208	726	1,460	1,660	1,910	948	693	785	1,160	690	247
(†)	0	0	72	252	0	284	24	0	0	0	0	0

CAL YR 1971 TOTAL 5,387.5 MEAN 14.8 MAX 46 MIN 2.0 AC-FT 10,690 † 632
WTR YR 1971 TOTAL 5,273.6 MEAN 14.4 MAX 46 MIN 2.0 AC-FT 10,460 † 632

† Diversion, in acre-feet, by Philmont ditch; data furnished by Cimarron River Watermaster.

07207500 Ponil Creek near Cimarron, N. Mex.

LOCATION.--Lat 36°34'25", long 104°56'46", Colfax County, in Maxwell Grant, on left bank 1.6 miles downstream from confluence of North and South Ponil Creeks, and 4.7 miles northwest of Cimarron.

DRAINAGE AREA.--171 sq mi.

PERIOD OF RECORD.--November 1915 to June 1919, August 1919 to July 1925, September 1925, September 1927 to July 1929, May 1950 to current year. Prior to May 1950 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 6,630 ft above mean sea level (from topographic map). Prior to May 8, 1922, at site 0.1 mile downstream at different datum. May 8, 1922 to Aug. 8, 1929, at site 0.4 mile upstream at different datum.

AVERAGE DISCHARGE.--32 years (1915-25, 1927-28, 1950-71), 12.0 cfs (8,690 acre-ft per year); 20 calendar years (1951-70), 9.44 cfs (6,840 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,030 cfs Aug. 23 (gage height, 5.40 ft); no flow at times.

Period of record: Maximum discharge, 5,630 cfs June 17, 1965 (gage height, 11.13 ft), from rating curve extended above 110 cfs on basis of slope-area measurements at gage heights 4.55, 5.80, 7.15, and 11.13 ft; no flow many days most years.

Discharge for flood of Aug. 8, 1929, which destroyed gage, was estimated as 5,200 cfs by State Engineer.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of 200 to 300 acres above station. Diversions 1,000 ft below station for irrigation of about 300 acres.

REVISIONS.--WSP 1281: Drainage area. WSP 1731: 1920.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.0	1.7	1.9	1.6	1.3	3.0	1.8	1.6	.02	7.1	21
2	2.2	3.4	1.8	2.0	1.4	1.5	2.8	1.8	1.4	.06	4.2	17
3	2.0	3.0	1.8	1.9	1.5	1.6	2.8	1.7	1.2	.06	3.4	15
4	2.2	2.9	1.7	1.7	1.4	1.7	2.9	1.6	.89	.02	2.9	11
5	2.0	3.0	1.9	1.5	1.5	1.8	2.8	1.5	.81	.01	13	8.4
6	2.0	3.4	1.8	1.3	1.2	1.4	2.4	1.7	.65	0	11	7.0
7	2.0	3.2	2.0	1.2	1.3	1.3	2.4	2.2	.57	0	9.8	5.6
8	3.2	3.4	2.3	1.3	1.2	1.4	2.3	2.4	.57	0	20	4.8
9	3.0	3.0	2.6	1.4	1.4	1.5	2.2	2.3	.57	.45	14	4.2
10	2.9	3.0	2.5	1.6	1.5	1.3	2.2	2.3	.57	.12	10	3.8
11	2.9	3.2	2.4	1.8	1.5	1.5	2.2	3.0	.50	.03	7.9	3.3
12	2.8	3.0	2.4	1.9	1.4	1.8	2.0	2.8	.43	.02	6.0	3.1
13	2.6	3.2	2.2	1.7	1.5	1.8	2.2	2.6	.36	.01	4.6	2.9
14	2.8	2.9	2.1	1.6	1.5	1.8	2.2	2.6	.24	.01	6.3	2.7
15	4.2	1.8	2.2	1.4	1.5	1.7	2.3	2.4	.19	.01	4.4	2.5
16	4.2	2.6	1.8	1.5	1.6	1.6	2.3	2.2	.19	.01	8.2	2.5
17	4.4	2.8	1.9	1.5	1.6	1.5	2.3	1.8	.19	0	9.3	5.0
18	4.2	2.6	2.1	1.6	1.7	1.6	2.2	2.3	.15	.03	3.6	8.4
19	3.8	2.6	1.8	1.7	1.5	1.5	2.2	2.8	.15	4.0	2.6	7.6
20	3.6	2.4	1.9	1.8	1.4	1.6	2.3	2.6	.15	10	2.2	7.3
21	3.2	2.9	2.0	1.8	1.3	1.8	2.3	2.3	.15	3.1	2.0	6.2
22	3.2	2.6	2.1	1.5	1.3	1.8	2.3	2.2	.07	1.4	2.4	6.2
23	3.2	1.8	2.0	1.3	1.4	1.8	2.3	1.8	.06	1.7	54	8.4
24	3.0	2.8	1.9	1.2	1.5	2.3	2.3	2.0	.06	1.8	28	8.0
25	2.9	2.9	2.0	1.3	1.6	3.0	2.3	1.8	.06	1.8	17	7.3
26	3.0	2.4	2.0	1.3	1.4	2.9	2.3	1.6	.06	1.2	7.6	5.9
27	3.2	2.4	2.2	1.5	1.3	3.6	2.3	1.6	.03	1.8	5.2	4.5
28	2.8	2.3	2.1	1.6	1.4	4.4	2.2	1.6	.02	8.0	31	3.8
29	2.6	2.6	2.0	1.6	-----	4.0	2.2	4.0	0	6.8	95	4.0
30	2.8	2.4	2.0	1.7	-----	3.8	2.0	2.4	.01	10	56	7.0
31	2.8	-----	1.9	1.7	-----	3.4	-----	1.8	-----	5.7	32	-----
TOTAL	91.9	83.5	63.1	48.8	40.4	64.0	70.5	67.5	11.90	58.16	480.7	204.4
MEAN	2.96	2.78	2.04	1.57	1.44	2.06	2.35	2.18	.40	1.88	15.5	6.81
MAX	4.4	3.4	2.6	2.0	1.7	4.4	3.0	4.0	1.6	10	95	21
MIN	2.0	1.8	1.7	1.2	1.2	1.3	2.0	1.5	0	0	2.0	2.5
AC-FT	182	166	125	97	80	127	140	134	24	115	953	405

CAL YR 1970 TOTAL 5,307.18 MEAN 14.5 MAX 126 MIN .89 AC-FT 10,530
WTR YR 1971 TOTAL 1,284.86 MEAN 3.52 MAX 95 MIN 0 AC-FT 2,550

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-23	2030	5.40	1,030	8-29	1830	2.90	242

07207500 Ponil Creek near Cimarron, N. Mex.

LOCATION.--Lat 36°34'25", long 104°56'46", Colfax County, in Maxwell Grant, on left bank 1.6 miles downstream from confluence of North and South Ponil Creeks, and 4.7 miles northwest of Cimarron.

DRAINAGE AREA.--171 sq mi.

PERIOD OF RECORD.--November 1915 to June 1919, August 1919 to July 1925, September 1925, September 1927 to July 1929, May 1950 to current year. Prior to May 1950 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 6,630 ft above mean sea level (from topographic map). Prior to May 8, 1922, at site 0.1 mile downstream at different datum. May 8, 1922 to Aug. 8, 1929, at site 0.4 mile upstream at different datum.

AVERAGE DISCHARGE.--31 calendar years (1916-24, 1928, 1951-71), 12.2 cfs (8,840 acre-ft per year); 20 calendar years (1952-71), 9.54 cfs (6,910 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,030 cfs Aug. 23 (gage height, 5.40 ft); no flow at times.

Period of record: Maximum discharge, 5,630 cfs June 17, 1965 (gage height, 11.13 ft), from rating curve extended above 110 cfs on basis of slope-area measurements at gage heights 4.55, 5.80, 7.15, and 11.13 ft; no flow many days most years. Discharge for flood of Aug. 8, 1929, which destroyed gage, was estimated as 5,200 cfs by State Engineer.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of 200 to 300 acres above station. Diversions 1,000 ft below station for irrigation of about 300 acres.

REVISIONS.--WSP 1281: Drainage area. WSP 1731: 1920.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.9	1.6	1.3	3.0	1.8	1.6	.02	7.1	21	7.0	5.2	3.1
2	2.0	1.4	1.5	2.8	1.8	1.4	.06	4.2	17	7.0	4.8	3.0
3	1.9	1.5	1.6	2.8	1.7	1.2	.06	3.4	15	7.0	4.5	2.9
4	1.7	1.4	1.7	2.9	1.6	.89	.02	2.9	11	6.6	4.5	3.0
5	1.5	1.5	1.8	2.8	1.5	.81	.01	13	8.4	6.2	4.2	3.0
6	1.3	1.2	1.4	2.4	1.7	.65	0	11	7.0	5.9	4.0	3.0
7	1.2	1.3	1.3	2.4	2.2	.57	0	9.8	5.6	5.6	3.6	3.0
8	1.3	1.2	1.4	2.3	2.4	.57	0	20	4.8	5.2	4.0	3.0
9	1.4	1.4	1.5	2.2	2.3	.57	.45	14	4.2	4.8	3.6	2.8
10	1.6	1.5	1.3	2.2	2.3	.57	.12	10	3.8	4.5	3.6	2.8
11	1.8	1.5	1.5	2.2	3.0	.50	.03	7.9	3.3	4.5	3.3	3.0
12	1.9	1.4	1.8	2.0	2.8	.43	.02	6.0	3.1	4.2	3.3	3.0
13	1.7	1.5	1.8	2.2	2.6	.36	.01	4.6	2.9	4.0	3.3	3.0
14	1.6	1.5	1.8	2.2	2.6	.24	.01	6.3	2.7	3.8	3.3	2.9
15	1.4	1.5	1.7	2.3	2.4	.19	.01	4.4	2.5	3.6	3.3	2.8
16	1.5	1.6	1.6	2.3	2.2	.19	.01	8.2	2.5	3.3	4.5	2.7
17	1.5	1.6	1.5	2.3	1.8	.19	0	9.3	5.0	3.8	4.8	2.6
18	1.6	1.7	1.6	2.2	2.3	.15	.03	3.6	8.4	4.5	4.0	2.6
19	1.7	1.5	1.5	2.2	2.8	.15	4.0	2.6	7.6	4.5	3.1	2.7
20	1.8	1.4	1.6	2.3	2.6	.15	10	2.2	7.3	4.0	2.6	2.8
21	1.8	1.3	1.8	2.3	2.3	.15	3.1	2.0	6.2	3.8	2.7	2.9
22	1.5	1.3	1.8	2.3	2.2	.07	1.4	2.4	6.2	3.8	2.8	3.0
23	1.3	1.4	1.8	2.3	1.8	.06	1.7	54	8.4	3.6	2.9	3.1
24	1.2	1.5	2.3	2.3	2.0	.06	1.8	28	8.0	3.6	3.0	3.2
25	1.3	1.6	3.0	2.3	1.8	.06	1.8	17	7.3	4.2	3.0	3.0
26	1.3	1.4	2.9	2.3	1.6	.06	1.2	7.6	5.9	5.9	3.1	2.8
27	1.5	1.3	3.6	2.3	1.6	.03	1.8	5.2	4.5	5.2	3.2	2.7
28	1.6	1.4	4.4	2.2	1.6	.02	8.0	31	3.8	4.5	3.6	2.5
29	1.6	-----	4.0	2.2	4.0	0	6.8	95	4.0	6.6	3.6	3.3
30	1.7	-----	3.8	2.0	2.4	.01	10	56	7.0	6.2	3.3	2.7
31	1.7	-----	3.4	-----	1.8	-----	5.7	32	-----	4.8	-----	2.3
TOTAL	48.8	40.4	64.0	70.5	67.5	11.90	58.16	480.7	204.4	152.2	108.7	89.2
MEAN	1.57	1.44	2.06	2.35	2.18	.40	1.88	15.5	6.81	4.91	3.62	2.88
MAX	2.0	1.7	4.4	3.0	4.0	1.6	10	95	21	7.0	5.2	3.3
MIN	1.2	1.2	1.3	2.0	1.5	0	0	2.0	2.5	3.3	2.6	2.3
AC-FT	97	80	127	140	134	24	115	953	405	302	216	177

CAL YR 1971 TOTAL 1,396.46 MEAN 3.83 MAX 95 MIN 0 AC-FT 2,770

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-23	2030	5.40	1,030	8-29	1830	2.90	242

07208500 Rayado Creek at Sauble Ranch, near Cimarron, N. Mex.

LOCATION.--Lat 36°22'20", long 104°58'10", Colfax County, in Maxwell Grant, on right bank at Sauble Ranch (Carson-Maxwell Base Camp of Philmont Scout Ranch), 2.5 miles upstream from State Highway 21, 4.0 miles downstream from Bonito Creek, and 9.8 miles southwest of Cimarron.

DRAINAGE AREA.--65 sq mi.

PERIOD OF RECORD.--January 1909 to February 1910, June to August 1910, May 1911 to May 1913, July 1913 to February 1915, October 1915 to September 1918, March 1919 to September 1920, June 1923 to September 1924, March to May 1927, August 1927 to current year. Monthly discharge only for some periods, published in WSP 1311. Records for April and May 1910, published in WSP 287, are unreliable and should not be used. Published as Rayado River "at," "near," or "above" Abreu's Ranch near Cimarron prior to October 1925 and as Rayado River at Sauble Ranch, near Cimarron, October 1925 to September 1952.

GAGE.--Water-stage recorder. Altitude of gage is 6,720 ft (from topographic map). See WSP 1921 for history of changes prior to Oct. 1, 1954. Oct. 1, 1954 to June 16, 1965, at site 270 ft downstream at datum 2.79 ft lower.

AVERAGE DISCHARGE.--52 years (1911-12, 1913-14, 1915-20, 1923-24, 1927-71), 14.3 cfs (10,360 acre-ft per year); 20 calendar years (1951-70), 13.2 cfs (9,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 30 cfs May 29 (gage height, 2.15 ft); maximum gage height, 2.33 ft Dec. 25 (backwater from ice); minimum discharge, 0.70 cfs Dec. 1, result of freezeup.

1909-12, 1913-71: Maximum discharge, 9,000 cfs June 17, 1965 (gage height, 11.5 ft from floodmarks), from rating curve extended above 70 cfs on basis of field estimate of peak flow; minimum, 0.03 cfs Dec. 3, 1950, but may have been less during periods of ice effect.

The major flood of June 10, 1913, destroyed the gage (stage and discharge not determined). Another major flood probably occurred Sept. 29 or 30, 1904.

REMARKS.--Records good except those for winter period, which are fair. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1281: 1914, 1934-35(M), 1937(M), 1941(P), 1942(M), 1944(M), drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	5.2	2.5	3.5	4.1	3.2	6.0	4.8	6.3	3.0	7.6	5.0
2	4.3	5.0	3.7	3.5	3.8	3.2	5.8	4.5	5.5	3.4	5.5	4.8
3	4.1	5.2	4.1	3.4	3.6	3.2	6.0	4.5	5.0	3.0	5.0	4.3
4	4.3	4.3	3.9	3.0	3.4	3.2	6.3	4.5	4.5	2.2	6.3	3.9
5	4.3	5.2	3.9	2.5	3.2	3.3	5.5	4.3	4.3	2.1	11	3.7
6	4.3	5.5	3.9	2.0	3.2	3.2	5.0	5.0	4.3	2.1	15	3.5
7	4.5	6.3	4.1	2.0	3.0	3.2	5.8	6.0	4.3	2.1	16	3.3
8	5.8	5.5	5.2	2.2	3.0	3.4	5.2	6.3	4.3	2.2	19	3.5
9	5.5	4.5	5.0	2.4	3.1	3.5	5.2	7.3	4.3	2.2	15	3.5
10	5.8	6.0	4.5	2.6	3.2	3.4	5.2	6.3	4.1	2.1	12	3.3
11	5.5	5.5	4.1	3.0	3.3	3.7	5.5	8.0	4.1	1.8		3.1
12	5.5	5.2	3.1	3.3	3.5	3.9	5.5	7.3	3.9	1.6	10	3.0
13	5.0	5.5	3.4	3.3	3.3	4.8	5.5	6.3	3.7	1.6	8.0	2.8
14	5.2	4.5	3.7	3.2	3.5	5.5	5.5	6.0	3.7	1.6	7.6	3.0
15	6.0	3.0	4.0	3.2	3.9	5.0	6.3	5.8	3.9	1.5	7.3	3.0
16	5.8	5.2	3.8	3.3	3.9	4.2	6.3	5.5	4.3	1.7	7.0	3.0
17	5.8	4.8	4.1	3.7	3.7	4.3	6.3	5.0	3.9	2.0	7.6	4.1
18	5.5	4.1	3.8	3.7	3.9	4.5	5.8	5.8	3.5	1.8	6.3	5.5
19	5.2	4.3	3.6	3.7	3.3	4.2	5.8	6.3	3.5	3.3	9.2	5.5
20	5.0	4.1	3.6	3.7	3.3	4.2	5.2	5.8	3.1	5.0	11	5.8
21	5.0	4.3	3.6	4.3	3.0	4.8	5.2	5.0	3.7	7.3	8.0	6.0
22	5.0	4.5	3.5	4.1	3.0	5.5	6.6	4.5	3.5	5.5	10	7.0
23	5.0	2.6	3.4	3.1	3.0	8.3	6.0	4.3	3.5	9.7	7.6	8.0
24	5.0	6.0	3.4	3.0	3.2	10	6.3	4.3	3.5	12	8.3	8.3
25	4.8	5.8	3.4	3.3	3.4	8.3	6.6	4.3	3.3	9.6	7.0	7.3
26	5.0	5.2	3.6	3.7	3.4	8.3	6.0	4.1	3.1	6.3	8.0	5.8
27	4.8	5.2	3.7	3.5	3.2	13	5.2	4.1	3.1	6.0	6.3	4.8
28	3.9	4.5	3.7	3.3	3.2	10	5.0	4.8	2.6	4.5	6.6	4.3
29	4.5	5.2	3.6	3.5	-----	8.7	5.0	20	2.4	5.5	11	4.1
30	5.0	5.0	3.5	3.5	-----	8.0	4.8	13	2.4	7.0	6.6	15
31	5.0	-----	3.5	3.9	-----	8.0	-----	8.3	-----	7.2	5.8	-----
TOTAL	154.7	147.2	116.9	100.4	94.6	170.0	170.4	192.0	115.6	126.9	280.3	148.2
MEAN	4.99	4.91	3.77	3.24	3.38	5.48	5.68	6.19	3.85	4.09	9.04	4.94
MAX	6.0	6.3	5.2	4.3	4.1	13	6.6	20	6.3	12	19	15
MIN	3.9	2.6	2.5	2.0	3.0	3.2	4.8	4.1	2.4	1.5	5.0	2.8
AC-FT	307	292	232	199	188	337	338	381	229	252	556	294

CAL YR 1970 TOTAL 5,570.2 MEAN 15.3 MAX 107 MIN 2.5 AC-FT 11,050
WTR YR 1971 TOTAL 1,817.2 MEAN 4.98 MAX 20 MIN 1.5 AC-FT 3,600

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

07208500 Rayado Creek at Sauble Ranch, near Cimarron, N. Mex.

LOCATION.--Lat 36°22'20", long 104°58'10", Colfax County, in Maxwell Grant, on right bank at Sauble Ranch (Carson-Maxwell Base Camp of Philmont Scout Ranch), 2.5 miles upstream from State Highway 21, 4.0 miles downstream from Bonito Creek, and 9.8 miles south-west of Cimarron.

DRAINAGE AREA.--65 sq mi.

PERIOD OF RECORD.--January 1909 to February 1910, June to August 1910, May 1911 to May 1913, July 1913 to February 1915, October 1915 to September 1918, March 1919 to September 1920, June 1923 to September 1924, March to May 1927, August 1927 to current year. Monthly discharge only for some periods, published in WSP 1311. Records for April and May 1910, published in WSP 287, are unreliable and should not be used. Published as Rayado River "at," "near," or "above" Abreu's Ranch near Cimarron prior to October 1925 and as Rayado River at Sauble Ranch, near Cimarron, October 1925 to September 1952.

GAGE.--Water-stage recorder. Altitude of gage is 6,720 ft (from topographic map). See WSP 1921 for history of changes prior to Oct. 1, 1954. Oct. 1, 1954 to June 16, 1965, at site 270 ft downstream at datum 2.79 ft lower.

AVERAGE DISCHARGE.--52 calendar years (1909, 1912, 1914, 1916-20, 1928-71), 14.0 cfs (10,140 acre-ft per year); 20 calendar years (1952-71), 13.3 cfs (9,640 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 30 cfs May 29 (gage height, 2.15 ft); maximum gage height, 2.38 ft Dec. 15 (backwater from ice); minimum discharge, 1.1 cfs Nov. 30, result of freezeup.

1909-12, 1913-71: Maximum discharge, 9,000 cfs June 17, 1965 (gage height, 11.5 ft from floodmarks), from rating curve extended above 70 cfs on basis of field estimate of peak flow; minimum, 0.03 cfs Dec. 3, 1950, but may have been less during periods of ice effect.

The major flood of June 10, 1913, destroyed the gage (stage and discharge not determined). Another major flood probably occurred Sept. 29 or 30, 1904.

REMARKS.--Records good except those for winter periods, which are fair. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1281: 1914, 1934-35(M), 1937(M), 1941(P), 1942(M), 1944(M), drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.5	4.1	3.2	6.0	4.8	6.3	3.0	7.6	5.0	8.7	7.0	2.6
2	3.5	3.8	3.2	5.8	4.5	5.5	3.4	5.5	4.8	8.3	5.8	3.0
3	3.4	3.6	3.2	6.0	4.5	5.0	3.0	5.0	4.3	7.0	5.8	3.5
4	3.0	3.4	3.2	6.3	4.5	4.5	2.2	6.3	3.9	6.3	6.0	4.0
5	2.5	3.2	3.3	5.5	4.3	4.3	2.1	11	3.7	5.8	6.3	4.0
6	2.0	3.2	3.2	5.0	5.0	4.3	2.1	15	3.5	5.5	6.0	4.0
7	2.0	3.0	3.2	5.8	6.0	4.3	2.1	16	3.3	5.5	5.2	4.0
8	2.2	3.0	3.4	5.2	6.3	4.3	2.2	19	3.5	5.2	6.0	4.5
9	2.4	3.1	3.5	5.2	7.3	4.3	2.2	15	3.5	5.5	5.5	4.0
10	2.6	3.2	3.4	5.2	6.3	4.1	2.1	12	3.3	5.2	5.2	4.0
11	3.0	3.3	3.7	5.5	8.0	4.1	1.8	10	3.1	5.0	5.2	4.2
12	3.3	3.5	3.9	5.5	7.3	3.9	1.6	8.7	3.0	4.8	5.2	4.6
13	3.3	3.3	4.8	5.5	6.3	3.7	1.6	8.0	2.8	4.5	5.2	4.8
14	3.2	3.5	5.5	5.5	6.0	3.7	1.6	7.6	3.0	4.5	4.3	4.6
15	3.2	3.9	5.0	6.3	5.8	3.9	1.5	7.3	3.0	4.3	5.2	4.4
16	3.3	3.9	4.2	6.3	5.5	4.3	1.7	7.0	3.0	4.3	5.8	4.2
17	3.7	3.7	4.3	6.3	5.0	3.9	2.0	7.6	4.1	5.0	5.8	4.0
18	3.7	3.9	4.5	5.8	5.8	3.5	1.8	6.3	5.5	6.3	3.3	4.0
19	3.7	3.3	4.2	5.8	6.3	3.5	3.3	9.2	5.5	5.0	2.4	4.0
20	3.7	3.3	4.2	5.2	5.8	3.1	5.0	11	5.8	4.8	3.0	5.2
21	4.3	3.0	4.8	5.2	5.0	3.7	7.3	8.0	6.0	4.8	3.5	4.6
22	4.1	3.0	5.5	6.6	4.5	3.5	5.5	10	7.0	4.5	4.0	4.1
23	3.1	3.0	8.3	6.0	4.3	3.5	9.7	7.6	8.0	4.3	4.8	5.2
24	3.0	3.2	10	6.3	4.3	3.5	12	8.3	8.3	4.1	5.0	5.0
25	3.3	3.4	8.3	6.6	4.3	3.3	9.6	7.0	7.3	6.3	5.0	5.2
26	3.7	3.4	8.3	6.0	4.1	3.1	6.3	8.0	5.8	10	5.0	5.8
27	3.5	3.2	13	5.2	4.1	3.1	6.0	6.3	4.8	8.0	5.0	5.0
28	3.3	3.2	10	5.0	4.8	2.6	4.5	6.6	4.3	7.6	4.5	4.5
29	3.5	-----	8.7	5.0	20	2.4	5.5	11	4.1	9.1	4.5	4.0
30	3.5	-----	8.0	4.8	13	2.4	7.0	6.6	15	8.3	2.2	3.5
31	3.9	-----	8.0	-----	8.3	-----	7.2	5.8	-----	7.0	-----	3.0
TOTAL	100.4	94.6	170.0	170.4	192.0	115.6	126.9	280.3	148.2	185.5	147.7	131.5
MEAN	3.24	3.38	5.48	5.68	6.19	3.85	4.09	9.04	4.94	5.98	4.92	4.24
MAX	4.3	4.1	13	6.6	20	6.3	12	19	15	10	7.0	5.8
MIN	2.0	3.0	3.2	4.8	4.1	2.4	1.5	5.0	2.8	4.1	2.2	2.6
AC-FT	199	188	337	338	381	229	252	556	294	368	293	261

CAL YR 1971 TOTAL 1,863.1 MEAN 5.10 MAX 20 MIN 1.5 AC-FT 3,700

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

ARKANSAS RIVER BASIN

07211000 Cimarron River at Springer, N. Mex.

LOCATION.--Lat 36°21'37", long 104°35'53", Colfax County, in Maxwell Grant, on left bank at Springer, 400 ft downstream from bridge on State Highway 199, 0.3 mile upstream from Salado Creek, and 8.2 miles upstream from mouth.

DRAINAGE AREA.--1,032 sq mi.

PERIOD OF RECORD.--August 1907 to December 1909, January 1921 to February 1922, October 1924 to January 1926, September 1926 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as Cimarron Creek at Springer, October 1952 to September 1965.

GAGE.--Water-stage recorder. Concrete control since Nov. 5, 1954. Altitude of gage is 5,770 ft (from topographic map). See WSP 1311 or 1731 for history of changes prior to July 17, 1942.

AVERAGE DISCHARGE.--47 years (1920-21, 1924-25, 1926-71), 18.0 cfs (13,040 acre-ft per year); 20 calendar years (1951-70), 15.5 cfs (11,230 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,370 cfs July 28 (gage height, 9.2 ft, from floodmarks), from rating curve extended as explained below; minimum, 0.16 cfs July 17.

1930-71: Maximum discharge, 29,500 cfs June 18, 1965 (gage height, 19.96 ft, from floodmarks), from rating curve extended above 1,800 cfs on basis of contracted-opening measurement of peak flow; no flow at times in 1954, 1956-57.

Maximum stage, about 22 ft Sept. 29, 1904 (backwater from debris on railroad bridge). Another major flood occurred June 11, 1913. Maximum discharges of these floods probably exceeded 10,000 cfs, but probably were less than 1965 flood.

REMARKS.--Records good except those for winter period, which are poor. Flow partly regulated by Eagle Nest Reservoir (see sta 07205500). Diversions for irrigation of about 23,000 acres above station and a few hundred acres between station and mouth.

REVISIONS (WATER YEARS).--WSP 827: 1934-36(M). WSP 1281: 1942, 1945-46(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	5.1	4.4	4.0	4.1	3.8	1.6	3.7	4.7	.94	11	3.5
2	2.0	7.4	4.2	3.5	4.0	3.8	2.1	3.7	3.5	5.6	7.7	3.5
3	2.0	7.9	4.0	3.0	4.0	3.5	2.3	3.2	3.2	4.3	6.1	3.3
4	2.0	7.4	4.0	2.5	4.0	4.0	2.8	2.6	2.9	2.4	5.0	3.2
5	1.9	7.1	4.0	2.0	4.0	4.6	2.8	2.2	2.3	1.4	7.4	2.6
6	1.8	6.6	4.0	2.0	3.8	4.8	2.7	2.6	2.2	.83	12	1.8
7	1.9	6.8	4.2	2.0	3.6	4.4	3.0	3.0	2.1	.51	9.5	1.3
8	3.3	7.3	4.7	2.5	3.5	4.3	2.4	3.5	2.3	.76	11	1.3
9	3.4	5.8	4.9	3.0	3.5	4.0	2.3	5.0	2.2	1.4	7.5	1.1
10	3.8	4.8	4.8	3.5	4.0	3.9	2.3	5.8	2.0	1.3	6.9	1.2
11	3.6	4.8	4.0	4.0	4.0	3.9	2.2	4.6	1.9	1.3	5.9	1.5
12	3.5	5.1	4.0	4.0	3.8	3.7	2.1	4.7	1.8	1.2	5.6	1.0
13	3.9	4.5	4.0	4.0	3.6	3.7	2.0	5.0	1.7	.56	4.5	.93
14	4.2	4.7	4.5	4.0	3.8	3.6	2.1	5.4	1.7	.35	6.7	.86
15	5.3	4.5	5.0	4.0	4.0	3.4	2.4	5.0	1.7	.28	6.2	.80
16	6.2	4.5	5.0	4.0	4.3	3.5	2.5	4.9	1.6	.34	4.9	.92
17	6.6	4.5	5.5	4.0	4.1	2.9	2.4	4.8	1.5	.28	4.3	3.4
18	5.2	4.4	5.5	4.0	4.1	2.1	2.9	4.9	1.6	1.4	4.7	3.5
19	4.1	4.3	5.0	4.0	4.0	2.1	3.5	5.8	1.8	2.2	4.1	2.5
20	3.6	4.0	4.5	4.5	4.0	2.2	3.4	6.2	1.8	2.8	4.0	2.3
21	2.6	4.0	4.5	4.5	3.8	2.2	2.8	3.9	2.3	2.6	3.3	2.0
22	3.0	4.2	4.0	4.5	3.5	2.1	3.0	3.2	2.7	3.8	4.1	2.5
23	3.1	4.0	4.0	4.0	3.6	2.2	3.4	2.7	1.7	2.1	4.2	2.5
24	3.8	4.5	4.0	4.4	3.8	2.2	3.1	2.4	1.3	3.2	3.6	3.8
25	3.8	4.8	4.0	4.7	4.0	2.1	2.7	2.3	1.0	3.2	5.8	3.9
26	3.9	4.4	4.0	5.1	3.8	2.2	3.4	2.3	.91	3.2	4.2	3.2
27	4.9	4.4	4.0	4.7	4.0	1.9	4.2	2.7	.83	5.9	3.6	2.6
28	5.7	4.4	4.0	4.7	4.0	1.8	4.2	2.7	.69	440	2.9	2.1
29	5.2	4.4	4.0	4.8	-----	2.2	4.4	71	.63	200	2.8	2.0
30	4.0	4.5	4.0	4.4	-----	2.0	4.3	27	.76	31	3.4	2.8
31	4.4	-----	4.0	4.1	-----	1.9	-----	7.7	-----	17	3.3	-----
TOTAL	115.8	155.1	134.7	119.4	108.7	95.0	85.3	214.5	57.32	765.55	176.2	67.91
MEAN	3.74	5.17	4.35	3.82	3.88	3.06	2.84	6.92	1.91	24.7	5.68	2.26
MAX	6.6	7.9	5.5	5.1	4.3	4.8	4.4	71	4.7	440	12	3.9
MIN	1.8	4.0	4.0	2.0	3.5	1.8	1.6	2.2	.63	.28	2.8	.80
AC-FT	230	308	267	235	216	188	169	425	114	1,520	349	135

CAI YR 1970 TOTAL 6,415.78 MEAN 17.6 MAX 212 MIN .88 AC-FT 12,730
WTR YR 1971 TOTAL 2,094.48 MEAN 5.74 MAX 440 MIN .28 AC-FT 4,150

PEAK DISCHARGE (BASE, 280 CFS, REVISED)

NOTE.--Fragmentary gage-height record July 28-29.

DATE	TIME about	G. H.	DISCHARGE
7-28	2030	9.20	5,370

07211000 Cimarron River at Springer, N. Mex.

LOCATION.--Lat 36°21'37", long 104°35'53", Colfax County, in Maxwell Grant, on left bank at Springer, 400 ft downstream from bridge on State Highway 199, 0.3 mile upstream from Salado Creek, and 8.2 miles upstream from mouth.

DRAINAGE AREA.--1,032 sq mi.

PERIOD OF RECORD.--August 1907 to December 1909, January 1921 to February 1922, October 1924 to January 1926, September 1926 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as Cimarron Creek at Springer, October 1952 to September 1965.

GAGE.--Water-stage recorder. Concrete control since Nov. 5, 1954. Altitude of gage is 5,770 ft (from topographic map). See WSP 1311 or 1731 for history of changes prior to July 17, 1942.

AVERAGE DISCHARGE.--47 calendar years (1921, 1925, 1927-71), 17.9 cfs (12,970 acre-ft per year); 20 calendar years (1952-71), 15.2 cfs (11,010 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,370 cfs July 28 (gage height, 9.2 ft, from floodmarks), from rating curve extended as explained below; minimum, 0.16 cfs July 17.

1930-71: Maximum discharge, 29,500 cfs June 18, 1965 (gage height, 19.96 ft, from floodmarks), from rating curve extended above 1,800 cfs on basis of contracted-opening measurement of peak flow; no flow at times in 1954, 1956-57.

Maximum stage, about 22 ft Sept. 29, 1904 (backwater from debris on railroad bridge). Another major flood occurred June 11, 1913. Maximum discharges of these floods probably exceeded 10,000 cfs, but probably were less than 1965 flood.

REMARKS.--Records good except those for winter periods, which are poor. Flow partly regulated by Eagle Nest Reservoir (see sta 07205500). Diversions for irrigation of about 23,000 acres above station and a few hundred acres between station and mouth.

REVISIONS (WATER YEARS).--WSP 827: 1934-36(M). WSP 1281: 1942, 1945-46(M).

DISCHARGE, IN CURIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	4.0	4.1	3.8	1.6	3.7	4.7	.94	11	3.5	8.2	5.4	4.9
2	3.5	4.0	3.8	2.1	3.7	3.5	5.6	7.7	3.5	4.4	4.7	5.8
3	2.0	4.0	3.5	2.3	3.2	3.2	4.3	6.1	3.3	3.2	4.5	5.8
4	2.5	4.0	4.0	2.8	2.6	2.9	2.4	9.0	3.2	2.9	4.4	5.0
5	2.0	4.0	4.6	2.8	2.2	2.3	1.4	7.4	2.6	2.8	4.1	5.0
6	2.0	3.8	4.8	2.7	2.6	2.2	.83	12	1.8	2.8	4.1	5.0
7	2.0	3.6	4.4	3.0	3.0	2.1	.51	9.5	1.3	2.8	4.1	5.0
8	2.5	3.5	4.3	2.4	3.5	2.3	.76	11	1.3	2.8	4.1	5.0
9	2.0	3.5	4.0	2.3	5.0	2.2	1.4	7.5	1.1	2.8	3.8	5.0
10	3.5	4.0	3.9	2.3	5.8	2.0	1.3	6.9	1.2	2.8	4.2	5.0
11	4.0	4.0	3.9	2.2	4.6	1.9	1.3	5.9	1.5	2.7	3.7	5.0
12	4.0	3.8	3.7	2.1	4.7	1.8	1.2	5.6	1.0	2.6	3.5	4.8
13	4.0	3.6	3.7	2.0	5.0	1.7	.56	4.5	.93	2.6	3.7	5.0
14	4.0	3.8	3.6	2.1	5.4	1.7	.35	6.7	.86	3.0	3.4	5.0
15	4.0	4.0	3.4	2.4	5.0	1.7	.28	6.2	.80	2.8	4.2	5.0
16	4.0	4.3	3.5	2.5	4.9	1.6	.34	4.9	.92	2.1	8.1	5.0
17	4.0	4.1	2.9	2.4	4.8	1.5	.28	4.3	3.4	2.5	10	5.0
18	4.0	4.1	2.1	2.9	4.9	1.6	1.4	4.7	3.5	2.5	9.4	5.0
19	4.0	4.0	2.1	3.5	5.8	1.8	2.2	4.1	2.5	2.3	7.1	5.0
20	4.5	4.0	2.2	3.4	6.2	1.8	2.8	4.0	2.3	2.3	5.8	5.5
21	4.5	3.8	2.2	2.8	3.9	2.3	26	3.3	2.0	2.4	5.1	6.0
22	4.5	3.5	2.1	3.0	3.2	2.7	3.8	4.1	2.5	2.5	4.9	5.8
23	4.0	3.6	2.2	3.4	2.7	1.7	2.1	4.2	2.5	2.5	4.9	7.7
24	4.4	3.8	2.2	3.1	2.4	1.3	3.2	3.6	3.8	2.5	4.9	10
25	4.7	4.0	2.1	2.7	2.3	1.0	3.2	5.8	3.9	3.6	4.9	8.6
26	5.1	3.8	2.2	3.4	2.3	.91	3.2	4.2	3.2	4.6	4.7	7.2
27	4.7	4.0	1.9	4.2	2.7	.93	5.9	3.6	2.6	3.7	4.7	6.7
28	4.7	4.0	1.8	4.2	2.7	.69	440	2.9	2.1	4.4	4.6	5.8
29	4.8	-----	2.2	4.4	71	.63	200	2.8	2.0	5.9	4.5	5.6
30	4.4	-----	2.0	4.3	27	.76	31	3.4	2.8	9.6	4.5	5.0
31	4.1	-----	1.9	-----	7.7	-----	17	3.3	-----	7.3	-----	5.0
TOTAL	118.4	108.7	95.0	85.3	214.5	57.32	765.55	176.2	67.91	109.9	150.0	175.2
MEAN	3.82	3.88	3.06	2.84	6.92	1.91	24.7	5.68	2.26	3.55	5.00	5.65
MAX	5.1	4.3	4.8	4.4	71	4.7	440	12	3.9	9.6	10	10
MIN	2.0	3.5	1.8	1.6	2.2	.63	.28	2.8	.80	2.1	3.4	4.8
AC-FT	235	216	188	169	425	114	1,520	349	135	218	298	348

CAL YR 1971 TOTAL 2,123.98 MEAN 5.82 MAX 440 MIN .28 AC-FT 4,210
WTR YR 1971 TOTAL 2,004.48 MEAN 5.74 MAX 440 MIN .29 AC-FT 4,150

PEAK DISCHARGE (BASE, 280 CFS)

DATE	TIME	G. H.	DISCHARGE
7-28	about 2030	9.20	5,370

NOTE.--Fragmentary gage-height record July 28-29.

07211500 Canadian River near Taylor Springs, N. Mex.

LOCATION.--Lat 36°17'49", long 104°29'36", in NW¼SE¼ sec.21, T.24 N., R.23 E., Colfax County, on left bank at head of gorge, 2.0 miles south of Taylor Springs, 2.2 miles downstream from Cimarron River, 2.4 miles upstream from Chico Creek, and 7.1 miles southeast of Springer.

DRAINAGE AREA.--2,850 sq mi.

PERIOD OF RECORD.--January 1940 to September 1958, annual maximum, water years 1959-63, June 1964 to current year. Water-year estimate for 1940, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 5,635 ft (from topographic map). Prior to June 10, 1964, water-stage recorder at site 1.7 miles downstream at different datum; operated as crest-stage gage at that site and datum during water years 1959-64.

AVERAGE DISCHARGE.--26 years (1939-58, 1964-71), 97.8 cfs (70,860 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,110 cfs July 28 (gage height, 6.78 ft); no flow Jan. 5, 6, 7.

Period of record: Maximum discharge, 162,000 cfs June 18, 1965 (gage height, 47.4 ft, from floodmarks), from rating curve extended above 7,000 cfs on basis of slope-area measurement of peak flow; no flow at times. Maximum flood prior to 1965 occurred Sept. 29, 1904 (discharge published as 91,100 cfs in WSP 842, 847).

REMARKS.--Records fair except those for winter period, which are poor. Diversions for irrigation of about 30,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1177: Drainage area. WSP 1281: 1941-42(F), 1945-47(M), 1948-50(F).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	17	13	18	18	13	4.9	6.4	22	5.2	28	6.4
2	6.9	20	14	16	18	11	3.8	5.8	11	52	24	34
3	6.4	22	14	14	18	10	4.5	5.4	8.1	18	15	6.9
4	6.4	20	13	12	16	12	8.1	3.8	4.9	6.4	28	3.2
5	6.4	20	15	10	15	15	11	2.2	4.2	4.0	70	2.9
6	6.4	21	13	9.0	13	13	10	1.9	3.8	3.0	80	2.4
7	7.5	20	15	8.0	11	13	10	2.6	3.5	2.0	263	2.6
8	13	19	18	9.0	10	13	8.8	4.9	3.8	2.0	69	2.2
9	20	18	20	10	11	13	6.4	14	12	2.0	33	2.4
10	18	17	18	12	12	13	5.8	23	27	15	23	2.4
11	17	17	16	16	14	12	5.4	14	10	6.0	16	2.2
12	16	17	15	17	16	12	4.9	9.4	5.4	3.0	13	1.9
13	15	17	16	18	18	12	4.2	9.4	3.8	1.4	14	1.9
14	17	17	17	18	18	8.8	3.8	9.4	3.2	1.2	149	1.4
15	20	17	17	17	18	8.0	4.9	9.4	2.9	1.0	160	1.4
16	21	17	15	18	17	8.8	6.9	8.1	2.9	1.0	42	1.2
17	22	17	13	20	14	11	8.1	8.1	2.9	4.8	22	3.0
18	23	18	12	19	14	8.1	10	9.4	2.6	2.6	13	14
19	19	16	11	19	12	9.4	15	11	2.4	20	8.8	16
20	17	14	12	18	12	7.5	12	11	2.2	120	44	10
21	17	13	12	19	11	8.1	8.8	9.4	2.4	86	25	6.9
22	15	12	11	20	12	8.8	8.1	5.4	3.2	35	18	8.1
23	15	12	10	18	15	7.5	8.1	3.8	3.2	28	102	11
24	15	12	11	19	17	7.5	10	3.5	2.6	31	21	14
25	14	13	12	20	17	7.5	7.5	3.2	2.2	30	12	13
26	14	14	14	20	16	6.9	5.4	2.4	2.2	17	8.1	9.4
27	18	15	16	18	12	6.4	4.9	2.4	3.8	26	4.9	5.4
28	18	15	18	20	14	5.4	5.8	2.6	1.6	322	4.2	3.5
29	18	17	19	19	-----	6.9	6.9	356	1.2	578	7.2	5.4
30	18	17	20	18	-----	7.5	6.4	208	1.0	99	19	35
31	17	-----	20	18	-----	5.8	-----	49	-----	52	14	-----
TOTAL	464.5	501	460	507.0	409	301.9	220.4	814.9	162.0	1,574.6	1,350.2	230.1
MEAN	15.0	16.7	14.8	16.4	14.6	9.74	7.35	26.3	5.40	50.8	43.6	7.67
MAX	23	22	20	20	18	15	15	356	27	578	263	35
MIN	6.4	12	10	8.0	10	5.4	3.8	1.9	1.0	1.0	4.2	1.2
AC-FT	921	994	912	1,010	811	599	437	1,620	321	3,120	2,680	456

CAL YR 1970 TOTAL 12,972.1 MEAN 35.5 MAX 483 MIN 3.0 AC-FT 25,730
 WTR YR 1971 TOTAL 6,995.6 MEAN 19.2 MAX 578 MIN 1.0 AC-FT 13,880

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE
7-28	2230	6.78	6,110

07211500 Canadian River near Taylor Springs, N. Mex.

LOCATION.--Lat 36°17'49", long 104°29'36", in NW¼SE¼ sec.21, T.24 N., R.23 E., Colfax County, on left bank at head of gorge, 2.0 miles south of Taylor Springs, 2.2 miles downstream from Cimarron River, 2.4 miles upstream from Chico Creek, and 7.1 miles southeast of Springer.

DRAINAGE AREA.--2,850 sq mi.

PERIOD OF RECORD.--January 1940 to September 1958, annual maximum, water years 1959-63, June 1964 to current year. Water-year estimate for 1940, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 5,635 ft (from topographic map). Prior to June 10, 1964, water-stage recorder at site 1.7 miles downstream at different datum; operated as crest-stage gage at that site and datum during water years 1959-64.

AVERAGE DISCHARGE.--25 calendar years (1940-57, 1965-71), 96.3 cfs (69,770 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,110 cfs July 28 (gage height, 6.78 ft); no flow Jan. 5, 6, 7.

Period of record: Maximum discharge, 162,000 cfs June 18, 1965 (gage height, 47.4 ft, from floodmarks), from rating curve extended above 7,000 cfs on basis of slope-area measurement of peak flow; no flow at times.

Maximum flood prior to 1965 occurred Sept. 29, 1904 (discharge published as 91,100 cfs in WSP 842, 847).

REMARKS.--Records fair except those for winter periods, which are poor. Diversions for irrigation of about 30,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1177: Drainage area. WSP 1281: 1941-42(P), 1945-47(M), 1948-50(P).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	18	18	13	4.9	6.4	22	5.2	28	6.4	32	30	15
2	16	18	11	3.8	5.8	11	52	24	34	30	30	14
3	14	18	10	4.5	5.4	8.1	18	15	6.9	16	25	13
4	12	16	12	8.1	3.8	4.9	6.4	28	3.2	11	20	12
5	10	15	15	11	2.2	4.2	4.0	70	2.9	12	16	11
6	9.0	13	13	10	1.9	3.8	3.0	80	2.4	11	10	10
7	8.0	11	13	10	2.6	3.5	2.0	263	2.6	9.4	9.0	9.0
8	9.0	10	13	8.8	4.9	3.8	2.0	69	2.2	12	9.0	8.0
9	10	11	13	6.4	14	12	2.0	33	2.4	12	9.0	9.0
10	12	12	13	5.8	23	27	15	23	2.4	12	8.8	10
11	16	14	12	5.4	14	10	6.0	16	2.2	7.5	9.4	10
12	17	16	12	4.9	9.4	5.4	3.0	13	1.9	7.5	8.8	10
13	18	18	12	4.2	9.4	3.8	1.4	14	1.9	7.5	8.8	10
14	18	18	8.8	3.8	9.4	3.2	1.2	149	1.4	7.5	6.9	10
15	17	18	8.0	4.9	9.4	2.9	1.0	160	1.4	6.4	8.8	10
16	18	17	8.8	6.9	8.1	2.9	1.0	42	1.2	6.4	18	10
17	20	14	11	8.1	8.1	2.9	4.8	22	3.0	5.4	40	10
18	19	14	8.1	10	9.4	2.6	2.6	13	14	7.5	30	11
19	19	12	9.4	15	11	2.4	20	8.8	16	7.5	28	12
20	18	12	7.5	12	11	2.2	120	44	10	6.9	26	13
21	19	11	8.1	8.8	9.4	2.4	86	25	6.9	5.8	24	13
22	20	12	8.8	8.1	5.4	3.2	35	18	8.1	5.8	23	14
23	18	15	7.5	8.1	3.8	3.2	28	102	11	5.4	22	15
24	19	17	7.5	10	3.5	2.6	31	21	14	5.8	24	14
25	20	17	7.5	7.5	3.2	2.2	30	12	13	8.1	21	15
26	20	16	6.9	5.4	2.4	2.2	17	8.1	9.4	21	19	18
27	18	12	6.4	4.9	2.4	3.8	26	4.9	5.4	30	18	16
28	20	14	5.4	5.8	2.6	1.6	322	4.2	3.5	18	21	14
29	19	-----	6.9	6.9	356	1.2	578	7.2	5.4	20	18	13
30	18	-----	7.5	6.4	208	1.0	99	19	35	25	16	12
31	18	-----	5.8	-----	49	-----	52	14	-----	30	-----	10
TOTAL	507.0	409	301.9	220.4	814.9	162.0	1,574.6	1,350.2	230.1	402.4	557.5	371.0
MEAN	16.4	14.6	9.74	7.35	26.3	5.40	50.8	43.6	7.67	13.0	18.6	12.0
MAX	20	18	15	15	356	27	578	263	35	32	40	18
MIN	8.0	10	5.4	3.8	1.9	1.0	1.0	4.2	1.2	5.4	6.9	8.0
AC-FT	1,010	811	599	437	1,620	321	3,120	2,680	456	798	1,110	736

CAL YR 1971 TOTAL 6,901.0 MEAN 18.9 MAX 578 MIN 1.0 AC-FT 13,690

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE
7-28	2230	6.78	6,110

07214500 Mora River near Holman, N. Mex.

LOCATION.--Lat 36°06'41", long 105°22'31", Mora County, in Mora Grant, on right bank 150 ft upstream from bridge, 2.3 miles south of Chacon, 4.4 miles downstream from confluence of Luna and Lujan Creeks, 5.1 miles north of Holman, and 8.0 miles southwest of Guadalupita.

DRAINAGE AREA.--57 sq mi.

PERIOD OF RECORD.--January 1953 to current year. Published as Rio Agua Negra near Holman prior to October 1965.

GAGE.--Water-stage recorder. Altitude of gage is 7,855 ft (from topographic map).

AVERAGE DISCHARGE.--18 years, 13.4 cfs (9,710 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 655 cfs Aug. 17 (gage height, 3.50 ft), from rating curve extended above 300 cfs as explained below; minimum, 0.35 cfs Mar. 1, 6, result of freezeup.

Period of record: Maximum discharge, 4,700 cfs July 22, 1954 (gage height, 6.10 ft), from rating curve extended above 300 cfs on basis of slope-area measurement of peak flow; minimum, about 0.06 cfs Jan. 18, 1967, result of freezeup.

A major flood probably occurred Sept. 29, 1904 when the entire Mora River basin was in heavy flood.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,600 acres above station.

REVISIONS.--WSP 1511. Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	4.8	4.8	5.2	3.3	3.0	5.2	3.6	1.5	12	6.6	8.3
2	4.0	5.2	5.1	5.2	3.6	2.7	5.6	3.6	1.5	5.2	5.2	7.7
3	4.0	5.6	4.4	4.8	3.6	3.3	4.8	3.0	1.7	3.0	5.2	7.2
4	4.0	5.6	4.8	4.4	3.0	3.0	3.6	3.3	1.7	3.0	5.2	6.6
5	4.0	5.2	4.8	3.0	3.3	1.7	4.0	3.3	1.5	3.0	7.2	5.6
6	4.0	5.6	4.8	2.7	3.3	1.7	4.0	4.0	1.5	2.7	14	4.8
7	4.0	6.1	4.8	3.0	3.0	1.3	3.3	4.4	2.4	2.7	16	5.2
8	4.0	6.6	4.8	3.3	2.7	1.7	3.3	3.6	3.0	3.3	15	5.2
9	4.4	5.6	4.4	3.6	3.0	2.0	3.3	2.7	2.7	3.0	12	5.2
10	4.4	5.6	4.0	4.0	3.3	2.5	3.3	2.7	2.1	2.7	11	4.8
11	4.4	5.6	4.4	4.4	3.0	3.0	3.0	3.0	2.1	1.7	9.8	4.4
12	4.0	5.6	4.8	4.0	3.3	3.3	3.0	3.6	1.9	1.1	9.0	4.4
13	4.0	6.1	5.6	4.8	3.3	3.6	3.3	3.0	2.1	1.1	7.7	4.0
14	4.0	5.2	5.6	4.0	3.6	4.4	3.6	2.4	1.9	.98	11	3.0
15	4.8	5.6	4.8	5.6	3.3	4.4	4.4	2.4	2.1	.86	9.8	1.7
16	4.8	5.6	5.2	4.8	3.6	4.4	4.8	1.9	1.9	.76	19	1.7
17	4.8	5.6	5.6	3.6	3.3	4.4	4.8	1.5	1.9	.76	45	2.4
18	5.2	5.2	5.2	2.7	3.3	4.0	4.4	1.5	1.5	.76	11	4.4
19	4.8	4.8	5.2	1.9	3.6	4.4	4.4	1.5	1.3	1.3	11	6.1
20	5.2	5.2	5.2	2.7	3.0	4.8	4.8	.86	1.5	6.9	12	6.6
21	4.8	5.2	4.8	3.3	2.7	4.8	5.2	.98	1.7	7.4	9.0	6.1
22	4.8	5.2	4.0	3.3	3.0	4.4	5.6	1.1	1.7	3.3	9.0	6.6
23	5.2	4.4	4.8	3.0	3.3	5.2	5.2	1.1	2.4	7.9	9.8	7.2
24	5.2	4.8	4.0	3.3	3.6	5.6	5.6	1.3	2.7	6.1	11	7.7
25	4.8	4.4	5.2	3.3	3.6	5.6	4.8	1.3	2.7	4.0	13	6.1
26	5.2	4.4	5.6	3.6	3.3	6.1	4.0	1.7	2.4	4.4	13	5.6
27	5.2	4.4	5.2	3.3	3.0	7.2	4.0	1.7	1.9	4.8	12	6.1
28	4.8	4.4	4.8	3.6	2.7	8.3	3.6	2.4	1.7	7.2	13	5.2
29	4.8	4.8	4.8	3.9	-----	7.7	3.3	7.4	1.5	12	11	4.8
30	4.8	4.4	5.2	3.6	-----	6.6	3.3	3.6	1.7	9.0	9.0	9.8
31	4.4	-----	4.8	3.9	-----	5.6	-----	1.9	-----	7.7	9.8	-----
TOTAL	140.8	156.8	151.5	115.8	90.6	130.7	125.5	80.34	58.2	130.62	362.3	164.5
MEAN	4.54	5.23	4.89	3.74	3.24	4.22	4.18	2.59	1.94	4.21	11.7	5.48
MAX	5.2	6.6	5.6	5.6	3.6	8.3	5.6	7.4	3.0	12	45	9.8
MIN	4.0	4.4	4.0	1.9	2.7	1.3	3.0	.86	1.3	.76	5.2	1.7
AC-FT	279	311	301	230	180	259	249	159	115	259	719	326

CAL YR 1970 TOTAL 4,639.30 MEAN 12.7 MAX 84 MIN 2.4 AC-FT 9,200
WTR YR 1971 TOTAL 1,707.66 MEAN 4.68 MAX 45 MIN .76 AC-FT 3,390

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE
8-17	1530	3.50	655

07214500 Mora River near Holman, N. Mex.

LOCATION.--Lat 36°06'41", long 105°22'31", Mora County, in Mora Grant, on right bank 150 ft upstream from bridge, 2.3 miles south of Chacon, 4.4 miles downstream from confluence of Luna and Lujan Creeks, 5.1 miles north of Holman, and 8.0 miles southwest of Guadalupe.

DRAINAGE AREA.--57 sq mi.

PERIOD OF RECORD.--January 1953 to current year. Published as Rio Agua Negra near Holman prior to October 1965.

GAGE.--Water-stage recorder. Altitude of gage is 7,855 ft (from topographic map).

AVERAGE DISCHARGE.--19 calendar years, 13.1 cfs (9,490 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 655 cfs Aug. 17 (gage height, 3.50 ft), from rating curve extended above 300 cfs as explained below; minimum, 0.35 cfs Mar. 1, 6, result of freezeup.

Period of record: Maximum discharge, 4,700 cfs July 22, 1954 (gage height, 6.10 ft), from rating curve extended above 300 cfs on basis of slope-area measurement of peak flow; minimum, about 0.06 cfs Jan. 18, 1967, result of freezeup.

A major flood probably occurred Sept. 29, 1904 when the entire Mora River basin was in heavy flood.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 1,600 acres above station.

REVISIONS.--WSP 1511. Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	5.2	3.3	3.0	5.2	3.6	1.5	12	6.6	8.3	6.6	7.2	5.5
2	5.2	3.6	2.7	5.6	3.6	1.5	5.2	5.2	7.7	6.1	6.6	5.5
3	4.8	3.6	3.3	4.8	3.0	1.7	3.0	5.2	7.2	6.1	6.6	5.0
4	4.4	3.0	3.0	3.6	3.3	1.7	3.0	5.2	6.6	6.6	6.6	4.5
5	3.0	3.3	1.7	4.0	3.3	1.5	3.0	7.2	5.6	7.2	6.6	4.8
6	2.7	3.3	1.7	4.0	4.0	1.5	2.7	14	4.8	7.2	6.1	6.0
7	3.0	3.0	1.3	3.3	4.4	2.4	2.7	16	5.2	6.6	5.6	6.5
8	3.3	2.7	1.7	3.3	3.6	3.0	3.3	15	5.2	6.1	5.6	7.0
9	3.6	3.0	2.0	3.3	2.7	2.7	3.0	12	5.2	6.6	5.6	6.5
10	4.0	3.3	2.5	3.3	2.7	2.1	2.7	11	4.8	7.2	6.1	7.0
11	4.4	3.0	3.0	3.0	3.0	2.1	1.7	9.8	4.4	6.1	5.6	6.0
12	4.0	3.3	3.3	3.0	3.6	1.9	1.1	9.0	4.4	5.6	6.1	5.5
13	4.8	3.3	3.6	3.3	3.0	2.1	1.1	7.7	4.0	5.6	6.1	5.5
14	4.0	3.6	4.4	3.6	2.4	1.9	.98	11	3.0	5.2	5.6	5.8
15	5.6	3.3	4.4	4.4	2.4	2.1	.86	9.8	1.7	4.8	6.1	6.0
16	4.8	3.6	4.4	4.8	1.9	1.9	.76	19	1.7	5.2	6.6	5.5
17	3.6	3.3	4.4	4.8	1.5	1.9	.76	45	2.4	6.6	6.6	5.5
18	2.7	3.3	4.0	4.4	1.5	1.5	.76	11	4.4	7.2	6.1	6.0
19	1.9	3.6	4.4	4.4	1.5	1.3	1.3	11	6.1	6.1	4.8	6.0
20	2.7	3.0	4.8	4.8	.86	1.5	6.9	12	6.6	5.2	5.6	6.5
21	3.3	2.7	4.8	5.2	.98	1.7	7.4	9.0	6.1	5.2	6.6	6.5
22	3.3	3.0	4.4	5.6	1.1	1.7	3.3	9.0	6.6	5.2	6.6	6.5
23	3.0	3.3	5.2	5.2	1.1	2.4	7.9	9.8	7.2	5.2	6.1	7.0
24	3.3	3.6	5.6	5.6	1.3	2.7	6.1	11	7.7	5.2	5.6	6.5
25	3.3	3.6	5.6	4.8	1.3	2.7	4.0	13	6.1	9.0	5.6	6.0
26	3.6	3.3	6.1	4.0	1.7	2.4	4.4	13	5.6	8.3	5.2	5.2
27	3.3	3.0	7.2	4.0	1.7	1.9	4.8	12	6.1	6.6	5.2	4.8
28	3.6	2.7	8.3	3.6	2.4	1.7	7.2	13	5.2	6.1	5.2	4.6
29	3.9	-----	7.7	3.3	7.4	1.5	12	11	4.8	9.8	5.2	4.4
30	3.6	-----	6.6	3.3	3.6	1.7	9.0	9.0	9.8	7.2	6.0	4.4
31	3.9	-----	5.6	-----	1.9	-----	7.7	9.8	-----	6.6	-----	4.4
TOTAL	115.8	90.6	130.7	125.5	80.34	58.2	130.62	362.3	164.5	198.3	179.1	176.9
MEAN	3.74	3.24	4.22	4.18	2.59	1.94	4.21	11.7	5.48	6.40	5.97	5.71
MAX	5.6	3.6	8.3	5.6	7.4	3.0	12	45	9.8	9.8	7.2	7.0
MIN	1.9	2.7	1.3	3.0	.86	1.3	.76	5.2	1.7	4.8	4.8	4.4
AC-FT	230	180	259	249	159	115	259	719	326	393	355	351

CAL YR 1971 TOTAL 1,812.86 MEAN 4.97 MAX 45 MIN .76 AC-FT 3,600

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE
8-17	1530	3.50	655

07215500 Mora River at La Cueva, N. Mex.

LOCATION.--Lat 35°56'19", long 105°14'56", Mora County, in Mora Grant, on right bank 600 ft downstream from bridge on State Highway 3, 0.2 mile south of La Cueva, and 0.5 mile downstream from La Cueva damsite.

DRAINAGE AREA.--173 sq mi.

PERIOD OF RECORD.--August 1903 to April 1905 (gage heights and discharge measurements only), May to December 1905, May 1906 to July 1911, April 1931 to current year. Monthly discharge only for some periods, published in WSP 1311. Records for February to April 1905, published in WSP 173, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 6,998.7 ft above mean sea level. Aug. 25, 1903 to Sept. 29, 1904 (destroyed by flood of Sept. 29, 1904) and Feb. 22, 1905 to July 31, 1911, nonrecording gages at sites about 600 ft upstream at different datums. Apr. 15, 1931 to Apr. 18, 1962, water-stage recorder at site 600 ft upstream at datum about 2 ft higher.

AVERAGE DISCHARGE.--44 years (1906-10, 1931-71), 27.9 cfs (20,210 acre-ft per year); 20 calendar years (1951-70), 25.6 cfs (18,550 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 466 cfs July 1 (gage height, 5.80 ft); minimum, 0.44 cfs Feb. 5, result of freezeup. 1931-71: Maximum discharge, 1,530 cfs Sept. 23, 1941, from rating curve extended above 400 cfs; maximum gage height, 9.00 ft Aug. 5, 1966; no flow at times. Flood of Sept. 29, 1904, may have exceeded 20,000 cfs; another major flood occurred June 11, 1913, but is believed less than that of 1904.

REMARKS.--Records good except those for winter period and those subsequent to June, which are fair. Diversions above station for irrigation of about 7,000 acres, part of which is below station. See tabulation below for monthly and yearly diversion of La Cueva Canal, which bypasses gage on left bank.

REVISIONS (WATER YEARS).--WSP 857: 1937. WSP 1281: 1931(M), 1932. WSP 1511: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	4.0	3.8	9.0	6.8	2.4	5.0	4.1	2.8	54	27	46
2	15	4.0	3.0	9.0	6.4	2.6	5.0	2.9	2.8	23	13	30
3	14	4.0	2.3	8.0	3.6	3.5	4.7	2.9	2.8	6.5	11	25
4	12	3.8	2.0	6.0	2.3	4.5	3.8	3.0	2.8	3.1	11	20
5	11	3.6	1.8	4.0	2.0	3.3	3.6	2.8	2.8	3.2	16	17
6	13	3.9	1.8	3.0	2.0	2.8	3.7	2.8	2.5	3.4	18	15
7	14	3.6	1.9	4.0	1.8	2.5	3.6	2.9	2.8	2.8	35	14
8	15	3.0	2.0	5.0	1.8	2.2	3.5	2.8	2.2	1.4	24	14
9	12	4.7	1.9	6.0	2.0	2.2	4.0	2.7	1.7	1.5	15	13
10	7.6	6.0	1.7	7.0	2.2	2.5	4.1	2.8	3.3	1.4	16	12
11	3.9	5.7	1.6	8.0	2.3	2.3	4.4	2.9	2.8	1.5	14	14
12	4.2	5.7	1.6	9.0	2.2	2.5	4.0	3.0	2.3	1.5	14	14
13	4.5	5.8	2.0	8.0	2.2	2.3	3.0	2.9	2.0	1.3	15	15
14	4.7	5.6	4.0	8.0	2.0	2.5	3.4	2.8	1.8	.71	26	19
15	7.2	5.7	6.0	8.0	2.0	3.0	4.0	2.8	1.8	.54	24	16
16	8.2	5.0	8.0	8.0	2.0	6.0	4.3	2.6	1.7	.65	39	16
17	9.6	4.9	9.6	8.0	2.0	8.0	2.4	2.2	1.8	.59	61	17
18	12	4.8	12	8.0	2.0	9.0	2.8	2.5	1.8	.71	73	20
19	11	4.5	11	8.0	2.2	10	2.5	2.5	2.0	4.9	52	20
20	9.5	4.4	11	8.4	2.0	9.8	2.2	2.3	2.0	11	67	22
21	4.6	4.2	11	8.4	1.8	9.5	2.3	2.2	2.0	13	43	20
22	3.0	4.1	11	8.4	1.8	7.2	2.3	2.5	2.0	4.5	41	21
23	3.7	4.0	9.0	8.0	1.8	5.5	2.8	2.3	2.0	16	88	23
24	3.4	3.7	9.0	7.2	2.0	5.3	2.8	2.5	2.0	8.1	125	26
25	3.0	3.0	10	7.2	2.4	4.9	3.3	2.5	2.0	4.0	112	21
26	3.0	2.1	11	8.0	2.6	4.5	2.0	2.5	2.0	12	81	19
27	2.4	4.0	12	8.0	2.4	4.6	1.5	2.8	2.0	6.1	60	19
28	1.7	5.1	11	7.6	2.2	4.7	1.6	3.2	1.8	4.7	62	19
29	2.4	5.0	10	8.0	-----	4.6	3.7	3.0	1.8	9.4	66	17
30	3.4	4.6	9.0	8.0	-----	4.5	4.1	2.8	2.5	28	53	63
31	3.4	-----	9.0	8.0	-----	4.7	-----	3.0	-----	33	48	-----
TOTAL	238.4	132.5	201.0	229.2	68.8	143.9	100.4	85.5	66.6	262.50	1,350	627
MEAN	7.69	4.42	6.48	7.39	2.46	4.64	3.35	2.76	2.22	8.47	43.5	20.9
MAX	16	6.0	12	9.0	6.8	10	5.0	4.1	3.3	54	125	63
MIN	1.7	2.1	1.6	3.0	1.8	2.2	1.5	2.2	1.7	.54	11	12
AC-FT	473	263	399	455	136	285	199	170	132	521	2,680	1,240
(+)	621	699	421	163	413	259	151	163	142	327	90	167

CAL YR 1970 TOTAL 7,363.00 MEAN 20.2 MAX 111 MIN 1.6 AC-FT 14,600 + 5,270
WTR YR 1971 TOTAL 3,505.80 MEAN 9.60 MAX 125 MIN .54 AC-FT 6,950 + 3,620

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	+ Diversion, in acre-feet, by La Cueva Canal.
7- 1	1700	5.80	466	8-24	1930	4.94	323	
8-18	0030	4.90	317					

07215500 Mora River at La Cueva, N. Mex.

LOCATION.--Lat 35°56'19", long 105°14'56", Mora County, in Mora Grant, on right bank 600 ft downstream from bridge on State Highway 3, 0.2 mile south of La Cueva, and 0.5 mile downstream from La Cueva damsite.

DRAINAGE AREA.--173 sq mi.

PERIOD OF RECORD.--August 1903 to April 1905 (gage heights and discharge measurements only), May to December 1905, May 1906 to July 1911, April 1931 to current year. Monthly discharge only for some periods, published in WSP 1311. Records for February to April 1905, published in WSP 173, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 6,998.7 ft above mean sea level. Aug. 25, 1903 to Sept. 29, 1904 (destroyed by flood of Sept. 29, 1904) and Feb. 22, 1905 to July 31, 1911, nonrecording gages at sites about 600 ft upstream at different datums. Apr. 15, 1931 to Apr. 18, 1962, water-stage recorder at site 600 ft upstream at datum about 2 ft higher.

AVERAGE DISCHARGE.--44 calendar years (1907-10, 1932-71), 27.7 cfs (20,070 acre-ft per year); 20 calendar years (1952-71), 25.9 cfs (18,760 acre-ft per year).

EX. FLOODS.--Current year: Maximum discharge, 466 cfs July 1 (gage height, 5.80 ft); minimum, 0.44 cfs Feb. 5, result of freezeup. 1931-71: Maximum discharge, 1,530 cfs Sept. 23, 1941, from rating curve extended above 400 cfs; maximum gage height, 9.00 ft Aug. 5, 1966; no flow at times. Flood of Sept. 29, 1904, may have exceeded 20,000 cfs; another major flood occurred June 11, 1913, but is believed less than that of 1904.

REMARKS.--Records good except those for winter periods and those subsequent to June, which are fair. Diversions above station for irrigation of about 7,000 acres, part of which is below station. See tabulation below for monthly and yearly diversion of La Cueva Canal, which bypasses gage on left bank.

REVISIONS (WATER YEARS).--WSP 857: 1937. WSP 1281: 1931(M), 1932. WSP 1511: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.0	6.9	2.4	5.0	4.1	2.9	54	27	46	37	9.1	20
2	2.0	6.4	2.6	5.0	2.9	2.9	23	13	30	34	7.7	20
3	2.0	2.6	3.5	4.7	2.9	2.9	6.5	11	25	31	8.1	14
4	2.0	2.3	4.5	3.8	3.0	2.9	3.1	11	20	29	8.6	12
5	2.0	2.0	3.3	3.6	2.9	2.9	3.2	16	17	25	8.6	10
6	2.0	2.0	2.8	3.7	2.8	2.5	3.4	18	15	18	9.0	3.0
7	2.0	1.8	2.5	3.6	2.9	2.9	2.8	35	14	17	9.9	9.2
8	2.0	1.9	2.2	3.5	2.9	2.2	1.4	24	14	16	10	10
9	2.0	2.0	2.2	4.0	2.7	1.7	1.5	15	13	16	9.8	9.0
10	2.0	2.2	2.5	4.1	2.9	3.3	1.4	16	12	15	9.9	9.0
11	2.0	2.3	2.3	4.4	2.9	2.9	1.5	14	14	11	11	8.0
12	2.0	2.2	2.5	4.0	3.0	2.3	1.5	14	14	6.9	11	7.0
13	2.0	2.2	2.3	3.0	2.7	2.0	1.3	15	15	8.0	11	7.0
14	2.0	2.0	2.5	3.4	2.9	1.9	.71	26	19	9.2	11	8.0
15	2.0	2.0	2.0	4.0	2.9	1.9	.54	24	16	11	14	8.0
16	2.0	2.0	6.0	4.3	2.6	1.7	.65	39	16	11	22	7.0
17	2.0	2.0	8.0	2.4	2.2	1.9	.59	61	17	14	23	7.0
18	2.0	2.0	9.0	2.8	2.5	1.8	.71	73	20	8.5	19	7.0
19	2.0	2.2	10	2.5	2.5	2.0	4.9	52	20	3.1	16	8.0
20	2.4	2.0	9.9	2.2	2.3	2.0	11	67	22	2.9	20	9.0
21	2.4	1.8	9.5	2.3	2.2	2.3	13	43	20	3.5	24	10
22	2.4	1.8	7.2	2.3	2.5	2.0	4.5	41	21	3.6	28	12
23	2.0	1.9	5.5	2.8	2.3	2.0	16	88	23	3.7	23	24
24	2.2	2.0	5.3	2.8	2.5	2.0	8.1	125	26	3.9	22	20
25	2.2	2.4	4.9	3.3	2.5	2.0	4.0	112	21	12	21	17
26	2.0	2.6	4.5	2.0	2.5	2.0	12	81	19	11	21	17
27	2.0	2.4	4.6	1.5	2.8	2.0	6.1	60	19	6.7	21	19
28	2.4	2.2	4.7	1.6	3.2	1.9	4.7	62	19	6.0	21	16
29	2.0	-----	4.6	3.7	3.0	1.9	9.4	66	17	18	21	19
30	2.0	-----	4.5	4.1	2.9	2.5	28	53	63	10	16	14
31	2.0	-----	4.7	-----	3.0	-----	23	48	-----	8.4	-----	10
TOTAL	222.2	68.8	143.9	100.4	95.5	66.6	262.50	1,350	627	410.4	466.7	374.2
MEAN	7.20	2.46	4.64	3.35	2.76	2.22	8.47	43.5	20.9	13.2	15.6	12.1
MAX	2.0	6.8	10	5.0	4.1	3.2	54	125	63	37	28	24
MIN	3.0	1.8	2.2	1.5	2.2	1.7	.54	11	12	2.9	7.7	7.0
AC-FT	455	136	295	199	170	132	521	2,680	1,240	814	926	742
(+)	163	413	259	151	163	142	327	90	167	448	534	356

CAL YR 1971 TOTAL 4,185.20 MEAN 11.5 MAX 125 MIN .54 AC-FT 8,300 + 3,210
WTR YR 1971 TOTAL 2,505.20 MEAN 9.60 MAX 125 MIN .54 AC-FT 6,950 + 3,620

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	+ Diversion, in acre-feet, by La Cueva Canal.
7-1	1700	5.80	466	8-24	1930	4.94	323	
8-18	0030	4.90	317					

07216500 Mora River near Golondrinas, N. Mex.

LOCATION.--Lat 35°53'45", long 105°09'12", Mora County, in Mora Grant, at downstream end of left abutment of highway bridge on State Highway 160, 1.2 miles upstream from Coyote Creek, 1.9 miles east of Golondrinas, and 5.4 miles downstream from Rito Cebolla.

DRAINAGE AREA.--267 sq mi.

PERIOD OF RECORD.--March 1915 to May 1921, October 1921 to March 1922, May, August, September 1922, July 1923 to July 1924, December 1924 to current year. Monthly discharge only 1915-30, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 6,735 ft (from topographic map). Mar. 10, 1915 to June 4, 1921, water-stage recorder at site 3.5 miles upstream at different datum. July 6, 1921 to Jan. 5, 1929, nonrecording gage or water-stage recorder at present site at datum 1.0 ft higher.

AVERAGE DISCHARGE.--54 years (1915-20, 1921-22, 1923-71), 34.5 cfs (25,000 acre-ft per year); 20 calendar years (1951-70), 29.3 cfs (21,230 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 822 cfs Aug. 7 (gage height, 6.00 ft); minimum, 0.40 cfs June 29.

Period of record: Maximum discharge, 14,000 cfs Aug. 22, 1952 (gage height, 14.4 ft), from rating curve extended above 660 cfs on basis of slope-area measurement of peak flow; no flow at times.

Floods of Sept. 29, 1904, and June 11, 1913, probably exceeded 25,000 cfs.

REMARKS.--Records fair except those for winter period and those for August, which are poor. Diversions for irrigation of about 12,000 acres above station. Off-channel lakes make it possible to divert and store water during non-irrigation season.

REVISIONS (WATER YEARS).--WSP 1281: 1951(M). WSP 1311: 1935(M), 1937-38(M), 1940-42(M), 1949(M). WSP 1511: Drainage area. WSP 1731: 1958(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	6.4	5.7	10	8.4	3.5	3.7	1.6	.83	63	30	26
2	16	7.4	5.9	9.0	7.9	3.5	3.9	1.3	.69	75	17	24
3	15	7.1	5.4	8.0	7.0	4.0	3.7	.76	.69	13	15	22
4	15	6.9	5.4	7.0	5.4	5.0	4.2	.98	.62	5.2	16	19
5	10	6.2	5.9	6.0	5.0	5.0	5.0	.83	.90	3.3	15	18
6	11	6.2	5.7	5.0	4.0	4.0	5.2	.98	.76	3.3	31	17
7	11	5.7	5.7	6.0	3.5	3.5	4.4	1.4	.76	3.1	135	16
8	15	6.2	5.0	7.0	3.5	3.0	4.1	1.6	.69	3.5	149	16
9	16	5.2	5.0	8.0	4.0	3.0	3.1	1.3	.62	3.3	63	15
10	12	7.9	5.4	9.0	4.5	3.0	2.8	1.2	.62	2.6	32	14
11	6.2	7.6	5.0	10	5.0	3.0	3.5	1.1	.56	2.1	23	14
12	6.4	7.6	5.0	11	4.6	3.0	3.9	1.4	.62	1.3	18	15
13	6.6	7.9	5.0	12	4.6	3.3	3.7	1.3	.76	.90	16	14
14	7.1	8.2	5.0	13	4.4	3.0	2.5	.76	.83	.76	15	15
15	9.6	7.4	5.0	14	4.1	3.0	3.0	.76	.90	.56	30	15
16	12	7.1	6.0	14	4.1	3.0	4.8	.83	1.1	.62	40	14
17	14	7.4	6.0	14	3.9	3.2	3.7	.62	1.2	.62	50	15
18	17	7.4	6.0	14	3.7	3.0	2.2	.69	.98	.69	60	21
19	17	7.4	6.0	14	3.5	3.2	1.7	.76	.98	2.0	50	21
20	15	7.1	6.0	13	3.3	3.4	1.8	.62	.90	20	40	22
21	13	6.9	7.0	12	3.0	3.5	1.6	.56	.98	28	40	20
22	6.4	5.9	7.0	11	3.0	3.5	1.5	.56	1.9	10	50	20
23	6.9	6.2	7.0	10	3.5	3.3	1.5	.56	1.4	9.2	60	22
24	7.4	6.2	8.0	10	4.0	3.7	1.4	.69	1.3	24	70	26
25	6.6	5.4	9.0	10	4.0	4.4	1.3	.62	.98	10	70	22
26	6.9	4.6	10	10	4.0	4.1	1.2	.62	.83	55	60	19
27	6.4	4.6	10	10	3.5	3.1	1.3	.69	.69	50	60	18
28	5.2	4.2	10	9.8	3.5	2.8	1.4	2.1	.56	15	50	18
29	5.2	4.4	10	9.3	-----	3.7	1.4	2.1	.50	18	60	17
30	5.7	5.0	10	9.3	-----	4.6	1.4	1.1	.56	30	40	40
31	5.2	-----	10	9.3	-----	3.7	-----	.90	-----	40	30	-----
TOTAL	323.8	193.7	208.1	314.7	122.9	109.0	84.9	31.29	25.71	494.05	1,435	575
MEAN	10.4	6.46	6.71	10.2	4.39	3.52	2.83	1.01	.86	15.9	46.3	19.2
MAX	17	8.2	10	14	8.4	5.0	5.2	2.1	1.9	75	149	40
MIN	5.2	4.2	5.0	5.0	3.0	2.8	1.2	.56	.50	.56	15	14
AC-FT	642	384	413	624	244	216	168	62	51	980	2,850	1,140

CAL YR 1970 TOTAL 7,619.70 MEAN 20.9 MAX 94 MIN 4.2 AC-FT 15,110
WTR YR 1971 TOTAL 3,918.15 MEAN 10.7 MAX 149 MIN .50 AC-FT 7,770

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 1	2130	4.82	428	8- 7	1900	6.00	822
7-26	2200	4.80	422	8- 8	1830	5.65	685

07216500 Mora River near Golondrinas, N. Mex.

LOCATION.--Lat 35°53'45", long 105°09'12", Mora County, in Mora Grant, at downstream end of left abutment of highway bridge on State Highway 160, 1.2 miles upstream from Coyote Creek, 1.9 miles east of Golondrinas, and 5.4 miles downstream from Rito Cebolla.

DRAINAGE AREA.--267 sq mi.

PERIOD OF RECORD.--March 1915 to May 1921, October 1921 to March 1922, May, August, September 1922, July 1923 to July 1924, December 1924 to current year. Monthly discharge only 1915-30, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 6,735 ft (from topographic map). Mar. 10, 1915 to June 4, 1921, water-stage recorder at site 3.5 miles upstream at different datum. July 6, 1921 to Jan. 5, 1929, nonrecording gage or water-stage recorder at present site at datum 1.0 ft higher.

AVERAGE DISCHARGE.--53 calendar years (1916-20, 1924-71), 34.8 cfs (25,210 acre-ft per year); 20 calendar years (1952-71), 29.7 cfs (21,520 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 822 cfs Aug. 7 (gage height, 6.00 ft); minimum, 0.40 cfs June 29.

Period of record: Maximum discharge, 14,000 cfs Aug. 22, 1952 (gage height, 14.4 ft), from rating curve extended above 660 cfs on basis of slope-area measurement of peak flow; no flow at times.

Floods of Sept. 29, 1904, and June 11, 1913, probably exceeded 25,000 cfs.

REMARKS.--Records fair except those for winter periods and those for August, which are poor. Diversions for irrigation of about 12,000 acres above station. Off-channel lakes make it possible to divert and store water during non-irrigation season.

REVISIONS (WATER YEARS).--WSP 1281: 1951(M). WSP 1311: 1935(M), 1937-38(M), 1940-42(M), 1949(M). WSP 1511: Drainage area. WSP 1731: 1958(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	10	8.4	3.5	3.7	1.6	.83	63	30	26	30	8.7	22
2	9.0	7.9	3.5	3.9	1.3	.69	75	17	24	25	8.7	23
3	8.0	7.0	4.0	3.7	.76	.69	13	15	22	23	8.4	18
4	7.0	5.4	5.0	4.2	.98	.62	5.2	16	19	23	9.3	15
5	6.0	5.0	5.0	5.0	.83	.90	3.3	15	18	22	6.6	14
6	5.0	4.0	4.0	5.2	.98	.76	3.3	31	17	17	6.2	14
7	6.0	3.5	3.5	4.4	1.4	.76	3.1	135	16	17	6.6	14
8	7.0	3.5	3.0	4.1	1.6	.69	3.5	149	16	17	9.0	13
9	8.0	4.0	3.0	3.1	1.3	.62	3.3	63	15	16	10	13
10	9.0	4.5	3.0	2.8	1.2	.62	2.6	32	14	15	10	12
11	10	5.0	3.0	3.5	1.1	.56	2.1	23	14	14	10	11
12	11	4.6	3.0	3.9	1.4	.62	1.3	18	15	9.0	11	10
13	12	4.6	3.3	3.7	1.3	.76	.90	16	14	8.7	11	10
14	13	4.4	3.0	2.5	.76	.83	.76	15	15	9.6	11	11
15	14	4.1	3.0	3.0	.76	.90	.56	30	15	9.6	12	11
16	14	4.1	3.0	4.8	.83	1.1	.62	40	14	9.6	22	10
17	14	3.9	3.2	3.7	.62	1.2	.62	50	15	11	27	10
18	14	3.7	3.0	2.2	.69	.98	.69	60	21	13	25	11
19	14	3.5	3.2	1.7	.76	.98	2.0	50	21	7.1	22	12
20	13	3.3	3.4	1.8	.62	.90	20	40	22	5.7	22	14
21	12	3.0	3.5	1.6	.56	.98	28	40	20	4.8	30	20
22	11	3.0	3.5	1.5	.56	1.9	10	50	20	5.2	34	30
23	10	3.5	3.3	1.5	.56	1.4	9.2	60	22	5.4	29	32
24	10	4.0	3.7	1.4	.69	1.3	24	70	26	5.4	26	28
25	10	4.0	4.4	1.3	.62	.98	10	70	22	7.4	25	27
26	10	4.0	4.1	1.2	.62	.83	55	60	19	17	25	28
27	10	3.5	3.1	1.3	.69	.69	50	60	18	9.0	25	30
28	9.8	3.5	2.8	1.4	2.1	.56	15	50	18	5.9	24	27
29	9.3	-----	3.7	1.4	2.1	.50	18	60	17	9.5	23	28
30	9.3	-----	4.6	1.4	1.1	.56	30	40	40	18	22	24
31	9.3	-----	3.7	-----	.90	-----	40	30	-----	9.8	-----	20
TOTAL	314.7	122.9	109.0	84.9	31.29	25.71	494.05	1,435	575	399.7	519.5	562
MEAN	10.2	4.39	3.52	2.83	1.01	.86	15.9	46.3	19.2	12.9	17.3	18.1
MAX	14	8.4	5.0	5.2	2.1	1.9	75	149	40	30	34	32
MIN	5.0	3.0	2.8	1.2	.56	.50	.56	15	14	4.8	6.2	10
AC-FT	624	244	216	168	62	51	980	2,850	1,140	793	1,030	1,110

CAL YR 1971 TOTAL 4,673.75 MEAN 12.8 MAX 149 MIN .50 AC-FT 9,270

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 1	2130	4.82	428	8- 7	1900	6.00	822
7-26	2200	4.80	422	8- 8	1830	5.65	685

07217100 Coyote Creek above Guadalupita, N. Mex.

LOCATION.--Lat 36°09'51", long 105°13'49", Mora County, in Mora Grant, on right bank 1.8 miles north of Guadalupita.

DRAINAGE AREA.--71 sq mi.

PERIOD OF RECORD.--May 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,605 ft (from topographic map).

AVERAGE DISCHARGE.--15 years, 9.61 cfs (6,960 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 87 cfs Aug. 4 (gage height, 2.70 ft); minimum, 0.67 cfs Feb. 4, result of freezeup.

Period of record: Maximum discharge, 1,820 cfs June 17, 1965 (gage height, 6.70 ft), from rating curve extended above 150 cfs on basis of slope-area measurement of peak flow; minimum, 0.04 cfs June 16, 1963.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1711: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	5.6	3.7	3.2	4.6	3.1	3.8	2.7	3.8	1.6	7.6	3.0
2	4.8	5.9	5.1	3.2	4.4	3.0	3.8	2.5	3.6	1.9	6.5	3.0
3	4.8	5.8	4.3	3.1	4.2	3.2	3.7	2.4	3.3	2.0	6.2	2.8
4	4.8	5.8	4.4	3.0	4.0	3.4	3.7	2.3	3.0	1.7	13	2.6
5	4.7	5.8	4.6	2.6	3.8	3.6	4.1	2.2	2.7	1.6	8.8	2.4
6	4.4	5.9	4.5	2.2	3.6	3.8	4.1	2.4	2.4	1.4	8.4	2.4
7	4.7	7.0	4.7	2.0	3.2	4.2	4.2	2.7	2.2	1.3	17	2.3
8	5.1	6.4	4.6	2.0	3.4	4.6	4.3	2.9	2.2	1.4	21	2.3
9	4.9	6.7	4.6	2.1	3.6	5.0	4.3	2.9	2.1	1.4	16	2.2
10	5.0	6.8	4.6	2.2	4.0	5.0	4.3	2.9	2.0	1.3	14	2.0
11	5.1	6.7	4.3	2.3	4.0	4.9	3.8	3.1	1.9	1.2	11	2.1
12	5.0	6.5	4.0	2.5	4.1	5.1	3.5	3.0	1.8	1.2	9.5	2.0
13	5.0	6.7	3.1	2.6	4.3	5.6	3.2	3.0	1.8	1.1	8.0	2.0
14	5.0	5.7	3.5	2.6	4.4	5.7	3.1	2.9	1.7	1.0	8.3	1.9
15	5.2	5.8	3.5	2.8	4.4	4.7	3.2	2.8	1.6	1.0	6.9	1.9
16	5.3	6.1	3.6	3.0	4.6	4.6	7.4	2.6	1.6	1.1	5.9	1.9
17	5.4	5.4	3.8	3.2	4.7	4.9	5.4	2.4	1.6	1.2	7.3	2.2
18	5.5	5.1	3.4	3.5	4.6	4.8	2.8	2.4	1.5	1.2	5.3	2.9
19	5.7	5.0	2.8	4.0	4.0	4.5	2.0	2.3	1.5	1.6	4.9	2.9
20	5.7	4.9	3.9	4.7	3.8	4.6	1.9	2.2	1.5	2.4	5.3	3.2
21	5.7	4.7	3.5	6.1	3.6	4.7	1.8	2.0	1.4	2.8	4.6	3.4
22	5.8	4.5	3.6	5.8	3.4	4.7	2.8	1.8	1.4	2.4	4.6	3.4
23	5.7	4.6	3.2	5.4	3.5	4.8	3.1	1.8	1.5	3.7	4.4	3.6
24	5.7	4.9	3.0	5.0	3.6	4.7	3.3	1.7	1.4	5.4	4.2	4.0
25	5.6	5.0	3.0	5.0	3.8	4.5	3.4	1.6	1.4	5.3	4.1	3.9
26	5.6	5.2	3.0	4.8	3.6	4.3	3.4	1.6	1.4	5.5	3.9	3.9
27	5.8	5.3	3.0	4.8	3.4	4.4	3.3	1.6	1.3	6.6	3.8	3.9
28	5.6	5.2	2.8	4.8	3.2	4.3	3.1	1.7	1.1	6.0	3.7	4.0
29	5.7	5.1	3.2	4.8	-----	3.8	2.9	3.1	1.1	8.6	3.6	4.2
30	5.3	5.2	3.0	4.7	-----	3.8	2.8	3.5	1.3	9.3	3.4	9.0
31	5.3	-----	3.2	4.8	-----	3.9	-----	3.5	-----	8.0	3.4	-----
TOTAL	162.8	169.3	115.5	112.8	109.8	136.2	106.5	76.5	57.1	92.2	234.6	91.3
MEAN	5.25	5.64	3.73	3.64	3.92	4.39	3.55	2.47	1.90	2.97	7.57	3.04
MAX	5.8	7.0	5.1	6.1	4.7	5.7	7.4	3.5	3.8	9.3	21	9.0
MIN	4.4	4.5	2.8	2.0	3.2	3.0	1.8	1.6	1.1	1.0	3.4	1.9
AC-FT	323	336	229	224	218	270	211	152	113	183	465	181

CAL YR 1970 TOTAL 3,611.2 MEAN 9.89 MAX 92 MIN 2.8 AC-FT 7,160
WTR YR 1971 TOTAL 1,464.6 MEAN 4.01 MAX 21 MIN 1.0 AC-FT 2,910

PEAK DISCHARGE (BASE, 50 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8- 4	1400	2.70	87	8-17	1230	2.53	66

07217100 Coyote Creek above Guadalupita, N. Mex.

LOCATION.--Lat 36°09'51", long 105°13'49", Mora County, in Mora Grant, on right bank 1.8 miles north of Guadalupita.

DRAINAGE AREA.--71 sq mi.

PERIOD OF RECORD.--May 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,605 ft (from topographic map).

AVERAGE DISCHARGE.--15 calendar years, 9.67 cfs (7,010 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 87 cfs Aug. 4 (gage height, 2.70 ft); minimum, 0.67 cfs Feb. 4, result of freezeup.
 Period of record: Maximum discharge, 1,820 cfs June 17, 1965 (gage height, 6.70 ft), from rating curve extended above 150 cfs on basis of slope-area measurement of peak flow; minimum, 0.04 cfs June 16, 1963.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 2,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1711: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.2	4.6	3.1	3.8	2.7	3.8	1.6	7.6	3.0	4.7	7.4	4.3
2	3.2	4.4	3.0	3.8	2.5	3.6	1.9	6.5	3.0	4.3	6.7	4.1
3	3.1	4.2	3.2	3.7	2.4	3.3	2.0	6.2	2.8	4.1	6.4	3.6
4	3.0	4.0	3.4	3.7	2.3	3.0	1.7	13	2.6	3.9	5.9	3.0
5	2.6	3.8	3.6	4.1	2.2	2.7	1.6	8.8	2.4	3.9	5.6	3.0
6	2.2	3.6	3.8	4.1	2.4	2.4	1.4	8.4	2.4	3.7	5.3	3.0
7	2.0	3.2	4.2	4.2	2.7	2.2	1.3	17	2.3	3.6	4.9	3.0
8	2.0	3.4	4.6	4.3	2.9	2.2	1.4	21	2.3	3.5	4.7	3.2
9	2.1	3.6	5.0	4.3	2.9	2.1	1.4	16	2.2	3.4	4.5	3.6
10	2.2	4.0	5.0	4.3	2.9	2.0	1.3	14	2.0	3.2	4.3	3.6
11	2.3	4.0	4.9	3.8	3.1	1.9	1.2	11	2.1	3.1	4.2	3.5
12	2.5	4.1	5.1	3.5	3.0	1.8	1.2	9.5	2.0	3.1	4.2	3.0
13	2.6	4.3	5.6	3.2	3.0	1.8	1.1	8.0	2.0	3.0	4.1	2.8
14	2.6	4.4	5.7	3.1	2.9	1.7	1.0	8.3	1.9	3.0	4.0	2.8
15	2.8	4.4	4.7	3.2	2.8	1.6	1.0	6.9	1.9	2.8	4.1	2.8
16	3.0	4.6	4.6	7.4	2.6	1.6	1.1	5.9	1.9	2.8	4.8	2.7
17	3.2	4.7	4.9	5.4	2.4	1.6	1.2	7.3	2.2	3.1	4.8	2.7
18	3.5	4.6	4.8	2.8	2.4	1.5	1.2	5.3	2.9	3.5	4.5	2.7
19	4.0	4.0	4.5	2.0	2.3	1.5	1.6	4.9	2.9	3.5	3.6	2.6
20	4.7	3.8	4.6	1.9	2.2	1.5	2.4	5.3	3.2	3.3	3.1	2.5
21	6.1	3.6	4.7	1.8	2.0	1.4	2.8	4.6	3.4	3.5	3.6	2.4
22	5.8	3.4	4.7	2.8	1.8	1.4	2.4	4.6	3.4	3.7	5.2	2.4
23	5.4	3.5	4.8	3.1	1.8	1.5	3.7	4.4	3.6	3.7	4.7	4.3
24	5.0	3.6	4.7	3.3	1.7	1.4	5.4	4.2	4.0	3.7	4.5	7.6
25	5.0	3.8	4.5	3.4	1.6	1.4	5.3	4.1	3.9	5.2	4.5	9.8
26	4.8	3.6	4.3	3.4	1.6	1.4	5.5	3.9	3.9	6.2	4.3	13
27	4.8	3.4	4.4	3.3	1.6	1.3	6.6	3.8	3.9	5.8	4.5	11
28	4.8	3.2	4.3	3.1	1.7	1.1	6.0	3.7	4.0	5.6	4.8	8.3
29	4.8	-----	3.8	2.9	3.1	1.1	8.6	3.6	4.2	8.0	4.5	8.5
30	4.7	-----	3.8	2.8	3.5	1.3	9.3	3.4	9.0	7.8	3.1	8.0
31	4.8	-----	3.9	-----	3.5	-----	8.0	3.4	-----	6.7	-----	5.0
TOTAL	112.8	109.8	136.2	106.5	76.5	57.1	92.2	234.6	91.3	129.4	140.8	142.8
MEAN	3.64	3.92	4.39	3.55	2.47	1.90	2.97	7.57	3.04	4.17	4.69	4.61
MAX	6.1	4.7	5.7	7.4	3.5	3.8	9.3	21	9.0	8.0	7.4	13
MIN	2.0	3.2	3.0	1.8	1.6	1.1	1.0	3.4	1.9	2.8	3.1	2.4
AC-FT	224	218	270	211	152	113	183	465	181	257	279	283

CAL YR 1971 TOTAL 1,430.0 MEAN 3.92 MAX 21 MIN 1.0 AC-FT 2,840
 WTR YR 1971 TOTAL 1,464.6 MEAN 4.01 MAX 21 MIN 1.0 AC-FT 2,910

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8- 4	1400	2.70	87	8-17	1230	2.53	66

07218000 Coyote Creek near Golondrinas, N. Mex.

LOCATION.--Lat 35°55'00", long 105°09'49", Mora County, in Mora Grant, on left bank 0.5 mile downstream from Coyote Creek damsite, 2.3 miles northeast of Golondrinas, and 2.7 miles upstream from mouth.

DRAINAGE AREA.--215 sq mi.

PERIOD OF RECORD.--April 1928 to September 1930 (monthly discharge only, published in WSP 1311), October 1930 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,785 ft (from topographic map). Prior to Apr. 26, 1938, at site 0.4 mile downstream at different datum (nonrecording gage prior to Apr. 20, 1929). Apr. 26, 1938 to Sept. 25, 1946, at site 139 ft downstream at same datum.

AVERAGE DISCHARGE.--43 years, 11.7 cfs (8,480 acre-ft per year); 20 calendar years (1951-70), 10.6 cfs (7,680 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,070 cfs July 1 (gage height, 8.51 ft), from rating curve extended above 180 cfs as explained below; minimum, 0.21 cfs June 26-30.

Period of record: Maximum discharge, 4,050 cfs Aug. 17, 1961 (gage height, 9.60 ft), from rating curve extended above 250 cfs on basis of slope-area measurements at gage heights 5.54, 7.74, and 9.60 ft; maximum gage height, 10.1 ft Aug. 30, 1936 (site and datum then in use); no flow Aug. 4, 1945, Apr. 10, May 9, 10, 1956.

REMARKS.--Records fair except those for winter period and those for July and August, which are poor. Diversions (including off-channel storage) for irrigation of about 4,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1281: 1939-40(M), 1941-42, 1945-47. WSP 1511: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	4.7	4.5	6.3	5.0	2.5	2.2	.57	.65	196	42	9.3
2	1.8	5.2	4.5	6.2	5.0	2.5	2.6	.65	.65	29	15	7.6
3	1.8	5.2	5.0	6.2	5.0	2.0	3.2	.57	.49	7.5	12	8.4
4	1.7	5.2	4.5	5.4	5.5	3.0	2.8	.65	.41	4.5	50	7.6
5	1.7	5.2	5.0	4.6	5.2	3.0	2.3	.57	.41	3.6	39	6.2
6	1.3	5.0	4.5	3.6	5.2	3.0	2.2	.57	.49	3.0	113	6.8
7	1.3	4.7	5.0	3.8	5.0	2.5	2.0	.65	.74	2.6	114	6.0
8	2.3	5.2	5.2	4.0	5.0	2.5	2.0	.57	.84	2.8	88	5.5
9	2.3	4.7	5.0	4.5	4.7	2.8	2.0	.49	.84	3.0	44	5.0
10	2.2	4.5	5.2	4.8	4.5	2.5	2.0	.49	.65	5.4	42	5.7
11	2.2	4.5	6.0	5.0	4.7	2.2	2.0	.49	.57	2.5	32	5.2
12	2.2	4.7	6.0	4.8	4.8	2.0	2.0	.57	.57	2.2	26	5.0
13	2.0	5.0	5.8	4.7	4.5	2.2	1.8	.57	.57	1.8	23	4.7
14	2.0	5.5	6.0	5.2	5.0	3.0	2.0	.49	.65	1.7	32	4.3
15	2.2	5.5	6.0	5.8	4.0	2.5	2.0	.49	.57	1.7	24	3.8
16	2.6	6.5	6.1	7.0	3.2	2.5	2.3	.49	.65	1.8	19	3.4
17	2.8	6.5	6.2	8.2	3.0	2.2	2.3	.41	.65	1.8	18	3.8
18	3.2	8.2	6.2	8.2	3.2	2.3	2.3	.41	.74	2.1	20	4.7
19	2.6	8.2	6.1	8.2	3.6	2.2	2.3	.41	.65	2.0	16	5.7
20	2.5	6.5	6.2	8.4	3.4	2.2	1.7	.41	.65	21	17	5.7
21	2.5	5.7	6.3	7.6	4.0	2.2	.95	.41	.57	49	14	5.7
22	2.5	5.0	6.4	7.6	2.8	2.0	.74	.34	.57	6.0	25	6.2
23	2.5	4.7	6.2	7.3	2.5	2.0	.65	.41	1.1	3.6	25	6.2
24	3.6	5.0	6.3	6.0	2.5	2.0	.74	.41	.49	21	20	6.5
25	3.4	4.7	6.4	5.5	2.5	2.0	.65	.41	.27	5.2	16	6.2
26	4.3	4.3	6.5	5.5	2.5	1.8	.65	.41	.27	8.4	13	5.5
27	5.5	4.7	6.2	5.5	2.5	2.0	.65	.41	.21	8.5	11	5.7
28	5.7	5.5	6.2	5.5	2.5	2.0	.57	1.1	.21	5.5	10	6.0
29	5.5	5.7	6.3	5.7	-----	2.0	.57	2.0	.21	51	13	6.0
30	5.0	5.0	6.4	5.7	-----	2.0	.57	1.1	.62	62	15	23
31	4.7	-----	6.2	5.0	-----	1.8	-----	.74	-----	38	10	-----
TOTAL	87.7	161.6	178.4	181.8	111.3	71.4	50.74	18.26	16.96	554.2	958	191.4
MEAN	2.83	5.37	5.75	5.86	3.98	2.30	1.69	.59	.57	17.9	30.9	6.38
MAX	5.7	8.2	6.5	8.4	5.5	3.0	3.2	2.0	1.1	196	114	23
MIN	1.3	4.3	4.5	3.6	2.5	1.8	.57	.34	.21	1.7	10	3.4
AC-FT	174	319	354	361	221	142	101	36	34	1,100	1,900	380

CAL YR 1970 TOTAL 3,309.72 MEAN 9.07 MAX 136 MIN .41 AC-FT 6,560
WTR YR 1971 TOTAL 2,581.16 MEAN 7.07 MAX 196 MIN .21 AC-FT 5,120

PEAK DISCHARGE (BASE, 180 CFS)

DATE	TIME	G. H.	DISCHARGE
7- 1	1900	8.51	3,070

07218000 Coyote Creek near Golondrinas, N. Mex.

LOCATION.--Lat 35°55'00", long 105°09'49", Mora County, in Mora Grant, on left bank 0.5 mile downstream from Coyote Creek damsite, 2.3 miles northeast of Golondrinas, and 2.7 miles upstream from mouth.

DRAINAGE AREA.--215 sq mi.

PERIOD OF RECORD.--April 1928 to September 1930 (monthly discharge only, published in WSP 1311), October 1930 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,785 ft (from topographic map). Prior to Apr. 26, 1938, at site 0.4 mile downstream at different datum (nonrecording gage prior to Apr. 20, 1929). Apr. 26, 1938 to Sept. 25, 1946, at site 139 ft downstream at same datum.

AVERAGE DISCHARGE.--43 calendar years, 11.7 cfs (8,480 acre-ft per year); 20 calendar years (1952-71), 10.8 cfs (7,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,070 cfs July 1 (gage height, 8.51 ft), from rating curve extended above 180 cfs as explained below; minimum, 0.21 cfs June 26-30.

Period of record: Maximum discharge, 4,050 cfs Aug. 17, 1961 (gage height, 9.60 ft), from rating curve extended above 250 cfs on basis of slope-area measurements at gage heights 5.54, 7.74, and 9.60 ft; maximum gage height, 10.1 ft Aug. 30, 1936 (site and datum then in use); no flow Aug. 4, 1945, Apr. 10, May 9, 10, 1956.

REMARKS.--Records fair except those for winter periods and those for July and August, which are poor. Diversions (including off-channel storage) for irrigation of about 4,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1281: 1939-40(M), 1941-42, 1945-47. WSP 1511: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	6.3	5.0	2.5	2.2	.57	.65	196	42	9.3	9.0	8.7	7.1
2	6.2	5.0	2.5	2.6	.65	.65	29	15	7.6	7.3	8.7	7.6
3	6.2	5.0	2.0	3.2	.57	.49	7.5	12	8.4	7.1	8.4	7.2
4	5.4	5.5	3.0	2.8	.65	.41	4.5	50	7.6	7.3	8.2	6.0
5	4.6	5.2	3.0	2.3	.57	.41	3.6	39	6.2	7.3	7.6	6.2
6	3.6	5.2	3.0	2.2	.57	.49	3.0	113	6.8	7.1	7.3	6.6
7	3.8	5.0	2.5	2.0	.65	.74	2.6	114	6.0	6.5	7.3	7.0
8	4.0	5.0	2.5	2.0	.57	.84	2.8	88	5.5	6.2	7.3	7.6
9	4.5	4.7	2.8	2.0	.49	.84	3.0	44	5.0	6.0	7.1	7.0
10	4.8	4.5	2.5	2.0	.49	.65	5.4	42	5.7	5.7	6.5	7.4
11	5.0	4.7	2.2	2.0	.49	.57	2.5	32	5.2	5.5	6.2	6.6
12	4.8	4.8	2.0	2.0	.57	.57	2.2	26	5.0	5.5	6.5	6.0
13	4.7	4.5	2.2	1.8	.57	.57	1.8	23	4.7	5.5	6.2	6.4
14	5.2	5.0	3.0	2.0	.49	.65	1.7	32	4.3	5.2	6.0	6.8
15	5.8	4.0	2.5	2.0	.49	.57	1.7	24	3.8	4.7	6.2	7.2
16	7.0	3.2	2.5	2.3	.49	.65	1.8	19	3.4	4.7	9.3	7.0
17	8.2	3.0	2.2	2.3	.41	.65	1.8	18	3.8	5.0	11	7.0
18	8.2	3.2	2.3	2.3	.41	.74	2.1	20	4.7	5.0	9.3	8.0
19	8.2	3.6	2.2	2.3	.41	.65	2.0	16	5.7	5.0	8.2	9.0
20	8.4	3.4	2.2	1.7	.41	.65	21	17	5.7	5.0	8.2	10
21	7.6	4.0	2.2	.95	.41	.57	49	14	5.7	4.7	9.0	11
22	7.6	2.8	2.0	.74	.34	.57	6.0	25	6.2	4.3	9.0	12
23	7.3	2.5	2.0	.65	.41	1.1	3.6	25	6.2	4.5	8.2	15
24	6.0	2.5	2.0	.74	.41	.49	21	20	6.5	5.0	7.6	17
25	5.5	2.5	2.0	.65	.41	.27	5.2	16	6.2	6.9	7.1	16
26	5.5	2.5	1.8	.65	.41	.27	8.4	13	5.5	12	7.1	18
27	5.5	2.5	2.0	.65	.41	.21	8.5	11	5.7	7.6	7.1	18
28	5.5	2.5	2.0	.57	1.1	.21	5.5	10	6.0	7.1	7.1	14
29	5.7	-----	2.0	.57	2.0	.21	51	13	6.0	10	7.6	16
30	5.7	-----	2.0	.57	1.1	.62	62	15	23	14	6.5	15
31	5.0	-----	1.8	-----	.74	-----	38	10	-----	9.7	-----	14
TOTAL	181.8	111.3	71.4	50.74	18.26	16.96	554.2	958	191.4	206.4	230.5	309.7
MEAN	5.86	3.98	2.30	1.69	.59	.57	17.9	30.9	6.38	6.66	7.68	9.99
MAX	8.4	5.5	3.0	3.2	2.0	1.1	196	114	23	14	11	18
MIN	3.6	2.5	1.8	.57	.34	.21	1.7	10	3.4	4.3	6.0	6.0
AC-FT	361	221	142	101	36	34	1,100	1,900	380	409	457	614

CAL YR 1971 TOTAL 2,900.66 MEAN 7.95 MAX 196 MIN .21 AC-FT 5,750

PEAK DISCHARGE (BASE, 180 CFS)

DATE TIME G. H. DISCHARGE

7- 1 1900 8.51 3,070

ARKANSAS RIVER BASIN

07220000 Sapello River at Sapello, N. Mex.

LOCATION.--Lat 35°46'11", long 105°15'05", San Miguel County, in Mora Grant, on downstream end of bridge pier nearest left bank, on State Highway 3, in Sapello, and 0.5 mile downstream from Manuelitas Creek.

DRAINAGE AREA.--132 sq mi.

PERIOD OF RECORD.--May to October 1915, January 1916 to November 1918, February 1919 to May 1921, July to September 1921, July 1956 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage heights and discharge measurements published under same name for August 1903 to March 1904 are for a site above Manuelitas Creek, and are not equivalent.

GAGE.--Water-stage recorder. Altitude of gage is 6,910 ft (from topographic map). May 1915 to September 1921, nonrecording gage at site 300 ft upstream at different datum.

AVERAGE DISCHARGE.--20 years (1915-20, 1956-71), 22.1 cfs (16,010 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,150 cfs Aug. 24 (gage height, 8.20 ft), from rating curve extended above 410 cfs on basis of field estimate at gage height 10.6 ft; minimum, 0.08 cfs June 29, 30, July 18.

Period of record: Maximum discharge determined, 6,420 cfs Aug. 5, 1966 (gage height, 7.50 ft), from rating curve extended above 350 cfs on basis of computation of flow over dam at gage height 7.40 ft; maximum gage height, 8.20 ft Aug. 24, 1971; no flow at times.

The flood of June 11, 1913 reached a peak discharge of 11,400 cfs at a site 3 miles downstream.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 4,200 acres. Sapello Canal diverts from right bank 500 ft above station.

REVISIONS (WATER YEARS).--WSP 1511: Drainage area. WSP 1731: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	6.2	3.3	3.1	5.3	4.0	1.9	1.0	.63	.94	72	25
2	4.4	7.4	3.3	2.6	3.9	3.5	1.8	.82	.72	2.4	19	22
3	4.4	7.0	3.3	2.5	4.0	3.5	1.9	.97	.83	.24	13	18
4	4.4	6.6	3.2	2.0	3.8	4.0	2.0	1.2	.77	.17	11	16
5	4.4	7.0	3.0	1.5	3.2	4.5	2.2	1.3	.42	.15	16	14
6	4.0	6.6	2.9	1.0	3.0	4.9	2.4	1.4	.46	.15	24	14
7	4.0	5.9	2.9	1.0	2.4	5.1	2.8	1.6	.37	.13	193	13
8	5.1	6.2	3.0	2.0	3.0	4.7	2.3	1.5	.30	.22	238	12
9	5.1	5.9	3.0	3.0	3.3	8.2	2.2	1.3	.35	.38	105	12
10	4.8	5.5	2.8	5.0	4.0	5.8	2.0	1.2	.38	.30	66	11
11	4.4	5.9	2.6	7.0	4.3	5.3	1.8	1.4	.45	.17	48	9.7
12	4.4	6.2	2.3	9.0	4.5	5.2	1.6	1.3	.48	.13	46	8.6
13	4.4	6.2	2.6	10	3.6	5.4	1.5	1.1	.28	.13	30	7.8
14	4.8	5.9	3.2	9.0	3.6	5.2	1.5	1.1	.31	.13	57	7.4
15	5.5	5.1	3.4	10	3.4	4.4	1.5	.89	.27	.14	59	5.5
16	6.2	5.5	3.4	10	3.2	4.3	1.7	.66	.27	.15	34	5.9
17	6.6	5.5	3.5	10	3.0	4.3	1.7	.68	.26	.13	52	6.6
18	6.6	5.1	3.3	9.0	3.0	5.1	1.3	.92	.40	1.5	64	9.7
19	6.6	4.8	2.8	7.6	2.9	3.9	1.3	.94	.31	54	33	9.7
20	6.2	4.4	3.5	7.1	4.0	4.6	1.3	.76	.41	67	30	9.7
21	5.5	5.5	3.1	8.5	3.8	5.6	1.3	.62	.41	26	53	8.9
22	5.5	5.5	2.8	7.1	3.5	6.2	1.4	.78	.33	38	52	9.3
23	5.5	4.4	2.4	5.4	3.5	5.8	1.4	.62	.22	22	60	10
24	5.5	5.1	2.3	4.6	4.0	5.3	1.5	.64	.17	11	576	13
25	5.1	5.1	2.4	4.3	4.5	4.7	1.3	.71	.17	4.6	239	11
26	5.1	4.4	3.0	4.8	4.5	3.4	1.3	.61	.17	200	87	8.9
27	5.5	4.4	3.9	5.1	4.5	1.9	1.3	.94	.13	91	49	7.4
28	5.1	4.8	3.0	5.0	4.5	1.7	1.4	1.2	.15	28	42	6.9
29	5.5	5.1	3.0	4.8	-----	1.9	1.3	1.2	.12	99	75	7.2
30	5.9	4.8	3.2	5.5	-----	2.2	1.1	.66	1.4	48	42	58
31	5.5	-----	3.0	6.0	-----	2.1	-----	.63	-----	72	30	-----
TOTAL	161.1	168.0	93.4	173.5	104.2	136.7	50.0	30.65	11.94	768.16	2,515	378.2
MEAN	5.20	5.60	3.01	5.60	3.72	4.41	1.67	.99	.40	24.8	81.1	12.6
MAX	6.6	7.4	3.9	10	5.3	8.2	2.8	1.6	1.4	200	576	58
MIN	4.0	4.4	2.3	1.0	2.4	1.7	1.1	.61	.12	.13	11	5.5
AC-FT	320	333	185	344	207	271	99	61	24	1,520	4,990	750

CAL YR 1970 TOTAL 4,132.90 MEAN 11.3 MAX 405 MIN 2.3 AC-FT 8,200
WTR YR 1971 TOTAL 4,590.85 MEAN 12.6 MAX 576 MIN .12 AC-FT 9,110

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-19	2215	5.50	1,540	8- 8	1700	5.50	1,540
7-26	1845	6.70	2,510	8-24	1530	8.20	4,150
8- 7	1715	5.30	1,400	9-30	0130	4.65	1,000

07220000 Sapello River at Sapello, N. Mex.

LOCATION.--Lat 35°46'11", long 105°15'05", San Miguel County, in Mora Grant, on downstream end of bridge pier nearest left bank, on State Highway 3, in Sapello, and 0.5 mile downstream from Manuelitas Creek.

DRAINAGE AREA.--132 sq mi.

PERIOD OF RECORD.--May to October 1915, January 1916 to November 1918, February 1919 to May 1921, July to September 1921, July 1956 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage heights and discharge measurements published under same name for August 1903 to March 1904 are for a site above Manuelitas Creek, and are not equivalent.

GAGE.--Water-stage recorder. Altitude of gage is 6,910 ft (from topographic map). May 1915 to September 1921, nonrecording gage at site 300 ft upstream at different datum.

AVERAGE DISCHARGE.--20 calendar years (1916-20, 1957-71), 22.3 cfs (16,160 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,150 cfs Aug. 24 (gage height, 8.20 ft), from rating curve extended above 410 cfs on basis of field estimate at gage height 10.6 ft; minimum, 0.08 cfs June 29, 30, July 18.

Period of record: Maximum discharge determined, 6,420 cfs Aug. 5, 1966 (gage height, 7.50 ft), from rating curve extended above 350 cfs on basis of computation of flow over dam at gage height 7.40 ft; maximum gage height, 8.20 ft Aug. 24, 1971; no flow at times.

The flood of June 11, 1913 reached a peak discharge of 11,400 cfs at a site 3 miles downstream.

REMARKS.--Records good except those for winter periods, which are poor. Diversions above station for irrigation of about 4,200 acres. Sapello Canal diverts from right bank 500 ft above station.

REVISIONS (WATER YEARS).--WSP 1511: Drainage area. WSP 1731: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.1	5.3	4.0	1.9	1.0	.63	.94	72	25	14	16	14
2	2.6	3.9	3.5	1.8	.82	.72	2.4	19	22	12	14	14
3	2.5	4.0	3.5	1.9	.97	.83	.24	13	18	12	13	15
4	2.0	3.8	4.0	2.0	1.2	.77	.17	11	16	11	13	12
5	1.5	3.2	4.5	2.2	1.3	.42	.15	16	14	11	12	11
6	1.0	3.0	4.9	2.4	1.4	.46	.15	24	14	10	11	12
7	1.0	2.4	5.1	2.8	1.6	.37	.13	193	13	10	11	14
8	2.0	3.0	4.7	2.3	1.5	.30	.22	238	12	9.7	10	13
9	3.0	3.3	8.2	2.2	1.3	.35	.38	105	12	8.9	10	14
10	5.0	4.0	5.8	2.0	1.2	.38	.30	66	11	8.5	10	12
11	7.0	4.3	5.3	1.8	1.4	.45	.17	48	9.7	8.6	10	13
12	9.0	4.5	5.2	1.6	1.3	.48	.13	46	8.6	8.2	10	11
13	10	3.6	5.4	1.5	1.1	.28	.13	30	7.8	8.2	10	13
14	9.0	3.6	5.2	1.5	1.1	.31	.13	57	7.4	8.2	11	14
15	10	3.4	4.4	1.5	.89	.27	.14	59	5.5	7.3	11	13
16	10	3.2	4.3	1.7	.66	.27	.15	34	5.9	6.4	16	12
17	10	3.0	4.3	1.7	.68	.26	.13	52	6.6	7.4	16	13
18	9.0	3.0	5.1	1.3	.92	.40	1.5	64	9.7	8.2	16	12
19	7.6	2.9	3.9	1.3	.94	.31	54	33	9.7	7.4	13	13
20	7.1	4.0	4.6	1.3	.76	.41	67	30	9.7	6.6	15	12
21	8.5	3.8	5.6	1.3	.62	.41	26	53	8.9	6.6	18	12
22	7.1	3.5	6.2	1.4	.78	.33	38	52	9.3	5.9	17	13
23	5.4	3.5	5.8	1.4	.62	.22	22	60	10	5.5	15	37
24	4.6	4.0	5.3	1.5	.64	.17	11	576	13	4.8	14	44
25	4.3	4.5	4.7	1.3	.71	.17	4.6	239	11	9.3	14	37
26	4.8	4.5	3.4	1.3	.61	.17	200	87	8.9	25	14	32
27	5.1	4.5	1.9	1.3	.94	.13	91	49	7.4	16	13	38
28	5.0	4.5	1.7	1.4	1.2	.15	28	42	6.9	13	13	28
29	4.8	-----	1.9	1.3	1.2	.12	99	75	7.2	22	13	28
30	5.5	-----	2.2	1.1	.66	1.4	48	42	58	25	12	20
31	6.0	-----	2.1	-----	.63	-----	72	30	-----	18	-----	20
TOTAL	173.5	104.2	136.7	50.0	30.65	11.94	768.16	2,515	378.2	334.7	391	566
MEAN	5.60	3.72	4.41	1.67	.99	.40	24.8	81.1	12.6	10.8	13.0	18.3
MAX	10	5.3	8.2	2.8	1.6	1.4	200	576	58	25	18	44
MIN	1.0	2.4	1.7	1.1	.61	.12	.13	11	5.5	4.8	10	11
AC-FT	344	207	271	99	61	24	1,520	4,990	750	664	776	1,120

CAL YR 1971 TOTAL 5,460.05 MEAN 15.0 MAX 576 MIN .12 AC-FT 10,830
WTR YR 1971 TOTAL 4,590.85 MEAN 12.6 MAX 576 MIN .12 AC-FT 9,110

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-19	2215	5.50	1,540	8- 8	1700	5.50	1,540
7-26	1845	6.70	2,510	8-24	1530	8.20	4,150
8- 7	1715	5.30	1,400	9-30	0130	4.65	1,000

07220100 Lake Isabel feeder canal near Sapello, N. Mex.

LOCATION.--Lat 35°44'42", long 105°09'25", San Miguel County, in Mora Grant, on right bank 20 feet upstream from concrete crossing, 1.0 mile northwest of Los Alamos, 2.0 miles downstream from canal heading, and 5.7 miles southeast of Sapello.

PERIOD OF RECORD.--September 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,790 ft (from topographic map). Prior to Aug. 10, 1967, at site 650 ft upstream at datum 2.93 ft higher.

EXTREMES.--Period of record: Maximum daily discharge, 322 cfs Aug. 2, 1965; no flow at times.

REMARKS.--Records good. Canal diverts water from left bank of Sapello River to fill Lake Isabel which stores water for irrigation.

MONTHLY DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

Month	Maximum	Minimum	Mean	Diversion in acre-feet
October.....	0	0	0	0
November.....	0	0	0	0
December.....	1.0	0	.32	20
CAL YR 1970.....	34	0	.60	434
January.....	5.8	0	2.92	179
February.....	3.6	0	1.19	66
March.....	0	0	0	0
April.....	0	0	0	0
May.....	0	0	0	0
June.....	0	0	0	0
July.....	20	0	2.48	152
August.....	111	0	27.6	1,700
September.....	34	0	5.06	301
WTR YR 1971.....	111	0	3.34	2,420

07220100 Lake Isabel feeder canal near Sapello, N. Mex.

LOCATION.--Lat 35°44'42", long 105°09'25". San Miguel County, in Mora Grant, on right bank 20 feet upstream from concrete crossing, 1.0 mile northwest of Los Alamos, 2.0 miles downstream from canal heading, and 5.7 miles southeast of Sapello.

PERIOD OF RECORD.--September 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,790 ft (from topographic map). Prior to Aug. 10, 1967, at site 650 ft upstream at datum 2.93 ft higher.

EXTREMES.--Period of record: Maximum daily discharge, 322 cfs Aug. 2, 1965; no flow at times.

REMARKS.--Records good. Canal diverts water from left bank of Sapello River to fill Lake Isabel which stores water for irrigation.

MONTHLY DIVERSION, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

Month	Maximum	Minimum	Mean	Diversion in acre-feet
January.....	5.8	0	2.92	179
February.....	3.6	0	1.19	66
March.....	0	0	0	0
April.....	0	0	0	0
May.....	0	0	0	0
June.....	0	0	0	0
July.....	20	0	2.48	152
August.....	111	0	27.6	1,700
September.....	34	0	5.06	301
October.....	9.0	0	.73	45
November.....	4.7	.22	1.78	106
December.....	10	3.6	7.68	472
CAL YR 1971.....	111	0	4.17	3,020

07221000 Mora River near Shoemaker, N. Mex.

LOCATION.--Lat 35°48'01", long 104°46'58", Mora County, in Mora Grant, on left bank 5.5 miles east of Shoemaker, and 12.3 miles upstream from Pedroso Creek.

DRAINAGE AREA.--1,104 sq mi, of which 71 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1914 to July 1915, October 1915 to August 1918, May 1919 to July 1924, September to November 1924, March to July 1925, June 1927 to current year. Prior to October 1930 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 6,145 ft (from topographic map). Prior to Oct. 10, 1934, at site 2,000 ft upstream at different datum.

AVERAGE DISCHARGE.--53 years (1914-18, 1919-24, 1927-71), 58.5 cfs (42,380 acre-ft per year); 20 calendar years (1951-70), 46.3 cfs (33,540 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,110 cfs July 22 (gage height, 4.34 ft); minimum, 0.60 cfs June 30.

Period of record: Maximum discharge, 15,200 cfs June 3, 1948 (gage height, 12.79 ft), from rating curve extended above

2,800 cfs on basis of slope-area measurements at gage heights 10.09 and 12.79 ft; no flow at times.

Floods of Sept. 29, 1904, and June 11, 1913, probably exceeded 30,000 cfs.

REMARKS.--Records good except those for December and January, which are poor. Diversions for irrigation of about 26,000 acres above station. Off-channel lakes make it possible to divert and store water during non-irrigation season.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1281: 1931(M), 1933-34(M), 1937(M), 1938(F), 1939-40(M), 1941-42(F). WSP 1731: 1921, 1928, 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	12	12	11	21	3.3	4.1	3.1	2.8	3.6	143	28
2	17	13	12	9.0	21	4.4	4.1	3.6	2.6	242	86	23
3	14	14	12	8.0	21	4.6	4.4	3.3	2.6	37	51	17
4	14	14	14	7.0	21	5.7	4.4	2.8	2.4	15	30	16
5	12	14	13	6.0	20	8.0	4.6	2.6	2.3	5.2	95	13
6	11	13	14	6.0	18	10	4.6	3.3	2.6	3.6	50	12
7	14	13	13	7.0	17	8.4	4.1	3.8	2.4	2.4	336	11
8	18	14	12	9.0	12	8.4	4.1	3.8	2.6	2.3	416	7.2
9	16	14	12	11	13	6.8	4.1	3.8	2.3	2.3	317	4.6
10	18	13	12	14	13	5.7	4.1	3.8	1.9	42	132	4.1
11	17	16	12	16	15	4.9	4.1	4.1	1.6	6.3	104	3.8
12	15	15	12	18	18	4.4	3.8	4.1	1.6	2.1	86	3.6
13	12	14	11	18	16	4.1	4.1	4.1	1.5	1.5	69	3.6
14	12	13	11	18	16	3.8	4.4	3.8	1.5	1.4	52	3.6
15	12	14	8.0	20	16	3.8	4.9	3.6	2.1	1.4	68	3.6
16	13	13	6.8	22	14	4.1	5.2	3.1	2.1	1.2	75	3.3
17	13	17	6.8	24	9.6	4.1	4.6	2.8	1.8	1.2	52	3.8
18	14	18	6.8	26	7.2	3.8	4.4	2.6	1.6	1.2	72	4.6
19	16	17	7.2	29	6.8	4.1	4.4	2.4	1.6	1.4	62	5.5
20	16	16	7.2	29	4.9	3.8	4.1	2.3	1.4	1.6	26	4.6
21	15	14	7.0	34	3.8	3.8	4.1	2.1	1.5	71	35	6.4
22	14	12	7.0	33	4.1	3.8	4.1	2.3	2.1	270	27	7.6
23	13	9.2	6.0	28	4.1	4.1	4.1	2.3	1.6	104	40	8.4
24	14	8.8	7.0	27	3.8	4.1	4.4	2.6	1.4	24	62	13
25	12	9.2	8.0	26	4.1	4.1	3.6	2.8	1.2	21	354	18
26	12	9.6	9.0	26	4.4	4.1	3.6	2.8	1.2	8.4	104	17
27	11	10	10	25	4.1	4.1	3.1	2.4	1.2	178	55	14
28	11	13	11	24	3.6	3.8	3.1	2.4	.98	73	37	12
29	12	12	12	22	-----	4.1	3.3	4.4	.82	54	56	13
30	13	12	12	21	-----	4.1	3.1	2.8	3.6	157	129	20
31	12	-----	12	21	-----	3.8	-----	3.1	-----	95	46	-----
TOTAL	437	396.8	315.8	595.0	332.5	150.1	123.1	96.8	56.90	1,444.5	3,267	305.3
MEAN	14.1	13.2	10.2	19.2	11.9	4.84	4.10	3.12	1.90	46.6	105	10.2
MAX	24	18	14	34	21	10	5.2	4.4	3.6	270	416	28
MIN	11	8.8	6.0	6.0	3.6	3.3	3.1	2.1	.82	1.2	26	3.3
AC-FT	867	787	626	1,180	660	298	244	192	113	2,870	6,480	606
CAL YR 1970	TOTAL	10,127.10	MEAN	27.7	MAX	228	MIN	3.0	AC-FT	20,090		
WTR YR 1971	TOTAL	7,526.80	MEAN	20.6	MAX	416	MIN	.82	AC-FT	14,920		

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 2	0530	4.03	935	8- 8	0330	4.10	970
7-22	0200	4.34	1,110	8-25	0600	3.96	900
8- 7	0200	4.13	988				

07221000 Mora River near Shoemaker, N. Mex.

LOCATION.--Lat 35°48'01", long 104°46'58", Mora County, in Mora Grant, on left bank 5.5 miles east of Shoemaker, and 12.3 miles upstream from Pedroso Creek.

DRAINAGE AREA.--1,104 sq mi, of which 71 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1914 to July 1915, October 1915 to August 1918, May 1919 to July 1924, September to November 1924, March to July 1925, June 1927 to current year. Prior to October 1930 monthly discharge only, published in WSP 1311.

GAGF.--Water-stage recorder. Altitude of gage is 6,145 ft (from topographic map). Prior to Oct. 10, 1934, at site 2,000 ft up-stream at different datum.

AVERAGE DISCHARGE.--52 calendar years (1915-17, 1920-24, 1928-71), 58.7 cfs (42,530 acre-ft per year); 20 calendar years (1952-71), 46.9 cfs (33,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,110 cfs July 22 (gage height, 4.34 ft); minimum, 0.60 cfs June 30.
Period of record: Maximum discharge, 15,200 cfs June 3, 1948 (gage height, 12.79 ft), from rating curve extended above 2,800 cfs on basis of slope-area measurements at gage heights 10.09 and 12.79 ft; no flow at times.
Floods of Sept. 29, 1904, and June 11, 1913, probably exceeded 30,000 cfs.

REMARKS.--Records good except those for January and December, which are poor. Diversions for irrigation of about 26,000 acres above station. Off-channel lakes make it possible to divert and store water during non-irrigation season.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1281: 1931(M), 1933-34(M), 1937(M), 1938(P), 1939-40(M), 1941-42(P).
WSP 1731: 1921, 1928, 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	11	21	3.3	4.1	3.1	2.8	3.6	143	28	65	45	40
2	9.0	21	4.4	4.1	3.6	2.6	242	86	23	34	44	41
3	8.0	21	4.6	4.4	3.3	2.6	37	51	17	25	28	38
4	7.0	21	5.7	4.4	2.8	2.4	15	30	16	23	25	35
5	6.0	20	8.0	4.6	2.6	2.3	5.2	95	13	21	32	36
6	6.0	18	10	4.6	3.3	2.6	3.6	50	12	20	31	33
7	7.0	17	8.4	4.1	3.8	2.4	2.4	336	11	17	28	32
8	9.0	12	8.4	4.1	3.8	2.6	2.3	416	7.2	15	27	30
9	11	13	6.8	4.1	3.8	2.3	2.3	317	4.6	14	28	28
10	14	13	5.7	4.1	3.8	1.9	42	132	4.1	14	28	30
11	16	15	4.9	4.1	4.1	1.6	6.3	104	3.8	13	27	30
12	18	18	4.4	3.8	4.1	1.6	2.1	86	3.6	12	28	28
13	18	16	4.1	4.1	4.1	1.5	1.5	69	3.6	9.6	28	30
14	18	16	3.8	4.4	3.8	1.5	1.4	52	3.6	8.0	28	30
15	20	16	3.8	4.9	3.6	2.1	1.4	68	3.6	8.4	29	28
16	22	14	4.1	5.2	3.1	2.1	1.2	75	3.3	8.8	36	30
17	24	9.6	4.1	4.6	2.8	1.8	1.2	52	3.8	10	51	31
18	26	7.2	3.8	4.4	2.6	1.6	1.2	72	4.6	12	53	35
19	29	6.8	4.1	4.4	2.4	1.6	1.4	62	5.5	12	50	41
20	29	4.9	3.8	4.1	2.3	1.4	1.6	26	4.6	11	46	37
21	34	3.8	3.8	4.1	2.1	1.5	71	35	6.4	9.2	47	37
22	33	4.1	3.8	4.1	2.3	2.1	270	27	7.6	8.8	56	40
23	28	4.1	4.1	4.1	2.3	1.6	104	40	8.4	7.6	59	46
24	27	3.8	4.1	4.4	2.6	1.4	24	62	13	8.4	55	59
25	26	4.1	4.1	3.6	2.8	1.2	21	354	18	12	52	59
26	26	4.4	4.1	3.6	2.8	1.2	8.4	104	17	14	51	59
27	25	4.1	4.1	3.1	2.4	1.2	178	55	14	22	48	56
28	24	3.6	3.8	3.1	2.4	.98	73	37	12	24	45	56
29	22	-----	4.1	3.3	4.4	.82	54	56	13	21	40	58
30	21	-----	4.1	3.1	2.8	3.6	157	129	20	24	40	46
31	21	-----	3.8	-----	3.1	-----	95	46	-----	47	-----	33
TOTAL	595.0	332.5	150.1	123.1	96.8	56.90	1,444.5	3,267	305.3	550.8	1,185	1,212
MEAN	19.2	11.9	4.84	4.10	3.12	1.90	46.6	105	10.2	17.8	39.5	39.1
MAX	34	21	10	5.2	4.4	3.6	270	416	28	65	59	59
MIN	6.0	3.6	3.3	3.1	2.1	.82	1.2	26	3.3	7.6	25	28
AC-FT	1,180	660	298	244	192	113	2,870	6,480	606	1,090	2,350	2,400

CAL YR 1971 TOTAL 9,319.00 MEAN 25.5 MAX 416 MIN .82 AC-FT 18,480

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 2	0530	4.03	935	8- 8	0330	4.10	970
7-22	0200	4.34	1,110	8-25	0600	3.96	900
8- 7	0200	4.13	988				

07221500 Canadian River near Sanchez, N. Mex.

LOCATION.--Lat 35°39'08", long 104°22'39", in SW¼ sec.34, T.17 N., R.24 E., on right bank 1,000 ft downstream from bridge on State Highway 65, 0.9 mile upstream from Lagartija Creek, 3.2 miles northeast of Sanchez, 10 miles downstream from Mora River, and 25 miles southwest of Mosquero.

DRAINAGE AREA.--6,015 sq mi, of which 303 sq mi is probably noncontributing.

PERIOD OF RECORD.--May 1912 to December 1914, October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 4,495 ft (from topographic map). May 15, 1912 to Dec. 31, 1914, at two sites within 100 ft about 3 miles upstream at different datums. October 1935 to June 1965 at site 1,000 ft upstream at datum 7.32 ft higher prior to October 1963 and 5.32 ft higher thereafter. June 1965 to October 1966 at site 0.6 mile upstream at datum about 20 ft higher. Supplemental water-stage recorder at site 0.6 mile upstream used at various times since 1966.

AVERAGE DISCHARGE.--38 years (1912-14, 1935-71), 212 cfs (153,600 acre-ft per year); 20 calendar years (1951-70), 157 cfs (113,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,800 cfs July 29 (gage height, 6.02 ft); minimum, 0.96 cfs May 27.
Period of record: Maximum discharge, 145,000 cfs June 18, 1965 (gage height, about 38.1 ft, from floodmarks, present site and datum), from rating curve extended above 91,000 cfs on basis of slope-area measurement of peak flow; no flow at times.
The flood of Sept. 29 or 30, 1904 probably exceeded 100,000 cfs, but is believed to have been less than the peak of June 18, 1965.

REMARKS.--Records fair. Diversions for irrigation of about 56,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1177: Drainage area. WSP 1281: 1939, 1940(P), 1942, 1946. WSP 1731: 1956-57(M). The revised figures of discharge for September 1942, as published in WSP 1281, supersede those published in WSP 1311.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	34	28	37	40	23	7.0	4.8	125	19	245	183
2	23	35	30	42	38	22	7.0	4.8	66	203	183	120
3	23	36	28	29	38	21	6.4	3.5	43	155	181	89
4	23	36	27	25	37	21	5.8	2.7	32	130	120	64
5	22	35	27	20	37	20	6.7	2.0	30	77	95	48
6	21	36	26	20	36	19	7.0	1.8	17	51	215	46
7	20	38	25	25	34	18	6.7	3.3	13	38	570	37
8	22	38	27	31	32	20	5.8	3.1	12	29	729	29
9	24	36	26	34	31	24	6.1	4.5	9.5	18	650	26
10	26	36	27	44	29	23	5.6	4.0	7.4	13	431	23
11	28	36	27	39	26	22	6.1	4.0	5.8	12	250	21
12	27	35	27	38	24	21	5.0	3.5	5.6	17	188	19
13	26	36	29	37	27	20	5.0	4.0	5.0	15	150	16
14	25	35	29	38	27	18	5.8	3.1	4.5	32	168	14
15	25	35	29	40	36	17	5.0	2.9	4.5	23	254	11
16	25	35	25	45	36	16	7.8	3.5	5.8	12	251	9.8
17	27	34	26	44	33	16	8.8	4.0	134	9.2	209	9.2
18	30	33	25	44	34	14	7.4	5.6	113	7.4	155	12
19	34	33	22	45	33	14	6.1	6.4	39	6.5	110	13
20	37	32	21	47	31	12	5.3	6.1	27	6.0	110	12
21	38	34	22	49	26	11	5.6	6.1	17	6.0	89	11
22	38	35	24	51	26	10	5.0	3.3	13	118	56	11
23	37	34	22	53	25	10	4.5	2.2	10	304	464	12
24	35	33	20	50	22	11	4.8	1.8	8.0	464	550	19
25	33	31	19	53	20	10	4.0	1.7	7.0	162	868	18
26	31	29	20	50	24	9.5	3.3	1.4	6.0	143	481	20
27	34	27	24	46	26	8.8	5.0	1.2	5.0	114	250	21
28	36	26	33	45	27	8.4	5.3	3.9	4.5	114	153	20
29	34	27	36	46	-----	8.4	5.6	5.0	4.5	806	120	26
30	33	29	36	43	-----	8.4	4.8	7.8	4.5	680	554	38
31	32	-----	37	41	-----	7.8	-----	143	-----	285	300	-----
TOTAL	893	1,009	824	1,251	855	484.3	174.3	255.0	778.6	4,069.1	9,149	998.0
MEAN	28.8	33.6	26.6	40.4	30.5	15.6	5.81	8.23	26.0	131	295	33.3
MAX	38	38	37	53	40	24	8.8	143	134	806	868	183
MIN	20	26	19	20	20	7.8	3.3	1.2	4.5	6.0	56	9.2
AC-FT	1,770	2,000	1,630	2,480	1,700	961	346	506	1,540	8,070	18,150	1,980

CAL YR 1970 TOTAL 22,929.1 MEAN 62.8 MAX 437 MIN 2.7 AC-FT 45,480
WTR YR 1971 TOTAL 20,740.3 MEAN 56.8 MAX 868 MIN 1.2 AC-FT 41,140

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

07221500 Canadian River near Sanchez, N. Mex.

LOCATION.--Lat 35°39'08", long 104°22'39", in SW¼ sec.34, T.17 N., R.24 E., on right bank 1,000 ft downstream from bridge on State Highway 65, 0.9 mile upstream from Lagartija Creek, 3.2 miles northeast of Sanchez, 10 miles downstream from Mora River, and 25 miles southwest of Mosquero.

DRAINAGE AREA.--6,015 sq mi, of which 303 sq mi is probably noncontributing.

PERIOD OF RECORD.--May 1912 to December 1914, October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 4,495 ft (from topographic map). May 15, 1912 to Dec. 31, 1914, at two sites within 100 ft about 3 miles upstream at different datums. October 1935 to June 1965 at site 1,000 ft upstream at datum 7.32 ft higher prior to October 1963 and 5.32 ft higher thereafter. June 1965 to October 1966 at site 0.6 mile upstream at datum about 20 ft higher. Supplemental water-stage recorder at site 0.6 mile upstream used at various times since 1966.

AVERAGE DISCHARGE.--38 calendar years (1913-14, 1936-71), 213 cfs (154,300 acre-ft per year); 20 calendar years (1952-71), 154 cfs (111,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,800 cfs July 29 (gage height, 6.02 ft); minimum, 0.96 cfs May 27.

Period of record: Maximum discharge, 145,000 cfs June 18, 1965 (gage height, about 38.1 ft, from floodmarks, present site and datum), from rating curve extended above 91,000 cfs on basis of slope-area measurement of peak flow; no flow at times.

The flood of Sept. 29 or 30, 1904 probably exceeded 100,000 cfs, but is believed to have been less than the peak of June 18, 1965.

REMARKS.--Records fair. Diversions for irrigation of about 56,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1177: Drainage area. WSP 1281: 1939, 1940(P), 1942, 1946. WSP 1731: 1956-57(M). The revised figures of discharge for September 1942, as published in WSP 1281, supersede those published in WSP 1311.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	37	40	23	7.0	4.8	125	19	245	183	29	38	54
2	42	38	22	7.0	4.8	66	203	183	120	24	46	57
3	29	38	21	6.4	3.5	43	155	181	89	38	56	56
4	25	37	21	5.8	2.7	32	130	120	64	45	57	54
5	20	37	20	6.7	2.0	30	77	95	48	44	51	47
6	20	36	19	7.0	1.8	17	51	215	46	39	45	45
7	25	34	18	6.7	3.3	13	38	570	37	35	47	46
8	31	32	20	5.8	3.1	12	29	729	29	31	45	46
9	34	31	24	6.1	4.5	9.5	18	650	26	28	42	41
10	44	29	23	5.6	4.0	7.4	13	431	23	26	41	42
11	39	26	22	6.1	4.0	5.8	12	250	21	22	39	40
12	38	24	21	5.0	3.5	5.6	17	188	19	20	38	37
13	37	27	20	5.0	4.0	5.0	15	150	16	19	37	34
14	38	27	18	5.8	3.1	4.5	32	168	14	18	36	45
15	40	36	17	5.0	2.9	4.5	23	254	11	16	38	47
16	45	36	16	7.8	3.5	5.8	12	251	9.8	15	41	41
17	44	33	16	8.8	4.0	134	9.2	209	9.2	14	45	35
18	44	34	14	7.4	5.6	113	7.4	155	12	14	49	45
19	45	33	14	6.1	6.4	39	6.5	110	13	12	57	47
20	47	31	12	5.3	6.1	27	6.0	110	12	12	82	47
21	49	26	11	5.6	6.1	17	6.0	89	11	12	76	45
22	51	26	10	5.0	3.3	13	118	56	11	14	69	45
23	53	25	10	4.5	2.2	10	304	464	12	16	65	46
24	50	22	11	4.8	1.8	8.0	464	550	19	16	68	46
25	53	20	10	4.0	1.7	7.0	162	868	18	18	67	52
26	50	24	9.5	3.3	1.4	6.0	143	481	20	32	64	61
27	46	26	8.8	5.0	1.2	5.0	114	250	21	24	60	66
28	45	27	8.4	5.3	3.9	4.5	114	153	20	24	59	67
29	46	-----	8.4	5.6	5.0	4.5	806	120	26	27	56	72
30	43	-----	8.4	4.8	7.8	4.5	680	554	38	30	53	75
31	41	-----	7.8	-----	143	-----	285	300	-----	41	-----	69
TOTAL	1,251	855	484.3	174.3	255.0	778.6	4,069.1	9,149	998.0	755	1,562	1,550
MEAN	40.4	30.5	15.6	5.81	8.23	26.0	131	295	33.3	24.4	52.1	50.0
MAX	53	40	24	8.8	143	134	806	868	183	45	82	75
MIN	20	20	7.8	3.3	1.2	4.5	6.0	56	9.2	12	36	34
AC-FT	2,480	1,700	961	346	506	1,540	8,070	18,150	1,980	1,500	3,100	3,070

CAL YR 1971 TOTAL 21,881.3 MEAN 59.9 MAX 868 MIN 1.2 AC-FT 43,400

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

07222500 Conchas River at Variadero, N. Mex.

LOCATION.--Lat 35°24'10", long 104°26'35", in NE 1/4 sec. 36, T.14 N., R.23 E., San Miguel County, on left bank 1.5 miles northeast of Variadero, and 14 miles west of Conchas Dam.

DRAINAGE AREA.--523 sq mi, of which 130 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1936 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,430 ft (from topographic map). Prior to Mar. 30, 1942, at site 1.5 miles upstream at different datum. Mar. 30, 1942 to May 18, 1950, at present site at datum 0.5 ft higher.

AVERAGE DISCHARGE.--35 years, 16.7 cfs (12,100 acre-ft per year); 20 calendar years (1951-70), 9.97 cfs (7,220 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,900 cfs Aug. 1 (gage height, 4.90 ft), from rating curve extended above 760 cfs as explained below; no flow many days.

Period of record: Maximum discharge, 44,000 cfs Sept. 1, 1942 (gage height, 19.96 ft, present datum), from rating curve extended above 760 cfs on basis of slope-area measurements at gage heights 10.5 and 19.96 ft (present datum); no flow many days.

REMARKS.--Records fair. Diversions for irrigation of about 300 acres above station.

REVISIONS (WATER YEARS).--WSP 1281: 1937-39, 1941-47.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.04	.03	.07	.08	.02	0		0	.13	291	.03
2	0	.06	.02	.07	.07	.15	0		0	.13	19	0
3	0	.06	.03	.04	.07	1.1	0		0	0	5.6	0
4	.01	.04	.04	.04	.06	.25	.04		0	0	2.3	0
5	0	.06	.04	.04	.06	.25	.06		0	0	14	0
6	0	.04	.04	.04	.06	.14	.07		0	0	76	0
7	0	.04	.04	.04	.05	.12	.07		0	0	56	0
8	.06	.04	.04	.04	.05	.10	.04		0	0	13	0
9	.07	.03	.04	.18	.04	.07	0		0	0	143	0
10	.03	.04	.02	.37	.04	.06	.01		0	0	55	0
11	.02	.04	.03	.19	.04	.04	.01		0	0	121	0
12	.01	.01	.03	.14	.04	.04	0		0	0	37	0
13	.01	.03	.04	.14	.04	.04	0		0	0	3.9	0
14	.01	.02	.04	.14	.04	.04	0		0	0	2.0	0
15	.25	.03	.04	.14	.03	.04	0		0	0	186	0
16	.42	.04	.04	.14	.02	.04	.01		0	0	19	0
17	.16	.04	.04	.14	.02	.06	.08		0	0	5.6	0
18	.10	.03	.03	.13	.03	.04	.06		0	0	100	0
19	.07	.03	.04	.13	.02	.06	.04		0	0	13	0
20	.04	.02	.04	.12	.02	.07	.01		0	0	3.7	0
21	.03	.01	.04	.12	.03	.07	0		0	0	2.0	0
22	.03	.01	.04	.12	.03	.08	0		0	0	1.1	0
23	.01	.01	.04	.11	.03	.08	0		0	0	2.9	0
24	.02	.03	.04	.11	.02	.07	0		0	0	5.4	.71
25	.01	.04	.06	.10	.02	.06	0		0	4.2	3.5	.01
26	.01	.02	.06	.10	.01	.04	0		0	.19	2.1	0
27	.06	.02	.07	.10	.01	.03	0		0	25	1.9	0
28	.07	.02	.07	.09	.01	.02	0		0	66	.74	0
29	.04	.04	.06	.09	-----	.02	0		0	54	.32	5.7
30	.04	.02	.06	.08	-----	.01	0		.24	19	.19	3.0
31	.04	-----	.06	.08	-----	.03	-----		-----	8.0	.10	-----
TOTAL	1.62	.96	1.31	3.44	1.04	3.24	.50	0	.24	176.65	1,186.35	9.45
MEAN	.052	.032	.042	.11	.037	.10	.017	0	.008	5.70	38.3	.32
MAX	.42	.06	.07	.37	.08	1.1	.08	0	.24	66	291	5.7
MIN	0	.01	.02	.04	.01	.01	0	0	0	0	.10	0
AC-FT	3.2	1.9	2.6	6.8	2.1	6.4	1.0	0	.5	350	2,350	19

CAL YR 1970 TOTAL 1,303.23 MEAN 3.57 MAX 300 MIN 0 AC-FT 2,580
WTR YR 1971 TOTAL 1,384.80 MEAN 3.79 MAX 291 MIN 0 AC-FT 2,750

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE
8- 1	0130	4.90	1,900

07222500 Conchas River at Variadero, N. Mex.

LOCATION.--Lat 35°24'10", long 104°26'35", in NE 1/4 sec. 36, T.14 N., R.23 E., San Miguel County, on left bank 1.5 miles northeast of Variadero, and 14 miles west of Conchas Dam.

DRAINAGE AREA.--523 sq mi, of which 130 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1936 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,430 ft (from topographic map). Prior to Mar. 30, 1942, at site 1.5 miles upstream at different datum. Mar. 30, 1942 to May 18, 1950, at present site at datum 0.5 ft higher.

AVERAGE DISCHARGE.--35 calendar years, 16.7 cfs (12,100 acre-ft per year); 20 calendar years (1952-71), 9.67 cfs (7,010 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,900 cfs Aug. 1 (gage height, 4.90 ft), from rating curve extended above 760 cfs as explained below; no flow many days.

Period of record: Maximum discharge, 44,000 cfs Sept. 1, 1942 (gage height, 19.96 ft, present datum), from rating curve extended above 760 cfs on basis of slope-area measurements at gage heights 10.5 and 19.96 ft (present datum); no flow many days.

REMARKS.--Records fair. Diversions for irrigation of about 300 acres above station.

REVISIONS (WATER YEARS).--WSP 1281: 1937-39, 1941-47.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.07	.08	.02	0		0	.13	291	.03	14	.99	.19
2	.07	.07	.15	0		0	.13	19	0	3.0	.74	.82
3	.04	.07	1.1	0		0		5.6	0	1.1	.54	.32
4	.04	.06	.25	.04		0	0	2.3	0	.60	.42	.22
5	.04	.06	.25	.06		0	0	14	0	.28	.32	.25
6	.04	.06	.14	.07		0	0	76	0	.12	.22	.19
7	.04	.05	.12	.07		0	0	56	0	.04	.22	.19
8	.04	.05	.10	.04		0	0	13	0	.01	.19	.19
9	.18	.04	.07	0		0	0	143	0	.01	.16	.16
10	.37	.04	.06	.01		0	0	55	0	0	.14	.14
11	.19	.04	.04	.01		0	0	121	0	0	.12	.14
12	.14	.04	.04	0		0	0	37	0	0	.10	.10
13	.14	.04	.04	0		0	0	3.9	0	0	.07	.08
14	.14	.04	.04	0		0	0	2.0	0	0	.04	.10
15	.14	.03	.04	0		0	0	186	0	0	.08	.12
16	.14	.02	.04	.01		0	0	19	0	0	.60	.08
17	.14	.02	.06	.08		0	0	5.6	0	0	.82	.08
18	.13	.03	.04	.06		0	0	100	0	0	.28	.10
19	.13	.02	.06	.04		0	0	13	0	0	.19	.08
20	.12	.02	.07	.01		0	0	3.7	0	0	.12	.08
21	.12	.03	.07	0		0	0	2.0	0	0	.10	.08
22	.12	.03	.08	0		0	0	1.1	0	.01	.12	.08
23	.11	.03	.08	0		0	0	2.9	0	.01	.10	.08
24	.11	.02	.07	0		0	0	5.4	.71	.01	.10	.07
25	.10	.02	.06	0		0	4.2	3.5	.01	1.3	.08	.08
26	.10	.01	.04	0		0	.19	2.1	0	32	.07	.08
27	.10	.01	.03	0		0	25	1.9	0	20	.04	.08
28	.09	.01	.02	0		0	66	.74	0	6.1	.04	.08
29	.09	-----	.02	0		0	54	.32	5.7	3.7	.04	.37
30	.08	-----	.01	0		.24	19	.19	3.0	2.6	.04	.32
31	.08	-----	.03	-----		-----	8.0	.10	-----	1.5	-----	.16
TOTAL	3.44	1.04	3.24	.50	0	.24	176.65	1,186.35	9.45	86.39	7.09	5.11
MEAN	.11	.037	.10	.017	0	.008	5.70	38.3	.32	2.79	.24	.16
MAX	.37	.08	1.1	.08	0	.24	66	291	5.7	32	.99	.82
MIN	.04	.01	.01	0	0	0	0	.10	0	0	.04	.07
AC-FT	6.8	2.1	6.4	1.0	0	.5	350	2,350	19	171	14	10

CAL YR 1971 TOTAL 1,479.50 MEAN 4.05 MAX 291 MIN 0 AC-FT 2,930

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE TIME G. H. DISCHARGE
8- 1 0130 4.90 1,900

07223000 Bell Ranch Canal below Conchas Dam, N. Mex.

LOCATION.--Lat 35°24'10", long 104°11'07", San Miguel County, in Pablo Montoya Grant, on left bank, 1,270 ft downstream from Conchas Dam and 23.5 miles north of Newkirk.

PERIOD OF RECORD.--October 1942 to current year. Prior to October 1965, published as "near Conchas Dam."

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 4,150 ft (from headgate elevations).

EXTREMES.--Period of record: Maximum daily discharge, 21 cfs July 10-13, Sept. 7-10, 1948, June 27, Aug. 7, 1951; no flow many days each year.

REMARKS.--Records good. Canal diverts from Conchas Lake (see sta 07223500) for irrigation of about 700 acres on Bell Ranch.

MONTHLY DIVERSION, IN CUBIC FEET PER SECOND, PERIOD OCTOBER 1970 TO DECEMBER 1971

Month	Maximum	Minimum	Mean	Diversion in acre-feet
October.....	6.5	0	1.26	78
November.....	0	0	0	0
December.....	0	0	0	0
CAL YR 1970.....	13	0	3.16	2,290
January.....	0	0	0	0
February.....	0	0	0	0
March.....	0	0	0	0
April.....	8.0	0	4.90	292
May.....	8.4	0	3.48	214
June.....	12	7.7	10.2	604
July.....	7.8	0	3.75	231
August.....	10	0	4.39	270
September.....	8.7	1.6	6.42	382
WTR YR 1971.....	12	0	2.86	2,070
October.....	5.4	0	.23	14
November.....	.44	0	.015	.9
December.....	0	0	0	0
CAL YR 1971.....	12	0	2.77	2,010

07223300 Conchas Canal below Conchas Dam, N. Mex.

LOCATION.--Lat 35°22'35", long 104°10'03", San Miguel County, in Pablo Montoya Grant, on left bank at upstream end of tunnel transition section, 1.0 mile downstream from headgates in Conchas Dam, and 21.5 miles north of Newkirk.

PERIOD OF RECORD.--September 1945 to June 1949, April 1954 to June 1955, September 1961 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,157.1 ft above mean sea level (from Bureau of Reclamation elevation of concrete structure). Prior to Nov. 19, 1948, at site three-quarters of a mile upstream at different datum.

EXTREMES.--Period of record: Maximum daily discharge, 751 cfs Aug. 31, 1961; no flow many days each year.

REMARKS.--Records good. No diversion or wasteway between canal headworks and gage. Water is diverted from Conchas Lake for irrigation of about 35,000 acres on Tucumcari Project (1966 conditions). Water quality records for the current year are published in Part 2 of this report.

MONTHLY DIVERSION, IN CUBIC FEET PER SECOND, PERIOD OCTOBER 1970 TO DECEMBER 1971

Month	Maximum	Minimum	Mean	Diversion in acre-feet
October.....	156	0.12	53.8	3,310
November.....	.19	0	.14	8.4
December.....	249	0	75.8	4,660
CAL YR 1970.....	444	0	123	89,120
January.....	.49	0	.28	17
February.....	.19	0	.045	2.5
March.....	.19	0	.046	2.8
April.....	431	111	330	19,670
May.....	335	102	276	16,970
June.....	244	116	168	9,980
July.....	533	70	279	17,140
August.....	307	48	162	9,960
September.....	434	53	293	17,410
WTR YR 1971.....	533	0	137	99,120
October.....	233	.37	66.5	4,090
November.....	.79	.12	.36	21
December.....	.63	0	.28	17
CAL YR 1971.....	533	0	132	95,280

07223500 Conchas Lake at Conchas Dam, N. Mex.
(Formerly published as Conchas Reservoir at Conchas Dam)

LOCATION.--Lat 35°24'10", long 104°11'25", San Miguel County, in Pablo Montoya Grant, stilling well within concrete portion of Conchas Dam on Canadian River, and about 24 miles north of Newkirk.

DRAINAGE AREA.--7,409 sq mi, of which 433 sq mi is probably noncontributing.

PERIOD OF RECORD.--December 1938 to September 1965, (monthly contents only), October 1965 to current year. Prior to October 1965, published as "near Conchas Dam."

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

EXTREMES.--Current year: Maximum contents, 251,400 acre-ft Oct. 1 (elevation, 4,189.28 ft); minimum, 154,900 acre-ft Sept. 30 (elevation, 4,176.40 ft).
Period of record: Maximum contents, 479,600 acre-ft Apr. 24, 1942 (elevation, 4,208.41 ft); minimum after initial filling, 82,840 acre-ft Sept. 12, 13, 1964 (elevation, 4,156.05 ft); minimum elevation, 4,155.80 ft Sept. 24, 1954.

REMARKS.--Reservoir is formed by dam consisting of concrete main section and earthfill wings, completed Sept. 15, 1939; storage began Dec. 29, 1938. Capacity, 330,100 (revised) acre-ft between elevations 4,060.0 and 4,201.0 ft (crest of 300-ft ungated service spillway); inactive storage, 70,490 (revised) acre-ft at elevation 4,155 ft. Reservoir usually not drawn below elevation, 4,157.35 ft (sill of irrigation outlet), capacity 77,790 (revised) acre-ft, except for minor sluicing and operation of small powerplant; during 1954-55, 1964 there was some pumping into Conchas Canal. Capacity of 198,800 (revised) acre-ft between elevations 4,201.0 (crest of 300-ft ungated service spillway) and 4,218.0 ft (crest of 3,000-ft ungated emergency spillway) acts as detention storage in the control of floods. Figures given herein represent total contents. Reservoir is used for irrigation, flood control, and recreation. Diversion above station for irrigation of about 57,000 acres. Direct diversions through Conchas Dam to Bell Ranch Canal and Conchas Canal (see sta 07223000, 07223300) irrigate about 36,000 acres near Tucumcari, and on Bell Ranch.

COOPERATION.--Records furnished by Corps of Engineers.

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

Oct. 1 to Apr. 30 (Based on survey by Corps of Engineers in 1963)		May 1 to Sept. 30 (Based on survey by Corps of Engineers in 1970)	
4,184	214,200	4,174	143,200
4,186	227,700	4,176	152,900
4,188	241,900	4,178	163,200
4,190	256,900	4,180	173,900
		4,182	185,200
		4,184	197,100
		4,186	209,600

CONTENTS, IN ACRE-Feet, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	251,400	246,600	245,500	239,500	241,300	241,300	239,500	197,900	180,300	168,100	161,400	172,400
2	251,200	246,600	245,500	239,600	241,300	241,300	239,000	197,000	180,200	169,200	161,500	171,800
3	251,000	246,600	245,500	239,800	241,200	241,400	238,300	196,400	180,000	169,400	161,600	171,100
4	250,700	246,600	245,600	239,800	241,300	241,400	237,700	195,500	179,600	169,400	161,700	170,500
5	250,300	246,600	245,400	239,800	241,300	241,400	237,100	194,800	179,300	169,400	162,200	169,800
6	249,900	246,600	245,400	239,800	241,300	241,300	236,300	193,900	178,900	169,300	162,200	169,200
7	249,500	246,600	245,100	239,800	241,400	241,300	235,400	193,300	178,600	168,800	163,200	168,400
8	249,100	246,500	244,600	239,800	241,400	241,300	234,500	192,700	178,100	168,400	164,700	167,500
9	248,700	246,500	244,000	239,800	241,400	241,200	233,500	192,100	177,800	168,000	166,800	166,800
10	248,300	246,500	243,500	239,900	241,500	241,200	232,600	191,300	177,200	167,400	167,700	165,800
11	248,000	246,500	243,000	239,900	241,400	241,200	231,600	190,700	176,500	166,700	168,900	164,900
12	247,600	246,400	242,400	239,900	241,400	241,200	230,500	190,100	176,000	165,800	169,500	164,000
13	247,200	246,300	241,900	239,900	241,500	241,200	229,500	189,400	175,400	164,900	169,700	163,200
14	247,100	246,300	241,400	239,900	241,500	241,100	228,500	188,800	174,700	163,800	169,900	162,200
15	247,500	246,200	240,900	240,000	241,500	241,100	227,700	188,100	174,200	162,700	171,200	161,300
16	247,500	246,200	240,500	240,000	241,500	241,000	226,900	187,500	173,700	161,600	171,400	160,500
17	247,600	246,200	240,000	240,000	241,600	240,900	226,300	186,600	173,100	160,500	171,600	159,700
18	247,600	246,100	240,000	240,000	241,600	240,800	225,600	186,000	172,800	159,300	172,000	159,100
19	247,600	246,100	239,900	240,100	241,600	240,800	224,700	185,300	172,400	158,400	172,000	158,400
20	247,700	246,100	239,900	240,300	241,600	240,700	223,700	184,500	172,000	157,600	171,800	157,900
21	247,600	245,900	239,800	240,300	241,800	240,600	222,900	183,800	171,600	156,800	171,600	157,100
22	247,500	245,800	239,800	240,500	241,800	240,600	222,100	182,900	171,400	156,100	171,300	156,600
23	247,500	245,800	239,800	240,500	241,700	240,500	221,400	182,100	171,000	155,800	171,300	156,600
24	247,500	245,800	239,700	240,600	241,600	240,500	220,700	181,400	170,600	156,100	171,500	156,400
25	247,400	245,800	239,600	240,800	241,600	240,400	219,900	180,900	170,100	156,300	172,700	156,200
26	246,700	245,800	239,600	240,800	241,500	240,300	219,100	180,200	169,700	156,200	173,200	156,000
27	246,700	245,700	239,500	240,900	241,400	240,300	218,300	179,600	169,100	157,400	173,400	155,700
28	246,700	245,600	239,500	241,000	241,400	240,200	217,300	181,400	168,500	158,300	173,100	155,600
29	246,700	245,600	239,500	241,100	-----	240,200	216,400	181,300	168,100	158,700	172,700	155,300
30	246,700	245,600	239,500	241,100	-----	240,100	215,700	180,900	167,800	160,200	172,400	154,900
31	246,700	-----	239,500	241,200	-----	240,000	-----	180,600	-----	160,600	172,600	-----
MAX	251,400	246,600	245,500	241,200	241,800	241,400	239,500	197,900	180,300	169,400	173,400	172,400
MIN	246,700	245,600	239,500	239,500	241,200	240,000	215,700	179,600	167,800	155,800	161,400	154,900
(+)	4,188.65	4,188.50	4,187.66	4,187.90	4,187.92	4,187.73	4,184.23	4,181.19	4,178.88	4,177.51	4,179.77	4,176.40
(#)	-4,900	-1,100	-6,100	+1,700	+200	-1,400	-24,300	-17,900	-12,800	-7,200	+12,000	-17,700

CAL YR 1970..... # -73,500
WTR YR 1971..... # -77,200

+ Elevation, in feet, at end of month.

Change in contents, in acre-ft.

NOTE.--Change in contents for May and for water year computed on basis of revised capacity table effective May 1, 1971.

07223500 Conchas Lake at Conchas Dam, N. Mex.

LOCATION.--Lat 35°24'10", long 104°11'25", San Miguel County, in Pablo Montoya Grant, stilling well within concrete portion of Conchas Dam on Canadian River, and about 24 miles north of Newkirk.

DRAINAGE AREA.--7,409 sq mi, of which 433 sq mi is probably noncontributing.

PERIOD OF RECORD.--December 1938 to September 1965, (monthly contents only), October 1965 to current year. Prior to October 1965, published as "near Conchas Dam." Prior to October 1970, published as "Conchas Reservoir."

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

EXTREMES.--Current year: Maximum contents, 241,800 acre-ft Feb. 21-22 (elevation, 4,187.98 ft); minimum, 150,100 acre-ft Oct. 21-24; minimum elevation, 4,175.42 Oct. 23-24.

Period of record: Maximum contents, 479,600 acre-ft Apr. 24, 1942 (elevation, 4,208.41 ft); minimum after initial filling, 82,840 acre-ft Sept. 12, 13, 1964 (elevation, 4,156.05 ft); minimum elevation, 4,155.80 ft Sept. 24, 1954.

REMARKS.--Reservoir is formed by dam consisting of concrete main section and earthfill wings, completed Sept. 15, 1939; storage began Dec. 29, 1938. Capacity, 330,100 (revised) acre-ft between elevations 4,060.0 and 4,201.0 ft (crest of 300-ft ungated service spillway); inactive storage, 70,490 (revised) acre-ft at elevation 4,155 ft. Reservoir usually not drawn below elevation, 4,157.35 ft (sill of irrigation outlet), capacity 77,790 (revised) acre-ft, except for minor sluicing and operation of small powerplant; during 1954-55, 1964 there was some pumping into Conchas Canal. Capacity of 198,800 (revised) acre-ft between elevations 4,201.0 (crest of 300-ft ungated service spillway) and 4,218.0 ft (crest of 3,000-ft ungated emergency spillway) acts as detention storage in the control of floods. Figures given herein represent total contents. Reservoir is used for irrigation, flood control, and recreation. Diversion above station for irrigation of about 57,000 acres. Direct diversions through Conchas Dam to Bell Ranch Canal and Conchas Canal (see sta 07223000, 07223300) irrigate about 36,000 acres near Tucumcari, and on Bell Ranch.

COOPERATION.--Records furnished by Corps of Engineers.

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

Jan. 1 to Apr. 30
(Based on survey by Corps of Engineers in 1963)

May 1 to Dec. 31
(Based on survey by Corps of Engineers in 1970)

4,184	214,200	4,174	143,200	4,182	185,200
4,186	227,700	4,176	152,900	4,184	197,100
4,188	241,900	4,178	163,200	4,186	209,600
4,190	256,900	4,180	173,900		

CONTENTS, IN ACRE-FEET, AT 2400, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	239,500	241,300	241,300	239,500	197,900	180,300	168,100	161,400	172,400	154,700	150,400	152,900
2	239,600	241,300	241,300	239,000	197,000	180,200	169,200	161,500	171,800	154,500	150,400	153,100
3	239,800	241,200	241,400	238,300	196,400	180,000	169,400	161,600	171,100	154,300	150,400	153,200
4	239,800	241,300	241,400	237,700	195,500	179,600	169,400	161,700	170,500	154,100	150,500	153,300
5	239,800	241,300	241,400	237,100	194,800	179,300	169,400	162,200	169,800	153,800	150,500	153,400
6	239,800	241,300	241,300	236,300	193,900	178,900	169,300	162,200	169,200	153,600	150,500	153,400
7	239,800	241,400	241,300	235,400	193,300	178,600	168,800	163,200	168,400	153,300	150,600	153,400
8	239,800	241,400	241,300	234,500	192,700	178,100	168,400	164,700	167,500	153,000	150,600	153,500
9	239,800	241,400	241,200	233,500	192,100	177,800	168,000	166,800	166,800	152,800	150,700	153,600
10	239,900	241,500	241,200	232,600	191,300	177,200	167,400	167,700	165,800	152,500	150,700	153,700
11	239,900	241,400	241,200	231,600	190,700	176,500	166,700	168,900	164,900	152,100	150,800	153,700
12	239,900	241,400	241,200	230,500	190,100	176,000	165,800	169,500	164,000	151,600	150,800	153,700
13	239,900	241,500	241,200	229,500	189,400	175,400	164,900	169,700	163,200	151,100	150,700	153,800
14	239,900	241,500	241,100	228,500	188,800	174,700	163,800	169,900	162,200	150,700	150,700	153,900
15	240,000	241,500	241,100	227,700	188,100	174,200	162,700	171,200	161,300	150,500	150,900	153,900
16	240,000	241,500	241,000	226,900	187,500	173,700	161,600	171,400	160,500	150,500	151,300	154,000
17	240,000	241,600	240,900	226,300	186,600	173,100	160,500	171,600	159,700	150,400	151,400	154,100
18	240,000	241,600	240,800	225,600	186,000	172,800	159,300	172,000	159,100	150,300	151,400	154,100
19	240,100	241,600	240,800	224,700	185,300	172,400	158,400	172,000	158,400	150,200	151,400	154,200
20	240,300	241,600	240,700	223,700	184,500	172,000	157,600	171,800	157,900	150,200	151,500	154,200
21	240,300	241,800	240,600	222,900	183,800	171,600	156,800	171,600	157,100	150,100	151,600	154,300
22	240,500	241,800	240,600	222,100	182,900	171,400	156,100	171,300	156,600	150,100	151,800	154,400
23	240,500	241,700	240,500	221,400	182,100	171,000	155,800	171,300	156,600	150,100	151,900	154,400
24	240,600	241,600	240,500	220,700	181,400	170,600	156,100	171,500	156,400	150,100	152,100	154,400
25	240,800	241,600	240,400	219,900	180,900	170,100	156,300	172,700	156,200	150,200	152,200	154,500
26	240,800	241,500	240,300	219,100	180,200	169,700	156,200	173,200	156,000	150,400	152,200	154,600
27	240,900	241,400	240,300	218,300	179,600	169,100	157,400	173,400	155,700	150,500	152,300	154,700
28	241,000	241,400	240,200	217,300	181,400	168,500	158,300	173,100	155,600	150,500	152,400	154,800
29	241,100	-----	240,200	216,400	181,300	168,100	158,700	172,700	155,300	150,500	152,500	155,100
30	241,100	-----	240,100	215,700	180,900	167,800	160,200	172,400	154,900	150,500	152,500	155,300
31	241,200	-----	240,000	-----	180,600	-----	160,600	172,600	-----	150,400	-----	155,400
MAX	241,200	241,800	241,400	239,500	197,900	180,300	169,400	173,400	172,400	154,700	152,500	155,400
MIN	239,500	241,200	240,000	215,700	179,600	167,800	155,800	161,400	154,900	150,100	150,400	152,900
(+)	4,187.90	4,187.92	4,187.73	4,184.23	4,181.19	4,178.88	4,177.51	4,179.77	4,176.40	4,175.49	4,175.91	4,176.49
(#)	+1,700	+200	-1,400	-24,300	-17,900	-12,800	-17,200	+12,000	-17,700	-4,500	+2,100	+2,900

CAL YR 1971.....# -65,200

+ Elevation, in feet, at end of month.

Change in contents, in acre-ft.

NOTE.--Change in contents for May and for calendar year computed on basis of revised capacity table effective May 1, 1971.

07224500 Canadian River below Conchas Dam, N. Mex.

LOCATION.--Lat 35°24'32", long 104°10'10", San Miguel County, in Pablo Montoya Grant, on right bank 2.8 miles downstream from Conchas Dam, and 24 miles north of Newkirk.

DRAINAGE AREA.--7,417 sq mi, of which 433 sq mi is probably noncontributing.

PERIOD OF RECORD.--May 1936 to December 1938, January 1942 to current year. Water-year estimate for 1942 published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 4,021.90 ft above mean sea level. Prior to Dec. 13, 1941, at site 0.7 mile downstream at datum 6.2 ft higher.

AVERAGE DISCHARGE.--30 years (1941-71), 74.8 cfs (54,190 acre-ft per year); 20 calendar years (1951-70), 16.2 cfs (11,740 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 83 cfs Apr. 14 (gage height, 5.99 ft); minimum daily, 2.3 cfs Sept. 11.
Period of record: Maximum discharge, 73,000 cfs June 3, 1937 (may have been affected by construction work on Conchas Dam); maximum gage height, 20.34 ft May 30, 1938, present datum (backwater from temporary construction dam); no flow at times.
Flood of Sept. 30, 1904 was estimated as 279,000 cfs by Corps of Engineers.

REMARKS.--Records poor. Flow regulated by Conchas Lake (see preceding page). Diversions above station for irrigation of about 90,000 acres, 36,000 of which are below station. Bell Ranch Canal (see sta 07223000) diverts directly from Conchas Dam and flumes from right to left bank just above river gage for irrigation of about 700 acres on Bell Ranch. Conchas Canal (see sta 07223300) diverts directly from Conchas Dam and bypasses gage for irrigation of about 35,000 acres around Tucumari.

REVISIONS.--WSP 1177: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	3.0	2.8	3.2	3.4	3.3	12	3.6	4.1	6.2	4.5	4.1
2	4.3	8.5	2.8	3.3	3.4	3.3	15	3.6	4.3	6.2	3.9	4.1
3	4.6	6.2	3.0	3.3	3.4	3.2	7.4	3.6	4.1	5.0	3.8	3.9
4	5.4	4.1	3.0	3.5	3.4	3.2	7.0	3.5	3.9	4.6	3.8	3.8
5	5.0	3.6	3.0	3.6	3.4	3.2	7.0	3.3	3.8	4.1	3.9	3.6
6	4.6	3.2	3.2	3.6	3.4	3.2	5.8	3.5	3.9	4.1	3.8	3.5
7	4.5	3.6	3.0	3.6	3.4	3.2	16	3.6	3.6	3.9	4.3	3.5
8	4.5	4.3	3.0	3.8	3.4	3.2	9.2	4.1	3.9	3.8	3.9	3.5
9	4.5	4.1	3.2	3.9	3.4	3.2	6.2	4.3	4.1	4.1	3.8	3.3
10	4.3	4.1	3.2	4.6	3.4	3.2	5.0	3.8	4.1	4.1	3.6	2.8
11	3.8	4.1	2.8	4.1	3.4	3.2	3.6	3.6	4.1	3.9	3.5	2.3
12	3.9	4.1	3.0	3.9	3.3	3.2	3.3	3.8	4.1	3.6	3.6	2.8
13	3.8	3.8	3.0	3.6	3.3	3.2	3.3	3.8	4.3	3.5	3.5	3.6
14	3.9	3.8	3.0	3.6	3.3	3.2	26	3.6	4.3	3.3	3.3	3.6
15	4.1	3.8	3.2	3.5	3.3	3.2	13	3.6	4.3	3.5	3.3	3.5
16	3.9	3.6	3.2	3.5	3.3	3.2	7.0	3.6	4.3	3.3	3.5	3.5
17	3.8	11	3.3	3.5	3.3	3.2	5.0	3.5	4.3	3.5	4.3	3.5
18	3.5	6.2	3.3	3.5	3.3	3.2	4.3	3.3	4.6	3.5	4.3	3.8
19	3.2	7.8	6.6	3.5	3.3	3.2	3.9	3.6	4.6	3.9	4.6	3.8
20	3.7	6.2	5.4	3.5	3.3	3.2	3.6	3.8	4.5	8.2	4.6	3.6
21	3.0	3.2	3.5	3.5	3.3	3.0	3.5	3.9	4.6	5.0	4.6	3.3
22	2.8	2.8	3.5	3.5	3.3	3.0	3.5	3.8	4.6	4.3	4.6	3.2
23	2.8	2.8	3.3	3.5	3.3	3.0	3.5	3.8	4.6	3.8	5.0	3.3
24	3.5	3.2	3.3	3.5	3.3	3.2	3.8	3.6	4.6	3.8	5.0	4.3
25	3.5	3.2	3.2	3.5	3.3	3.2	3.6	3.6	4.5	3.9	4.8	3.8
26	3.2	3.0	3.2	3.5	3.3	3.2	3.6	3.9	4.6	3.9	4.8	3.5
27	3.3	3.2	3.2	3.5	3.3	3.0	3.3	3.9	4.8	4.5	4.8	3.3
28	3.3	3.0	3.2	3.5	3.3	2.8	3.5	3.8	4.8	6.2	4.8	3.6
29	3.2	2.8	3.2	3.5	-----	3.0	3.5	3.8	4.5	6.0	4.8	3.6
30	3.0	2.8	3.3	3.5	-----	5.4	3.6	3.9	4.8	4.5	4.6	3.8
31	3.2	-----	3.3	3.5	-----	7.0	-----	3.9	-----	4.5	4.5	-----
TOTAL	117.5	129.1	103.2	111.1	93.5	104.0	199.0	115.0	129.6	136.7	130.1	105.8
MEAN	3.79	4.30	3.33	3.58	3.34	3.35	6.63	3.71	4.32	4.41	4.20	3.53
MAX	5.4	11	6.6	4.6	3.4	7.0	26	4.3	4.8	8.2	5.0	4.3
MIN	2.8	2.8	2.8	3.2	3.3	2.8	3.3	3.3	3.6	3.3	3.3	2.3
AC-FT	233	256	205	220	185	206	395	228	257	271	258	210

CAL YR 1970 TOTAL 1,252.1 MEAN 3.43 MAX 114 MIN 1.5 AC-FT 2,480
WTR YR 1971 TOTAL 1,474.6 MEAN 4.04 MAX 26 MIN 2.3 AC-FT 2,920

07224500 Canadian River below Conchas Dam, N. Mex.

LOCATION.--Lat 35°24'32", long 104°10'10", San Miguel County, in Pablo Montoya Grant, on right bank 2.8 miles downstream from Conchas Dam, and 24 miles north of Newkirk.

DRAINAGE AREA.--7,417 sq mi, of which 433 sq mi is probably noncontributing.

PERIOD OF RECORD.--May 1936 to December 1938, January 1942 to current year. Water-year estimate for 1942 published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 4,021.90 ft above mean sea level. Prior to Dec. 13, 1941, at site 0.7 mile downstream at datum 6.2 ft higher.

AVERAGE DISCHARGE.--30 calendar years (1942-71), 68.7 cfs (49,770 acre-ft per year); 20 calendar years (1952-71), 16.0 cfs (11,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 83 cfs Apr. 14 (gage height, 5.99 ft); minimum daily, 2.3 cfs Sept. 11.
Period of record: Maximum discharge, 73,000 cfs June 3, 1937 (may have been affected by construction work on Conchas Dam); maximum gage height, 20.34 ft May 30, 1936, present datum (backwater from temporary construction dam); no flow at times.
Flood of Sept. 30, 1904 was estimated as 279,000 cfs by Corps of Engineers.

REMARKS.--Records poor. Flow regulated by Conchas Lake (see sta 07223500). Diversions above station for irrigation of about 90,000 acres, 36,000 of which are below station. Bell Ranch Canal (see sta 07223000) diverts directly from Conchas Dam and flumes from right to left bank just above river gage for irrigation of about 700 acres on Bell Ranch. Conchas Canal (see sta 07223300) diverts directly from Conchas Dam and bypasses gage for irrigation of about 35,000 acres around Tucumari.

REVISIONS.--WSP 1177: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.2	3.4	3.3	12	3.6	4.1	6.2	4.5	4.1	3.8	4.5	3.5
2	3.3	3.4	3.3	15	3.6	4.3	6.2	3.9	4.1	3.5	4.5	3.6
3	3.3	3.4	3.2	7.4	3.6	4.1	5.0	3.8	3.9	3.6	4.5	3.5
4	3.5	3.4	3.2	7.0	3.5	3.9	4.6	3.8	3.8	3.5	4.6	3.5
5	3.6	3.4	3.2	7.0	3.3	3.8	4.1	3.9	3.6	3.3	4.8	3.5
6	3.6	3.4	3.2	5.8	3.5	3.9	4.1	3.8	3.5	3.2	4.6	3.3
7	3.6	3.4	3.2	16	3.6	3.6	3.9	4.3	3.5	3.2	4.6	3.3
8	3.8	3.4	3.2	9.2	4.1	3.9	3.8	3.9	3.5	3.2	4.5	3.0
9	3.9	3.4	3.2	6.2	4.3	4.1	4.1	3.8	3.3	3.5	4.3	3.0
10	4.6	3.4	3.2	5.0	3.8	4.1	4.1	3.6	2.8	3.8	4.1	3.0
11	4.1	3.4	3.2	3.6	3.6	4.1	3.9	3.5	2.3	3.6	3.9	3.2
12	3.9	3.3	3.2	3.3	3.8	4.1	3.6	3.6	2.8	4.1	3.9	3.2
13	3.6	3.3	3.2	3.3	3.8	4.3	3.5	3.5	3.6	3.9	3.9	3.2
14	3.6	3.3	3.2	26	3.6	4.3	3.3	3.3	3.6	3.8	3.9	3.3
15	3.5	3.3	3.2	13	3.6	4.3	3.5	3.3	3.5	4.3	3.8	3.5
16	3.5	3.3	3.2	7.0	3.6	4.3	3.3	3.5	3.5	4.5	4.3	3.5
17	3.5	3.3	3.2	5.0	3.5	4.3	3.5	4.3	3.5	4.5	4.6	3.5
18	3.5	3.3	3.2	4.3	3.3	4.6	3.5	4.3	3.8	4.5	4.5	3.5
19	3.5	3.3	3.2	3.9	3.6	4.6	3.9	4.6	3.8	4.5	3.9	3.5
20	3.5	3.3	3.2	3.6	3.8	4.5	8.2	4.6	3.6	4.5	3.9	3.5
21	3.5	3.3	3.0	3.5	3.9	4.6	5.0	4.6	3.3	4.5	3.9	3.4
22	3.5	3.3	3.0	3.5	3.8	4.6	4.3	4.6	3.2	4.5	3.8	3.4
23	3.5	3.3	3.0	3.5	3.8	4.6	3.8	5.0	3.3	4.6	3.6	3.4
24	3.5	3.3	3.2	3.8	3.6	4.6	3.8	5.0	4.3	4.5	3.6	3.4
25	3.5	3.3	3.2	3.6	3.6	4.5	3.9	4.8	3.8	4.5	3.6	3.4
26	3.5	3.3	3.2	3.6	3.9	4.6	3.9	4.8	3.5	4.8	3.5	3.4
27	3.5	3.3	3.0	3.3	3.9	4.8	4.5	4.8	3.3	4.6	3.6	3.4
28	3.5	3.3	2.8	3.5	3.8	4.8	6.2	4.8	3.6	4.5	3.6	3.4
29	3.5	-----	3.0	3.5	3.8	4.5	6.0	4.8	3.6	4.8	3.6	3.4
30	3.5	-----	5.4	3.6	3.9	4.8	4.5	4.6	3.8	5.0	3.5	3.4
31	3.5	-----	7.0	-----	3.9	-----	4.5	4.5	-----	4.8	-----	3.4
TOTAL	111.1	93.5	104.0	199.0	115.0	129.6	136.7	130.1	105.8	127.9	121.9	104.5
MEAN	3.58	3.34	3.35	6.63	3.71	4.32	4.41	4.20	3.53	4.13	4.06	3.37
MAX	4.6	3.4	7.0	26	4.3	4.8	8.2	5.0	4.3	5.0	4.8	3.6
MIN	3.2	3.3	2.8	3.3	3.3	3.6	3.3	3.3	2.3	3.2	3.5	3.0
AC-FT	220	185	206	395	228	257	271	258	210	254	242	207

CAL YR 1971 TOTAL 1,479.1 MEAN 4.05 MAX 26 MIN 2.3 AC-FT 2,930

07226500 Ute Creek near Logan, N. Mex.

LOCATION.--Lat 35°26'18", long 103°31'31", in NW¼SE¼ sec.15, T.14 N., R.32 E., Harding County, on right bank 1.9 miles downstream from Alamosa Creek, 4.5 miles upstream from State Road 155, 4.7 miles upstream from high-water line of Ute Reservoir, 8.2 miles northwest of Logan, and 10.2 miles upstream from mouth.

DRAINAGE AREA.--2,060 sq mi, of which 617 is probably noncontributing.

PERIOD OF RECORD.--January 1912 to May 1914 (gage heights and discharge measurements only), January 1942 to current year. Records of discharge for August 1904 to June 1906, April 1909 to December 1911, published in WSP 307, are unreliable and should not be used.

GAGE.--Water-stage recorder. Altitude of gage is 3,815 ft (from topographic map). Prior to May 24, 1914, at site 4.2 miles downstream at different datum. Jan. 13, 1942 to Dec. 15, 1955, at site 4.8 miles downstream at datum of 3,758.50 ft above mean sea level. Dec. 16, 1955 to Sept. 30, 1964, at site 4.8 miles downstream at datum of 3,757.50 ft above mean sea level.

AVERAGE DISCHARGE.--29 years, 26.9 cfs (19,490 acre-ft per year); 20 calendar years (1951-70), 25.4 cfs (18,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,620 cfs May 27 (gage height, 5.25 ft); no flow most of time. 1942-71: Maximum discharge, 24,500 cfs May 28, 1946, July 12, 1951 (gage height, 8.4 ft, site and datum then in use), from rating curve extended above 7,700 cfs on basis of slope-area measurements at gage heights 5.2 and 7.2 ft; no flow most of time. Flood of May 1, 1914, reached a stage of 22.95 ft, site and datum then in use. Another major flood reached a stage of 16.0 ft (1942 datum) sometime in 1941, from information furnished by Bureau of Reclamation (discharge, about 70,000 cfs).

REMARKS.--Records poor. Diversions for irrigation of a few hundred acres above station.

REVISIONS (WATER YEARS).--WSP 1281: 1942-48, 1950, 1951(P). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	0	5.0	33	2.6	
2							0	0	0	172	.11	
3							0	0	0	14	0	
4							0	0	0	0	0	
5							0	0	0	0	42	
6							0	0	0	0	23	
7							0	0	0	0	112	
8							0	0	0	0	757	
9							0	0	0	0	494	
10							0	0	0	0	322	
11							0	0	0	0	109	
12							0	0	0	0	373	
13							0	0	41	0	82	
14							0	0	.10	0	38	
15							0	0	4.3	0	432	
16							0	0	0	0	58	
17							0	0	0	0	39	
18							.03	0	51	0	7.0	
19							0	0	76	0	.60	
20							0	0	10	.01	0	
21							0	0	52	0	0	
22							0	0	1.3	28	53	
23							0	0	0	89	417	
24							0	0	0	2.6	64	
25							0	0	0	1.1	7.0	
26							0	0	0	.60	.60	
27							0	252	0	.05	.01	
28							0	455	0	221	0	
29					-----		0	35	0	124	0	
30					-----		0	200	3.8	25	0	
31		-----			-----		0	154	-----	9.7	0	-----
TOTAL	0	0	0	0	0	0	.03	1,096	244.50	720.06	3,432.32	0
MEAN	0	0	0	0	0	0	.001	35.4	8.15	23.2	111	0
MAX	0	0	0	0	0	0	.03	455	76	221	757	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	.06	2,170	485	1,430	6,810	0
CAL YR 1970	TOTAL 1,020.64	MEAN 2.80	MAX 200	MIN 0	AC-FT 2,020							
WTR YR 1971	TOTAL 5,492.91	MEAN 15.0	MAX 757	MIN 0	AC-FT 10,900							

PEAK DISCHARGE (BASE, 3,700 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE
5-27	2300	5.25	5,620

07226500 Ute Creek near Logan, N. Mex.

LOCATION.--Lat 35°26'18", long 103°31'31", in NW¼SE¼ sec.15, T.14 N., R.32 E., Harding County, on right bank 1.9 miles downstream from Alamosa Creek, 4.5 miles upstream from State Road 155, 4.7 miles upstream from high-water line of Ute Reservoir, 8.2 miles northwest of Logan, and 10.2 miles upstream from mouth.

DRAINAGE AREA.--2,060 sq mi, of which 617 is probably noncontributing.

PERIOD OF RECORD.--January 1912 to May 1914 (gage heights and discharge measurements only), January 1942 to current year. Records of discharge for August 1904 to June 1906, April 1909 to December 1911, published in WSP 307, are unreliable and should not be used.

GAGE.--Water-stage recorder. Altitude of gage is 3,815 ft (from topographic map). Prior to May 24, 1914, at site 4.2 miles downstream at different datum. Jan. 13, 1942 to Dec. 15, 1955, at site 4.8 miles downstream at datum of 3,758.50 ft above mean sea level. Dec. 16, 1955 to Sept. 30, 1964, at site 4.8 miles downstream at datum of 3,757.50 ft above mean sea level.

AVERAGE DISCHARGE.--30 calendar years, 28.6 cfs (20,720 acre-ft per year); 20 calendar years (1952-71), 24.1 cfs (17,460 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,620 cfs May 27 (gage height, 5.25 ft); no flow most of time.

1942-71: Maximum discharge, 24,500 cfs May 28, 1946, July 12, 1951 (gage height, 8.4 ft, site and datum then in use), from rating curve extended above 7,700 cfs on basis of slope-area measurements at gage heights 5.2 and 7.2 ft; no flow most of time.

Flood of May 1, 1914, reached a stage of 22.95 ft, site and datum then in use. Another major flood reached a stage of 16.0 ft (1942 datum) sometime in 1941, from information furnished by Bureau of Reclamation (discharge, about 70,000 cfs).

REMARKS.--Records poor. Diversions for irrigation of a few hundred acres above station.

REVISIONS (WATER YEARS).--WSP 1281: 1942-48, 1950, 1951(P). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				0	0	5.0	33	2.0		0	0	
2				0	0	0	172	.11		0	0	
3				0	0	0	14	0		0	0	
4				0	0	0	0	0		0	0	
5				0	0	0	0	42		0	0	
6				0	0	0	0	23		0	0	
7				0	0	0	0	112		0	0	
8				0	0	0	0	757		0	0	
9				0	0	0	0	494		0	0	
10				0	0	0	0	322		0	0	
11				0	0	0	0	109		0	0	
12				0	0	0	0	373		0	0	
13				0	0	41	0	82		0	0	
14				0	0	.10	0	38		0	0	
15				0	0	4.3	0	432		0	0	
16				0	0	0	0	58		0	2.5	
17				0	0	0	0	39		8.8	6.7	
18				.03	0	51	0	7.0		2.8	.13	
19				0	0	76	0	.60		0	0	
20				0	0	10	.01	0		0	0	
21				0	0	52	0	0		0	0	
22				0	0	1.3	28	53		0	0	
23				0	0	0	89	417		0	0	
24				0	0	0	2.6	64		0	0	
25				0	0	0	1.1	7.0		0	0	
26				0	0	0	.60	.60		52	0	
27				0	252	0	.05	.01		4.4	0	
28				0	455	0	221	0		.06	0	
29				0	35	0	124	0		.09	0	
30				0	200	3.8	25	0		6.8	0	
31				-----	154	-----	9.7	0	-----	.03	-----	
TOTAL	0	0	0	.03	1,096	244.50	720.06	3,432.32	0	74.98	9.33	0
MEAN	0	0	0	.001	35.4	8.15	23.2	111	0	2.42	.31	0
MAX	0	0	0	.03	455	76	221	757	0	52	6.7	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	.06	2,170	485	1,430	6,810	0	149	19	0

CAL YR 1971 TOTAL 5,577.22 MEAN 15.3 MAX 757 MIN 0 AC-FT 11,060

PEAK DISCHARGE (BASE, 3,700 CFS)

DATE	TIME	G. H.	DISCHARGE
5-27	2300	5.25	5,620

07226800 Ute Reservoir near Logan, N. Mex.

LOCATION.--Lat 35°20'35", long 103°26'37", in NW¼ sec.21, T.13 N., R.33 E., Quay County, on face of Ute Dam on Canadian River, 2.5 miles southwest of Logan, and 3.5 miles downstream from Ute Creek.

DRAINAGE AREA.--11,140 sq mi, of which 1,110 sq mi is probably noncontributing.

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

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Interstate Stream Commission).

EXTREMES.--Current year: Maximum contents observed, 103,700 acre-ft Aug. 11 (elevation, 3,758.55 ft); minimum, 91,610 acre-ft May 7-28 (elevation, 3,755.4 ft).

Period of record: Maximum contents observed, 119,900 acre-ft June 17, 1969 (elevation, 3,762.4 ft); minimum, 22,230 acre-ft Aug. 7, 1964 (elevation, 3,726.2 ft).

REMARKS.--Reservoir is formed by earthfill dam 121 ft high above streambed, 2,050 ft long; an earth-dike section on north (left) bank of Canadian River is 2,860 ft long and has a maximum height of 27 ft; a concrete spillway section 840 ft long is constructed between main embankment and the dike. Construction completed in May 1963; storage began Dec. 13, 1962. Capacity, 109,600 acre-ft at elevation 3,760.0 ft (crest of 840-ft ungated service spillway). Top of dam is at elevation 3,801.0 ft. Maximum design capacity of 307,000 acre-ft at elevation 3,791.0 ft (31 ft above crest of 840-ft spillway) allows 197,400 acre-ft of capacity for protection of the structure. Dead storage, 20,710 acre-ft at elevation 3,725.0 ft (crest of outlet tower); inactive pool of 49,870 acre-ft below elevation 3,741.6 ft is maintained for fish and wildlife. Figures given herein represent total contents. Reservoir is planned to furnish water for municipal and industrial uses and for recreational purposes; some incidental flood control. Diversions above station for irrigation of about 90,000 acres. Water quality records for the current year are published in Part 2 of this report.

COOPERATION.--Records furnished by New Mexico Interstate Stream Commission.

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

(Based on survey by New Mexico Interstate Stream Commission in 1963)

3,754	86,550
3,756	93,840
3,758	101,500
3,760	109,600

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97,630	96,100	94,970	94,210	93,090	92,720	92,350	91,980	98,020	98,790	98,790	97,630
2	97,630	96,100	94,970	94,210	93,090	92,720	92,350	91,980	98,020	102,300	98,400	97,630
3	97,630	96,100	94,970	93,840	93,090	92,720	92,350	91,980	98,020	103,100	98,020	97,630
4	97,250	96,100	94,970	93,840	93,090	92,720	92,350	91,980	98,020	102,300	98,020	97,630
5	97,250	96,100	94,970	93,840	92,720	92,720	92,350	91,980	98,020	101,500	98,020	97,250
6	97,250	96,100	94,970	93,840	92,720	92,720	92,350	91,980	97,630	101,100	97,630	97,250
7	97,250	96,100	94,970	93,840	92,720	92,720	92,350	91,610	97,630	100,300	97,630	97,250
8	97,250	96,100	94,970	93,840	92,720	92,720	92,350	91,610	97,630	99,950	99,560	97,250
9	96,860	96,100	94,970	93,840	92,720	92,720	92,350	91,610	97,630	98,790	103,100	97,250
10	96,860	96,100	94,970	93,840	92,720	92,720	92,350	91,610	97,630	98,790	103,500	-
11	96,860	95,720	94,590	93,840	92,720	92,350	91,980	91,610	97,250	98,790	103,700	97,250
12	96,860	95,720	94,590	93,840	92,720	92,350	91,980	91,610	97,250	98,400	103,500	96,860
13	96,860	95,720	94,590	93,470	92,720	92,350	91,980	91,610	97,250	98,400	103,300	96,860
14	96,480	95,720	94,590	93,470	92,720	92,350	91,980	91,610	97,250	98,400	103,100	96,860
15	96,480	95,720	94,590	93,470	92,720	92,350	91,980	91,610	97,250	98,400	103,100	96,860
16	96,480	95,720	94,590	93,470	92,720	92,350	91,980	91,610	97,250	98,400	102,900	96,480
17	96,860	95,720	94,590	93,470	92,720	92,350	91,980	91,610	97,250	98,400	102,500	96,480
18	96,860	95,340	94,590	93,470	92,720	92,350	91,980	91,610	97,250	98,400	101,900	96,480
19	96,860	95,340	94,590	93,470	92,720	92,350	91,980	91,610	97,250	98,790	101,500	96,480
20	96,860	95,340	94,590	93,470	92,720	92,350	91,980	91,610	97,250	98,790	101,100	96,480
21	96,480	95,340	94,210	93,470	92,720	92,350	91,980	91,610	97,250	98,790	100,700	96,480
22	96,480	95,340	94,210	93,470	92,720	92,350	91,980	91,610	100,700	98,790	99,950	96,480
23	96,480	95,340	94,210	93,470	92,720	92,350	91,980	91,610	100,300	99,170	99,170	96,480
24	96,480	95,340	94,210	93,470	92,720	92,350	91,980	91,610	100,100	99,170	99,370	96,480
25	96,480	95,340	94,210	93,470	92,720	92,350	91,980	91,610	99,760	99,370	99,370	96,480
26	96,480	95,340	94,210	93,470	92,720	92,350	91,980	91,610	99,370	99,560	99,950	96,480
27	96,480	94,970	94,210	93,090	92,720	92,350	91,980	91,610	98,980	99,560	99,560	96,480
28	96,100	94,970	94,210	93,090	92,720	92,350	91,980	91,610	98,790	99,950	99,170	96,480
29	96,100	94,970	94,210	93,090	-----	92,350	91,980	95,720	98,590	99,950	98,790	96,480
30	96,100	94,970	94,210	93,090	-----	92,350	91,980	97,630	98,400	99,560	98,400	96,480
31	96,100	-----	94,210	93,090	-----	92,350	-----	98,020	-----	99,170	98,020	-----
MAX	97,630	96,100	94,970	94,210	93,090	92,720	92,350	98,020	100,700	103,100	103,700	97,630
MIN	96,100	94,970	94,210	93,090	92,720	92,350	91,980	91,610	97,250	98,400	97,630	96,480
(+)	3,756.6	3,756.3	3,756.1	3,755.8	3,755.7	3,755.6	3,755.5	3,757.1	3,757.2	3,757.4	3,757.1	3,756.7
(#)	-1,530	-1,130	-760	-1,120	-370	-370	-370	+6,040	+380	+770	-1,150	-1,540
CAL YR 1970.....	+											
WTR YR 1971.....	+											

+ Elevation, in feet, at end of month.

Change in contents, in acre-ft.

07226800 Ute Reservoir near Logan, N. Mex.

LOCATION.--Lat 35°20'35", long 103°26'37", in NW¼ sec.21, T.13 N., R.33 E., Quay County, on face of Ute Dam on Canadian River, 2.5 miles southwest of Logan, and 3.5 miles downstream from Ute Creek.

DRAINAGE AREA.--11,140 sq mi, of which 1,110 sq mi is probably noncontributing.

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

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Interstate Stream Commission).

EXTREMES.--Current year: Maximum contents observed, 103,700 acre-ft Aug. 11 (elevation, 3,758.55 ft); minimum, 91,610 acre-ft May 7-28 (elevation, 3,755.4 ft).

Period of record: Maximum contents observed, 119,900 acre-ft June 17, 1969 (elevation, 3,762.4 ft); minimum, 22,230 acre-ft Aug. 7, 1964 (elevation, 3,726.2 ft).

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COOPERATION.--Records furnished by New Mexico Interstate Stream Commission.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by New Mexico Interstate Stream Commission in 1963)

3,754	86,550
3,756	93,840
3,758	101,500
3,760	109,600

CONTENTS, IN ACRE-FEET, AT 0800, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	94,210	93,090	92,720	92,350	91,980	98,020	98,790	98,790	97,630	96,480	95,720	96,480
2	94,210	93,090	92,720	92,350	91,980	98,020	102,300	98,400	97,630	96,480	95,720	96,480
3	93,840	93,090	92,720	92,350	91,980	98,020	103,100	98,020	97,630	96,100	95,720	96,480
4	93,840	93,090	92,720	92,350	91,980	98,020	102,300	98,020	97,630	96,100	95,720	96,480
5	93,840	92,720	92,720	92,350	91,980	98,020	101,500	98,020	97,250	96,100	95,720	96,480
6	93,840	92,720	92,720	92,350	91,980	97,630	101,100	97,630	97,250	96,100	95,720	96,480
7	93,840	92,720	92,720	92,350	91,610	97,630	100,300	97,630	97,250	96,100	95,720	96,480
8	93,840	92,720	92,720	92,350	91,610	97,630	99,950	99,560	97,250	96,100	95,720	96,480
9	93,840	92,720	92,720	92,350	91,610	97,630	98,790	103,100	97,250	96,100	95,720	96,480
10	93,840	92,720	92,720	92,350	91,610	97,630	98,790	103,500	-	96,100	95,720	96,480
11	93,840	92,720	92,350	91,980	91,610	97,250	98,790	103,700	97,250	96,100	95,720	96,480
12	93,840	92,720	92,350	91,980	91,610	97,250	98,400	103,500	96,860	96,100	-	96,480
13	93,470	92,720	92,350	91,980	91,610	97,250	98,400	103,300	96,860	96,100	95,720	96,480
14	93,470	92,720	92,350	91,980	91,610	97,250	98,400	103,100	96,860	96,100	95,720	96,480
15	93,470	92,720	92,350	91,980	91,610	97,250	98,400	103,100	96,860	96,100	95,720	96,480
16	93,470	92,720	92,350	91,980	91,610	97,250	98,400	102,900	96,480	96,100	96,100	96,480
17	93,470	92,720	92,350	91,980	91,610	97,250	98,400	102,500	96,480	96,100	96,100	96,480
18	93,470	92,720	92,350	91,980	91,610	97,250	98,400	101,900	96,480	96,100	96,100	96,480
19	93,470	92,720	92,350	91,980	91,610	97,250	98,790	101,500	96,480	96,100	96,100	96,100
20	93,470	92,720	92,350	91,980	91,610	97,250	98,790	101,100	96,480	96,100	96,480	96,100
21	93,470	92,720	92,350	91,980	91,610	97,250	98,790	100,700	96,480	96,100	96,480	96,100
22	93,470	92,720	92,350	91,980	91,610	100,700	98,790	99,950	96,480	96,100	96,480	96,100
23	93,470	92,720	92,350	91,980	91,610	100,300	99,170	99,170	96,480	96,100	96,480	96,100
24	93,470	92,720	92,350	91,980	91,610	100,100	99,170	99,370	96,480	96,100	96,480	96,100
25	93,470	92,720	92,350	91,980	91,610	99,760	99,370	99,370	96,480	96,100	96,480	96,100
26	93,470	92,720	92,350	91,980	91,610	99,370	99,560	99,950	96,480	96,100	96,480	96,100
27	93,090	92,720	92,350	91,980	91,610	98,980	99,560	99,560	96,480	96,100	96,480	96,100
28	93,090	92,720	92,350	91,980	91,610	98,790	99,950	99,170	96,480	96,100	96,480	96,100
29	93,090	-----	92,350	91,980	95,720	98,590	99,950	98,790	96,480	96,100	96,480	96,100
30	93,090	-----	92,350	91,980	97,630	98,400	99,560	98,400	96,480	95,720	96,480	96,100
31	93,090	-----	92,350	-----	98,020	-----	99,170	98,020	-----	95,720	-----	96,100
MAX	94,210	93,090	92,720	92,350	98,020	100,700	103,100	103,700	97,630	96,480	96,480	96,480
MIN	93,090	92,720	92,350	91,980	91,610	97,250	98,400	97,630	96,480	95,720	95,720	96,100
(+)	3,755.8	3,755.7	3,755.6	3,755.5	3,757.1	3,757.2	3,757.4	3,757.1	3,756.7	3,756.5	3,756.7	3,756.6
(±)	-1,120	-370	-370	-370	+6,040	+380	+770	-1,150	-1,540	-760	+760	-380

CAL YR 1971..... ± +1,890

+ Elevation, in feet, at end of month.
± Change in contents, in acre-ft.

ARKANSAS RIVER BASIN

07227000 Canadian River at Logan, N. Mex.

LOCATION.--Lat 35°21'25", long 103°25'03", in NE¼NE¼ sec.15, T.13 N., R.33 E., on left bank 1,100 ft upstream from bridge on U.S. Highway 54, 0.7 mile south of Logan, 1.4 miles upstream from Chicago, Rock Island & Pacific Railroad Co. bridge, 2.0 miles downstream from Ute Dam, 4.3 miles upstream from Revuelto Creek, and 5.7 miles downstream from Ute Creek.

DRAINAGE AREA.--11,141 sq mi, of which 1,110 sq mi is probably noncontributing.

PERIOD OF RECORD.--June 1904 to November 1905 (gage heights and discharge measurements only), December 1908 to September 1909, February 1910, April to July 1910, August 1910 to September 1911 (gage heights and discharge measurements only), October 1911 to May 1914, January to May 1924, September 1924 to July 1925, January 1927 to April 1934, August 1934 to current year. Monthly discharge only for some periods, published in WSP 1311. Records for December 1909, January 1910, and May to July 1934, published in WSP 267, 287, and 762 are unreliable and should not be used. Published as South Canadian River, June to September 1904.

GAGE.--Water-stage recorder. Datum of gage is 3,668.1 ft above mean sea level. See WSP 1311 or 1731 for history of changes prior to Oct. 1, 1934.

AVERAGE DISCHARGE.--15 years (1908-9, 1911-13, 1926-38), 392 cfs (283,800 acre-ft per year), prior to completion of Conchas Dam; 24 years (1938-62), 257 cfs (186,100 acre-ft per year); prior to completion of Ute Dam; 9 years (1962-71), 38.9 cfs (28,180 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,130 cfs July 1 (gage height, 5.25 ft); minimum, 1.3 cfs July 26.

1930-71: Maximum discharge, 219,000 cfs Sept. 22, 1941 (gage height, 29.3 ft, from floodmarks), from rating curve extended above 75,000 cfs; no flow at times prior to completion of Ute Dam.

Maximum discharge, 278,000 cfs Sept. 30, 1904 (gage height, about 36.5 ft, site and datum used in 1909), from rating curve extended above 14,000 cfs, from Ninth Biennial Report of State Engineer.

REMARKS.--Records good. Flow regulated by Conchas Lake, 45 miles upstream (see sta 07223500) and Ute Reservoir, 2 miles upstream (see sta 07226800). Diversions for irrigation of about 90,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1087: 1935-36. WSP 1117: Drainage area. WSP 1281: 1912, 1932(M), 1934, 1945-47, 1949-50. WSP 1311: 1931(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	2.6	3.6	2.6	2.9	2.4	2.4	2.4	2.4	123	336	6.3
2	5.8	2.4	3.6	2.6	2.9	2.9	2.6	2.4	2.3	323	302	3.1
3	5.8	2.6	3.6	2.9	2.9	2.9	2.4	2.3	2.3	285	9.3	2.9
4	5.8	2.6	3.4	3.0	2.9	2.6	2.4	2.4	2.3	285	3.4	2.6
5	5.5	2.6	3.1	3.1	2.6	2.9	2.4	2.1	2.3	285	2.4	2.6
6	5.5	2.4	3.1	3.1	2.9	3.1	2.9	2.4	2.3	285	2.1	2.6
7	5.2	2.4	3.1	3.1	2.9	3.1	2.6	2.6	2.4	285	10	2.3
8	6.2	2.4	3.4	2.6	3.1	3.6	2.4	2.6	2.4	281	28	2.3
9	5.2	2.6	2.9	1.8	2.9	4.1	2.4	2.6	2.4	250	332	2.6
10	5.2	2.6	2.9	1.7	2.6	3.1	2.4	2.4	2.3	11	336	2.4
11	4.6	2.6	2.9	2.4	2.6	2.9	2.4	2.3	2.4	9.8	336	2.3
12	4.6	2.6	2.9	2.3	2.4	2.9	2.4	2.6	2.9	5.8	336	2.1
13	4.6	2.4	2.6	2.3	2.4	2.9	2.3	2.9	2.3	4.3	336	2.1
14	4.3	2.6	2.6	2.3	2.4	2.6	2.6	2.9	2.3	3.6	336	2.0
15	5.5	2.9	2.6	2.4	2.4	2.9	2.9	2.9	2.4	3.6	345	2.1
16	5.5	2.9	2.6	2.4	2.4	2.9	3.1	2.9	2.0	2.9	340	2.1
17	4.3	2.9	2.3	2.4	2.6	2.9	2.9	2.6	1.8	2.4	340	2.9
18	4.3	2.6	2.6	2.4	2.6	2.4	3.1	2.6	3.4	2.3	340	2.6
19	102	2.6	2.9	2.6	2.6	2.9	3.1	2.9	2.6	2.4	345	2.6
20	8.8	2.6	2.9	2.6	2.6	2.9	2.4	2.6	2.1	4.3	354	2.3
21	7.2	2.4	2.6	2.6	3.4	2.6	2.3	2.6	2.3	2.4	340	2.6
22	6.6	2.4	2.9	2.6	3.4	2.9	2.1	2.6	43	2.3	327	2.9
23	6.6	2.6	2.9	2.6	2.6	2.6	2.4	2.4	171	2.3	332	3.6
24	6.6	2.6	2.9	2.6	2.6	2.6	2.6	2.6	174	2.4	327	3.1
25	6.6	2.6	2.9	2.6	2.6	2.6	2.6	7.5	181	2.1	332	2.4
26	5.8	2.6	2.9	2.9	2.4	2.6	2.4	2.9	181	2.1	327	2.4
27	3.4	3.1	2.6	2.9	2.4	2.4	2.3	3.9	181	2.0	327	2.3
28	2.9	3.1	2.6	2.9	2.6	2.4	2.3	4.8	181	79	327	2.3
29	2.6	3.1	2.6	2.9	-----	2.6	2.4	8.5	86	323	336	2.3
30	2.6	3.4	2.6	2.9	-----	2.4	2.4	3.4	7.2	323	236	3.1
31	2.6	-----	2.6	2.9	-----	2.3	-----	2.3	-----	327	142	-----
TOTAL	258.8	79.8	89.7	81.0	75.6	86.9	75.9	94.9	1,255.1	3,522.0	8,122.2	79.8
MEAN	8.35	2.66	2.89	2.61	2.70	2.80	2.53	3.06	41.8	114	262	2.66
MAX	102	3.4	3.6	3.1	3.4	4.1	3.1	8.5	181	327	354	6.3
MIN	2.6	2.4	2.3	1.7	2.4	2.3	2.1	2.1	1.8	2.0	2.1	2.0
AC-FT	513	158	178	161	150	172	151	188	2,490	6,990	16,110	158

CAL YR 1970 TOTAL 5,634.8 MEAN 15.4 MAX 323 MIN 1.7 AC-FT 11,180
WTR YR 1971 TOTAL 13,821.7 MEAN 37.9 MAX 354 MIN 1.7 AC-FT 27,420

07227000 Canadian River at Logan, N. Mex.

LOCATION.--Lat 35°21'25", long 103°25'03", in NE¼ sec.15, T.13 N., R.33 E., on left bank 1,100 ft upstream from bridge on U.S. Highway 54, 0.7 mile south of Logan, 1.4 miles upstream from Chicago, Rock Island & Pacific Railroad Co. bridge, 2.0 miles downstream from Ute Dam, 4.3 miles upstream from Revuelto Creek, and 5.7 miles downstream from Ute Creek.

DRAINAGE AREA.--11,141 sq mi, of which 1,110 sq mi is probably noncontributing.

PERIOD OF RECORD.--June 1904 to November 1905 (gage heights and discharge measurements only), December 1908 to September 1909, February 1910, April to July 1910, August 1910 to September 1911 (gage heights and discharge measurements only), October 1911 to May 1914, January to May 1924, September 1924 to July 1925, January 1927 to April 1934, August 1934 to current year. Monthly discharge only for some periods, published in WSP 1311. Records for December 1909, January 1910, and May to July 1934, published in WSP 267, 287, and 762 are unreliable and should not be used. Published as South Canadian River, June to September 1904.

GAUGE.--Water-stage recorder. Datum of gage is 3,668.1 ft above mean sea level. See WSP 1311 or 1731 for history of changes prior to Oct. 1, 1934.

AVERAGE DISCHARGE.--14 calendar years (1912-13, 1927-38), 388 cfs (281,100 acre-ft per year), prior to completion of Conchas Dam; 24 calendar years (1939-62), 254 cfs (184,000 acre-ft per year), prior to completion of Ute Dam; 9 calendar years (1963-71), 38.8 cfs (28,110 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,130 cfs July 1 (gage height, 5.25 ft); minimum, 1.3 cfs July 26.

1930-71: Maximum discharge, 219,000 cfs Sept. 22, 1941 (gage height, 29.3 ft, from floodmarks), from rating curve extended above 75,000 cfs; no flow at times prior to completion of Ute Dam.

Maximum discharge, 278,000 cfs Sept. 30, 1904 (gage height, about 36.5 ft, site and datum used in 1909), from rating curve extended above 14,000 cfs, from Ninth Biennial Report of State Engineer.

REMARKS.--Records good. Flow regulated by Conchas Lake, 45 miles upstream (see sta 07223500) and Ute Reservoir, 2 miles upstream (see sta 07226800). Diversions for irrigation of about 90,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1087: 1935-36. WSP 1117: Drainage area. WSP 1281: 1912, 1932(M), 1934, 1945-47, 1949-50. WSP 1311: 1931(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.6	2.9	2.4	2.4	2.4	2.4	123	336	6.3	2.3	2.3	2.4
2	2.6	2.9	2.9	2.6	2.4	2.3	323	302	3.1	2.1	2.4	2.6
3	2.9	2.9	2.9	2.4	2.3	2.3	285	9.3	2.9	2.3	2.4	2.4
4	3.0	2.9	2.6	2.4	2.4	2.3	285	3.4	2.6	2.4	2.4	2.3
5	3.1	2.6	2.9	2.4	2.1	2.3	285	2.4	2.6	2.4	2.4	2.3
6	3.1	2.9	3.1	2.9	2.4	2.3	285	2.1	2.6	2.4	2.4	2.3
7	3.1	2.9	3.1	2.6	2.6	2.4	285	10	2.3	2.4	2.4	2.1
8	2.6	3.1	3.6	2.4	2.6	2.4	281	28	2.3	2.4	2.4	2.1
9	1.8	2.9	4.1	2.4	2.6	2.4	250	332	2.6	2.9	2.3	2.1
10	1.7	2.6	3.1	2.4	2.4	2.3	11	336	2.4	2.4	2.1	2.3
11	2.4	2.6	2.9	2.4	2.3	2.4	9.8	336	2.3	2.6	2.1	2.3
12	2.3	2.4	2.9	2.4	2.6	2.9	5.8	336	2.1	2.6	2.1	2.3
13	2.3	2.4	2.9	2.3	2.9	2.3	4.3	336	2.1	2.6	2.1	2.3
14	2.3	2.4	2.6	2.6	2.9	2.3	3.6	336	2.0	2.3	2.1	2.3
15	2.4	2.4	2.9	2.9	2.9	2.4	3.6	345	2.1	2.3	2.1	2.3
16	2.4	2.4	2.9	3.1	2.9	2.0	2.9	340	2.1	2.3	2.1	2.3
17	2.4	2.6	2.9	2.9	2.6	1.8	2.4	340	2.9	2.9	2.1	2.3
18	2.4	2.6	2.4	3.1	2.6	3.4	2.3	340	2.6	2.1	2.1	2.3
19	2.6	2.6	2.9	3.1	2.9	2.6	2.4	345	2.6	2.0	2.1	2.1
20	2.6	2.6	2.9	2.4	2.6	2.1	4.3	354	2.3	2.1	2.1	2.3
21	2.6	3.4	2.6	2.3	2.6	2.3	2.4	340	2.6	2.1	2.1	2.3
22	2.6	3.4	2.9	2.1	2.6	43	2.3	327	2.9	2.1	2.3	2.4
23	2.6	2.6	2.6	2.4	2.4	171	2.3	332	3.6	2.3	2.3	2.4
24	2.6	2.6	2.6	2.6	2.6	174	2.4	327	3.1	2.3	2.3	2.6
25	2.6	2.6	2.6	2.6	7.5	181	2.1	332	2.4	2.3	2.3	2.6
26	2.9	2.4	2.6	2.4	2.9	181	2.1	327	2.4	3.6	2.3	2.4
27	2.9	2.4	2.4	2.3	3.9	181	2.0	327	2.3	2.1	2.3	2.4
28	2.9	2.6	2.4	2.3	4.8	181	79	327	2.3	2.3	2.3	2.4
29	2.9	-----	2.6	2.4	8.5	86	323	336	2.3	2.6	2.1	2.6
30	2.9	-----	2.4	2.4	3.4	7.2	323	236	3.1	2.6	2.1	2.3
31	2.9	-----	2.3	-----	2.3	-----	327	142	-----	2.3	-----	2.3
TOTAL	81.0	75.6	86.9	75.9	94.9	1,255.1	3,522.0	8,122.2	79.8	74.4	66.9	72.4
MEAN	2.61	2.70	2.80	2.53	3.06	41.8	114	262	2.66	2.40	2.23	2.34
MAX	3.1	3.4	4.1	3.1	8.5	181	327	354	6.3	3.6	2.4	2.6
MIN	1.7	2.4	2.3	2.1	2.1	1.8	2.0	2.1	2.0	2.0	2.1	2.1
AC-FT	161	150	172	151	188	2,490	6,990	16,110	158	148	133	144

CAL YR 1971 TOTAL 13,607.1 MEAN 37.3 MAX 354 MIN 1.7 AC-FT 26,990

ARKANSAS RIVER BASIN

07227100 Revuelto Creek near Logan, N. Mex.

LOCATION.--Lat 35°20'28", long 103°23'40", in SW 1/4 sec. 24, T.13 N., R.33 E., Quay County, on right bank 0.3 mile upstream from bridge on State Highway 39, 1.9 miles southeast of Logan, and 2.3 miles upstream from mouth.

DRAINAGE AREA.--786 sq mi.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,665 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 54.4 cfs (39,410 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,200 cfs July 1 (gage height, 6.68 ft); no flow at times.

Period of record: Maximum discharge, 26,700 cfs July 9, 1960 (gage height, 14.3 ft); no flow at times.

1941-47: Maximum discharge determined, about 13,400 cfs Sept. 18, 1946 (gage height, 9.04 ft, at site 500 ft downstream at different datum), from unpublished records collected by Bureau of Reclamation.

A peak of 26,100 cfs (time and date unknown; gage height, 12.9 ft) was measured by slope-area method in May 1957.

REMARKS.--Records poor. Low flows supplemented by surface and ground water return from irrigation in vicinity of Tucumcari. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.0	1.6	1.5	2.6	6.7	0	30	42	1,370	33	16
2	11	5.7	1.5	1.7	2.3	6.7	0	28	35	193	49	15
3	9.6	5.7	1.4	1.5	2.1	7.8	5.0	26	24	57	34	12
4	8.7	5.7	1.5	1.0	2.1	9.6	10	24	10	21	22	10
5	12	5.4	1.5	.80	1.8	9.2	15	22	9.2	15	15	11
6	12	5.1	1.5	.60	1.8	7.0	15	20	8.7	14	14	16
7	9.6	4.6	1.7	.80	2.0	4.8	15	19	8.2	6.3	43	16
8	16	4.4	2.1	1.0	1.4	4.2	15	18	8.7	4.6	855	11
9	23	4.0	2.1	1.4	2.0	3.4	15	17	9.2	4.0	241	9.2
10	21	3.8	2.0	2.0	3.0	2.6	15	17	8.7	3.6	143	13
11	18	3.8	2.3	2.5	3.4	2.1	15	17	58	3.8	266	15
12	16	3.8	8.2	3.6	3.0	1.8	15	18	173	3.0	760	15
13	16	3.4	4.2	5.1	2.4	1.2	15	21	49	3.0	86	15
14	14	3.4	3.4	6.0	2.4	.62	15	14	29	4.6	40	16
15	20	3.0	2.3	5.4	2.3	.56	25	14	39	6.3	113	16
16	68	3.8	2.0	8.2	1.8	.35	20	14	23	6.3	40	16
17	56	3.8	2.4	7.8	1.7	.31	20	10	21	9.6	25	16
18	30	3.6	2.0	6.7	1.6	.20	20	9.6	20	16	30	17
19	22	3.4	2.4	6.3	1.6	.17	25	15	24	16	17	34
20	14	3.2	2.8	5.7	1.6	.08	20	14	22	116	12	29
21	14	2.8	3.2	5.4	1.8	.05	20	11	450	76	10	25
22	16	2.0	3.8	5.1	3.0	.02	20	11	135	500	9.2	321
23	22	1.8	4.4	4.6	5.0	.05	20	9.6	43	76	32	156
24	24	1.8	3.8	3.6	8.3	.03	20	10	42	54	49	199
25	16	2.6	4.6	3.0	16	.02	20	14	32	34	173	66
26	13	2.1	3.8	3.0	18	.01	20	12	19	28	43	40
27	8.2	1.7	2.8	3.2	12	0	20	14	14	24	24	26
28	8.2	1.7	2.3	3.0	8.2	0	20	1,080	12	52	20	20
29	7.0	1.7	1.4	3.0	-----	0	20	191	8.7	239	16	18
30	6.7	2.0	1.4	3.0	-----	0	25	88	11	94	13	30
31	6.7	-----	1.4	2.8	-----	0	-----	72	-----	45	14	-----
TOTAL	549.7	105.8	81.8	109.35	113.2	69.57	500.0	1,880.2	1,388.4	3,045.1	3,241.2	1,219.2
MEAN	17.7	3.53	2.64	3.53	4.04	2.24	16.7	60.7	46.3	99.8	105	40.6
MAX	68	6.0	8.2	8.2	18	9.6	25	1,080	450	1,370	855	321
MIN	6.7	1.7	1.4	.60	1.4	0	0	9.6	8.2	3.0	9.2	9.2
AC-FT	1,590	210	162	217	225	138	992	3,730	2,750	6,140	6,430	2,420

CAL YR 1970 TOTAL 20,184.61 MEAN 55.3 MAX 7,580 MIN .90 AC-FT 40,040
 WTR YR 1971 TOTAL 12,353.47 MEAN 33.8 MAX 1,370 MIN 0 AC-FT 24,500

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE
7- 1	0230	6.68	5,200

07227100 Revuelto Creek near Logan, N. Mex.

LOCATION.--Lat 35°20'28", long 103°23'40", in SW¼NW¼ sec.24, T.13 N., R.33 E., Quay County, on right bank 0.3 mile upstream from bridge on State Highway 39, 1.9 miles southeast of Logan, and 2.3 miles upstream from mouth.

DRAINAGE AREA.--786 sq mi.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,665 ft (from topographic map).

AVERAGE DISCHARGE.--12 calendar years, 53.8 cfs (38,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,200 cfs July 1 (gage height, 6.68 ft); no flow at times.

Period of record: Maximum discharge, 26,700 cfs July 9, 1960 (gage height, 14.3 ft); no flow at times.

1941-47: Maximum discharge determined, about 13,400 cfs Sept. 18, 1946 (gage height, 9.04 ft, at site 500 ft downstream at different datum), from unpublished records collected by Bureau of Reclamation.

A peak of 26,100 cfs (time and date unknown; gage height, 12.9 ft) was measured by slope-area method in May 1957.

REMARKS.--Records poor. Low flows supplemented by surface and ground water return from irrigation in vicinity of Tucumcari. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.5	2.6	6.7	0	30	42	1,370	33	16	25	29	8.2
2	1.7	2.3	6.7	0	28	35	193	49	15	20	24	10
3	1.5	2.1	7.8	5.0	26	24	57	34	12	18	8.7	30
4	1.0	2.1	9.6	10	24	10	21	22	10	16	5.1	30
5	.80	1.8	9.2	15	22	9.2	15	15	11	16	4.8	20
6	.60	1.8	7.0	15	20	8.7	14	14	16	14	4.2	13
7	.80	2.0	4.8	15	19	8.2	6.3	43	16	14	4.0	8.7
8	1.0	1.4	4.2	15	18	8.7	4.6	855	11	14	4.0	6.0
9	1.4	2.0	3.4	15	17	9.2	4.0	241	9.2	14	4.0	6.0
10	2.0	3.0	2.6	15	17	8.7	3.6	143	13	16	3.8	8.2
11	2.5	3.4	2.1	15	17	58	3.8	266	15	14	3.6	6.7
12	3.6	3.0	1.8	15	18	173	3.0	760	15	13	3.4	6.3
13	5.1	2.4	1.2	15	21	49	3.0	86	15	12	2.8	5.4
14	6.0	2.4	.62	15	14	29	4.6	40	16	16	2.3	5.7
15	5.4	2.3	.56	25	14	39	6.3	113	16	18	16	5.4
16	8.2	1.8	.35	20	14	23	6.3	40	16	19	387	5.1
17	7.8	1.7	.31	20	10	21	9.6	25	16	24	112	5.4
18	6.7	1.6	.20	20	9.6	20	16	30	17	54	38	5.4
19	6.3	1.6	.17	25	15	24	16	17	34	32	22	5.7
20	5.7	1.6	.08	20	14	22	116	12	29	62	17	5.7
21	5.4	1.8	.05	20	11	450	76	10	25	22	15	5.4
22	5.1	3.0	.02	20	11	135	500	9.2	321	12	11	5.1
23	4.6	5.0	.05	20	9.6	43	76	32	156	7.4	11	5.1
24	3.6	6.3	.03	20	10	42	54	49	199	6.3	9.2	4.8
25	3.0	16	.02	20	14	32	34	173	66	6.0	7.4	4.8
26	3.0	18	.01	20	12	19	28	43	40	46	6.7	4.6
27	3.2	12	0	20	14	14	24	24	26	45	5.7	4.2
28	3.0	8.2	0	20	1,080	12	52	20	20	30	5.7	4.0
29	3.0	-----	0	20	191	8.7	239	16	18	20	6.3	4.8
30	3.0	-----	0	25	88	11	94	13	30	14	6.7	5.4
31	2.8	-----	0	-----	72	-----	45	14	-----	9.6	-----	4.8
TOTAL	109.30	113.2	69.57	500.0	1,880.2	1,388.4	3,095.1	3,241.2	1,219.2	649.3	780.4	249.9
MEAN	3.53	4.04	2.24	16.7	60.7	46.3	99.8	105	40.6	20.9	26.0	8.06
MAX	8.2	18	9.6	25	1,080	450	1,370	855	321	62	387	30
MIN	.60	1.4	0	0	9.6	8.2	3.0	9.2	9.2	6.0	2.3	4.0
AC-FT	217	225	138	992	3,730	2,750	6,140	6,430	2,420	1,290	1,550	496

CAL YR 1971 TOTAL 13,295.77 MEAN 36.4 MAX 1,370 MIN 0 AC-FT 26,370

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE TIME G. H. DISCHARGE

7- 1 0230 6.68 5,200

ARKANSAS RIVER BASIN

07227200 Tramperos Creek near Stead, N. Mex.

LOCATION.--Lat 36°04'15", long 103°12'10", in NW¼NW¼ sec.10, T.21 N., R.35 E., Union County, at downstream end of bridge pier on State Highway 18, 2.1 miles south of Stead, and 26 miles south of Clayton.

DRAINAGE AREA.--556 sq mi, approximately.

PERIOD OF RECORD.--October 1964 to May 1966 (annual maximum only), June 1966 to current year. Prior to October 1966, published as Major Longs Creek near Stead (sta 07227445).

GAGE.--Water-stage recorder. Datum of gage is 4,481.19 ft above mean sea level. Prior to Feb 6, 1969, at site 90 ft upstream at datum 1.61 ft lower.

AVERAGE DISCHARGE.--5 years, 4.31 cfs (3,120 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,720 cfs May 30 (gage height, 9.27 ft), from rating curve extended above 14 cfs on basis of slope-area measurements at gage heights 12.4 and 14.9 ft; no flow most of time.

Period of record: Maximum discharge, 12,300 cfs Oct. 17, 1965 (gage height, 14.9 ft, from floodmark, present datum), by slope-area measurement; no flow most of time.

A flood in 1904 reached a stage of about 27.4 ft (discharge, about 45,500 cfs) with only a single span bridge and a flood in 1937 reached a stage of about 20.4 ft (discharge, about 31,600 cfs), from information by State Highway Department.

REMARKS.--Records poor. Minor regulation by detention reservoirs and stock ponds.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	2.0	2.1	.32	
2								0	0	10	0	
3								0	0	2.5	0	
4								0	0	.89	0	
5								0	0	.34	0	
6								0	0	0	0	
7								0	0	0	27	
8								0	0	0	136	
9								0	0	0	37	
10								0	0	0	5.4	
11								0	0	0	1.2	
12								0	0	0	.34	
13								0	0	0	.04	
14								0	0	0	.02	
15								0	0	0	130	
16								0	0	0	17	
17								0	0	0	7.4	
18								0	0	0	2.9	
19								0	0	0	.89	
20								0	36	0	.08	
21								0	25	0	0	
22								0	1.5	0	0	
23								0	.70	3.9	0	
24								0	.34	17	0	
25								0	.03	5.0	0	
26								0	0	20	0	
27								0	0	10	0	
28								0	0	6.3	0	
29								.08	0	2.3	0	
30								462	2.4	6.8	0	
31								25		3.4	0	
TOTAL	0	0	0	0	0	0	0	487.08	67.97	90.53	365.59	0
MEAN	0	0	0	0	0	0	0	15.7	2.27	2.92	11.8	0
MAX	0	0	0	0	0	0	0	462	36	20	136	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	966	135	180	725	0

CAL YR 1970 TOTAL 69.57 MEAN .19 MAX 2.3 MIN 0 AC-FT 138
WTR YR 1971 TOTAL 1,011.17 MEAN 2.77 MAX 462 MIN 0 AC-FT 2,010

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-30	0530	9.27	1,720				

07227200 Tramperos Creek near Stead, N. Mex.

LOCATION.--Lat 36°04'15", long 103°12'10", in NW 1/4 sec.10, T.21 N., R.35 E., Union County, at downstream end of bridge pier on State Highway 18, 2.1 miles south of Stead, and 26 miles south of Clayton.

DRAINAGE AREA.--556 sq mi, approximately.

PERIOD OF RECORD.--October 1964 to May 1966 (annual maximum only), June 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,481.19 ft above mean sea level. Prior to Feb. 6, 1969, at site 90 ft upstream at datum 1.61 ft lower.

AVERAGE DISCHARGE.--5 calendar years, 4.30 cfs (3,120 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,720 cfs May 30 (gage height, 9.27 ft), from rating curve extended above 14 cfs on basis of slope-area measurements at gage heights 12.4 and 14.9 ft; no flow most of time.

Period of record: Maximum discharge, 12,300 cfs Oct. 17, 1965 (gage height, 14.9 ft, from floodmark, present datum), by slope-area measurement; no flow most of time.

A flood in 1904 reached a stage of about 27.4 ft (discharge, about 45,500 cfs) with only a single span bridge and a flood in 1937 reached a stage of about 20.4 ft (discharge, about 31,600 cfs), from information by State Highway Department.

REMARKS.--Records poor. Minor regulation by detention reservoirs and stock ponds.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	2.0	2.1	.32				
2					0	0	10	0				
3					0	0	2.5	0				
4					0	0	.89	0				
5					0	0	.34	0				
6					0	0	0	0				
7					0	0	0	27				
8					0	0	0	136				
9					0	0	0	37				
10					0	0	0	5.4				
11					0	0	0	1.2				
12					0	0	0	.34				
13					0	0	0	.04				
14					0	0	0	.02				
15					0	0	0	130				
16					0	0	0	17				
17					0	0	0	7.4				
18					0	0	0	2.9				
19					0	0	0	.89				
20					0	36	0	.08				
21					0	25	0	0				
22					0	1.5	0	0				
23					0	.70	3.9	0				
24					0	.34	17	0				
25					0	.03	5.0	0				
26					0	0	20	0				
27					0	0	10	0				
28					0	0	6.3	0				
29		-----			.08	0	2.3	0				
30		-----			462	2.4	6.8	0				
31		-----		-----	25	-----	3.4	0	-----		-----	
TOTAL	0	0	0	0	487.08	67.97	90.53	365.59	0	0	0	0
MEAN	0	0	0	0	15.7	2.27	2.92	11.8	0	0	0	0
MAX	0	0	0	0	462	36	20	136	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	966	135	180	725	0	0	0	0

CAL YR 1971 TOTAL 1,011.17 MEAN 2.77 MAX 462 MIN 0 AC-FT 2,010

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE TIME G. H. DISCHARGE

5-30 0539 9.27 1,720

08251500 RIO GRANDE NEAR LOBATOS. COLO.

REVISIONS (WATER YEARS).--WSP 210: Drainage area. WSP 1312: 1907 (monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	246	587	556	340	470	370	934	102	118	120	174	110
2	226	601	532	340	490	350	699	98	142	120	167	108
3	216	736	400	320	500	400	574	80	136	128	142	105
4	226	916	430	290	500	450	460	80	122	130	130	98
5	246	916	460	275	450	520	370	80	98	125	112	102
6	254	925	455	260	470	500	306	88	98	122	108	110
7	262	934	470	250	460	490	286	95	102	120	95	105
8	274	952	440	250	400	480	278	112	115	125	90	110
9	298	934	445	250	410	510	262	115	112	145	85	92
10	478	889	514	255	430	496	242	110	125	184	85	85
11	532	889	502	260	450	450	242	102	130	136	78	88
12	405	864	502	270	460	472	242	100	133	115	76	90
13	365	706	395	280	460	502	274	95	136	102	78	95
14	335	650	360	290	470	538	266	92	145	88	67	90
15	330	622	390	300	480	556	250	85	164	69	56	82
16	350	574	270	310	500	508	254	80	154	76	53	76
17	410	532	400	330	520	496	242	78	151	76	50	82
18	430	538	380	340	550	472	212	92	167	92	48	82
19	538	556	330	360	550	466	223	105	170	112	44	95
20	580	556	400	370	500	460	216	122	178	125	38	98
21	587	544	390	380	380	466	192	160	174	142	41	108
22	594	526	350	410	410	496	198	133	157	164	50	112
23	580	532	355	420	450	574	220	110	145	226	46	128
24	580	556	330	430	500	699	195	108	136	202	51	133
25	568	568	310	440	500	872	188	105	133	209	76	142
26	562	568	340	430	490	907	174	102	133	226	69	148
27	574	562	350	420	450	1,020	145	102	128	254	62	139
28	568	550	370	430	410	1,320	115	100	133	216	94	136
29	550	544	380	440	-----	1,560	105	100	133	184	80	136
30	568	550	360	450	-----	1,640	105	115	122	174	82	151
31	574	-----	350	460	-----	1,330	-----	118	-----	154	92	-----
TOTAL	13,306	20,377	12,516	10,650	13,110	20,370	8,469	3,164	4,090	4,461	2,519	3,236
MEAN	429	679	404	344	468	657	282	102	136	144	81.3	108
MAX	594	952	556	460	550	1,640	934	160	178	254	174	151
MIN	216	526	270	250	380	350	105	78	98	69	38	76
AC-FT	26,390	40,420	24,830	21,120	26,000	40,400	16,800	6,280	8,110	8,850	5,000	6,420
CAL YR 1970	TOTAL 163,113	MEAN 447	MAX 1,920	MIN 44	AC-FT 323,500							
WTR YR 1971	TOTAL 116,268	MEAN 319	MAX 1,640	MIN 38	AC-FT 230,600							

08251500 RIO GRANDE NEAR LOBATOS, COLO.

LOCATION.--Lat 37°04'42", long 105°45'22", in sec.22, T.33 N., R.11 E., Conejos County, on right bank at highway bridge, 6 miles north of Colorado-New Mexico State line, 7 miles downstream from Culebra Creek, 10 miles east of Lobatos, and 14 miles east of Antonito.

DRAINAGE AREA.--7,700 sq mi, approximately (includes 2,940 sq mi in closed basin in northern part of San Luis Valley, Colo.).

PERIOD OF RECORD.--June 1889 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "at Cenicerio" 1899-1901, and as "near Cenicerio" 1902-4.

GAGE.--Water-stage recorder. Datum of gage is 7,427.63 ft above mean sea level. Prior to Nov. 8, 1910, non-recording gages at same site and datum.

AVERAGE DISCHARGE.--72 calendar years, 599 cfs (434,000 acre-ft per year), 20 calendar years (1952-71), 323 cfs (234,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,720 cfs Mar. 30 (gage height, 3.29 ft); minimum daily discharge, 38 cfs Aug. 20.

Period of record: Maximum discharge observed, 13,200 cfs June 8, 1905 (gage height, 9.1 ft), from rating curve extended above 8,000 cfs; no flow at times in 1950-51, 1956.

Maximum stage since at least 1828, that of June 8, 1905.

REMARKS.--Records good except those for winter periods, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 210: Drainage area. WSP 1312: 1907 (monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	340	470	370	934	102	118	120	174	110	164	234	400
2	340	490	350	699	98	142	120	167	108	212	234	350
3	320	500	400	574	80	136	128	142	105	440	294	320
4	290	500	450	460	80	122	130	130	98	664	410	310
5	275	450	520	370	80	98	125	112	102	678	450	280
6	260	470	500	306	88	98	122	108	110	608	460	240
7	250	460	490	286	95	102	120	95	105	556	466	280
8	250	400	480	278	112	115	125	90	110	526	472	280
9	250	410	510	262	115	112	145	85	92	520	460	240
10	255	430	496	242	110	125	184	85	85	508	455	230
11	260	450	450	242	102	130	136	78	88	490	455	270
12	270	460	472	242	100	133	115	76	90	478	455	310
13	280	460	502	274	95	136	102	78	95	472	466	340
14	290	470	538	266	92	145	88	67	90	466	472	340
15	300	480	556	250	85	164	69	56	82	460	478	330
16	310	500	508	254	80	154	76	53	76	390	478	320
17	330	520	496	242	78	151	76	50	82	330	484	320
18	340	550	472	212	92	167	92	48	82	298	478	300
19	360	550	466	223	105	170	112	44	95	278	440	290
20	370	500	460	216	122	178	125	38	98	310	420	280
21	380	380	466	192	160	174	142	41	108	294	390	270
22	410	410	496	198	133	157	164	50	112	262	390	290
23	420	450	574	220	110	145	226	46	128	250	380	310
24	430	500	699	195	108	136	202	51	133	258	380	320
25	440	500	872	188	105	133	209	76	142	258	410	340
26	430	490	907	174	102	133	226	69	148	246	420	380
27	420	450	1,020	145	102	128	254	62	139	246	430	400
28	430	410	1,320	115	100	133	216	94	136	238	425	410
29	440		1,560	105	100	133	184	80	136	246	440	410
30	450		1,640	105	115	122	174	82	151	242	420	390
31	460	-----	1,330		118		154	92		230		380
TOTAL	10,650	13,110	20,370	8,469	3,164	4,090	4,461	2,519	3,236	11,618	12,646	9,930
MEAN	344	468	657	282	102	136	144	81.3	108	375	422	320
MAX	460	550	1,640	934	160	178	254	174	151	678	484	410
MIN	250	380	350	105	78	98	69	38	76	164	234	230
AC-FT	21,120	26,000	40,400	16,800	6,280	8,110	8,850	5,000	6,420	23,040	25,080	19,700
CAL YR 1971 TOTAL	104,263			286	MAX 1,640	MIN 38	AC-FT 206,800					

08252000 RIO GRANDE AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 37°00'03", long 105°43'19", Costilla County, in Sangre de Cristo Grant, on left bank 0.6 mile upstream from Colorado-New Mexico State line, 1.7 miles upstream from Costilla Creek, and 5.5 miles west of Jaroso.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,390 ft (from topographic map).

AVERAGE DISCHARGE.--18 years, 309 cfs (223,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,740 cfs Mar. 30 (gage height, 4.89 ft); minimum daily, 42 cfs Aug. 22.

Period of record: Maximum discharge, 4,150 cfs May 29, 1958 (gage height, 7.07 ft); no flow at times in 1956.

Flood of June 8, 1905 (daily discharge, 13,100 cfs at station near Lobatos 5.8 miles upstream), was probably the greatest since at least 1828.

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

REVISIONS (WATER YEARS).--WSP 1732: 1954(M).

DISCHARGE, IN CUBIC FEET PER SECCND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	587	547	350	475	370	986	106	118	118	178	112
2	234	599	519	340	490	340	752	103	141	120	183	110
3	210	680	411	310	500	430	644	92	143	125	152	103
4	213	900	428	285	485	480	535	78	122	130	138	97
5	228	910	459	270	460	515	435	78	106	128	120	90
6	243	926	466	260	470	500	368	88	99	125	110	115
7	237	938	473	250	455	490	340	99	103	122	97	97
8	255	980	445	250	400	485	327	112	122	125	90	108
9	271	980	452	250	415	510	308	122	120	143	86	95
10	404	944	523	255	435	540	283	130	125	186	86	78
11	519	944	504	260	450	527	277	118	135	155	78	78
12	442	920	452	270	460	523	280	118	141	132	74	80
13	356	775	401	280	460	539	305	110	143	120	80	84
14	340	689	365	290	465	583	308	108	155	106	70	84
15	333	653	380	300	490	615	289	101	172	88	61	78
16	343	607	300	315	505	555	280	88	178	84	55	70
17	404	559	380	330	530	523	261	76	166	90	50	72
18	425	555	380	345	550	527	231	99	180	95	48	76
19	498	579	340	360	540	484	237	106	192	110	47	86
20	571	579	390	370	450	494	225	115	186	125	44	86
21	579	551	390	385	390	515	195	160	189	135	44	99
22	583	535	360	410	430	527	198	135	169	149	42	108
23	583	539	360	420	480	611	228	112	152	219	47	128
24	575	563	340	430	500	725	204	110	135	204	44	138
25	567	575	320	440	490	900	192	108	130	204	64	143
26	567	571	330	450	480	932	175	106	130	225	68	146
27	567	567	340	445	435	1,020	160	103	122	243	64	138
28	563	555	360	420	400	1,330	128	103	122	225	68	135
29	543	547	375	430	-----	1,560	112	97	128	189	90	143
30	563	535	370	435	-----	1,650	112	108	122	175	84	163
31	567	-----	360	460	-----	1,400	-----	120	-----	163	86	-----
TOTAL	13,044	20,842	12,520	10,665	13,090	21,200	9,375	3,309	4,246	4,558	2,548	3,140
MEAN	421	695	404	344	468	684	313	107	142	147	82.2	105
MAX	583	980	547	460	550	1,650	986	160	192	243	183	163
MIN	210	535	300	250	390	340	112	76	99	84	42	70
AC-FT	25,870	41,340	24,830	21,150	25,960	42,050	18,600	6,560	8,420	9,040	5,050	6,230

CAL YR 1970 TOTAL 167,127 MEAN 458 MAX 2,080 MIN 46 AC-FT 331,500
WTR YR 1971 TOTAL 118,537 MEAN 325 MAX 1,650 MIN 42 AC-FT 235,100

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

08252000 RIO GRANDE AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 37°00'03", long 105°43'19", Costilla County, in Sangre de Cristo Grant, on left bank 0.6 mile upstream from Colorado-New Mexico State line, 1.7 miles upstream from Costilla Creek, and 5.5 miles west of Jaroso.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,390 ft (from topographic map).

AVERAGE DISCHARGE.--18 calendar years, 312 cfs (226,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,740 cfs Mar. 30 (gage height, 4.89 ft); minimum daily, 42 cfs Aug. 22.

Period of record: Maximum discharge, 4,150 cfs May 29, 1958 (gage height, 7.07 ft); no flow at times in 1956.

Flood of June 8, 1905 (daily discharge, 13,100 cfs at station near Lobatos 5.8 miles upstream), was probably the greatest since at least 1828.

REMARKS.--Records good except those for winter periods, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1732: 1954(M).

DISCHARGE, IN CFS, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	350	475	370	986	106	118	118	178	112	169	228	405
2	340	490	340	752	103	141	120	183	110	204	237	370
3	310	500	430	644	92	143	125	152	103	414	274	320
4	285	485	480	535	78	122	130	138	97	648	375	320
5	270	460	515	435	78	106	128	120	90	694	431	290
6	250	470	500	368	88	99	125	110	115	619	448	230
7	250	435	490	340	99	103	122	97	97	575	432	270
8	250	400	485	327	112	122	125	90	108	539	459	290
9	250	415	510	308	122	120	143	86	95	515	448	250
10	255	435	540	283	130	125	186	86	78	515	445	220
11	260	450	527	277	118	135	155	78	78	498	445	260
12	270	460	523	280	118	141	132	74	80	487	438	300
13	280	460	539	305	110	143	120	80	84	484	445	340
14	290	465	583	308	108	155	106	70	84	476	459	350
15	300	490	615	289	101	172	98	61	78	470	466	330
16	315	505	555	280	88	178	84	55	70	411	456	320
17	330	530	523	261	76	166	90	50	72	343	473	320
18	345	550	527	231	99	180	95	48	76	295	462	310
19	360	540	484	237	106	192	110	47	86	264	430	290
20	370	450	494	225	115	186	125	44	86	292	428	280
21	385	390	515	195	160	189	135	44	99	298	368	270
22	410	430	527	198	135	169	149	42	108	261	380	280
23	420	480	611	228	112	152	219	47	128	246	380	310
24	430	500	725	204	110	135	204	44	138	249	380	320
25	440	490	900	192	108	130	204	64	143	255	390	330
26	450	480	932	175	106	130	225	68	146	240	410	370
27	445	435	1,020	160	103	122	243	64	138	234	420	400
28	420	400	1,330	128	103	122	225	68	135	228	430	410
29	430		1,560	112	97	128	189	90	143	231	440	420
30	435		1,650	112	108	122	175	84	163	237	430	390
31	460	-----	1,400		120		163	86	-----	222		380
TOTAL	10,665	13,090	21,200	9,375	3,309	4,246	4,558	2,548	3,140	11,613	12,337	9,945
MEAN	344	468	684	313	107	142	147	82.2	105	375	411	321
MAX	460	550	1,650	986	160	192	243	183	163	694	473	420
MIN	250	390	340	112	76	99	84	42	70	169	228	220
AC-FT	21,150	25,960	42,050	18,600	6,560	8,420	9,040	5,050	6,230	23,030	24,470	19,730

CAL YR 1971 TOTAL 106,026 MEAN 290 MAX 1,650 MIN 42 AC-FT 210,300

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

08252500 Costilla Creek above Costilla Dam, N. Mex.

LOCATION.--Lat 36°53'52", long 105°15'16", Taos County, in Sangre de Cristo Grant, on left bank 1,900 ft upstream from normal high-water line of Costilla Reservoir, 2.1 miles northeast of Costilla Dam, and 16 miles southeast of Costilla.

DRAINAGE AREA.--25.1 sq mi.

PERIOD OF RECORD.--April 1937 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1312 and 1732. Prior to October 1951, published as "above reservoir, near Costilla."

GAGE.--Water-stage recorder. Concrete control since Sept. 17, 1965. Altitude of gage is 9,429 ft (from topographic map). See WSP 1923 for history of changes prior to Sept. 17, 1965.

EXTREMES.--Current year: Maximum discharge, 25 cfs July 19 (gage height, 2.46 ft); minimum not determined.

Period of record: Maximum discharge, 3,870 cfs July 22, 1954 (gage height, 6.3 ft, from floodmarks, present site and datum), on basis of slope-area measurement of peak flow; minimum not determined.

The flood in 1954 destroyed the gaging station and is highest known since about 1909, from information by local range rider.

A portion of this flow may have originated in Casias Creek basin (see REMARKS).

REMARKS.--Records good. Natural flow may be augmented by transbasin diversions or irrigation returns from about 1,300 acres irrigated from Casias Creek (see sta 08253000).

REVISIONS (WATER YEARS).--WSP 878: 1937. WSP 1923: 1937-50, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1							4.5	7.4	5.1	4.5	4.1
2	3.1							4.5	7.2	6.0	4.1	4.0
3	3.2							4.7	7.2	4.9	5.1	3.7
4	3.2							5.1	7.2	4.3	6.0	3.2
5	3.1							4.9	6.7	4.0	7.2	2.9
6	3.2							5.1	7.6	4.0	8.7	2.8
7	3.2							5.8	7.9	4.1	8.1	2.8
8	4.1							7.0	7.9	7.2	6.7	3.4
9	4.1							6.5	7.6	7.9	4.5	2.8
10	4.7							6.5	7.4	5.4	4.3	2.5
11	4.9							8.4	7.2	4.1	3.5	2.5
12	4.3							7.4	7.2	4.0	2.9	2.5
13	4.3							7.7	7.2	3.8	2.9	2.4
14	-							7.2	7.4	3.7	3.1	2.3
15	-							8.4	7.6	6.8	4.1	2.3
16	-							8.9	7.6	5.6	3.8	2.2
17	-							8.7	7.6	4.0	3.4	3.1
18	-							8.4	7.2	4.0	3.6	3.4
19	-							8.8	7.2	8.5	7.8	4.3
20	-							9.8	8.9	13	7.6	3.6
21	-							8.9	12	9.6	7.4	3.1
22	-							7.6	9.5	7.9	7.3	4.0
23	-							7.6	8.4	10	5.1	5.1
24	-							7.6	7.4	9.5	4.9	4.3
25	-							7.4	6.7	6.5	6.1	3.1
26	-							7.4	6.7	10	6.5	2.2
27	-							7.4	6.0	8.2	7.2	1.7
28	-							8.4	5.1	4.5	5.8	1.6
29	-							9.8	4.7	4.5	5.6	1.9
30	-							9.8	4.7	5.1	5.2	5.8
31	-	-----					-----	8.4	-----	4.9	4.3	-----
TOTAL	-	-	-	-	-	-	-	228.6	220.4	191.1	167.3	93.6
MEAN	-	-	-	-	-	-	-	7.37	7.35	6.16	5.40	3.12
MAX	-	-	-	-	-	-	-	9.8	12	13	8.7	5.8
MIN	-	-	-	-	-	-	-	4.5	4.7	3.7	2.9	1.6
AC-FT	-	-	-	-	-	-	-	453	437	379	332	186

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

08252500 Costilla Creek above Costilla Dam, N. Mex.

LOCATION.--Lat 36°53'52", long 105°15'16", Taos County, in Sangre de Cristo Grant, on left bank 1,900 ft upstream from normal high-water line of Costilla Reservoir, 2.1 miles northeast of Costilla Dam, and 16 miles southeast of Costilla.

DRAINAGE AREA.--25.1 sq mi.

PERIOD OF RECORD.--April 1937 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1312 and 1732. Prior to October 1951, published as "above reservoir, near Costilla."

GAGE.--Water-stage recorder. Concrete control since Sept. 17, 1965. Altitude of gage is 9,429 ft (from topographic map). See WSP 1923 for history of changes prior to Sept. 17, 1965.

EXTREMES.--Current year: Maximum discharge, 25 cfs July 19 (gage height, 2.46 ft); minimum not determined.
 Period of record: Maximum discharge, 3,870 cfs July 22, 1954 (gage height, 6.3 ft, from floodmarks, present site and datum), on basis of slope-area measurement of peak flow; minimum not determined.
 The flood in 1954 destroyed the gaging station and is highest known since about 1909, from information by local range rider. A portion of this flow may have originated in Casias Creek basin (see REMARKS).

REMARKS.--Records good. Natural flow may be augmented by transbasin diversions or irrigation returns from about 1,300 acres irrigated from Casias Creek (see sta 08253000).

REVISIONS (WATER YEARS).--WSP 878: 1937. WSP 1923: 1937-50, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					4.5	7.4	5.1	4.5	4.1	7.3		
2					4.5	7.2	6.0	4.1	4.0	4.8		
3					4.7	7.2	4.9	5.1	3.7	3.7		
4					5.1	7.2	4.3	6.0	3.2	3.7		
5					4.9	6.7	4.0	7.2	2.9	3.2		
6					5.1	7.6	4.0	8.7	2.8	--		
7					5.8	7.9	4.1	8.1	2.8	--		
8					7.0	7.9	7.2	6.7	3.4	--		
9					6.5	7.6	7.9	4.5	2.8	--		
10					6.5	7.4	5.4	4.3	2.5	--		
11					8.4	7.2	4.1	3.5	2.5	--		
12					7.4	7.2	4.0	2.9	2.5	--		
13					7.7	7.2	3.8	2.9	2.4	--		
14					7.2	7.4	3.7	3.1	2.3	--		
15					8.4	7.6	6.8	4.1	2.3	--		
16					8.9	7.6	5.6	3.8	2.2	--		
17					8.7	7.6	4.0	3.4	3.1	--		
18					8.4	7.2	4.0	3.6	3.4	--		
19					8.8	7.2	8.5	7.8	4.3	--		
20					9.8	8.9	13	7.6	3.6	--		
21					8.9	12	9.6	7.4	3.1	--		
22					7.6	9.5	7.9	7.3	4.0	--		
23					7.6	8.4	10	5.1	5.1	--		
24					7.6	7.4	9.5	4.9	4.3	--		
25					7.4	6.7	6.5	6.1	3.1	--		
26					7.4	6.7	10	6.5	2.2	--		
27					7.4	6.0	8.2	7.2	1.7	--		
28					8.4	5.1	4.5	5.8	1.6	--		
29					9.8	4.7	4.5	5.6	1.9	--		
30					9.8	4.7	5.1	5.2	5.8	--		
31					8.4		4.9	4.3	-----	--	-----	
TOTAL	--	--	--	--	228.6	220.4	191.1	167.3	93.6	--	--	--
MEAN	--	--	--	--	7.37	7.35	6.16	5.40	3.12	--	--	--
MAX	--	--	--	--	9.8	12	13	8.7	5.8	--	--	--
MIN	--	--	--	--	4.5	4.7	3.7	2.9	1.6	--	--	--
AC-FT	--	--	--	--	453	437	379	332	186	--	--	--

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

08253000 Casias Creek near Costilla, N. Mex.

LOCATION.--Lat 36°53'48", long 105°15'35", Taos County, in Sangre de Cristo Grant, on left bank 200 ft downstream from road crossing, 900 ft upstream from normal high-water line of Costilla Reservoir, 1.8 miles northeast of Costilla Dam, and 16 miles southeast of Costilla.

DRAINAGE AREA.--16.6 sq mi.

PERIOD OF RECORD.--April 1937 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1312 and 1732. Figures of daily discharge for Nov. 1-7, 1947 and Nov. 1-16, 1948, published in WSP 1118 and 1148, respectively, are unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,404 ft (from topographic map). Prior to July 18, 1940, water-stage recorder and wooden control 100 ft downstream at datum 1.56 ft lower.

EXTREMES.--Current year: Maximum discharge, 181 cfs July 20 (gage height, 2.07 ft), from rating curve extended above 63 cfs; minimum not determined.

Period of record: Maximum discharge, 181 cfs July 20, 1971 (gage height, 2.07 ft), from rating curve extended above 63 cfs; minimum not determined.

REMARKS.--Records good. Diversion 3.5 miles upstream for irrigation of about 1,300 acres, part of which is in Costilla Creek basin.

REVISIONS (WATER YEARS).--WSP 1282: 1948-51. WSP 1923: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								4.5	4.5	4.5	11	7.3
2								4.5	4.5	5.0	9.8	7.3
3								4.7	4.2	4.0	9.8	6.9
4								4.7	4.5	3.4	9.8	6.5
5								5.4	4.2	3.2	11	6.1
6								5.8	4.2	3.2	11	6.1
7								6.9	4.2	3.2	13	5.8
8								7.3	5.0	4.7	11	6.1
9								6.5	4.7	4.2	9.8	5.8
10								6.9	4.7	3.4	9.8	5.4
11								8.0	4.7	2.9	8.4	5.4
12								7.3	4.7	2.9	8.4	5.0
13								6.9	4.7	2.9	8.0	5.0
14								6.5	4.5	2.7	8.0	4.7
15								7.3	4.5	3.4	9.3	4.7
16								7.7	4.5	3.4	8.0	4.5
17								7.7	4.5	2.9	12	5.0
18								8.0	4.5	3.2	10	5.4
19								8.0	4.7	5.3	11	6.5
20								6.5	5.0	15	11	5.8
21								4.7	6.1	7.7	11	5.4
22								4.2	5.8	6.1	11	6.5
23								4.2	5.4	7.3	9.3	8.3
24								4.2	5.4	7.7	9.3	7.3
25								4.2	5.0	5.8	9.3	6.1
26								4.0	4.7	8.4	9.3	5.4
27								4.2	4.5	8.8	9.8	4.7
28								4.5	4.2	11	8.8	4.5
29								5.0	4.2	11	8.8	4.7
30								5.0	4.2	11	8.4	11
31								4.5		11	7.7	
TOTAL	-	-	-	-	-	-	-	179.8	140.5	179.2	302.8	179.2
MEAN	-	-	-	-	-	-	-	5.80	4.68	5.78	9.77	5.97
MAX	-	-	-	-	-	-	-	8.0	6.1	15	13	11
MIN	-	-	-	-	-	-	-	4.0	4.2	2.7	7.7	4.5
AC-FT	-	-	-	-	-	-	-	357	279	355	601	355

PEAK DISCHARGE (BASE, 35 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE
7-20	2030	2.07	181

08253000 Casias Creek near Costilla, N. Mex.

LOCATION.--Lat 36°53'48", long 105°15'35", Taos County, in Sangre de Cristo Grant, on left bank 200 ft downstream from road crossing, 900 ft upstream from normal high-water line of Costilla Reservoir, 1.8 miles northeast of Costilla Dam, and 16 miles southeast of Costilla.

DRAINAGE AREA.--16.6 sq mi.

PERIOD OF RECORD.--April 1937 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1312 and 1732. Figures of daily discharge for Nov. 1-7, 1947 and Nov. 1-16, 1948, published in WSP 1118 and 1148, respectively, are unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,404 ft (from topographic map). Prior to July 18, 1940, water-stage recorder and wooden control 100 ft downstream at datum 1.56 ft lower.

EXTREMES.--Current year: Maximum discharge, 181 cfs July 20 (gage height, 2.07 ft), from rating curve extended above 63 cfs; minimum not determined.

Period of record: Maximum discharge, 181 cfs July 20, 1971 (gage height, 2.07 ft), from rating curve extended above 63 cfs; minimum not determined.

REMARKS.--Records good. Diversion 3.5 miles upstream for irrigation of about 1,300 acres, part of which is in Costilla Creek basin.

REVISIONS (WATER YEARS).--WSP 1282: 1948-51. WSP 1923: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					4.5	4.5	4.5	11	7.3	12		
2					4.5	4.5	5.0	9.8	7.3	7.7		
3					4.7	4.2	4.0	9.8	6.9	6.9		
4					4.7	4.5	3.4	9.8	6.5	6.9		
5					5.4	4.2	3.2	11	6.1	6.5		
6					5.8	4.2	3.2	11	6.1	-		
7					6.9	4.2	3.2	13	5.8	-		
8					7.3	5.0	4.7	11	6.1	-		
9					6.5	4.7	4.2	9.8	5.8	-		
10					6.9	4.7	3.4	9.8	5.4	-		
11					8.0	4.7	2.9	8.4	5.4	-		
12					7.3	4.7	2.9	8.4	5.0	-		
13					6.9	4.7	2.9	8.0	5.0	-		
14					6.5	4.5	2.7	8.0	4.7	-		
15					7.3	4.5	3.4	9.3	4.7	-		
16					7.7	4.5	3.4	8.0	4.5	-		
17					7.7	4.5	2.9	12	5.0	-		
18					8.0	4.5	3.2	10	5.4	-		
19					8.0	4.7	5.3	11	6.5	-		
20					6.5	5.0	15	11	5.8	-		
21					4.7	6.1	7.7	11	5.4	-		
22					4.2	5.8	6.1	11	6.5	-		
23					4.2	5.4	7.3	9.3	8.3	-		
24					4.2	5.4	7.7	9.3	7.3	-		
25					4.2	5.0	5.8	9.3	6.1	-		
26					4.0	4.7	8.4	9.3	5.4	-		
27					4.2	4.5	8.8	9.8	4.7	-		
28					4.5	4.2	11	8.8	4.5	-		
29		-----			5.0	4.2	11	8.8	4.7	-		
30		-----			5.0	4.2	11	8.4	11	-		
31		-----		-----	4.5	-----	11	7.7	-----	-	-----	
TOTAL	-	-	-	-	179.8	140.5	179.2	302.8	179.2	-	-	-
MEAN	-	-	-	-	5.80	4.68	5.78	9.77	5.97	-	-	-
MAX	-	-	-	-	8.0	6.1	15	13	11	-	-	-
MIN	-	-	-	-	4.0	4.2	2.7	7.7	4.5	-	-	-
AC-FT	-	-	-	-	357	279	355	601	355	-	-	-

PEAK DISCHARGE (BASE, 35 CFS)

DATE TIME G. H. DISCHARGE

7-20 2030 2.07 181

RIO GRANDE BASIN

08253500 Santistevan Creek near Costilla, N. Mex.

LOCATION.--Lat 36°53'03", long 105°16'50", Taos County, in Sangre de Cristo Grant, on left bank 200 ft upstream from road crossing, 1,300 ft upstream from normal high-water line of Costilla Reservoir, 0.6 mile north of Costilla Dam, and 16 miles southeast of Costilla.

DRAINAGE AREA.--2.15 sq mi.

PERIOD OF RECORD.--April 1937 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1312 and 1732.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 9,487 ft (from topographic map). Prior to June 27, 1940, water-stage recorder and wooden control at datum 0.99 ft lower.

EXTREMES.--Current year: Maximum discharge, 16 cfs July 20 (gage height, 1.38 ft); minimum not determined.

Period of record: Maximum discharge, 18 cfs Aug. 11, 1941, July 12, 1957; maximum gage height 1.73 ft Aug. 11, 1941; minimum not determined.

REMARKS.--Records fair. No diversions above or below station.

REVISIONS.--WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								.73	1.4	2.1	1.9	2.2
2								.79	1.4	2.2	2.0	2.2
3								.79	1.5	2.0	2.1	2.1
4								.79	1.6	1.9	2.0	2.1
5								.86	1.6	1.9	2.3	2.0
6								.86	1.7	1.9	2.2	2.0
7								1.0	1.7	1.9	2.3	1.9
8								1.1	1.8	2.3	2.3	1.9
9								1.0	1.9	1.9	2.0	1.9
10								1.1	1.9	1.8	1.9	1.8
11								1.1	1.9	1.6	1.9	1.8
12								1.1	1.9	1.5	1.8	1.7
13								1.1	2.0	1.5	1.8	1.6
14								1.1	2.1	1.4	1.8	1.6
15								1.1	2.1	1.5	1.8	1.5
16								1.2	2.1	1.4	1.8	1.5
17								1.1	2.1	1.4	2.5	1.7
18								1.1	2.2	1.4	2.2	1.7
19								1.1	2.2	1.6	2.3	1.7
20								1.4	2.3	3.4	2.4	1.6
21								1.3	2.3	2.3	2.4	1.6
22								1.3	2.3	2.3	2.2	1.7
23								1.3	2.2	2.3	2.2	1.7
24								1.3	2.2	2.2	2.2	1.7
25								1.1	2.2	2.1	2.4	1.6
26								1.1	2.2	2.3	2.4	1.5
27								1.2	2.2	2.1	2.8	1.4
28								1.3	2.1	2.0	2.5	1.4
29								1.4	2.1	2.0	2.6	1.4
30								1.4	2.1	2.0	2.4	1.9
31								1.4		2.0	2.3	
TOTAL	-	-	-	-	-	-	-	34.52	59.3	60.2	67.7	52.4
MEAN	-	-	-	-	-	-	-	1.11	1.98	1.94	2.18	1.75
MAX	-	-	-	-	-	-	-	1.4	2.3	3.4	2.8	2.2
MIN	-	-	-	-	-	-	-	.73	1.4	1.4	1.8	1.4
AC-FT	-	-	-	-	-	-	-	68	118	119	134	104

PEAK DISCHARGE (BASE, 6.0 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	1830	1.38	16	8-17	1530	.77	6.7

08253500 Santistevan Creek near Costilla, N. Mex.

LOCATION.--Lat 36°53'03", long 105°16'50", Taos County, in Sangre de Cristo Grant, on left bank 200 ft upstream from road crossing, 1,300 ft upstream from normal high-water line of Costilla Reservoir, 0.6 mile north of Costilla Dam, and 16 miles southeast of Costilla.

DRAINAGE AREA.--2.15 sq mi.

PERIOD OF RECORD.--April 1937 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1312 and 1732.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 9,487 ft (from topographic map). Prior to June 27, 1940, water-stage recorder and wooden control at datum 0.99 ft lower.

EXTREMES.--Current year: Maximum discharge, 16 cfs July 20 (gage height, 1.38 ft); minimum not determined.

Period of record: Maximum discharge, 18 cfs Aug. 11, 1941, July 12, 1957; maximum gage height 1.73 ft Aug. 11, 1941; minimum not determined.

REMARKS.--Records fair. No diversions above or below station.

REVISIONS.--WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					.73	1.4	2.1	1.9	2.2	1.9		
2					.79	1.4	2.2	2.0	2.2	1.5		
3					.79	1.5	2.0	2.1	2.1	1.4		
4					.79	1.6	1.9	2.0	2.1	1.4		
5					.86	1.6	1.9	2.3	2.0	1.4		
6					.86	1.7	1.9	2.2	2.0	-		
7					1.0	1.7	1.9	2.3	1.9	-		
8					1.1	1.8	2.3	2.3	1.9	-		
9					1.0	1.9	1.9	2.0	1.9	-		
10					1.1	1.9	1.8	1.9	1.8	-		
11					1.1	1.9	1.6	1.9	1.8	-		
12					1.1	1.9	1.5	1.8	1.7	-		
13					1.1	2.0	1.5	1.8	1.6	-		
14					1.1	2.1	1.4	1.8	1.6	-		
15					1.1	2.1	1.5	1.8	1.5	-		
16					1.2	2.1	1.4	1.8	1.5	-		
17					1.1	2.1	1.4	2.5	1.7	-		
18					1.1	2.2	1.4	2.2	1.7	-		
19					1.1	2.2	1.6	2.3	1.7	-		
20					1.4	2.3	3.4	2.4	1.6	-		
21					1.3	2.3	2.3	2.4	1.6	-		
22					1.3	2.3	2.3	2.2	1.7	-		
23					1.3	2.2	2.3	2.2	1.7	-		
24					1.3	2.2	2.2	2.2	1.7	-		
25					1.1	2.2	2.1	2.4	1.6	-		
26					1.1	2.2	2.3	2.4	1.5	-		
27					1.2	2.2	2.1	2.8	1.4	-		
28					1.3	2.1	2.0	2.5	1.4	-		
29					1.4	2.1	2.0	2.6	1.4	-		
30					1.4	2.1	2.0	2.4	1.9	-		
31					1.4		2.0	2.3		-		
TOTAL	-	-	-	-	34.52	59.3	60.2	67.7	52.4	-	-	-
MEAN	-	-	-	-	1.11	1.98	1.94	2.18	1.75	-	-	-
MAX	-	-	-	-	1.4	2.3	3.4	2.8	2.2	-	-	-
MIN	-	-	-	-	.73	1.4	1.4	1.8	1.4	-	-	-
AC-FT	-	-	-	-	68	118	119	134	104	-	-	-

PEAK DISCHARGE (BASE, 6.0 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	1830	1.38	16	8-17	1530	.77	6.7

08253900 Costilla Reservoir near Costilla, N. Mex.

LOCATION.--Lat 36°52'32", Long 105°16'45", Taos County, in Sangre de Cristo Grant, on face of Costilla Dam on Costilla Creek, and 16 miles southeast of Costilla.

DRAINAGE AREA.--54.6 sq mi.

PERIOD OF RECORD.--May 1922 to September 1965 (monthend contents only), October 1965 to current year. Records prior to 1961 published in WSP 1732. Prior to October 1966, published as Costilla Lake near Costilla.

GAGE.--Inclined staff gage painted on base of railroad rail on left side of control tower of Dam. Altitude of gage is -107 ft (from topographic map).

EXTREMES.--Current year: Maximum contents observed, 7,540 acre-ft May 1-3 (gage height, 9,489.1 ft); minimum observed, 232 acre-ft Sept. 9, 13, 17 (gage height, 9,428.3 ft).

Period of record: Maximum contents observed, 15,130 acre-ft June 13, 1938, June 20-23, 1941 (gage height, 9,511.5 ft); no contents October 1925 to February 1926, September 1956.

REMARKS.--Reservoir is formed by earthfill dam faced with broken stone. Storage began in 1920. Capacity 15,740 acre-ft between gage heights 9,405.0 ft (sill of outlet) and 9,513.0 ft (crest of ungated spillway cut in natural rock). By order of New Mexico State Engineer storage is limited to 14,540 acre-ft maximum, and 10,880 acre-ft for not to exceed 60 days. Diversions for irrigation of about 1,300 acres above Reservoir.

COOPERATION.--Gage readings collected in cooperation with New Mexico Interstate Stream Commission.

REVISIONS.--WSP 1923: Drainage area.

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	-	-	-	-	-	7,540	6,120	2,310	-	450
2	-	-	-	-	-	-	-	7,540	5,950	2,130	1,210	364
3	-	-	-	-	-	-	-	7,540	5,760	-	1,190	294
4	-	-	-	-	-	-	-	7,490	5,550	-	1,100	-
5	-	-	-	-	-	-	-	7,460	-	2,020	984	-
6	-	-	-	-	-	-	-	7,460	-	1,900	959	263
7	-	-	-	-	-	-	-	7,460	5,360	1,730	-	243
8	-	-	-	-	-	-	-	-	5,250	1,520	-	238
9	-	-	-	-	-	-	-	7,490	5,070	1,350	878	232
10	-	-	-	-	-	-	-	7,490	4,900	-	855	247
11	-	-	-	-	-	-	-	7,460	4,700	-	807	-
12	-	-	-	-	-	-	-	7,460	-	1,320	786	-
13	4,450	-	-	-	-	-	-	7,460	-	1,330	737	232
14	-	-	-	-	-	-	7,190	7,460	4,530	1,170	-	238
15	-	-	-	-	-	-	-	7,460	4,370	-	-	240
16	-	-	-	-	-	-	-	-	4,190	1,170	737	236
17	-	-	-	-	-	-	-	7,460	4,050	-	710	232
18	-	-	-	-	-	-	-	7,430	3,850	-	698	-
19	-	-	-	-	-	-	-	7,240	-	1,140	695	-
20	-	-	-	-	-	-	-	7,140	-	1,110	691	-
21	-	-	-	-	-	-	-	7,030	3,740	1,140	-	-
22	-	-	-	-	-	-	-	-	3,530	1,120	-	-
23	-	-	-	-	-	-	-	-	3,300	1,080	737	-
24	-	-	-	-	-	-	-	6,930	3,160	-	706	-
25	-	-	-	-	-	-	-	6,800	2,950	-	695	-
26	-	-	-	-	-	-	-	6,670	-	1,140	628	-
27	-	-	-	-	-	-	-	6,540	-	1,120	625	-
28	-	-	-	-	6,000	-	7,540	6,390	2,860	1,130	-	-
29	-	-	-	-	-----	-	-	-	2,700	1,150	-	-
30	-	5,100	-	-	-----	-	7,540	-	2,530	1,170	607	610
31	4,700	-----	5,450	5,750	-----	6,590	-----	6,260	-----	1,180	532	-----
(+)	-	-	-	-	-	9,485.5	-	9,484.2	9,465.6	-	9,439.3	-
(±)	+500	+400	+350	+300	+250	+590	+950	-1,280	-3,730	-1,350	-648	+78

CAL YR 1970..... ± -2,850

WTR YR 1971..... ± -3,590

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

± Change in contents, in acre-feet.

NOTE.--Contents interpolated at end of month except Mar. 31, May 31, June 30, Aug. 31.

08253900 Costilla Reservoir near Costilla, N. Mex.

LOCATION.--Lat 36°52'32", long 105°16'45", Taos County, in Sangre de Cristo Grant, on face of Costilla Dam on Costilla Creek, and 16 miles southeast of Costilla.

DRAINAGE AREA.--54.6 sq mi.

PERIOD OF RECORD.--May 1922 to September 1965 (monthend contents only), October 1965 to current year. Records prior to October 1960 published in WSP 1732. Prior to October 1966, published as Costilla Lake near Costilla.

GAGE.--Inclined staff gage painted on base of railroad rail on left side of control tower of Dam. Altitude of gage is -107 ft (from topographic map).

EXTREMES.--Current year: Maximum contents observed, 7,540 acre-ft May 1-3 (gage height, 9,489.1 ft); minimum observed, 232 acre-ft Sept. 9, 13, 17 (gage height, 9,428.3 ft).

Period of record: Maximum contents observed, 15,130 acre-ft June 13, 1938, June 20-23, 1941 (gage height, 9,511.5 ft); no contents October 1925 to February 1926, September 1956.

REMARKS.--Reservoir is formed by earthfill dam faced with broken stone. Storage began in 1920. Capacity 15,740 acre-ft between gage heights 9,405.0 ft (sill of outlet) and 9,513.0 ft (crest of ungated spillway cut in natural rock). By order of New Mexico State Engineer storage is limited to 14,540 acre-ft maximum, and 10,880 acre-ft for not to exceed 60 days. Diversions for irrigation of about 1,300 acres above Reservoir.

COOPERATION.--Gage readings collected in cooperation with New Mexico Interstate Stream Commission.

REVISIONS.--WSP 1923: Drainage area.

CONTENTS, IN ACRE-FEET, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	-	-	-	-	7,540	6,120	2,310	-	450	-	-	-
2	-	-	-	-	7,540	5,950	2,130	1,210	364	-	-	-
3	-	-	-	-	7,540	5,760	-	1,190	294	-	-	-
4	-	-	-	-	7,490	5,550	-	1,100	-	-	-	-
5	-	-	-	-	7,460	-	2,020	984	-	842	-	-
6	-	-	-	-	7,460	-	1,900	959	263	-	-	-
7	-	-	-	-	7,460	5,360	1,730	-	243	-	-	-
8	-	-	-	-	-	5,250	1,520	-	238	-	-	-
9	-	-	-	-	7,490	5,070	1,350	878	232	-	-	-
10	-	-	-	-	7,490	4,900	-	855	247	-	-	-
11	-	-	-	-	7,460	4,700	-	807	-	-	-	-
12	-	-	-	-	7,460	-	1,320	786	-	-	-	-
13	-	-	-	-	7,460	-	1,330	737	232	-	-	-
14	-	-	-	7,190	7,460	4,530	1,170	-	238	-	-	-
15	-	-	-	-	7,460	4,370	-	-	240	-	-	-
16	-	-	-	-	-	4,190	1,170	737	236	-	-	-
17	-	-	-	-	7,460	4,050	-	710	232	-	-	-
18	-	-	-	-	7,430	3,850	-	698	-	-	-	-
19	-	-	-	-	7,240	-	1,140	695	-	-	-	-
20	-	-	-	-	7,140	-	1,110	691	-	-	-	-
21	-	-	-	-	7,030	3,740	1,140	-	-	-	-	-
22	-	-	-	-	-	3,530	1,120	-	-	-	-	-
23	-	-	-	-	-	3,300	1,080	737	-	-	-	-
24	-	-	-	-	6,930	3,160	-	706	-	-	-	-
25	-	-	-	-	6,800	2,950	-	695	-	-	-	-
26	-	-	-	-	6,670	-	1,140	628	-	-	-	-
27	-	-	-	-	6,540	-	1,120	625	-	-	-	-
28	-	6,000	-	7,540	6,390	2,860	1,130	-	-	-	-	-
29	-	-----	-	-	-	2,700	1,150	-	-	-	-	-
30	-	-----	-	7,540	-	2,530	1,170	607	610	-	2,050	-
31	5,750	-----	6,590	-----	6,260	-----	1,180	532	-----	1,500	-----	2,500
(+)	-	-	9,485.5	-	9,484.2	9,465.6	-	9,439.3	-	-	-	-
(#)	+300	+250	+590	+950	-1,280	-3,730	-1,350	-648	+78	+890	+550	+450

CAL YR 1971..... # -2,950

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

Change in contents, in acre-feet.

NOTE.--Contents interpolated at end of month except Mar. 31, May 31, June 30, and Aug. 31.

08254000 Costilla Creek below Costilla Dam, N. Mex.

LOCATION.--Lat 36°52'26", long 105°16'47", Taos County, in Sangre de Cristo Grant, on left bank 125 ft downstream from Costilla Dam, and 16 miles southeast of Costilla.

DRAINAGE AREA.--54.6 sq mi.

PERIOD OF RECORD.--April 1937 to current year (no winter records 1937-44, 1948-49). Monthly discharge only for some periods, published in WSP 1312. Prior to October 1951, published as "below reservoir, near Costilla."

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,290 ft (from topographic map).

AVERAGE DISCHARGE.--25 years (1944-47, 1949-71), 16.7 cfs (12,100 acre-ft per year); 20 calendar years (1951-70), 16.8 cfs (12,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 125 cfs June 11 (gage height, 1.80 ft); minimum not determined.
Period of record: Maximum discharge, 286 cfs May 9, 10, 1942 (gage height, 2.65 ft); no flow at times.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Flow regulated by Costilla Reservoir (see sta 08253900). Diversions for irrigation of about 1,300 acres above Reservoir.

REVISIONS.--WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.05	.04	.04	.04	.04	.04	.05	97	108	16	50
2	.04	.05	.04	.04	.04	.04	.04	6.7	111	54	26	48
3	.04	.05	.04	.03	.04	.04	.04	24	111	16	41	28
4	.04	.04	.04	.02	.03	.04	.04	22	55	40	86	16
5	.04	.05	.04	.01	.03	.04	.04	18	16	111	84	16
6	.05	.04	.04	.01	.03	.04	.04	18	40	102	47	16
7	.05	.04	.04	.01	.03	.04	.04	7.3	114	90	21	15
8	.05	.04	.04	.01	.03	.04	.04	.09	113	89	23	13
9	.05	.04	.04	.02	.04	.04	.04	5.9	113	45	33	12
10	.05	.04	.04	.02	.04	.04	.04	17	113	14	33	12
11	.05	.04	.04	.03	.04	.04	.04	20	56	19	33	11
12	.05	.04	.04	.03	.04	.04	.04	30	15	33	33	11
13	.05	.04	.04	.03	.04	.04	.04	32	41	31	24	11
14	.05	.04	.04	.03	.04	.04	.04	13	114	31	17	11
15	.05	.04	.04	.03	.04	.04	.04	.09	113	31	20	11
16	.05	.03	.04	.03	.04	.04	.04	23	113	20	28	11
17	.05	.04	.04	.03	.04	.04	.04	69	111	12	28	.48
18	.05	.04	.04	.03	.04	.04	.04	69	54	18	28	.02
19	.05	.04	.04	.04	.04	.04	.04	69	17	33	26	.02
20	.05	.04	.04	.04	.03	.04	.04	69	41	33	21	.02
21	.05	.04	.04	.04	.03	.04	.04	36	113	33	17	.02
22	.05	.04	.04	.04	.03	.04	.04	14	111	33	21	.02
23	.05	.04	.04	.04	.03	.04	.04	35	110	21	33	.02
24	.05	.04	.04	.04	.04	.04	.04	81	110	11	33	.02
25	.05	.04	.04	.04	.04	.04	.04	81	54	11	33	.02
26	.05	.04	.04	.04	.04	.04	.04	80	16	12	33	.02
27	.05	.04	.04	.04	.04	.04	.04	80	39	12	27	.02
28	.05	.04	.04	.04	.04	.04	.04	42	110	12	21	.02
29	.05	.04	.04	.04	-----	.04	.05	12	110	12	24	.02
30	.05	.04	.04	.04	-----	.04	.05	37	108	12	45	.02
31	.05	-----	.04	.04	-----	.04	-----	93	-----	12	53	-----
TOTAL	1.50	1.23	1.24	.97	1.03	1.24	1.22	1,104.13	2,439	1,111	1,008	292.74
MEAN	.048	.041	.040	.031	.037	.040	.041	35.6	81.3	35.8	32.5	9.76
MAX	.05	.05	.04	.04	.04	.04	.05	93	114	111	86	50
MIN	.04	.03	.04	.01	.03	.04	.04	.05	15	11	16	.02
AC-FT	3.0	2.4	2.5	1.9	2.0	2.5	2.4	2,190	4,840	2,200	2,000	581

CAL YR 1970 TOTAL 8,717.22 MEAN 23.9 MAX 157 MIN .03 AC-FT 17,290
WTR YR 1971 TOTAL 5,963.30 MEAN 16.3 MAX 114 MIN .01 AC-FT 11,830

NOTE.--No gage-height record Dec. 5 to Apr. 13.

08254000 Costilla Creek below Costilla Dam, N. Mex.

LOCATION.--Lat 36°52'26", long 105°16'47", Taos County, in Sangre de Cristo Grant, on left bank 125 ft downstream from Costilla Dam, and 16 miles southeast of Costilla.

DRAINAGE AREA.--54.6 sq mi.

PERIOD OF RECORD.--April 1937 to current year (no winter records 1937-44, 1947-49). Monthly discharge only for some periods, published in WSP 1312. Prior to October 1951, published as "below reservoir, near Costilla."

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,290 ft (from topographic map).

AVERAGE DISCHARGE.--24 calendar years (1945-46, 1950-71), 16.7 cfs (12,100 acre-ft per year); 20 calendar years (1952-71), 17.0 cfs (12,320 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 125 cfs June 11 (gage height, 1.80 ft); minimum not determined.
Period of record: Maximum discharge, 286 cfs May 9, 10, 1942 (gage height, 2.65 ft); no flow at times.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Flow regulated by Costilla Reservoir (see sta 08253900). Diversions for irrigation of about 1,300 acres above Reservoir.

REVISIONS.--WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.04	.04	.04	.04	.05	97	108	16	50	.02	.03	.03
2	.04	.04	.04	.04	6.7	111	54	26	48	.02	.03	.03
3	.03	.04	.04	.04	24	111	16	41	28	.02	.03	.03
4	.02	.03	.04	.04	22	55	40	86	16	.02	.03	.03
5	.01	.03	.04	.04	18	16	111	84	16	.03	.03	.03
6	.01	.03	.04	.04	18	40	102	47	16	.03	.03	.03
7	.01	.03	.04	.04	7.3	114	90	21	15	.03	.03	.03
8	.01	.03	.04	.04	.09	113	89	23	13	.03	.03	.03
9	.02	.04	.04	.04	5.9	113	45	33	12	.03	.03	.03
10	.02	.04	.04	.04	17	113	14	33	12	.03	.03	.03
11	.03	.04	.04	.04	20	56	19	33	11	.03	.03	.03
12	.03	.04	.04	.04	30	15	33	33	11	.03	.03	.03
13	.03	.04	.04	.04	32	41	31	24	11	.03	.03	.03
14	.03	.04	.04	.04	13	114	31	17	11	.03	.03	.03
15	.03	.04	.04	.04	.09	113	31	20	11	.03	.03	.03
16	.03	.04	.04	.04	23	113	20	28	11	.04	.03	.03
17	.03	.04	.04	.04	69	111	12	28	.48	.05	.03	.03
18	.03	.04	.04	.04	69	54	18	28	.02	.07	.03	.03
19	.04	.04	.04	.04	69	17	33	26	.02	.07	.03	.03
20	.04	.03	.04	.04	69	41	33	21	.02	.09	.03	.03
21	.04	.03	.04	.04	36	113	33	17	.02	.09	.03	.03
22	.04	.03	.04	.04	14	111	33	21	.02	.09	.03	.03
23	.04	.03	.04	.04	35	110	21	33	.02	.09	.03	.03
24	.04	.04	.04	.04	81	110	11	33	.02	.09	.03	.03
25	.04	.04	.04	.04	81	54	11	33	.02	.09	.03	.03
26	.04	.04	.04	.04	80	16	12	33	.02	.09	.03	.03
27	.04	.04	.04	.04	80	39	12	27	.02	.07	.03	.03
28	.04	.04	.04	.04	42	110	12	21	.02	.07	.03	.03
29	.04	-----	.04	.05	12	110	12	24	.02	.07	.03	.03
30	.04	-----	.04	.05	37	108	12	45	.02	.07	.03	.03
31	.04	-----	.04	-----	93	-----	12	53	-----	.05	-----	.03
TOTAL	.97	1.03	1.24	1.22	1,104.13	2,439	1,111	1,008	292.74	1.60	.90	.93
MEAN	.031	.037	.040	.041	35.6	81.3	35.8	32.5	9.76	.052	.030	.030
MAX	.04	.04	.04	.05	93	114	111	86	50	.09	.03	.03
MIN	.01	.03	.04	.04	.05	15	11	16	.02	.02	.03	.03
AC-FT	1.9	2.0	2.5	2.4	2,190	4,840	2,200	2,000	581	3.2	1.8	1.8

CAL YR 1971 TOTAL 5,962.76 MEAN 16.3 MAX 114 MIN .01 AC-FT 11,830

NOTE.--No gage-height record Jan. 1 to Apr. 13, Nov. 7 to Dec. 31.

08254500 Costilla Creek near Amalia, N. Mex.

LOCATION.--Lat 36°52'33", long 105°23'22", Taos County, in Sangre de Cristo Grant, on right bank 40 ft downstream from third bridge upstream from Amalia, 2.4 miles downstream from Latir Creek, 5.8 miles southeast of Amalia, and 10.5 miles southeast of Costilla.

DRAINAGE AREA.--152 sq mi.

PERIOD OF RECORD.--May 1949 to September 1959 and April 1961 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1732.

GAGE.--Water-stage recorder. Concrete control since Sept. 27, 1965. Altitude of gage is 8,521 ft (from topographic map). May 1949 to May 2, 1956, at site 40 ft upstream at datum 0.81 ft lower. May 3, 1956 to Sept. 27, 1965, at site 10 ft downstream at datum 1.81 ft lower.

EXTREMES.--Current year: Maximum discharge, 111 cfs June 3 (gage height, 2.38 ft); minimum not determined.

Period of record: Maximum discharge, 689 cfs Apr. 25, 1958 (gage height, 3.70 ft, site and datum then in use); maximum gage height, 3.11 ft July 27, 1966; minimum discharge not determined.

REMARKS.--Records good. Flow regulated by Costilla Reservoir (see sta 08253900) about 10 miles upstream. Diversions for irrigation of about 1,300 acres above Costilla Reservoir.

REVISIONS (WATER YEARS).--WSP 1732: 1956(M). WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0						-	11	84	96	15	51
2	6.5						-	11	100	67	26	49
3	6.5						-	30	107	20	34	38
4	6.5						-	32	73	22	81	19
5	6.5						-	28	25	94	84	18
6	6.5						-	29	29	91	62	18
7	6.5						-	25	104	82	30	18
8	8.1						-	16	107	83	28	18
9	8.1						-	14	106	58	33	15
10	8.7						-	28	104	18	33	15
11	9.0						-	30	73	16	35	15
12	8.1						-	40	22	32	35	15
13	8.1						12	42	27	32	29	15
14	-						12	34	104	32	20	14
15	-						13	15	107	32	21	14
16	-						13	19	106	26	30	14
17	-						13	73	106	15	31	38
18	-						13	78	73	15	31	7.4
19	-						13	79	24	35	34	6.9
20	-						11	78	27	39	30	6.6
21	-						12	56	102	37	23	5.8
22	-						14	26	106	37	22	6.9
23	-						13	34	104	35	36	8.3
24	-						15	82	102	25	38	8.3
25	-						15	81	69	16	39	6.9
26	-						15	79	22	16	41	5.2
27	-						12	79	25	16	35	4.3
28	-						11	58	94	16	27	3.9
29	-						11	26	96	16	27	4.1
30	-						11	36	96	15	44	6.9
31	-	-----			-----		-----	86	-----	15	53	-----
TOTAL	-	-	-	-	-	-	-	1,355	2,324	1,149	1,107	465.5
MEAN	-	-	-	-	-	-	-	43.7	77.5	37.1	35.7	15.5
MAX	-	-	-	-	-	-	-	86	107	96	84	51
MIN	-	-	-	-	-	-	-	11	22	15	15	3.9
AC-FT	-	-	-	-	-	-	-	2,690	4,610	2,280	2,200	923

08254500 Costilla Creek near Amalia, N. Mex.

LOCATION.--Lat 36°52'33", long 105°23'22", Taos County, in Sangre de Cristo Grant, on right bank 40 ft downstream from third bridge upstream from Amalia, 2.4 miles downstream from Latir Creek, 5.8 miles southeast of Amalia, and 10.5 miles southeast of Costilla.

DRAINAGE AREA.--152 sq mi.

PERIOD OF RECORD.--May 1949 to September 1959 and April 1961 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1732.

GAGE.--Water-stage recorder. Concrete control since Sept. 27, 1965. Altitude of gage is 8,521 ft (from topographic map). May 1949 to May 2, 1956, at site 40 ft upstream at datum 0.81 ft lower. May 3, 1956 to Sept. 27, 1965, at site 10 ft downstream at datum 1.81 ft lower.

EXTREMES.--Current year: Maximum discharge, 111 cfs June 3 (gage height, 2.38 ft); minimum not determined.

Period of record: Maximum discharge, 689 cfs Apr. 25, 1958 (gage height, 3.70 ft, site and datum then in use); maximum gage height, 3.11 ft July 27, 1966; minimum discharge not determined.

REMARKS.--Records good. Flow regulated by Costilla Reservoir (see sta 08253900) about 10 miles upstream. Diversions for irrigation of about 1,300 acres above Costilla Reservoir.

REVISIONS (WATER YEARS).--WSP 1732: 1956(M). WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				--	11	84	96	15	51	18		
2				--	11	100	67	26	49	14		
3				--	30	107	20	34	38	9.6		
4				--	32	73	22	81	19	8.3		
5				--	28	25	94	84	18	7.4		
6				--	29	29	91	62	18	6.9		
7				--	25	104	82	30	18	6.9		
8				--	16	107	83	28	18	--		
9				--	14	106	58	33	15	--		
10				--	28	104	18	33	15	--		
11				--	30	73	16	35	15	--		
12				--	40	22	32	35	15	--		
13				12	42	27	32	29	15	--		
14				12	34	104	32	20	14	--		
15				13	15	107	32	21	14	--		
16				13	19	106	26	30	14	--		
17				13	73	106	15	31	38	--		
18				13	78	73	15	31	7.4	--		
19				13	79	24	35	34	6.9	--		
20				11	78	27	39	30	6.6	--		
21				12	56	102	37	23	5.8	--		
22				14	26	106	37	22	6.9	--		
23				13	34	104	35	36	8.3	--		
24				15	82	102	25	38	8.3	--		
25				15	81	69	16	39	6.9	--		
26				15	79	22	16	41	5.2	--		
27				12	79	25	16	35	4.3	--		
28				11	58	94	16	27	3.9	--		
29				11	26	96	16	27	4.1	--		
30				11	36	96	15	44	6.9	--		
31				-----	86	-----	15	53	-----	--		
TOTAL	--	--	--	--	1,355	2,324	1,149	1,107	465.5	--	--	--
MEAN	--	--	--	--	43.7	77.5	37.1	35.7	15.5	--	--	--
MAX	--	--	--	--	86	107	96	84	51	--	--	--
MIN	--	--	--	--	11	22	15	15	3.9	--	--	--
AC-FT	--	--	--	--	2,690	4,610	2,280	2,200	923	--	--	--

08255500 Costilla Creek near Costilla, N. Mex.

LOCATION.--Lat 36°58'01", long 105°30'23", Taos County, in Sangre de Cristo Grant, on right bank 70 ft downstream from bridge on State Highway 196, 0.5 mile upstream from diversion dam, and 1.6 miles southeast of Costilla.

DRAINAGE AREA.--195 sq mi.

PERIOD OF RECORD.--March 1936 to current year (no winter records 1936-41, 1943). Monthly discharge for March 1943 and water-year estimate for 1943, published in WSP 1312.

GAGE.--Water-stage recorder. Concrete control since October 13, 1952. Altitude of gage is 7,900 ft (from topographic map). Prior to June 18, 1944, at site 200 ft downstream at different datum. June 18, 1944 to Sept. 30, 1964, at site 0.4 mile upstream at different datum.

AVERAGE DISCHARGE.--30 years (1941-71), 42.3 cfs (30,650 acre-ft per year); 20 calendar years (1951-70), 36.8 cfs (26,660 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 265 cfs July 20 (gage height, 3.83 ft); minimum, 1.8 cfs Feb. 27, Mar. 15, result of freezeup.

Period of record: Maximum discharge, 1,150 cfs May 11, 1942 (gage height, 5.37 ft, site and datum then in use); minimum, 0.34 cfs Mar. 15, 1969, result of freezeup.

A major flood occurred in 1886, from information by local residents.

REMARKS.--Records good except those for winter period, which are poor. Regulation by Costilla Reservoir (see sta 08253900) about 20 miles upstream. Diversions for irrigation of about 2,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1312: 1937-39 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	15	5.7	7.5	13	7.0	15	13	89	100	24	61
2	11	13	8.6	7.0	14	7.0	14	13	103	91	29	58
3	11	9.9	8.5	6.0	12	6.5	16	24	107	37	34	53
4	11	10	8.5	5.0	12	8.0	15	30	92	28	70	26
5	11	12	8.6	4.0	10	10	13	29	34	82	86	24
6	11	14	8.6	3.5	8.5	9.0	12	29	29	95	77	23
7	11	14	9.1	3.3	7.0	9.0	14	30	87	86	43	23
8	13	13	11	3.3	7.0	9.5	14	21	102	92	41	23
9	13	11	11	3.3	7.5	10	13	18	105	83	45	19
10	14	12	10	3.4	9.0	9.2	14	24	105	31	48	18
11	15	13	8.5	3.6	8.5	9.5	13	28	94	24	44	17
12	14	13	7.5	4.0	9.0	11	14	36	37	33	43	17
13	13	14	7.0	5.0	9.5	11	14	40	31	35	41	17
14	13	9.1	8.0	6.0	10	11	14	40	83	33	27	17
15	13	7.4	7.5	7.0	11	10	15	20	97	33	26	16
16	14	11	7.5	9.0	11	11	15	16	101	32	32	16
17	13	11	8.5	8.5	11	10	15	59	103	19	34	18
18	13	11	8.0	9.0	10	7.9	16	73	89	19	35	14
19	12	11	7.0	9.0	9.9	8.8	17	75	37	32	37	12
20	13	9.6	7.5	8.5	7.5	10	15	77	31	62	37	12
21	13	11	7.0	10	6.5	11	14	66	87	53	44	11
22	13	11	6.5	9.5	5.5	13	17	28	102	45	33	12
23	13	11	6.5	9.0	6.0	21	16	27	105	49	40	14
24	12	10	6.5	8.5	8.0	28	17	77	104	46	45	14
25	13	12	6.5	9.0	8.0	18	18	82	90	30	44	12
26	13	12	7.0	9.5	7.5	21	17	82	35	27	47	10
27	12	11	8.0	10	7.5	34	15	80	28	28	44	8.5
28	9.5	9.3	7.5	10	7.0	29	14	72	79	26	33	7.6
29	11	11	7.0	11	-----	23	14	37	92	34	34	7.9
30	13	10	7.0	12	-----	21	14	34	94	26	48	24
31	14	-----	7.5	12	-----	22	-----	85	-----	24	63	-----
TOTAL	387.5	342.3	243.6	226.4	253.4	426.4	444	1,365	2,372	1,435	1,328	605.0
MEAN	12.5	11.4	7.86	7.30	9.05	13.8	14.8	44.0	79.1	46.3	42.8	20.2
MAX	15	15	11	12	14	34	18	85	107	100	86	61
MIN	9.5	7.4	5.7	3.3	5.5	6.5	12	13	28	19	24	7.6
AC-FT	769	679	483	449	503	846	881	2,710	4,700	2,850	2,630	1,200

CAL YR 1970 TOTAL 17,299.3 MEAN 47.4 MAX 187 MIN 4.5 AC-FT 34,310
WTR YR 1971 TOTAL 9,428.6 MEAN 25.8 MAX 107 MIN 3.3 AC-FT 18,700

PEAK DISCHARGE (BASE, 175 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	2030	3.83	265	8-21	2115	3.50	204

08255500 Costilla Creek near Costilla, N. Mex.

LOCATION.--Lat 36°58'01", long 105°30'23", Taos County, in Sangre de Cristo Grant, on right bank 70 ft downstream from bridge on State Highway 196, 0.5 mile upstream from diversion dam, and 1.6 miles southeast of Costilla.

DRAINAGE AREA.--195 sq mi.

PERIOD OF RECORD.--March 1936 to current year (no winter records 1936-43). Monthly discharge for March 1943 and calendar-year estimates for 1942-43, published in WSP 1312.

GAGE.--Water-stage recorder. Concrete control since October 13, 1952. Altitude of gage is 7,900 ft (from topographic map). Prior to June 18, 1944, at site 200 ft downstream at different datum. June 18, 1944 to Sept. 30, 1964, at site 0.4 mile upstream at different datum.

AVERAGE DISCHARGE.--30 calendar years (1942-71), 42.1 cfs (30,500 acre-ft per year); 20 calendar years (1952-71), 37.1 cfs (26,880 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 265 cfs July 20 (gage height, 3.83 ft); minimum, 1.8 cfs Feb. 27, Mar. 15, result of freezeup.

Period of record: Maximum discharge, 1,150 cfs May 11, 1942 (gage height, 5.37 ft, site and datum then in use); minimum, 0.34 cfs Mar. 15, 1969, result of freezeup.

A major flood occurred in 1886, from information by local residents.

REMARKS.--Records good except those for winter periods, which are poor. Regulation by Costilla Reservoir (see sta 08253900) about 20 miles upstream. Diversions for irrigation of about 2,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1312: 1937-39(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	7.5	13	7.0	15	13	89	100	24	61	33	15	8.0
2	7.0	14	7.0	14	13	103	91	29	58	26	12	8.0
3	6.0	12	6.5	16	24	107	37	34	53	19	11	8.0
4	5.0	12	8.0	15	30	92	28	70	26	17	13	8.0
5	4.0	10	10	13	29	34	82	86	24	15	13	7.0
6	3.5	8.5	9.0	12	29	29	95	77	23	14	11	7.0
7	3.3	7.0	9.0	14	30	87	86	43	23	12	10	8.0
8	3.3	7.0	9.5	14	21	102	92	41	23	12	12	9.0
9	3.3	7.5	10	13	18	105	83	45	19	12	11	8.0
10	3.4	9.0	9.2	14	24	105	31	48	18	11	10	8.0
11	3.6	8.5	9.5	13	28	94	24	44	17	11	11	8.0
12	4.0	9.0	11	14	36	37	33	43	17	10	11	7.0
13	5.0	9.5	11	14	40	31	35	41	17	10	12	7.0
14	6.0	10	11	14	40	83	33	27	17	10	8.9	7.0
15	7.0	11	10	15	20	97	33	26	16	9.9	11	7.0
16	9.0	11	11	15	16	101	32	32	16	9.7	12	7.0
17	8.5	11	10	15	59	103	19	34	18	10	9.3	7.0
18	9.0	10	7.9	16	73	89	19	35	14	13	6.4	7.0
19	9.0	9.9	8.8	17	75	37	32	37	12	11	6.0	7.0
20	8.5	7.5	10	15	77	31	62	37	12	10	8.0	7.0
21	10	6.5	11	14	66	87	53	44	11	11	9.0	7.0
22	9.5	5.5	13	17	28	102	45	33	12	11	10	8.0
23	9.0	6.0	21	16	27	105	49	40	14	11	9.0	9.0
24	8.5	8.0	28	17	77	104	46	45	14	11	8.0	10
25	9.0	8.0	18	18	82	90	30	44	12	24	8.0	10
26	9.5	7.5	21	17	82	35	27	47	10	21	8.0	10
27	10	7.5	34	15	80	28	28	44	8.5	17	8.0	9.0
28	10	7.0	29	14	72	79	26	33	7.6	15	8.0	8.0
29	11	-----	23	14	37	92	34	34	7.9	15	7.0	8.0
30	12	-----	21	14	34	94	26	48	24	13	7.0	7.0
31	12	-----	22	-----	85	-----	24	63	-----	12	-----	7.0
TOTAL	226.4	253.4	426.4	444	1,365	2,372	1,435	1,328	605.0	436.6	295.6	243.0
MEAN	7.30	9.05	13.8	14.8	44.0	79.1	46.3	42.8	20.2	14.1	9.85	7.84
MAX	12	14	34	18	85	107	100	86	61	33	15	10
MIN	3.3	5.5	6.5	12	13	28	19	24	7.6	9.7	6.0	7.0
AC-FT	449	503	846	881	2,710	4,700	2,850	2,630	1,200	866	586	482

CAL YR 1971 TOTAL 9,430.4 MEAN 25.8 MAX 107 MIN 3.3 AC-FT 18,710

PEAK DISCHARGE (BASE, 175 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	2030	3.83	265	8-21	2115	3.50	204

08260500 Costilla Creek below diversion dam, at Costilla, N. Mex.

LOCATION.--Lat 36°58'03", long 105°31'00", Taos County, in Sangre de Cristo Grant, on right bank 650 ft downstream from diversion dam, and 1.1 miles southeast of Costilla.

DRAINAGE AREA.--197 sq mi.

PERIOD OF RECORD.--April 1952 to current year (no winter records).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,861 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 220 cfs July 20 (gage height, 3.10 ft); minimum not determined.

Period of record: Maximum discharge, 525 cfs July 22, 1954 (gage height, 4.03 ft); maximum gage height, 5.05 ft July 24, 1957 (backwater from debris); no flow Oct. 14, 1963.

A major flood occurred in 1886, from information by local residents. Flood of May 11, 1942, probably exceeded 1,000 cfs, based on records for upstream station (see sta 08255500).

REMARKS.--Records good. Flow partly regulated by Costilla Reservoir (see sta 08253900) about 21 miles upstream, and by canal headgates or sluice gates at diversion dam. Diversions above station for irrigation of about 5,000 acres, 3,000 of which are below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01						~	.12	2.2	.07	.34	.12
2	.01						~	.23	1.9	3.2	1.1	.12
3	.01						~	.38	1.7	.25	.77	1.7
4	.01						~	.31	10	.22	2.8	2.3
5	.01						~	.30	8.8	.17	.43	2.1
6	~						~	.30	3.2	.16	.21	2.0
7	~						~	.29	3.3	.16	.11	1.3
8	~						~	.22	3.2	.16	.17	.80
9	~						~	.54	.69	.16	.20	.68
10	~						~	1.6	.46	.14	.15	.67
11	~						~	1.4	.44	.14	.33	.66
12	~						~	1.5	.35	.14	.59	.60
13	~						~	1.5	.34	.14	.57	.56
14	~						~	.27	1.4	.37	1.1	.56
15	~						~	.24	1.2	.41	.69	.51
16	~						~	.24	1.1	.36	.23	.45
17	~						~	.24	1.6	.31	.24	.43
18	~						~	.21	2.0	9.5	.41	.40
19	~						~	.21	4.3	9.6	.40	.34
20	~						~	.21	4.0	.18	18	.27
21	~						~	.21	10	.26	11	.27
22	~						~	.21	18	.21	3.0	.31
23	~						~	.21	15	.44	2.6	.37
24	~						~	.18	8.9	5.4	2.8	.36
25	~						~	.18	4.9	6.3	2.5	.37
26	~						~	.18	4.1	1.4	2.5	.34
27	~						~	.15	4.4	1.3	2.6	.34
28	~						~	.12	3.4	.54	2.4	.34
29	~						~	.12	2.7	1.2	5.0	.28
30	~						~	.12	2.8	.17	1.1	.49
31	~	-----			-----		-----	3.8	-----	.40	.14	-----
TOTAL	~	~	~	~	~	~	~	102.29	74.53	62.08	37.07	30.55
MEAN	~	~	~	~	~	~	~	3.30	2.48	2.00	1.20	1.02
MAX	~	~	~	~	~	~	~	18	10	18	11	11
MIN	~	~	~	~	~	~	~	.12	.17	.07	.08	.12
AC-FT	~	~	~	~	~	~	~	203	148	123	74	61

08260500 Costilla Creek below diversion dam, at Costilla, N. Mex.

LOCATION.--Lat 36°58'03", long 105°31'00", Taos County, in Sangre de Cristo Grant, on right bank 650 ft downstream from diversion dam, and 1.1 miles southeast of Costilla.

DRAINAGE AREA.--197 sq mi.

PERIOD OF RECORD.--April 1952 to current year (no winter records).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,861 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 220 cfs July 20 (gage height, 3.10 ft); minimum not determined.

Period of record: Maximum discharge, 525 cfs July 22, 1954 (gage height, 4.03 ft); maximum gage height, 5.05 ft July 24, 1957 (backwater from debris); no flow Oct. 14, 1963.

A major flood occurred in 1886, from information by local residents. Flood of May 11, 1942, probably exceeded 1,000 cfs, based on records for upstream station (see sta 08255500).

REMARKS.--Records good. Flow partly regulated by Costilla Reservoir (see sta 08253900) about 21 miles upstream, and by canal headgates or sluice gates at diversion dam. Diversions above station for irrigation of about 5,000 acres, 3,000 of which are below station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				-	.12	2.2	.07	.34	.12	18		
2				-	.23	1.9	3.2	1.1	.12	14		
3				-	.38	1.7	.25	.77	1.7	8.8		
4				-	.31	10	.22	2.8	2.3	6.9		
5				-	.30	8.8	.17	.43	2.1	5.5		
6				-	.30	3.2	.16	.21	2.0	4.9		
7				-	.29	3.3	.16	.11	1.3	-		
8				-	.22	3.2	.16	.17	.80	-		
9				-	.54	.69	.16	.20	.68	-		
10				-	1.6	.46	.14	.15	.67	-		
11				-	1.4	.44	.14	.33	.66	-		
12				-	1.5	.35	.14	.59	.60	-		
13				-	1.5	.34	.14	.57	.56	-		
14				.27	1.4	.37	1.1	.24	.56	-		
15				.24	1.2	.41	.69	.18	.51	-		
16				.24	1.1	.36	.23	.33	.45	-		
17				.24	1.6	.31	.24	.41	.43	-		
18				.21	2.0	9.5	.41	.38	.40	-		
19				.21	4.3	9.6	.40	.62	.34	-		
20				.21	4.0	.18	18	.45	.27	-		
21				.21	10	.26	11	11	.27	-		
22				.21	18	.21	3.0	10	.31	-		
23				.21	15	.44	2.6	3.3	.37	-		
24				.18	8.9	5.4	2.8	.28	.36	-		
25				.18	4.9	6.3	2.5	.09	.37	-		
26				.18	4.1	1.4	2.5	.54	.34	-		
27				.15	4.4	1.3	2.6	.69	.34	-		
28				.12	3.4	.54	2.4	.08	.34	-		
29		-----		.12	2.7	1.2	5.0	.08	.28	-		
30		-----		.12	2.8	.17	1.1	.49	11	-		
31		-----		-----	3.8	-----	.40	.14	-----	-	-----	
TOTAL	-	-	-	-	102.29	74.53	62.08	37.07	30.55	-	-	-
MEAN	-	-	-	-	3.30	2.48	2.00	1.20	1.02	-	-	-
MAX	-	-	-	-	18	10	18	11	11	-	-	-
MIN	-	-	-	-	.12	.17	.07	.08	.12	-	-	-
AC-FT	-	-	-	-	203	148	123	74	61	-	-	-

RIO GRANDE BASIN

08261000 Costilla Creek at Garcia, Colo.

LOCATION.--Lat 36°59'21", long 105°31'54", Taos County, in Sangre de Cristo Grant, on left bank 0.4 mile downstream from old State Highway 3, 0.5 mile upstream from New Mexico-Colorado state line, and 0.9 mile south of Garcia.

DRAINAGE AREA.--200 sq mi, approximately.

PERIOD OF RECORD.--June 1944 to current year (no winter records).

GAGE.--Water-stage recorder. Concrete control since Oct. 9, 1956. Altitude of gage is 7,758 ft (from topographic map). Prior to Apr. 20, 1950, at site 0.4 mile downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 160 cfs July 20 (gage height, 3.96 ft); no flow for many days.

Period of record: Maximum discharge, 460 cfs July 24, 1957 (gage height, 4.76 ft); no flow for many days most years.

A major flood occurred in 1886, from information by local residents. Flood of May 11, 1942, probably reached a discharge of 1,000 cfs.

REMARKS.--Records fair. Flow partly regulated by Costilla Reservoir (see sta 08253900) about 23 miles upstream. Diversions above station for irrigation of about 5,500 acres, 2,000 of which are below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0						-	0	0	.39	0	0
2	0						-	0	.09	2.0	.08	0
3	0						-	0	0	0	.05	.88
4	0						-	0	6.7	0	1.8	.71
5	0						-	0	11	0	.03	.54
6	0						-	0	.80	0	.02	.46
7	0						-	0	.14	0	0	.89
8	0						-	0	.55	0	0	.48
9	0						-	0	0	0	0	0
10	0						-	0	0	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	0	0	0
16	-						0	0	0	0	0	0
17	-						0	0	0	0	0	0
18	-						0	.02	3.9	0	0	0
19	-						0	.96	12	0	0	0
20	-						0	.56	0	10	0	0
21	-						0	6.3	0	15	7.0	0
22	-						0	18	.08	1.1	12	0
23	-						0	14	.06	.62	3.0	0
24	-						0	6.6	4.1	.62	0	0
25	-						0	1.1	8.4	.25	0	0
26	-						0	.76	0	.14	0	0
27	-						0	1.1	0	.03	0	0
28	-						0	.42	.18	.03	0	0
29	-						0	.01	1.2	3.6	0	0
30	-						0	.02	.54	.56	0	9.2
31	-	-----			-----		-----	1.7	-----	0	0	-----
TOTAL	-	-	-	-	-	-	-	51.55	49.74	34.34	23.98	13.16
MEAN	-	-	-	-	-	-	-	1.66	1.66	1.11	.77	.44
MAX	-	-	-	-	-	-	-	18	12	15	12	9.2
MIN	-	-	-	-	-	-	-	0	0	0	0	0
AC-FT	-	-	-	-	-	-	-	102	99	68	48	26

08261000 Costilla Creek at Garcia, Colo.

LOCATION.--Lat 36°59'21", long 105°31'54", Taos County, in Sangre de Cristo Grant, on left bank 0.4 mile downstream from old State Highway 3, 0.5 mile upstream from New Mexico-Colorado state line, and 0.9 mile south of Garcia.

DRAINAGE AREA.--200 sq mi, approximately.

PERIOD OF RECORD.--June 1944 to current year (no winter records).

GAGE.--Water-stage recorder. Concrete control since Oct. 9, 1956. Altitude of gage is 7,758 ft (from topographic map). Prior to Apr. 20, 1950, at site 0.4 mile downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 160 cfs July 20 (gage height, 3.96 ft); no flow for many days.

Period of record: Maximum discharge, 460 cfs July 24, 1957 (gage height, 4.76 ft); no flow for many days most years.

A major flood occurred in 1886, from information by local residents. Flood of May 11, 1942, probably reached a discharge of 1,000 cfs.

REMARKS.--Records fair. Flow partly regulated by Costilla Reservoir (see sta 08253900) about 23 miles upstream. Diversions above station for irrigation of about 5,500 acres, 2,000 of which are below station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				-	0	0	.39	0	0	16		
2				-	0	.09	2.0	.08	0	12		
3				-	0	0	0	.05	.88	7.1		
4				-	0	6.7	0	1.8	.71	5.1		
5				-	0	11	0	.03	.54	3.3		
6				-	0	.80	0	.02	.46	-		
7				-	0	.14	0	0	.89	-		
8				-	0	.55	0	0	.48	-		
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	0	-		
14				0	0	0	0	0	0	-		
15				0	0	0	0	0	0	-		
16				0	0	0	0	0	0	-		
17				0	0	0	0	0	0	-		
18				0	.02	3.9	0	0	0	-		
19				0	.96	12	0	0	0	-		
20				0	.56	0	10	0	0	-		
21				0	6.3	0	15	7.0	0	-		
22				0	18	.08	1.1	12	0	-		
23				0	14	.06	.62	3.0	0	-		
24				0	6.6	4.1	.62	0	0	-		
25				0	1.1	8.4	.25	0	0	-		
26				0	.76	0	.14	0	0	-		
27				0	1.1	0	.03	0	0	-		
28				0	.42	.18	.03	0	0	-		
29		-----		0	.01	1.2	3.6	0	0	-		
30		-----		0	.02	.54	.56	0	9.2	-		
31		-----		-----	1.7	-----	0	0	-----	-	-----	
TOTAL	-	-	-	-	51.55	49.74	34.34	23.98	13.16	-	-	-
MEAN	-	-	-	-	1.66	1.66	1.11	.77	.44	-	-	-
MAX	-	-	-	-	18	12	15	12	9.2	-	-	-
MIN	-	-	-	-	0	0	0	0	0	-	-	-
AC-FT	-	-	-	-	102	99	68	48	26	-	-	-

Principal diversions from Costilla Creek, New Mexico-Colorado

Records of discharge are collected at 8 gaging stations on 3 diversions from Costilla Creek. Each of these stations is equipped with a water-stage recorder and a Parshall flume. Water diverted is used for irrigation in the Sangre de Cristo Grant in New Mexico and Colorado below the gaging station on Costilla Creek near Costilla, N. Mex. Records collected during irrigation season only except for sta 08262000.

08256000 ACEQUIA MADRE AT COSTILLA, N. MEX.--Lat 36°58'03", long 105°30'57", Taos County, 275 ft downstream from diversion dam. Period of record May 1944 to current year. Acequia diverts from right bank of Costilla Creek.

08256500 MESA DITCH NEAR GARCIA, COLO.--Lat 36°59'50", long 105°30'49", Costilla County, 429 ft north of milepost No. 136 + 54 on New Mexico-Colorado state line. Period of record, June 1944 to September 1965, May 1969 to current year. Ditch diverts from right bank of Acequia Madre for irrigation in Colorado.

08257500 CORDILLERA DITCH AT GARCIA, COLO.--Lat 36°59'41", long 105°31'39", Taos County, 570 ft south of New Mexico-Colorado state line. Period of record, June 1944 to current year. Ditch diverts from left bank of Acequia Madre for irrigation in Colorado.

08258000 CERRO CANAL AT COSTILLA, N. MEX.--Lat 36°57'56", long 105°31'07", Taos County, 1,400 ft downstream from diversion dam.
Period of record, April 1944 to current year. Canal diverts from left bank of Costilla Creek.

08258500 ASSOCIATION DITCH AT COSTILLA, N. MEX.--Lat 36°57'38", long 105°32'03", Taos County, 100 ft downstream from headgate. Period of record, May 1955 to September 1971 (discontinued). Ditch diverts from left bank of Cerro Canal.

08259000 CERRO CANAL NEAR JAROSO, COLO.--Lat 36°59'41", long 105°34'36", Taos County, 800 ft upstream from head of N. Mex. branch Cerro Canal. Period of record, June 1944 to current year. Flow measured is delivered to Colorado and to New Mexico branch Cerro Canal.

08259500 NEW MEXICO BRANCH CERRO CANAL NEAR JAROSO, COLO.--Lat 36°59'43", long 105°34'47", Taos County, 225 ft downstream from headgate.
Period of record, June 1944 to current year. Canal diverts from left bank of Cerro Canal for irrigation in New Mexico.

08262000 EASTDALE NO. 1 INTAKE CANAL NEAR JAROSO, COLO.--Lat 37°02'25", long 105°36'15", Costilla County, 750 ft downstream from headgate. Period of record, June 1944 to current year. Canal diverts from right bank of Costilla Creek to Eastdale Reservoir No. 1 for irrigation in Colorado.

Monthly diversions, in acre-feet, water year October 1970 to September 1971

[illegible]

Records of discharge are collected at 8 gaging stations on 3 diversions from Costilla Creek. Each of these stations is equipped with a water-stage recorder and a Parshall flume. Water diverted is used for irrigation in the Sangre de Cristo Grant in New Mexico and Colorado below the gaging station on Costilla Creek near Costilla, N. Mex. Records collected during irrigation season only except for sta 08262000.

08256500 MESA DITCH NEAR GARCIA, COLO.--Lat 36°59'50", long 105°30'49", Costilla County, 429 ft north of milepost No. 136 + 54 on New Mexico-Colorado state line. Period of record, June 1944 to September 1965, May 1969 to current year. Ditch diverts from right bank of Acequia Madre for irrigation in Colorado.

08257500 CORDILLERA DITCH AT GARCIA, COLO.--Lat 36°59'41", long 105°31'39", Taos County, 570 ft south of New Mexico-Colorado state line. Period of record, June 1944 to current year. Ditch diverts from left bank of Acequia Madre for irrigation in Colorado.

08258000 CERRO CANAL AT COSTILLA, N. MEX.--Lat 36°57'56", long 105°31'07", Taos County, 1,400 ft downstream from diversion dam. Period of record, April 1944 to current year. Canal diverts from left bank of Costilla Creek.

08258500 ASSOCIATION DITCH AT COSTILLA, N. MEX.--Lat 36°57'38", long 105°32'03", Taos County, 100 ft downstream from headgate. Period of record, May 1955 to September 1971 (discontinued). Ditch diverts from left bank of Cerro Canal.

08259000 CERRO CANAL NEAR JAROSO, COLO.--Lat 36°59'41", long 105°34'36", Taos County, 800 ft upstream from head of N. Mex. branch Cerro Canal. Period of record, June 1944 to current year. Flow measured is delivered to Colorado and to New Mexico branch Cerro Canal.

08259500 NEW MEXICO BRANCH CERRO CANAL NEAR JAROSO, COLO.--Lat 36°59'43", long 105°34'47", Taos County, 225 ft downstream from headgate.
Period of record, June 1944 to current year. Canal diverts from left bank of Cerro Canal for irrigation in New Mexico.

08262000 EASTDALE NO. 1 INTAKE CANAL NEAR JAROSO, COLO.--Lat 37°02'25", long 105°36'15", Costilla County, 750 ft downstream from headgate. Period of record, June 1944 to current year. Canal diverts from right bank of Costilla Creek to Eastdale Reservoir No. 1 for irrigation in Colorado.

[illegible]

RIO GRANDE BASIN

08263500 Rio Grande near Cerro, N. Mex.

LOCATION.--Lat 36°44'24", long 105°40'59", in NW¼ sec.20, T.29 N., R.12 E., Taos County, on left bank 4 miles southwest of Cerro, 5.5 miles northwest of Questa, and 7.4 miles upstream from Red River.

DRAINAGE AREA.--8,440 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--May 1948 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,110 ft (from topographic map).

AVERAGE DISCHARGE.--23 years, 366 cfs (265,200 acre-ft per year); 20 calendar years (1951-70), 353 cfs (255,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,750 cfs Mar. 30 (gage height, 7.86 ft); minimum, about 95 cfs Aug. 25.
Period of record: Maximum discharge, 9,740 cfs June 22, 1949 (gage height, 15.78 ft); minimum, 43 cfs Sept. 22, 1956.

REMARKS.--Records good. Diversions above station for irrigation of about 620,000 acres in Colorado and 7,000 acres in New Mexico.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	324	605	571	403	513	397	1,130	160	160	152	191	126
2	294	625	565	403	537	360	875	152	156	146	208	146
3	269	642	479	401	545	316	735	148	179	147	196	143
4	254	887	462	331	557	495	612	138	168	155	177	136
5	267	947	485	300	488	560	515	136	155	156	166	130
6	282	960	509	290	521	553	431	135	135	153	152	133
7	280	971	495	280	539	525	373	137	131	151	143	142
8	287	1,010	483	270	447	519	357	143	141	151	132	135
9	297	1,020	519	270	470	600	348	148	155	164	129	141
10	335	1,010	555	280	485	632	326	159	151	169	124	124
11	543	985	571	290	491	608	307	159	160	202	120	114
12	513	974	509	300	491	583	314	147	165	168	117	115
13	412	896	448	310	493	591	319	150	170	152	117	116
14	380	745	405	315	509	612	348	144	172	141	117	118
15	373	708	366	323	531	668	342	142	176	131	110	117
16	360	662	386	349	553	640	324	139	190	121	105	108
17	393	615	257	362	595	591	324	128	187	120	100	109
18	446	591	410	371	620	569	292	127	184	119	105	109
19	491	602	403	384	595	543	273	146	197	127	105	115
20	593	622	346	399	620	531	285	152	200	141	111	121
21	612	600	433	431	437	575	264	168	202	153	105	126
22	615	583	416	446	353	565	241	196	198	166	105	139
23	620	571	378	456	480	665	259	173	183	186	105	151
24	610	593	383	473	517	730	272	156	170	238	105	164
25	605	610	358	485	561	884	248	153	165	212	100	168
26	602	610	335	477	559	992	237	152	160	226	105	176
27	598	610	369	460	489	1,050	220	151	156	246	105	176
28	600	602	391	458	477	1,250	200	147	148	256	105	166
29	585	585	414	464	-----	1,510	176	148	155	229	120	168
30	583	579	414	475	-----	1,660	166	141	156	208	120	190
31	595	-----	408	493	-----	1,580	-----	153	-----	194	120	-----
TOTAL	14,018	22,020	13,523	11,749	14,473	22,354	11,113	4,628	5,025	5,280	3,920	4,122
MEAN	452	734	436	379	517	721	370	149	168	170	126	137
MAX	620	1,020	571	493	620	1,660	1,130	196	202	256	208	190
MIN	254	571	257	270	353	316	166	127	131	119	100	108
AC-FT	27,800	43,680	26,820	23,300	28,710	44,340	22,040	9,180	9,970	10,470	7,780	8,180

CAL YR 1970 TOTAL 180,933 MEAN 496 MAX 1,980 MIN 88 AC-FT 358,900
WTR YR 1971 TOTAL 132,225 MEAN 362 MAX 1,660 MIN 100 AC-FT 262,300

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-9	0400	6.27	1,030	3-30	1400	7.86	1,750

08263500 Rio Grande near Cerro, N. Mex.

LOCATION.--Lat 36°44'24", long 105°40'59", in NW¼ sec. 20, T. 29 N., R. 12 E., Taos County, on left bank 4 miles southwest of Cerro, 5.5 miles northwest of Questa, and 7.4 miles upstream from Red River.

DRAINAGE AREA.--8,440 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--May 1948 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,110 ft (from topographic map).

AVERAGE DISCHARGE.--23 calendar years, 367 cfs (265,900 acre-ft per year); 20 calendar years (1952-71), 362 cfs (262,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,750 cfs Mar. 30 (gage height, 7.86 ft); minimum, about 95 cfs Aug. 25.

Period of record: Maximum discharge, 9,740 cfs June 22, 1949 (gage height, 15.78 ft); minimum, 43 cfs Sept. 22, 1956.

REMARKS.--Records good. Diversions above station for irrigation of about 620,000 acres in Colorado and 7,000 acres in New Mexico.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	403	513	397	1,130	160	160	152	191	126	198	250	424
2	403	537	360	875	152	156	146	208	146	196	256	405
3	401	545	316	735	148	179	147	196	143	270	262	340
4	331	557	495	612	138	168	155	177	136	534	326	318
5	300	488	560	515	136	155	156	166	130	695	433	323
6	290	521	553	431	135	135	153	152	133	645	462	237
7	280	539	525	373	137	131	151	143	142	589	467	272
8	270	447	519	357	143	141	151	132	135	559	475	316
9	270	470	600	348	148	155	164	129	141	529	477	220
10	280	485	632	326	159	151	169	124	124	527	469	240
11	290	491	608	307	159	160	202	120	114	515	464	275
12	300	491	583	314	147	165	168	117	115	501	464	302
13	310	493	591	319	150	170	152	117	116	493	464	333
14	315	509	612	348	144	172	141	117	118	489	473	376
15	323	531	668	342	142	176	131	110	117	487	489	355
16	349	553	640	324	139	190	121	105	108	460	491	330
17	362	595	591	324	128	187	120	100	109	380	495	340
18	371	620	569	292	127	184	119	105	109	320	501	333
19	384	595	543	273	146	197	127	105	115	300	439	318
20	399	620	531	285	152	200	141	111	121	330	452	294
21	431	437	575	264	168	202	153	105	126	320	362	287
22	446	353	565	241	196	198	166	105	139	290	386	295
23	456	480	665	259	173	183	186	105	151	270	382	318
24	473	517	730	272	156	170	238	105	164	270	390	326
25	485	561	884	248	153	165	212	100	168	270	410	339
26	477	559	992	237	152	160	226	105	176	270	433	375
27	460	489	1,050	220	151	156	246	105	176	260	431	416
28	458	477	1,250	200	147	148	256	105	166	260	477	414
29	464	-----	1,510	176	148	155	229	120	168	260	467	443
30	475	-----	1,660	166	141	156	208	120	190	260	462	414
31	493	-----	1,580	-----	153	-----	194	120	-----	250	-----	397
TOTAL	11,749	14,473	22,354	11,113	4,628	5,025	5,280	3,920	4,122	11,997	12,809	10,375
MEAN	379	517	721	370	149	168	170	126	137	387	427	335
MAX	493	620	1,660	1,130	196	202	256	208	190	695	501	443
MIN	270	353	316	166	127	131	119	100	108	196	250	220
AC-FT	23,300	28,710	44,340	22,040	9,180	9,970	10,470	7,780	8,180	23,800	25,410	20,580

CAL YR 1971 TOTAL 117,845 MEAN 323 MAX 1,660 MIN 100 AC-FT 233,700

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE
3-30	1400	7.86	1,750

08264500 Red River below Zwergle damsite, near Red River, N. Mex.

LOCATION.--Lat 36°40'25", long 105°22'45", in NE¼SW¼ sec.7, T.28 N., R.15 E. (projected), Taos County, in Carson National Forest, on right bank 2,000 ft upstream from Goose Creek, 1.9 miles downstream from Bear Canyon, 2.6 miles southeast of Red River, and at mile 24.1.

DRAINAGE AREA.--25.7 sq mi.

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

GAGE.--Water-stage recorder. Concrete control since July 23, 1963. Datum of gage is 8,871.88 ft above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--8 years, 17.8 cfs (12,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 58 cfs July 18 (gage height, 2.55 ft); maximum gage height, 2.60 ft Feb. 14 (backwater from ice); minimum discharge recorded, 1.7 cfs Jan. 24, but may have been less during period of ice effect.

Period of record: Maximum discharge, 216 cfs June 19, 1965 (gage height, 3.38 ft); maximum gage height, 3.63 ft Apr. 3, 1970 (backwater from ice); minimum discharge recorded, 0.7 cfs Feb. 8, 1965, but may have been less during periods of ice effect.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	8.9	7.1	6.0	5.8	5.0	8.2	8.9	17	15	9.5	11
2	9.2	8.6	8.3	7.0	5.8	5.0	8.3	9.8	17	15	9.2	12
3	8.9	8.6	8.0	7.0	5.3	5.0	9.2	10	18	14	9.2	12
4	8.9	7.7	7.7	6.0	4.9	5.0	8.9	11	18	13	8.9	10
5	8.6	8.6	8.0	5.0	5.0	5.0	8.3	12	18	12	11	9.5
6	8.6	8.6	6.9	4.0	5.0	5.0	7.9	11	20	12	12	9.2
7	8.6	8.3	7.4	3.0	5.0	5.0	8.9	11	20	12	10	8.9
8	8.6	8.0	8.0	4.0	5.0	6.0	8.9	11	23	12	10	8.6
9	8.6	8.3	7.4	5.0	5.0	6.0	9.2	11	22	12	10	8.3
10	9.2	8.3	7.7	6.0	5.5	6.0	9.5	10	22	11	10	8.0
11	9.2	8.3	6.2	6.0	6.0	6.0	10	10	21	10	9.2	8.0
12	8.9	8.6	6.0	6.0	6.0	6.0	10	11	21	9.8	8.9	7.7
13	8.9	8.3	6.4	6.0	6.0	6.0	11	11	21	9.8	8.6	7.7
14	8.9	6.9	6.9	6.0	6.0	5.5	12	11	21	9.8	9.5	7.7
15	8.9	6.2	8.0	6.0	6.0	5.0	12	11	22	12	9.8	8.3
16	9.2	8.0	7.1	6.0	6.0	5.0	11	13	20	11	8.9	7.8
17	8.9	8.0	8.3	6.2	6.0	5.5	10	15	22	10	9.5	8.6
18	8.9	8.6	7.7	6.0	6.0	5.0	11	15	22	12	10	9.2
19	8.9	7.4	6.0	5.8	5.5	5.0	10	14	22	12	11	8.9
20	9.2	7.7	7.0	6.0	5.0	6.0	7.4	14	22	12	11	8.6
21	9.5	8.0	7.0	6.0	4.5	7.0	9.2	14	21	10	10	8.6
22	9.5	7.4	7.0	5.3	4.0	7.0	9.8	14	20	10	11	8.6
23	9.5	7.7	8.0	5.1	4.5	7.0	9.2	15	20	12	11	8.6
24	9.2	7.7	8.0	4.9	5.0	8.0	9.8	14	19	13	12	9.2
25	9.2	8.0	8.0	5.3	5.0	7.0	9.8	15	18	11	13	8.6
26	8.9	8.0	9.0	5.6	5.0	8.0	10	16	18	10	14	8.3
27	8.3	7.4	9.0	6.2	5.0	9.8	8.9	18	17	10	14	7.7
28	7.1	7.4	6.4	6.4	5.0	9.8	8.9	20	16	10	14	7.4
29	8.6	8.0	6.0	5.1	-----	9.8	8.9	20	16	12	14	8.0
30	8.9	6.9	6.0	6.0	-----	9.5	8.6	20	15	11	12	21
31	8.6	-----	6.0	6.0	-----	9.8	-----	18	-----	10	12	-----
TOTAL	275.6	238.4	226.5	174.9	148.8	200.7	284.8	414.7	589	355.4	333.2	276.0
MEAN	8.89	7.95	7.31	5.64	5.31	6.47	9.49	13.4	19.6	11.5	10.7	9.20
MAX	9.5	8.9	9.0	7.0	6.0	9.8	12	20	23	15	14	21
MIN	7.1	6.2	6.0	3.0	4.0	5.0	7.4	8.9	15	9.8	8.6	7.4
AC-FT	547	473	449	347	295	398	565	823	1,170	705	661	547

CAL YR 1970 TOTAL 6,768.7 MEAN 18.5 MAX 90 MIN 5.0 AC-FT 13,430
WTR YR 1971 TOTAL 3,518.0 MEAN 9.64 MAX 23 MIN 3.0 AC-FT 6,980

PEAK DISCHARGE (BASE, 65 CFS).--No peak above base.

08264500 Red River below Zwergle damsite, near Red River, N. Mex.

LOCATION.--Lat 36°40'25", long 105°22'45", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T.28 N., R.15 E. (projected), Taos County, in Carson National Forest, on right bank 2,000 ft upstream from Goose Creek, 1.9 miles downstream from Bear Canyon, 2.6 miles southeast of Red River, and at mile 24.1.

DRAINAGE AREA.--25.7 sq mi.

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

GAGE.--Water-stage recorder. Concrete control since July 23, 1963. Datum of gage is 8,871.88 ft above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--8 calendar years, 7.8 cfs (12,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 58 cfs July 18 (gage height, 2.55 ft); maximum gage height, 2.92 ft Dec. 5 (backwater from ice); minimum discharge recorded, 1.7 cfs Jan. 24, but may have been less during period of ice effect.
Period of record: Maximum discharge, 216 cfs June 19, 1965 (gage height, 3.38 ft); maximum gage height, 3.63 ft Apr. 3, 1970 (backwater from ice); minimum discharge recorded, 0.7 cfs Feb. 8, 1965, but may have been less during periods of ice effect.

REMARKS.--Records good except those for winter periods, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	6.0	5.8	5.0	8.2	8.9	17	15	9.5	11	24	9.8	6.9
2	7.0	5.8	5.0	8.3	9.8	17	15	9.2	12	20	9.5	7.1
3	7.0	5.3	5.0	9.2	10	18	14	9.2	12	17	9.2	6.7
4	6.0	4.9	5.0	8.9	11	18	13	8.9	10	16	9.2	6.4
5	5.0	5.0	5.0	8.3	12	18	12	11	9.5	14	9.2	6.0
6	4.0	5.0	5.0	7.9	11	20	12	12	9.2	14	8.6	6.5
7	3.0	5.0	5.0	8.9	11	20	12	10	8.9	13	8.2	7.0
8	4.0	5.0	6.0	8.9	11	23	12	10	8.6	13	8.6	6.5
9	5.0	5.0	6.0	9.2	11	22	12	10	8.3	12	8.0	6.0
10	6.0	5.5	6.0	9.5	10	22	11	10	8.0	12	8.2	6.5
11	6.0	6.0	6.0	10	10	21	10	9.2	8.0	12	8.0	6.0
12	6.0	6.0	6.0	10	11	21	9.8	8.9	7.7	11	8.0	6.0
13	6.0	6.0	6.0	11	11	21	9.8	8.6	7.7	11	8.0	6.5
14	6.0	6.0	5.5	12	11	21	9.8	9.5	7.7	10	7.4	6.7
15	6.0	6.0	5.0	12	11	22	12	9.8	8.3	9.8	8.0	6.4
16	6.0	6.0	5.0	11	13	20	11	8.9	7.8	9.8	7.7	5.8
17	6.2	6.0	5.5	10	15	22	10	9.5	8.6	10	6.7	6.0
18	6.0	6.0	5.0	11	15	22	12	10	9.2	8.6	5.8	6.2
19	5.8	5.5	5.0	10	14	22	12	11	8.9	8.7	6.0	5.8
20	6.0	5.0	6.0	7.4	14	22	12	11	8.6	9.5	7.4	5.6
21	6.0	4.5	7.0	9.2	14	21	10	10	8.6	10	8.0	5.3
22	5.3	4.0	7.0	9.8	14	20	10	11	8.6	10	8.0	6.4
23	5.1	4.5	7.0	9.2	15	20	12	11	8.6	9.8	8.0	6.0
24	4.9	5.0	8.0	9.8	14	19	13	12	9.2	9.8	7.4	6.0
25	5.3	5.0	7.0	9.8	15	18	11	13	8.6	13	7.1	6.0
26	5.6	5.0	8.0	10	16	18	10	14	8.3	13	7.4	5.8
27	6.2	5.0	9.8	8.9	18	17	10	14	7.7	11	7.4	4.9
28	6.4	5.0	9.8	8.9	20	16	10	14	7.4	11	7.4	6.0
29	5.1	-----	9.8	8.9	20	16	12	14	8.0	11	7.1	5.8
30	6.0	-----	9.5	8.6	20	15	11	12	21	8.9	6.7	5.6
31	6.0	-----	9.8	-----	18	-----	10	12	-----	9.2	-----	5.0
TOTAL	174.9	148.8	200.7	284.8	414.7	589	355.4	333.2	276.0	372.1	236.0	189.4
MEAN	5.64	5.31	6.47	9.49	13.4	19.6	11.5	10.7	9.20	12.0	7.87	6.11
MAX	7.0	6.0	9.8	12	20	23	15	14	21	24	9.8	7.1
MIN	3.0	4.0	5.0	7.4	8.9	15	9.8	8.6	7.4	8.6	5.8	4.9
AC-FT	347	295	398	565	823	1,170	705	661	547	738	468	376

CAL YR 1971 TOTAL 3,575.0 MEAN 9.79 MAX 24 MIN 3.0 AC-FT 7,090

PEAK DISCHARGE (BASE, 65 CFS).--No peak above base.

RIO GRANDE BASIN

08265000 Red River near Questa, N. Mex.

LOCATION.--Lat 36°42'12", long 105°34'04", in NE¼ sec.32, T.29 N., R.13 E. (projected), Taos County, in Carson National Forest, on left bank 1.3 miles upstream from Cabresto Creek, 1.5 miles east of Questa, and at mile 9.0.

DRAINAGE AREA.--113 sq mi.

PERIOD OF RECORD.--April to October 1910 and January to September 1911 (gage heights and discharge measurements only), October 1912 to March 1924, May 1924 to September 1925, January to March 1926, September 1926 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as Rio Colorado above Questa 1910-11, 1926-30, and as Rio Colorado near Questa 1912-25, 1930-48.

GAGE.--Water-stage recorder. Wood or concrete control since Mar. 20, 1936. Datum of gage is 7,451.92 ft above mean sea level. See WSP 1923 for history of changes prior to Oct. 4, 1938.

AVERAGE DISCHARGE.--58 years (1912-25, 1926-71), 53.2 cfs (38,540 acre-ft per year); 20 calendar years (1951-70), 39.7 cfs (28,760 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 74 cfs Sept. 30 (gage height, 2.75 ft); maximum gage height, 2.79 ft Dec. 24 (backwater from ice); minimum discharge, 1.8 cfs Mar. 19.

1930-71: Maximum discharge, 886 cfs May 25, 1942, from rating curve extended above 450 cfs; maximum gage height, 4.10 ft June 19, 1965; minimum discharge, 1.5 cfs Nov. 23, 1957.

The peak of June 15, 1921, may have equaled or exceeded the peak of May 25, 1942.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of a few hundred acres above station. Figures of discharge do not include flow in South ditch which diverts from left bank 1,500 ft upstream and bypasses gage for irrigation and stock water below.

Tailings pipelines from Molybdenum Corp. of America (Molycorp) refinery 5.5 miles upstream also bypass gage on left bank and discharge into settling pond 3 miles downstream. Effluent from this pond enters Red River as surface water and is included in discharge at Red River at mouth near Questa (see sta 08267000). See tabulation below for monthly discharge through tailings pipelines (records furnished by Molycorp).

REVISIONS (WATER YEARS).--WSP 808: 1935. WSP 1392: 1913, 1932, 1941, 1947-48. WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	13	5.2	4.0	5.7	5.0	9.8	9.3	25	17	14	17
2	16	13	5.7	4.0	6.1	5.0	9.1	9.9	25	17	13	16
3	15	12	7.4	4.0	5.7	5.0	10	11	25	15	12	17
4	15	11	6.6	3.5	6.1	5.0	9.7	13	24	14	12	14
5	14	12	5.6	3.0	4.9	5.0	8.6	13	22	14	12	13
6	13	12	4.6	2.5	5.5	5.0	8.9	14	24	13	15	13
7	12	12	4.7	2.5	4.5	5.5	9.6	16	24	12	14	13
8	15	11	5.9	3.0	4.0	6.0	8.4	15	28	12	14	12
9	14	11	5.7	4.0	4.5	6.2	8.1	14	28	14	13	11
10	14	11	6.1	5.0	5.0	6.7	8.6	15	28	11	12	10
11	14	10	5.2	5.5	5.5	7.2	8.9	15	28	10	11	8.6
12	14	10	3.7	6.0	6.0	7.5	8.8	16	26	9.4	13	8.1
13	14	10	3.5	6.0	6.2	8.3	8.9	16	25	9.3	12	8.0
14	14	9.0	3.5	5.8	6.5	7.9	9.3	16	25	10	11	8.1
15	15	8.0	4.0	4.9	6.3	6.8	11	16	26	13	12	8.2
16	15	9.0	4.0	4.8	6.2	7.8	11	16	28	15	12	8.6
17	14	9.3	4.0	4.8	5.9	7.5	10	18	29	13	11	12
18	14	9.1	4.0	5.3	6.1	5.8	10	20	28	13	13	13
19	14	8.8	3.5	5.5	5.8	6.0	11	20	27	16	20	12
20	15	7.5	4.0	5.5	5.4	7.2	9.8	20	26	20	22	11
21	16	8.3	4.0	5.6	4.7	8.1	9.3	19	24	16	15	11
22	16	9.4	3.7	5.8	4.5	8.1	11	18	24	14	18	14
23	14	9.0	4.0	5.0	4.5	12	10	20	25	18	17	13
24	14	6.9	4.0	4.9	5.0	12	11	20	24	22	15	13
25	14	8.4	4.0	5.2	5.0	9.4	11	18	24	15	14	14
26	15	8.7	4.0	5.7	5.0	10	11	20	24	14	20	13
27	13	8.5	4.5	6.3	5.0	12	9.4	21	22	14	19	11
28	12	8.1	3.5	6.9	5.0	14	9.9	24	18	17	22	11
29	13	8.4	4.0	6.5	-----	13	10	25	18	21	25	11
30	13	8.8	4.0	6.1	-----	11	9.8	27	17	18	20	46
31	13	-----	4.0	5.8	-----	12	-----	26	-----	15	18	-----
TOTAL	440	293.2	140.6	153.4	150.6	248.0	291.9	541.2	741	451.7	471	390.6
MEAN	14.2	9.77	4.54	4.95	5.38	8.00	9.73	17.5	24.7	14.6	15.2	13.0
MAX	16	13	7.4	6.9	6.5	14	11	27	29	22	25	46
MIN	12	6.9	3.5	2.5	4.0	5.0	8.1	9.3	17	9.3	11	8.0
AC-FT	873	582	279	304	299	492	579	1,070	1,470	896	934	775
{+}	538	538	486	442	468	538	496	535	469	538	562	488

CAL YR 1970 TOTAL 11,837.5 MEAN 32.4 MAX 189 MIN 3.5 AC-FT 23,480 + 5,810
WTR YR 1971 TOTAL 4,313.2 MEAN 11.8 MAX 46 MIN 2.5 AC-FT 8,560 + 6,100

PEAK DISCHARGE (BASE, 160 CFS).--No peak above base. + Diversion, in acre-feet, through Molycorp tailings pipelines.

08265000 Red River near Questa, N. Mex.

LOCATION.--Lat 36°42'12", long 105°34'04", in NE¼SE¼ sec.32, T.29 N., R.13 E. (projected), Taos County, in Carson National Forest, on left bank 1.3 miles upstream from Cabresto Creek, 1.5 miles east of Questa, and at mile 9.0.

DRAINAGE AREA.--113 sq mi.

PERIOD OF RECORD.--April to October 1910 and January to September 1911 (gage heights and discharge measurements only), October 1912 to March 1924, May 1924 to September 1925, January to March 1926, September 1926 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as Rio Colorado above Questa 1910-11, 1926-30, and as Rio Colorado near Questa 1912-25, 1930-48.

GAGE.--Water-stage recorder. Wood or concrete control since Mar. 20, 1936. Datum of gage is 7,451.92 ft above mean sea level. See WSP 1923 for history of changes prior to Oct. 4, 1938.

AVERAGE DISCHARGE.--57 calendar years (1913-24, 1927-71), 53.5 cfs (38,760 acre-ft per year); 20 calendar years (1952-71), 39.0 cfs (28,260 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 74 cfs Sept. 30 (gage height, 2.75 ft); minimum, 1.8 cfs Mar. 19.
1930-71: Maximum discharge, 886 cfs May 25, 1942, from rating curve extended above 450 cfs; maximum gage height, 4.10 ft June 19, 1965; minimum discharge, 1.5 cfs Nov. 23, 1957.
The peak of June 15, 1921, may have equalled or exceeded the peak of May 25, 1942.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of a few hundred acres above station. Figures of discharge do not include flow in South ditch which diverts from left bank 1,500 ft upstream and bypasses gage for irrigation and stock water below.

Tailings pipelines from Molybdenum Corp. of America (Molycorp) refinery 5.5 miles upstream also bypass gage on left bank and discharge into settling pond 3 miles downstream. Effluent from this pond enters Red River as surface water and is included in discharge at Red River at mouth near Questa (see sta 08267000). See tabulation below for monthly discharge through tailings pipelines (records furnished by Molycorp).

REVISIONS (WATER YEARS).--WSP 808: 1935. WSP 1392: 1913, 1932, 1941, 1947-48. WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	4.0	5.7	5.0	9.8	9.3	25	17	14	17	56	19	5.7
2	4.0	6.1	5.0	9.1	9.9	25	17	13	16	43	19	6.9
3	4.0	5.7	5.0	10	11	25	15	12	17	30	17	6.3
4	3.5	6.1	5.0	9.7	13	24	14	12	14	27	18	6.1
5	3.0	4.9	5.0	8.6	13	22	14	12	13	25	17	4.8
6	2.5	5.5	5.0	8.9	14	24	13	15	13	23	15	3.9
7	2.5	4.5	5.5	9.6	16	24	12	14	13	22	15	5.2
8	3.0	4.0	6.0	8.4	15	28	12	14	12	22	16	6.9
9	4.0	4.5	6.2	8.1	14	28	14	13	11	20	15	4.5
10	5.0	5.0	6.7	8.6	15	28	11	12	10	19	13	5.0
11	5.5	5.5	7.2	8.9	15	28	10	11	8.6	18	13	5.0
12	6.0	6.0	7.5	8.8	16	26	9.4	13	8.1	18	13	4.0
13	6.0	6.2	8.3	8.9	16	25	9.3	12	8.0	20	13	4.5
14	5.8	6.5	7.9	9.3	16	25	10	11	8.1	17	13	4.5
15	4.9	6.3	6.8	11	16	26	13	12	8.2	17	13	4.0
16	4.8	6.2	7.8	11	16	28	15	12	8.6	17	13	4.1
17	4.8	5.9	7.5	10	18	29	13	11	12	23	12	3.8
18	5.3	6.1	5.8	10	20	28	13	13	13	20	7.7	5.7
19	5.5	5.8	6.0	11	20	27	16	20	12	16	4.6	6.5
20	5.5	5.4	7.2	9.8	20	26	20	22	11	15	4.2	6.0
21	5.6	4.7	8.1	9.3	19	24	16	15	11	15	6.0	6.0
22	5.8	4.5	8.1	11	18	24	14	18	14	17	7.0	6.8
23	5.0	4.5	12	10	20	25	18	17	13	16	8.0	7.0
24	4.9	5.0	12	11	20	24	22	15	13	17	9.0	7.0
25	5.2	5.0	9.4	11	18	24	15	14	14	36	9.0	8.0
26	5.7	5.0	10	11	20	24	14	20	13	30	9.0	8.0
27	6.3	5.0	12	9.4	21	22	14	19	11	27	7.9	7.0
28	6.9	5.0	14	9.9	24	18	17	22	11	25	7.9	7.0
29	6.5	-----	13	10	25	18	21	25	11	24	8.2	7.0
30	6.1	-----	11	9.8	27	17	18	20	46	21	5.9	6.9
31	5.8	-----	12	-----	26	-----	15	18	-----	19	-----	4.7
TOTAL	153.4	150.6	248.0	291.9	541.2	741	451.7	471	390.6	715	348.4	178.0
MEAN	4.95	5.38	8.00	9.73	17.5	24.7	14.6	15.2	13.0	23.1	11.6	5.74
MAX	6.9	6.5	14	11	27	29	22	25	46	56	19	8.0
MIN	2.5	4.0	5.0	8.1	9.3	17	9.3	11	8.0	15	4.2	3.8
AC-FT	304	299	492	579	1,070	1,470	896	934	775	1,420	691	353
(†)	442	468	538	496	535	469	538	562	488	523	538	550

CAL YR 1971 TOTAL 4,680.8 MEAN 12.8 MAX 56 MIN 2.5 AC-FT 9,280 † 6,150

PEAK DISCHARGE (BASE, 160 CFS).--No peak above base.

† Diversion, in acre-feet, through Molycorp tailings pipelines.

08266000 Cabresto Creek near Questa, N. Mex.

LOCATION.--Lat 36°43'50", long 105°33'12", in SE¼SE¼ sec.21, T.29 N., R.13 E., Taos County, in Carson National Forest, on right bank 900 feet downstream from Llano ditch heading, 2.6 miles downstream from Lake Fork, 3 miles northeast of Questa, and 3.4 miles upstream from mouth.

DRAINAGE AREA.--36.7 sq mi.

PERIOD OF RECORD.--September 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,845 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--28 years, 9.44 cfs (6,840 acre-ft per year); 20 calendar years (1951-70), 9.18 cfs (6,650 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 34 cfs Mar. 27 (gage height, 2.45 ft); minimum, 0.78 cfs Mar. 19, result of freezeup. Period of record: Maximum discharge, 176 cfs June 8, 1957 (gage height, 4.44 ft); minimum, 0.44 cfs Dec. 2, 1950, result of freezeup.

The flood of May 25, 1942, may have exceeded the maximum of record.

REMARKS.--Records good. Llano ditch, the only diversion above station, diverts from right bank 900 ft above gage for irrigation of about 800 acres below. See tabulation below for monthly diversion of Llano ditch (records of daily discharge available in district files). Flow regulated by Cabresto Reservoir (capacity, 732 acre-feet, after reconstruction in 1928) on Lake Fork 1 mile above mouth.

REVISIONS.--WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	4.9	4.0	4.0	3.8	4.1	7.0	7.9	8.4	6.8	6.7	5.1
2	6.2	5.0	4.1	4.3	3.8	4.6	6.8	7.6	8.3	10	6.1	5.0
3	6.2	4.6	4.6	3.6	4.0	4.3	6.9	7.6	8.0	10	5.9	5.0
4	6.3	4.7	4.3	3.0	4.0	4.0	6.7	7.8	7.8	7.2	5.9	4.8
5	6.2	4.6	4.6	2.3	3.8	3.6	6.3	8.0	7.7	6.8	6.0	4.8
6	6.1	5.0	4.4	2.6	4.0	3.4	6.2	7.9	7.5	7.3	6.1	4.6
7	6.0	5.2	4.6	2.7	2.9	3.3	6.5	8.2	7.5	7.1	6.4	4.4
8	6.3	5.0	4.7	3.2	3.3	3.7	6.3	8.8	7.7	7.2	6.4	4.4
9	6.2	4.7	4.7	3.7	3.8	3.6	6.3	9.2	7.7	7.1	6.0	4.3
10	6.2	4.7	4.6	3.8	3.8	3.3	6.5	8.8	7.5	6.7	5.7	4.2
11	6.2	5.0	4.5	3.7	3.7	3.4	6.3	9.6	7.3	6.4	5.3	4.1
12	5.9	5.2	3.6	3.7	3.7	3.6	6.6	9.5	7.2	6.0	5.9	4.0
13	5.5	5.2	3.6	3.7	4.0	3.6	6.6	9.1	7.1	5.9	5.6	3.9
14	5.4	4.7	3.6	3.6	3.8	3.6	6.6	9.1	6.9	5.9	5.5	3.8
15	4.6	3.8	4.6	3.6	3.8	3.3	7.0	8.9	6.8	6.1	5.2	3.7
16	4.2	4.4	3.8	3.6	3.7	3.4	7.1	8.8	7.2	7.6	4.9	3.6
17	4.2	4.7	4.8	3.6	3.7	3.5	7.0	8.8	8.2	7.6	4.7	4.1
18	4.3	4.9	4.6	3.4	3.7	3.3	7.2	9.2	7.2	7.5	4.8	4.3
19	4.2	5.0	3.8	3.4	3.7	3.0	7.4	9.2	7.1	7.8	6.9	4.2
20	4.3	4.6	4.6	3.4	3.6	3.6	6.7	9.9	6.9	8.0	7.2	4.2
21	4.3	5.0	4.4	3.6	3.2	3.8	7.2	9.3	6.9	7.6	6.9	4.2
22	4.4	5.0	4.4	3.4	2.6	4.0	8.2	8.9	6.7	7.5	6.4	4.6
23	4.4	4.9	3.8	3.3	3.4	4.4	7.8	9.0	6.6	8.4	6.1	4.6
24	4.3	4.9	3.5	3.6	3.8	4.7	8.1	9.1	6.5	11	5.9	4.7
25	4.4	5.0	3.3	3.8	3.8	4.5	8.1	8.9	6.4	8.4	5.7	4.6
26	4.5	4.9	3.7	3.8	3.8	4.6	8.7	8.6	6.3	8.1	5.8	4.2
27	4.6	4.9	4.5	4.0	3.8	12	7.9	8.4	6.1	7.7	6.4	3.9
28	4.6	4.9	4.1	4.0	4.1	12	8.1	8.6	6.0	7.8	5.8	3.8
29	4.6	4.9	3.4	3.8	-----	9.1	8.2	8.9	5.9	7.8	5.8	3.9
30	4.9	4.7	3.3	3.8	-----	8.2	7.9	9.2	5.9	7.3	5.4	5.8
31	4.7	-----	3.6	3.8	-----	8.3	-----	8.9	-----	7.0	5.3	-----
TOTAL	160.5	145.0	128.1	109.8	103.1	147.8	214.2	271.7	213.3	233.6	182.7	130.8
MEAN	5.18	4.83	4.13	3.54	3.68	4.77	7.14	8.76	7.11	7.54	5.89	4.36
MAX	6.3	5.2	4.8	4.3	4.1	12	8.7	9.9	8.4	11	7.2	5.8
MIN	4.2	3.8	3.3	2.3	2.6	3.0	6.2	7.6	5.9	5.9	4.7	3.6
AC-FT	318	288	254	218	205	293	425	539	423	463	362	259
(†)	0	-	-	-	-	-	0	0	0	25	0	0

CAL YR 1970 TOTAL 3,143.9 MEAN 8.61 MAX 62 MIN 1.8 AC-FT 6,240
WTR YR 1971 TOTAL 2,040.6 MEAN 5.59 MAX 12 MIN 2.3 AC-FT 4,050

† Diversion, in acre-feet, by Llano ditch.

08266000 Cabresto Creek near Questa, N. Mex.

LOCATION.--Lat 36°43'50", long 105°33'12", in SE¼SE¼ sec.21, T.29 N., R.13 E., Taos County, in Carson National Forest, on right bank 900 feet downstream from Llano ditch heading, 2.6 miles downstream from Lake Fork, 3 miles northeast of Questa, and 3.4 miles upstream from mouth.

DRAINAGE AREA.--36.7 sq mi.

PERIOD OF RECORD.--September 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,845 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--28 calendar years; 9.45 cfs (6,850 acre-ft per year); 20 calendar years (1952-71), 9.16 cfs (6,640 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 34 cfs Mar. 27 (gage height, 2.45 ft); minimum, 0.70 cfs Dec. 31, result of freezeup. Period of record: Maximum discharge, 176 cfs June 8, 1957 (gage height, 4.44 ft); minimum, 0.44 cfs Dec. 2, 1950, result of freezeup.

The flood of May 25, 1942, may have exceeded the maximum of record.

REMARKS.--Records good. Llano ditch, the only diversion above station, diverts from right bank 900 ft above gage for irrigation of about 800 acres below. See tabulation below for monthly diversion of Llano ditch (records of daily discharge available in district files). Flow regulated by Cabresto Reservoir (capacity, 732 acre-feet, after reconstruction in 1928) on Lake Fork 1 mile above mouth.

REVISIONS.--WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	4.0	3.8	4.1	7.0	7.9	8.4	6.8	6.7	5.1	9.0	7.0	4.8
2	4.3	3.8	4.6	6.8	7.6	8.3	10	6.1	5.0	8.7	6.4	5.2
3	3.6	4.0	4.3	6.9	7.6	8.0	10	5.9	5.0	7.3	6.1	5.2
4	3.0	4.0	4.0	6.7	7.8	7.8	7.2	5.9	4.8	6.7	6.3	4.6
5	2.3	3.8	3.6	6.3	8.0	7.7	6.8	6.0	4.8	6.4	6.4	2.8
6	2.6	4.0	3.4	6.2	7.9	7.5	7.3	6.1	4.6	6.2	6.1	2.4
7	2.7	2.9	3.3	6.5	8.2	7.5	7.1	6.4	4.4	6.5	5.6	4.9
8	3.2	3.3	3.7	6.3	8.8	7.7	7.2	6.4	4.4	6.7	6.2	3.9
9	3.7	3.8	3.6	6.3	9.2	7.7	7.1	6.0	4.3	6.9	5.7	2.1
10	3.8	3.8	3.3	6.5	8.8	7.5	6.7	5.7	4.2	6.8	5.6	1.6
11	3.7	3.7	3.4	6.3	9.6	7.3	6.4	5.3	4.1	6.6	5.8	1.7
12	3.7	3.7	3.6	6.6	9.5	7.2	6.0	5.9	4.0	6.7	5.7	1.3
13	3.7	4.0	3.6	6.6	9.1	7.1	5.9	5.6	3.9	6.5	5.7	1.6
14	3.6	3.8	3.6	6.6	9.1	6.9	5.9	5.5	3.8	6.6	4.9	2.6
15	3.6	3.8	3.3	7.0	8.9	6.8	6.1	5.2	3.7	6.5	5.7	2.8
16	3.6	3.7	3.4	7.1	8.8	7.2	7.6	4.9	3.6	6.5	5.7	2.5
17	3.6	3.7	3.5	7.0	8.8	8.2	7.6	4.7	4.1	7.0	5.1	1.5
18	3.4	3.7	3.3	7.2	9.2	7.2	7.5	4.8	4.3	7.3	4.2	2.0
19	3.4	3.7	3.0	7.4	9.2	7.1	7.8	6.9	4.2	6.6	2.5	2.8
20	3.4	3.6	3.6	6.7	9.9	6.9	8.0	7.2	4.2	6.7	2.4	2.7
21	3.6	3.2	3.8	7.2	9.3	6.9	7.6	6.9	4.2	6.6	4.9	2.9
22	3.4	2.6	4.0	8.2	8.9	6.7	7.5	6.4	4.6	6.5	5.7	3.3
23	3.3	3.4	4.4	7.8	9.0	6.6	8.4	6.1	4.6	6.3	5.2	3.5
24	3.6	3.8	4.7	8.1	9.1	6.5	11	5.9	4.7	6.5	5.1	3.3
25	3.8	3.8	4.5	8.1	8.9	6.4	8.4	5.7	4.6	8.3	5.2	3.2
26	3.8	3.8	4.6	8.7	8.6	6.3	8.1	5.8	4.2	8.1	5.5	3.3
27	4.0	3.8	12	7.9	8.4	6.1	7.7	6.4	3.9	7.5	5.5	3.2
28	4.0	4.1	12	8.1	8.6	6.0	7.8	5.8	3.8	7.6	5.4	3.2
29	3.8	-----	9.1	8.2	8.9	5.9	7.8	5.8	3.9	7.3	5.4	3.5
30	3.8	-----	8.2	7.9	9.2	5.9	7.3	5.4	5.8	6.9	3.1	2.5
31	3.8	-----	8.3	-----	8.9	-----	7.0	5.3	-----	6.1	-----	1.6
TOTAL	109.8	103.1	147.8	214.2	271.7	213.3	233.6	182.7	130.8	215.9	160.1	92.5
MEAN	3.54	3.68	4.77	7.14	8.76	7.11	7.54	5.89	4.36	6.96	5.34	2.98
MAX	4.3	4.1	12	8.7	9.9	8.4	11	7.2	5.8	9.0	7.0	5.2
MIN	2.3	2.6	3.0	6.2	7.6	5.9	5.9	4.7	3.6	6.1	2.4	1.3
AC-FT	218	205	293	425	539	423	463	362	259	428	318	183
(†)	-	-	-	0	0	0	25	0	0	-	-	-

CAL YR 1971 TOTAL 2,075.5 MEAN 5.69 MAX 12 MIN 1.3 AC-FT 4,120

† Diversion, in acre-feet, by Llano ditch.

08267000 Red River at mouth, near Questa, N. Mex.

LOCATION.--Lat 36°38'53", long 105°41'34", in SW¼ sec. 20, T.28 N., R.12 E., Taos County, in Carson National Forest, on left bank 250 ft upstream from Rio Grande, and 6.5 miles southwest of Questa.

DRAINAGE AREA.--190 sq mi.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for October and November 1950, published in WSP 1732.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft (from topographic map).

AVERAGE DISCHARGE.--21 years, 77.6 cfs (56,220 acre-ft per year); 20 calendar years (1951-70), 79.0 cfs (57,240 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 289 cfs Aug. 20 (gage height, 4.22 ft); minimum, 33 cfs Mar. 19, 20.
Period of record: Maximum discharge, 730 cfs Aug. 12, 1964 (gage height, 6.05 ft); minimum, 29 cfs Feb. 13, 1965.

REMARKS.--Records good. Diversions for irrigation of about 3,000 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	57	47	39	48	46	44	46	65	58	63	53
2	61	59	46	43	48	46	43	48	65	54	62	52
3	61	55	49	44	48	46	44	48	68	52	60	54
4	62	56	47	39	48	49	44	48	71	49	58	52
5	61	55	47	37	46	51	45	48	69	49	56	51
6	58	58	44	36	47	48	44	47	69	48	59	50
7	56	58	44	36	44	48	44	49	68	46	62	50
8	59	61	40	36	43	49	44	49	69	47	62	52
9	58	54	41	37	46	51	44	47	69	49	59	47
10	58	55	42	43	48	49	45	47	65	47	61	46
11	57	58	41	46	49	49	45	48	65	46	58	45
12	55	56	39	44	49	49	46	47	63	46	54	45
13	56	55	37	46	49	49	48	49	65	47	56	45
14	56	54	37	46	49	48	49	47	66	49	62	45
15	58	47	38	46	48	45	50	49	69	50	54	41
16	59	48	37	44	48	45	51	49	69	52	53	39
17	59	51	39	46	47	41	51	52	69	50	48	42
18	59	53	39	47	48	38	46	55	67	50	47	43
19	60	55	36	46	47	36	47	57	61	51	58	41
20	62	51	39	47	46	37	49	57	61	53	93	39
21	61	52	40	48	44	38	48	56	61	54	64	41
22	60	54	40	49	44	38	49	54	61	52	61	46
23	59	54	41	46	44	39	50	56	62	52	62	47
24	59	52	41	46	47	41	50	58	61	65	60	49
25	61	53	41	46	47	39	50	58	62	55	52	46
26	62	53	43	46	46	39	50	58	60	54	59	44
27	59	52	46	47	44	41	49	57	58	58	58	43
28	54	52	46	47	47	42	49	58	55	68	60	42
29	54	54	42	46	-----	44	48	62	58	78	73	43
30	57	54	43	46	-----	46	47	66	67	73	62	83
31	58	-----	42	47	-----	46	-----	66	-----	67	57	-----
TOTAL	1,821	1,626	1,294	1,362	1,309	1,373	1,413	1,636	1,938	1,669	1,853	1,416
MEAN	58.7	54.2	41.7	43.9	46.8	44.3	47.1	52.8	64.6	53.8	59.8	47.2
MAX	62	61	49	49	49	51	51	66	71	78	93	83
MIN	54	47	36	36	43	36	43	46	55	46	47	39
AC-FT	3,610	3,230	2,570	2,700	2,600	2,720	2,800	3,250	3,840	3,310	3,680	2,810

CAL YR 1970 TOTAL 26,216 MEAN 71.8 MAX 206 MIN 36 AC-FT 52,000
WTR YR 1971 TOTAL 18,710 MEAN 51.3 MAX 93 MIN 36 AC-FT 37,110

PEAK DISCHARGE (BASE, 175 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE
8-20	1630	4.22	289

08267000 Red River at mouth, near Questa, N. Mex.

LOCATION.--Lat 36°38'53", long 105°41'34", in SW 1/4 sec. 20, T.28 N., R.12 E., Taos County, in Carson National Forest, on left bank 250 ft upstream from Rio Grande, and 6.5 miles southwest of Questa.

DRAINAGE AREA.--190 sq mi.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for October and November 1950, published in WSP 1732.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft (from topographic map).

AVERAGE DISCHARGE.--21 calendar years, 77.7 cfs (56,290 acre-ft per year); 20 calendar years (1952-71), 78.6 cfs (56,950 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 289 cfs Aug. 20 (gage height, 4.22 ft); minimum, 33 cfs Mar. 19, 20.

Period of record: Maximum discharge, 730 cfs Aug. 12, 1964 (gage height, 6.05 ft); minimum, 29 cfs Feb. 13, 1965.

REMARKS.--Records good. Diversions for irrigation of about 3,000 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	39	48	46	44	46	65	58	63	53	104	60	46
2	43	48	46	43	48	65	54	62	52	90	60	49
3	44	48	46	44	48	68	52	60	54	77	57	47
4	39	48	49	44	48	71	49	58	52	74	59	46
5	37	46	51	45	48	69	49	56	51	72	58	42
6	36	47	48	44	47	69	48	59	50	69	56	41
7	36	44	48	44	49	68	46	62	50	67	58	43
8	36	43	49	44	49	69	47	62	52	65	61	44
9	37	46	51	44	47	69	49	59	47	65	60	40
10	43	48	49	45	47	65	47	61	46	61	58	39
11	46	49	49	45	48	65	46	58	45	63	58	41
12	44	49	49	46	47	63	46	54	45	61	56	39
13	46	49	49	48	49	65	47	56	45	61	58	41
14	46	49	48	49	47	66	49	62	45	60	52	42
15	46	48	45	50	49	69	50	54	41	58	55	41
16	44	48	45	51	49	69	52	53	39	58	61	41
17	46	47	41	51	52	69	50	48	42	65	58	40
18	47	48	38	46	55	67	50	47	43	69	53	41
19	46	47	36	47	57	61	51	58	41	55	44	44
20	47	46	37	49	57	61	53	93	39	53	41	45
21	48	44	38	48	56	61	54	64	41	52	43	44
22	49	44	38	49	54	61	52	61	46	54	49	43
23	46	44	39	50	56	62	52	62	47	54	49	46
24	46	47	41	50	58	61	65	60	49	54	47	47
25	46	47	39	50	58	62	55	52	46	82	48	51
26	46	46	39	50	58	60	54	59	44	74	50	55
27	47	44	41	49	57	58	58	58	43	69	52	56
28	47	47	42	49	58	55	68	60	42	68	53	50
29	46	-----	44	48	62	58	78	73	43	65	53	56
30	46	-----	46	47	66	67	73	62	83	63	46	46
31	47	-----	46	-----	66	-----	67	57	-----	59	-----	41
TOTAL	1,362	1,309	1,373	1,413	1,636	1,938	1,669	1,853	1,416	2,041	1,613	1,387
MEAN	43.9	46.8	44.3	47.1	52.8	64.6	53.8	59.8	47.2	65.8	53.8	44.7
MAX	49	49	51	51	66	71	78	93	83	104	61	56
MIN	36	43	36	43	46	55	46	47	39	52	41	39
AC-FT	2,700	2,600	2,720	2,800	3,250	3,840	3,310	3,680	2,810	4,050	3,200	2,750

CAL YR 1971 TOTAL 19,010 MEAN 52.1 MAX 104 MIN 36 AC-FT 37,710

PEAK DISCHARGE (BASE, 175 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-20	1630	4.22	289	10-1	1130	3.35	184

08267500 Rio Hondo near Valdez, N. Mex.

LOCATION.--Lat 36°32'30", long 105°33'21", Taos County, in Carson National Forest, on right bank 500 ft upstream from first diversion, 1.6 miles east of Valdez, 3.8 miles downstream from South Fork, and 9.2 miles upstream from mouth.

DRAINAGE AREA.--36.2 sq mi.

PERIOD OF RECORD.--August 1934 to current year.

GAGE.--Water-stage recorder. Concrete control since Oct. 28, 1938. Altitude of gage is 7,650 ft (from topographic map). Prior to Oct. 28, 1938, at datum 1.92 ft lower.

AVERAGE DISCHARGE.--37 years, 34.7 cfs (25,140 acre-ft per year); 20 calendar years (1951-70), 32.0 cfs (23,180 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 64 cfs Sept. 30 (gage height, 2.37 ft); maximum gage height, 4.32 ft Jan. 6 (ice jam); minimum discharge, 6.4 cfs Feb. 21, result of freezeup.

Period of record: Maximum discharge, 541 cfs May 13, 1941; maximum gage height, 4.81 ft Jan. 5, 1970 (ice jam); minimum discharge, about 1 cfs Jan. 27, 1942, result of freezeup.

REMARKS.--Records good except those for winter period and those for May, July and August, which are fair. No diversions above station.

REVISIONS (WATER YEARS).--WSP 1342: 1935. WSP 1712: Drainage area. WSP 1732: 1942(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	14	10	11	10	9.0	12	16	27	24	18	17
2	18	14	11	11	10	9.0	12	17	29	25	17	18
3	18	14	12	10	10	8.0	12	18	29	23	16	19
4	18	13	11	8.0	10	9.0	12	19	30	21	15	18
5	18	13	12	7.0	9.5	10	12	18	33	20	16	17
6	18	13	11	7.0	9.0	9.0	12	18	34	20	16	17
7	17	14	11	7.5	8.5	8.5	12	18	34	19	16	17
8	19	14	12	8.0	8.5	9.0	12	18	36	20	15	16
9	17	13	11	9.0	9.0	10	12	18	35	19	15	16
10	17	13	11	10	10	10	12	18	34	17	15	16
11	17	13	12	11	11	11	12	17	34	16	14	16
12	16	13	12	11	10	12	13	17	34	16	14	16
13	16	13	12	10	10	11	13	18	34	15	14	16
14	16	12	12	9.5	10	11	14	18	34	15	15	15
15	16	11	12	10	9.9	10	15	19	34	17	15	15
16	16	12	12	10	9.7	10	15	19	35	16	14	15
17	16	12	12	10	9.5	11	15	20	35	15	15	18
18	15	12	12	10	10	10	15	21	34	15	15	17
19	15	12	11	10	9.8	9.5	15	20	34	15	18	16
20	15	12	11	11	9.8	10	13	21	33	16	17	16
21	15	12	11	11	9.0	11	14	21	32	18	16	16
22	15	12	11	10	8.0	11	15	21	31	19	15	16
23	16	12	11	9.8	8.5	11	14	22	31	19	16	16
24	15	12	10	9.0	9.0	11	16	21	30	21	16	16
25	15	12	10	10	10	11	17	21	29	20	16	15
26	16	12	11	10	10	12	18	23	28	20	16	14
27	14	12	11	11	9.5	13	16	24	27	18	16	14
28	13	12	11	10	9.5	14	16	29	26	18	16	14
29	13	12	10	10	-----	13	16	30	25	21	18	15
30	14	12	11	10	-----	13	16	31	24	19	17	35
31	14	-----	12	10	-----	13	-----	29	-----	19	17	-----
TOTAL	497	377	349	301.8	267.7	330.0	418	640	945	576	489	502
MEAN	16.0	12.6	11.3	9.74	9.56	10.6	13.9	20.6	31.5	18.6	15.8	16.7
MAX	19	14	12	11	11	14	18	31	36	25	18	35
MIN	13	11	10	7.0	8.0	8.0	12	16	24	15	14	14
AC-FT	986	748	692	599	531	655	829	1,270	1,870	1,140	970	996

CAL YR 1970 TOTAL 9,849.0 MEAN 27.0 MAX 119 MIN 10 AC-FT 19,540
WTR YR 1971 TOTAL 5,692.5 MEAN 15.6 MAX 36 MIN 7.0 AC-FT 11,290

PEAK DISCHARGE (BASE, 80 CFS, REVISED).--No peak above base.

08267500 Rio Hondo near Valdez, N. Mex.

LOCATION.--Lat 36°32'30", long 105°33'21", Taos County, in Carson National Forest, on right bank 500 ft upstream from first diversion, 1.6 miles east of Valdez, 3.8 miles downstream from South Fork, and 9.2 miles upstream from mouth.

DRAINAGE AREA.--36.2 sq mi.

PERIOD OF RECORD.--August 1934 to current year.

GAGE.--Water-stage recorder. Concrete control since Oct. 28, 1938. Altitude of gage is 7,650 ft (from topographic map). Prior to Oct. 28, 1938, at datum 1.92 ft lower.

AVERAGE DISCHARGE.--37 calendar years, 35.7 cfs (25,860 acre-ft per year); 20 calendar years (1952-71), 31.8 cfs (23,040 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 64 cfs Sept. 30 (gage height, 2.37 ft); maximum gage height, 4.32 ft Jan. 6 (ice jam); minimum discharge, 6.4 cfs Feb. 21, result of freezeup.

Period of record: Maximum discharge, 541 cfs May 13, 1941; maximum gage height, 4.81 ft Jan. 5, 1970 (ice jam); minimum discharge, about 1 cfs Jan. 27, 1942, result of freezeup.

REMARKS.--Records good except those for winter periods and those for May, July and August, which are fair. No diversions above station.

REVISIONS (WATER YEARS).--WSP 1342: 1935. WSP 1712: Drainage area. WSP 1732: 1942(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	11	10	9.0	12	16	27	24	18	17	35	21	14
2	11	10	9.0	12	17	29	25	17	18	33	21	14
3	10	10	8.0	12	18	29	23	16	19	28	20	14
4	8.0	10	9.0	12	19	30	21	15	18	26	20	13
5	7.0	9.5	10	12	18	33	20	16	17	25	20	11
6	7.0	9.0	9.0	12	18	34	20	16	17	24	19	12
7	7.5	8.5	8.5	12	18	34	19	16	17	23	19	13
8	8.0	8.5	9.0	12	18	36	20	15	16	23	18	14
9	9.0	9.0	10	12	18	35	19	15	16	22	18	12
10	10	10	10	12	18	34	17	15	16	22	17	12
11	11	11	11	12	17	34	16	14	16	22	17	12
12	11	10	12	13	17	34	16	14	16	23	17	12
13	10	10	11	13	18	34	15	14	16	22	17	13
14	9.5	10	11	14	18	34	15	15	15	22	17	14
15	10	9.9	10	15	19	34	17	15	15	22	20	13
16	10	9.7	10	15	19	35	16	14	15	22	20	12
17	10	9.5	11	15	20	35	15	15	18	23	20	10
18	10	10	10	15	21	34	15	15	17	22	17	11
19	10	9.8	9.5	15	20	34	15	18	16	21	14	13
20	11	9.8	10	13	21	33	16	17	16	21	12	12
21	11	9.0	11	14	21	32	18	16	16	22	12	11
22	10	8.0	11	15	21	31	19	15	16	22	13	13
23	9.8	8.5	11	14	22	31	19	16	16	21	14	15
24	9.0	9.0	11	16	21	30	21	16	16	21	14	15
25	10	10	11	17	21	29	20	16	15	33	14	15
26	10	10	12	18	23	28	20	16	14	32	15	16
27	11	9.5	13	16	24	27	18	16	14	28	15	16
28	10	9.5	14	16	29	26	18	16	14	26	15	15
29	10	-----	13	16	30	25	21	18	15	26	15	14
30	10	-----	13	16	31	24	19	17	35	23	13	11
31	10	-----	13	-----	29	-----	19	17	-----	21	-----	9.0
TOTAL	301.8	267.7	330.0	418	640	945	576	489	502	756	504	401.0
MEAN	9.74	9.56	10.6	13.9	20.6	31.5	18.6	15.8	16.7	24.4	16.8	12.9
MAX	11	11	14	18	31	36	25	18	35	35	21	16
MIN	7.0	8.0	8.0	12	16	24	15	14	14	21	12	9.0
AC-FT	599	531	655	829	1,270	1,870	1,140	970	996	1,500	1,000	795

CAL YR 1971 TOTAL 6,130.5 MEAN 16.8 MAX 36 MIN 7.0 AC-FT 12,160

PEAK DISCHARGE (BASE, 80 CFS).--No peak above base.

08268500 Arroyo Hondo at Arroyo Hondo, N. Mex.

LOCATION.--Lat 36°31'56", long 105°41'06", Taos County, in Arroyo Hondo Grant, on left bank 0.9 mile downstream from Arroyo Hondo, and 1.4 miles upstream from mouth.

DRAINAGE AREA.--65.6 sq mi.

PERIOD OF RECORD.--April 1910 to June 1912 (discharge measurements and fragmentary gage-height record), July 1912 to December 1928 (fragmentary), and January 1932 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as Rio Hondo near Arroyo Hondo prior to 1928, and as Rio Hondo at Arroyo Hondo 1928-65.

GAGE.--Water-stage recorder. Altitude of gage is 6,670 ft (from topographic map). See WSP 1923 for history of changes prior to Sept. 11, 1963. Sept. 11, 1963 to Apr. 2, 1969, at site 25 ft downstream on right bank at same datum.

AVERAGE DISCHARGE.--55 years (1912-28, 1932-71), 27.5 cfs (19,920 acre-ft per year); 20 calendar years (1951-70), 20.5 cfs (14,850 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 94 cfs Aug. 19 (gage height, 3.41 ft); minimum, 5.0 cfs May 3, 4, June 4, July 22, Aug. 27, 28, 31, Sept. 1.

1938-71: Maximum discharge, 1,060 cfs July 19, 1948 (gage height, 3.75 ft), from rating curve extended above 200 cfs; minimum, 3.8 cfs Aug. 1, 6, 1963.

Maximum gage height observed, 5.45 ft (site and datum then in use) Aug. 23, 1935 (discharge uncertain, but probably exceeded 1,200 cfs). A minimum daily discharge of 3 cfs occurred Oct. 19, 1912 (statement in WSP 328 that there was no flow in January and much of February 1912 is believed erroneous). Discharge not determined for the major floods of Oct. 6, 1911, Sept. 1, 1932, and July 22, 1934.

REMARKS.--Records good. Diversions above station for irrigation of about 2,500 acres.

REVISIONS (WATER YEARS).--WSP 1342: 1915, 1932(M), 1934-38(M). WSP 1712: Drainage area. WSP 1732: 1926.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	17	16	17	18	12	11	6.0	6.1	7.5	6.6	5.7
2	7.8	18	14	19	18	15	9.7	5.9	6.1	8.3	7.0	6.0
3	7.8	17	15	19	17	15	11	5.7	6.0	7.6	6.8	6.7
4	8.2	16	14	12	18	18	11	5.6	5.9	7.4	6.6	6.4
5	8.0	16	15	12	15	17	11	6.1	6.0	7.1	6.8	6.3
6	8.3	16	15	11	16	14	10	6.3	6.5	7.0	7.1	6.1
7	8.3	17	18	11	11	14	11	6.5	6.3	7.1	7.7	6.2
8	8.7	17	18	12	12	15	11	6.7	6.4	7.2	7.1	6.4
9	12	16	17	14	15	14	10	6.7	6.6	7.5	6.9	6.3
10	14	16	17	17	17	14	9.6	6.9	6.3	7.3	6.8	6.0
11	14	16	18	19	18	14	7.8	6.8	6.4	7.0	6.7	6.0
12	14	16	16	18	17	15	6.8	6.7	6.4	6.8	6.9	6.2
13	15	17	15	17	16	15	6.5	6.6	6.5	6.8	6.9	6.2
14	15	17	15	17	16	14	7.5	6.6	6.7	6.8	6.9	6.2
15	17	15	19	17	16	14	8.8	6.5	6.8	7.0	7.1	6.2
16	18	17	16	17	16	13	8.1	6.4	7.2	6.9	7.1	6.1
17	18	17	19	17	16	14	7.5	6.1	7.3	6.5	7.1	8.5
18	18	18	20	18	18	13	7.7	6.4	6.8	6.6	7.1	7.8
19	17	18	16	18	17	12	7.8	6.7	6.7	6.9	11	7.7
20	16	17	21	18	16	13	7.5	6.4	7.2	8.9	6.1	7.0
21	15	17	20	19	15	14	7.2	6.3	6.9	7.1	7.2	6.6
22	16	17	20	18	12	14	8.4	6.2	6.6	6.2	7.6	7.6
23	16	15	18	17	15	14	7.6	6.2	6.5	7.3	6.3	7.4
24	16	16	15	17	17	14	6.9	6.3	7.0	6.6	6.1	8.0
25	16	16	16	17	16	13	6.5	6.2	6.9	6.1	6.0	7.4
26	18	18	18	17	14	13	6.3	6.3	7.0	7.0	6.0	7.2
27	17	19	22	18	13	12	6.2	6.1	6.8	6.6	5.9	6.3
28	16	18	19	17	15	13	6.1	6.2	6.8	6.4	5.8	6.1
29	16	18	16	17	-----	13	6.1	6.2	6.9	6.3	6.0	8.0
30	16	18	15	17	-----	12	6.1	6.4	7.4	6.7	6.0	19
31	16	-----	16	17	-----	12	-----	6.2	-----	6.6	5.8	-----
TOTAL	430.9	506	529	511	440	429	248.7	196.2	199.0	217.1	211.0	213.6
MEAN	13.9	16.9	17.1	16.5	15.7	13.8	8.29	6.33	6.63	7.00	6.81	7.12
MAX	18	19	22	19	18	18	11	6.9	7.4	8.9	11	19
MIN	7.8	15	14	11	11	12	6.1	5.6	5.9	6.1	5.8	5.7
AC-FT	855	1,000	1,050	1,010	873	851	493	389	395	431	419	424

CAL YR 1970 TOTAL 6,457.1 MEAN 17.7 MAX 65 MIN 6.9 AC-FT 12,810
WTR YR 1971 TOTAL 4,131.5 MEAN 11.3 MAX 22 MIN 5.6 AC-FT 8,190

PEAK DISCHARGE (BASE, 75 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE
8-19	1615	3.41	94

08268500 Arroyo Hondo at Arroyo Hondo, N. Mex.

LOCATION.--Lat 36°31'56", long 105°41'06", Taos County, in Arroyo Hondo Grant, on left bank 0.9 mile downstream from Arroyo Hondo, and 1.4 miles upstream from mouth.

DRAINAGE AREA.--65.6 sq mi.

PERIOD OF RECORD.--April 1910 to June 1912 (discharge measurements and fragmentary gage-height record), July 1912 to December 1928 (fragmentary), and January 1932 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as Rio Hondo near Arroyo Hondo prior to 1928, and as Rio Hondo at Arroyo Hondo 1928-65.

GAGE.--Water-stage recorder. Altitude of gage is 6,670 ft (from topographic map). See WSP 1923 for history of changes prior to Sept. 11, 1963. Sept. 11, 1963 to Apr. 2, 1969, at site 25 ft downstream on right bank at same datum.

AVERAGE DISCHARGE.--56 calendar years (1913-28, 1932-71), 27.8 cfs (20,140 acre-ft per year); 20 calendar years (1952-71), 20.3 cfs (14,710 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 94 cfs Aug. 19 (gage height, 3.41 ft); minimum, 5.0 cfs May 3, 4, June 4, July 22, Aug. 27, 28, 31, Sept. 1.

1938-71: Maximum discharge, 1,060 cfs July 19, 1948 (gage height, 3.75 ft), from rating curve extended above 200 cfs; minimum, 3.8 cfs Aug. 1, 6, 1963.

Maximum gage height observed, 5.45 ft (site and datum then in use) Aug. 23, 1935 (discharge uncertain, but probably exceeded 1,200 cfs). A minimum daily discharge of 3 cfs occurred Oct. 19, 1912 (statement in WSP 328 that there was no flow in January and much of February 1912 is believed erroneous). Discharge not determined for the major floods of Oct. 6, 1911, Sept. 1, 1932, and July 22, 1934.

REMARKS.--Records good. Diversions above station for irrigation of about 2,500 acres.

REVISIONS (WATER YEARS).--WSP 1342: 1915, 1932(M), 1934-38(M). WSP 1712: Drainage area. WSP 1732: 1926.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	17	18	12	11	6.0	6.1	7.5	6.6	5.7	20	20	19
2	19	18	15	9.7	5.9	6.1	8.3	7.0	6.0	21	20	19
3	19	17	15	11	5.7	6.0	7.6	6.8	6.7	18	19	19
4	12	18	18	11	5.6	5.9	7.4	6.6	6.4	15	19	16
5	12	15	17	11	6.1	6.0	7.1	6.8	6.3	12	19	14
6	11	16	14	10	6.3	6.5	7.0	7.1	6.1	12	19	18
7	11	11	14	11	6.5	6.3	7.1	7.7	6.2	13	19	25
8	12	12	15	11	6.7	6.4	7.2	7.1	6.4	15	19	19
9	14	15	14	10	6.7	6.6	7.5	6.9	6.3	14	19	17
10	17	17	14	9.6	6.9	6.3	7.3	6.8	6.0	14	19	17
11	19	18	14	7.8	6.8	6.4	7.0	6.7	6.0	14	18	20
12	18	17	15	6.8	6.7	6.4	6.8	6.9	6.2	14	16	14
13	17	16	15	6.5	6.6	6.5	6.8	6.9	6.2	16	16	19
14	17	16	14	7.5	6.6	6.7	6.8	6.9	6.2	15	16	22
15	17	16	14	8.8	6.5	6.8	7.0	7.1	6.2	15	17	19
16	17	16	13	8.1	6.4	7.2	6.9	7.1	6.1	17	17	15
17	17	16	14	7.5	6.1	7.3	6.5	7.1	8.5	20	17	11
18	18	18	13	7.7	6.4	6.8	6.6	7.1	7.8	20	16	14
19	18	17	12	7.8	6.7	6.7	6.9	11	7.7	17	15	20
20	18	16	13	7.5	6.4	7.2	8.9	6.1	7.0	17	17	15
21	19	15	14	7.2	6.3	6.9	7.1	7.2	6.6	16	19	13
22	18	12	14	8.4	6.2	6.6	6.2	7.6	7.6	16	21	18
23	17	15	14	7.6	6.2	6.5	7.3	6.3	7.4	17	20	25
24	17	17	14	6.9	6.3	7.0	6.6	6.1	8.0	18	20	22
25	17	16	13	6.5	6.2	6.9	6.1	6.0	7.4	29	21	19
26	17	14	13	6.3	6.3	7.0	7.0	6.0	7.2	25	21	19
27	18	13	12	6.2	6.1	6.8	6.6	5.9	6.3	22	21	20
28	17	15	13	6.1	6.2	6.8	6.4	5.8	6.1	21	21	19
29	17	-----	13	6.1	6.2	6.9	6.3	6.0	8.0	22	20	19
30	17	-----	12	6.1	6.4	7.4	6.7	6.0	19	21	16	13
31	17	-----	12	-----	6.2	-----	6.6	5.8	-----	20	-----	11
TOTAL	511	440	429	248.7	196.2	199.0	217.1	211.0	213.6	546	557	550
MEAN	16.5	15.7	13.8	8.29	6.33	6.63	7.00	6.81	7.12	17.6	18.6	17.7
MAX	19	18	18	11	6.9	7.4	8.9	11	19	29	21	25
MIN	11	11	12	6.1	5.6	5.9	6.1	5.8	5.7	12	15	11
AC-FT	1,010	873	851	493	389	395	431	419	424	1,080	1,100	1,090

CAL YR 1971 TOTAL 4,318.6 MEAN 11.8 MAX 29 MIN 5.6 AC-FT 8,570

PEAK DISCHARGE (BASE, 75 CFS)

DATE	TIME	G. H.	DISCHARGE
8-19	1615	3.41	94

08268700 Rio Grande near Arroyo Hondo, N. Mex.

LOCATION.--Lat 36°32'04", long 105°42'34", in NW¼ sec.31, T.27 N., R.12 E., Taos County, on right bank 350 ft downstream from Arroyo Hondo, 400 ft downstream from bridge on county road, 2.2 miles west of Arroyo Hondo, and 11.6 miles northwest of Taos.

DRAINAGE AREA.--8,760 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,470 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 551 cfs (399,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,850 cfs Mar. 30 (gage height, 3.77 ft); minimum, 190 cfs Aug. 18, 25.
Period of record: Maximum discharge, 4,400 cfs June 22, 1965 (gage height, 5.81 ft); minimum, 136 cfs Aug. 2, 1963.

REMARKS.--Records excellent. Diversions above station for irrigation of about 620,000 acres in Colorado and 15,000 acres in New Mexico.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	445	739	705	540	648	544	1,310	252	275	272	323	236
2	413	760	688	539	680	463	1,020	246	276	263	334	260
3	389	772	650	547	697	484	860	239	289	260	339	267
4	372	978	576	478	724	560	743	231	302	263	307	256
5	379	1,100	596	433	653	689	643	218	281	268	295	248
6	387	1,110	620	410	633	689	554	215	266	264	279	241
7	392	1,130	620	400	699	668	491	227	252	261	274	264
8	400	1,160	605	380	585	640	466	231	258	261	260	251
9	413	1,180	609	378	601	715	459	239	275	273	249	253
10	434	1,170	662	387	632	767	439	245	272	276	244	241
11	615	1,140	710	403	636	767	418	253	275	313	240	223
12	654	1,140	652	415	634	725	415	241	285	291	232	220
13	541	1,080	590	434	633	734	418	241	291	267	228	221
14	503	912	526	445	640	742	450	237	293	257	238	225
15	497	851	495	455	663	793	454	238	305	245	225	225
16	490	805	513	485	689	795	443	238	319	235	211	214
17	503	762	398	500	731	741	433	230	326	221	200	218
18	564	731	504	508	759	710	402	226	316	227	195	214
19	589	737	543	522	777	684	381	244	319	233	212	220
20	710	756	488	539	740	657	384	255	331	262	247	223
21	744	740	546	565	645	705	370	264	324	273	233	229
22	747	718	570	588	451	702	348	306	327	281	207	250
23	751	702	506	592	573	748	351	292	314	299	207	261
24	743	717	533	606	635	860	379	271	298	380	206	280
25	736	740	488	623	695	997	352	265	289	349	195	287
26	740	749	449	618	711	1,130	337	262	282	351	211	289
27	733	746	499	607	632	1,180	318	259	279	377	227	291
28	729	739	521	600	589	1,360	301	257	266	401	223	283
29	718	723	545	606	-----	1,610	275	261	266	398	231	287
30	711	713	542	618	-----	1,760	257	260	285	361	256	369
31	732	-----	536	633	-----	1,740	-----	263	-----	336	242	-----
TOTAL	17,774	26,300	17,485	15,854	18,385	26,359	14,471	7,706	8,736	9,018	7,570	7,546
MEAN	573	877	564	511	657	850	482	249	291	291	244	252
MAX	751	1,180	710	633	777	1,760	1,310	306	331	401	339	369
MIN	372	702	398	378	451	463	257	215	252	221	195	214
AC-FT	35,250	52,170	34,680	31,450	36,470	52,280	28,700	15,280	17,330	17,890	15,020	14,970

CAL YR 1970 TOTAL 234,459 MEAN 642 MAX 2,040 MIN 197 AC-FT 465,000
WTR YR 1971 TOTAL 177,204 MEAN 485 MAX 1,760 MIN 195 AC-FT 351,500

PEAK DISCHARGE (BASE, 1,400 CFS)

DATE	TIME	G. H.	DISCHARGE
3-30	1615	3.77	1,850

08268700 Rio Grande near Arroyo Hondo, N. Mex.

LOCATION.--Lat 36°32'04", long 105°42'34", in NW¼ sec.31, T.27 N., R.12 E., Taos County, on right bank 350 ft downstream from Arroyo Hondo, 400 ft downstream from bridge on county road, 2.2 miles west of Arroyo Hondo, and 11.6 miles northwest of Taos.

DRAINAGE AREA.--8,760 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,470 ft (from topographic map).

AVERAGE DISCHARGE.--8 calendar years, 561 cfs (406,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,850 cfs Mar. 30 (gage height, 3.77 ft); minimum, 190 cfs Aug. 18, 25.

Period of record: Maximum discharge, 4,400 cfs June 22, 1965 (gage height, 5.81 ft); minimum, 136 cfs Aug. 2, 1963.

REMARKS.--Records excellent. Diversions above station for irrigation of about 620,000 acres in Colorado and 15,000 acres in New Mexico.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	540	648	544	1,310	252	275	272	323	236	398	404	562
2	539	680	463	1,020	246	276	263	334	260	384	407	543
3	547	697	484	860	239	289	260	339	267	399	411	477
4	478	724	560	743	231	302	263	307	256	648	459	461
5	433	653	689	643	218	281	268	295	248	859	567	426
6	410	633	689	554	215	266	264	279	241	833	607	363
7	400	699	688	491	227	252	261	274	264	769	617	387
8	380	585	640	466	231	258	261	260	251	732	627	437
9	378	601	715	459	239	275	273	249	253	699	634	356
10	387	632	767	439	245	272	276	244	241	687	620	330
11	403	636	767	418	253	275	313	240	223	681	609	389
12	415	634	725	415	241	285	291	232	220	660	605	410
13	434	633	734	418	241	291	267	228	221	655	604	440
14	445	640	742	450	237	293	257	238	225	648	605	495
15	455	663	793	454	238	305	245	225	225	640	625	481
16	485	689	795	443	238	319	235	211	214	633	637	451
17	500	731	741	433	230	326	221	200	218	569	631	447
18	508	759	710	402	226	316	227	195	214	528	634	454
19	522	777	684	381	244	319	233	212	220	460	590	437
20	539	740	657	384	255	331	262	247	223	438	575	412
21	565	645	705	370	264	324	273	233	229	468	515	399
22	588	451	702	348	306	327	281	207	250	462	501	405
23	592	573	748	351	292	314	299	207	261	427	515	442
24	606	635	860	379	271	298	380	206	280	413	535	455
25	623	695	997	352	265	289	349	195	287	474	535	460
26	618	711	1,130	337	262	282	351	211	289	455	565	497
27	607	632	1,180	318	259	279	377	227	291	430	565	548
28	600	589	1,360	301	257	266	401	223	283	422	585	541
29	606	-----	1,610	275	261	266	398	231	287	416	600	568
30	618	-----	1,760	257	260	285	361	256	369	418	585	540
31	633	-----	1,740	-----	263	-----	336	242	-----	412	-----	506
TOTAL	15,854	18,385	26,359	14,471	7,706	8,736	9,018	7,570	7,546	17,117	16,969	14,119
MEAN	511	657	850	482	249	291	291	244	252	552	566	455
MAX	633	777	1,760	1,310	306	331	401	339	369	859	637	568
MIN	378	451	463	257	215	252	221	195	214	384	404	330
AC-FT	31,450	36,470	52,280	28,700	15,280	17,330	17,890	15,020	14,970	33,950	33,660	28,010

CAL YR 1971 TOTAL 163,850 MEAN 449 MAX 1,760 MIN 195 AC-FT 325,000

PEAK DISCHARGE (BASE, 1,400 CFS)

DATE	TIME	G. H.	DISCHARGE
3-30	1615	3.77	1,850

08269000 Rio Pueblo de Taos near Taos, N. Mex.

LOCATION.--Lat 36°26'22", long 105°30'11", in SW¼SE¼ sec.36, T.26 N., R.13 E., Taos County, in Taos Pueblo Grant, on right bank 2.3 miles east of Taos Pueblo, 4.5 miles northeast of Taos, and 5.8 miles upstream from Rio Lucero.

DRAINAGE AREA.--66.6 sq mi.

PERIOD OF RECORD.--January 1911 to December 1916, January 1940 to December 1951, annual maximum, water years 1952-62, October 1962 (monthly discharge only), November 1962 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Concrete control since Nov. 20, 1962. Altitude of gage is 7,380 ft (from topographic map). See WSP 1923 for history of changes prior to Nov. 20, 1962.

AVERAGE DISCHARGE.--26 years (1910-16, 1940-51, 1962-71), 28.7 cfs (20,790 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 20 cfs Mar. 27 (gage height, 1.06 ft); maximum gage height, 1.72 ft Jan. 4 (ice jam); minimum discharge, 2.4 cfs Nov. 15, result of freezeup.
Period of record: Maximum discharge, 970 cfs May 14, 1941 (gage height, 3.90 ft, from floodmark, site and datum then in use), from rating curve extended above 290 cfs; minimum, about 0.9 cfs Jan. 9, 1964, result of freezeup.

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

REVISIONS (WATER YEARS).--WSP 1312: 1911-12, 1914. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	9.9	6.0	7.7	7.3	5.2	13	15	15	8.7	7.3	5.8
2	7.7	9.7	7.2	7.7	7.2	5.5	12	15	14	10	6.5	5.3
3	7.7	9.2	8.5	7.0	7.2	5.0	12	16	14	8.8	6.8	5.3
4	7.7	8.4	5.9	6.0	6.8	5.8	11	18	14	7.8	6.5	5.0
5	7.8	9.0	7.5	5.0	6.2	6.6	10	18	14	7.3	7.4	4.9
6	8.0	9.8	6.5	4.5	6.0	5.4	9.9	18	14	7.1	7.6	4.7
7	7.5	10	7.2	4.0	5.5	5.4	10	18	14	7.0	7.3	4.5
8	8.8	10	8.5	4.0	5.0	6.7	10	18	15	7.1	7.1	4.6
9	8.5	8.9	8.7	4.5	6.0	7.0	11	16	15	7.5	8.2	4.4
10	8.7	9.8	9.1	5.5	6.5	7.0	11	15	14	6.6	7.8	4.3
11	9.1	10	8.4	6.5	6.5	7.0	12	16	14	6.1	6.7	4.1
12	8.8	9.8	5.9	7.0	6.7	7.3	13	16	13	5.8	6.2	4.1
13	8.6	9.8	6.2	7.0	6.7	7.9	14	15	13	5.5	6.1	4.1
14	9.1	8.0	8.1	6.7	6.6	7.9	14	15	12	5.7	5.7	4.0
15	10	4.4	9.3	6.6	6.6	6.1	14	15	12	7.7	6.0	3.9
16	9.7	7.7	9.5	6.7	6.6	6.4	14	15	12	10	6.2	3.9
17	9.3	8.4	8.7	6.6	6.4	7.2	13	17	12	7.2	7.5	7.1
18	9.5	8.6	9.3	6.7	6.4	6.1	12	17	12	8.0	7.1	8.9
19	9.2	9.0	9.2	6.8	6.4	5.8	13	17	12	8.7	6.1	6.9
20	9.2	7.6	8.4	7.0	6.4	7.0	10	16	12	10	6.4	7.0
21	9.3	8.7	8.6	7.4	5.9	7.7	13	15	13	10	6.5	7.2
22	9.4	8.6	8.4	7.1	5.4	8.4	15	14	12	8.3	6.7	7.5
23	11	8.2	8.4	6.4	6.0	8.7	14	15	12	9.7	6.8	7.7
24	10	7.8	9.2	6.1	6.5	9.8	15	15	11	10	6.6	7.7
25	10	8.5	9.2	7.0	6.7	9.5	17	14	11	8.1	6.3	7.8
26	11	8.5	8.2	6.7	5.8	10	16	14	10	7.8	6.5	6.9
27	10	8.7	8.3	6.7	5.5	15	16	14	9.8	8.2	6.5	6.2
28	8.6	8.2	7.3	6.7	5.5	17	16	15	9.1	7.1	6.6	5.6
29	8.6	8.4	7.7	6.2	-----	15	16	17	8.7	9.3	7.3	5.8
30	9.5	8.6	7.0	7.4	-----	14	15	18	8.4	9.1	6.5	13
31	9.8	-----	7.4	7.2	-----	15	-----	17	-----	8.1	6.1	-----
TOTAL	280.1	262.2	247.8	198.4	176.3	258.4	391.9	494	372.0	248.3	208.9	178.2
MEAN	9.04	8.74	7.99	6.40	6.30	8.34	13.1	15.9	12.4	8.01	6.74	5.94
MAX	11	10	9.5	7.7	7.3	17	17	18	15	10	8.2	13
MIN	7.5	4.4	5.9	4.0	5.0	5.0	9.9	14	8.4	5.5	5.7	3.9
AC-FT	556	520	492	394	350	513	777	980	738	493	414	353

CAL YR 1970 TOTAL 7,748.3 MEAN 21.2 MAX 138 MIN 4.4 AC-FT 15,370
WTR YR 1971 TOTAL 3,316.5 MEAN 9.09 MAX 18 MIN 3.9 AC-FT 6,580

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

08269000 Rio Pueblo de Taos near Taos, N. Mex.

LOCATION.--Lat 36°26'22", long 105°30'11", in SW¼SE¼ sec.36, T.26 N., R.13 E., Taos County, in Taos Pueblo Grant, on right bank 2.3 miles east of Taos Pueblo, 4.5 miles northeast of Taos, and 5.8 miles upstream from Rio Lucero.

DRAINAGE AREA.--66.6 sq mi.

PERIOD OF RECORD.--January 1911 to December 1916, January 1940 to December 1951, annual maximum, water years 1952-62, October 1962 (monthly discharge only), November 1962 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Concrete control since Nov. 20, 1962. Altitude of gage is 7,380 ft (from topographic map). See WSP 1923 for history of changes prior to Nov. 20, 1962.

AVERAGE DISCHARGE.--27 calendar years (1911-16, 1940-51, 1963-71), 28.7 cfs (20,790 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 24 cfs Oct. 1 (gage height, 1.14 ft); maximum gage height, 1.72 ft Jan. 4 (ice jam); minimum discharge, 2.6 cfs Feb. 26, Mar. 19, result of freezeup.
Period of record: Maximum discharge, 970 cfs May 14, 1941 (gage height, 3.90 ft, from floodmark, site and datum then in use), from rating curve extended above 290 cfs; minimum, about 0.9 cfs Jan. 9, 1964, result of freezeup.

REMARKS.--Records good except those for winter periods, which are fair. No diversions above station.

REVISIONS (WATER YEARS).--WSP 1312: 1911-12, 1914. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	7.7	7.3	5.2	13	15	15	8.7	7.3	5.8	16	11	8.0
2	7.7	7.2	5.5	12	15	14	10	6.5	5.3	17	9.8	8.0
3	7.0	7.2	5.0	12	16	14	8.8	6.8	5.3	12	8.9	7.6
4	6.0	6.8	5.8	11	18	14	7.8	6.5	5.0	11	9.1	6.8
5	5.0	6.2	6.6	10	18	14	7.3	7.4	4.9	9.7	9.0	5.9
6	4.5	6.0	5.4	9.9	18	14	7.1	7.6	4.7	9.1	8.3	7.7
7	4.0	5.5	5.4	10	18	14	7.0	7.3	4.5	8.9	7.3	8.6
8	4.0	5.0	6.7	10	18	15	7.1	7.1	4.6	8.6	8.6	7.6
9	4.5	6.0	7.0	11	16	15	7.5	8.2	4.4	8.3	8.0	6.0
10	5.5	6.5	7.0	11	15	14	6.6	7.8	4.3	8.0	7.6	7.5
11	6.5	6.5	7.0	12	16	14	6.1	6.7	4.1	7.9	8.2	8.5
12	7.0	6.7	7.3	13	16	13	5.8	6.2	4.1	7.6	8.2	8.5
13	7.0	6.7	7.9	14	15	13	5.5	6.1	4.1	7.3	8.0	8.0
14	6.7	6.6	7.9	14	15	12	5.7	5.7	4.0	7.2	6.7	7.1
15	6.6	6.6	6.1	14	15	12	7.7	6.0	3.9	7.0	8.4	6.5
16	6.7	6.6	6.4	14	15	12	10	6.2	3.9	7.0	8.3	5.5
17	6.6	6.4	7.2	13	17	12	7.2	7.5	7.1	7.4	8.0	5.0
18	6.7	6.4	6.1	12	17	12	8.0	7.1	8.9	9.3	5.5	5.0
19	6.8	6.4	5.8	13	17	12	8.7	6.1	6.9	7.5	4.9	5.5
20	7.0	6.4	7.0	10	16	12	10	6.4	7.0	7.5	7.2	5.5
21	7.4	5.9	7.7	13	15	13	10	6.5	7.2	7.7	9.3	5.5
22	7.1	5.4	8.4	15	14	12	8.3	6.7	7.5	7.8	9.0	6.0
23	6.4	6.0	8.7	14	15	12	9.7	6.8	7.7	7.5	6.9	7.0
24	6.1	6.5	9.8	15	15	11	10	6.6	7.7	7.4	7.4	6.7
25	7.0	6.7	9.5	17	14	11	8.1	6.3	7.8	16	7.6	6.4
26	6.7	5.8	10	16	14	10	7.8	6.5	6.9	17	8.1	6.6
27	6.7	5.5	15	16	14	9.8	8.2	6.5	6.2	14	8.2	6.8
28	6.7	5.5	17	16	15	9.1	7.1	6.6	5.6	13	8.2	5.5
29	6.2	-----	15	16	17	8.7	9.3	7.3	5.8	12	8.1	6.0
30	7.4	-----	14	15	18	8.4	9.1	6.5	13	11	5.4	5.5
31	7.2	-----	15	-----	17	-----	8.1	6.1	-----	10	-----	5.0
TOTAL	198.4	176.3	258.4	391.9	494	372.0	248.3	208.9	178.2	307.7	239.2	205.8
MEAN	6.40	6.30	8.34	13.1	15.9	12.4	8.01	6.74	5.94	9.93	7.97	6.64
MAX	7.7	7.3	17	17	18	15	10	8.2	13	17	11	8.6
MIN	4.0	5.0	5.0	9.9	14	8.4	5.5	5.7	3.9	7.0	4.9	5.0
AC-FT	394	350	513	777	980	738	493	414	353	610	474	408

CAL YR 1971 TOTAL 3,279.1 MEAN 8.98 MAX 18 MIN 3.9 AC-FT 6,500

PEAK DISCHARGE (BASE, 60 CFS) --No data

08271000 Rio Lucero near Arroyo Seco, N. Mex.

LOCATION.--Lat 36°30'30", long 105°31'49", Taos County, in Tract C Taos Pueblo Grant, on right bank 200 ft upstream from diversion dam for Tenorio and Indian ditches, 2.2 miles east of Arroyo Seco, and 7.4 miles northeast of Taos.

DRAINAGE AREA.--16.6 sq mi.

PERIOD OF RECORD.--April to December 1910 (discharge measurements and occasional gage heights), January 1911 to September 1915, March to December 1916 (fragmentary), October 1933 to December 1951, annual maximum, water years 1952-62, October 1962 (monthly discharge only), November 1962 to current year. Monthly discharge only for some periods, published in WSP 1312. Fragmentary records for October 1915 to February 1916, published in WSP 438, are unreliable and should not be used. Published as "near Taos," 1910-16.

GAGE.--Water-stage recorder. Concrete control since Nov. 21, 1962. Datum of gage is 8,051.44 ft above mean sea level. See WSP 1923 for history of changes prior to Nov. 21, 1962.

AVERAGE DISCHARGE.--32 years (1910-15, 1933-51, 1962-71), 22.3 cfs (16,160 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 36 cfs Aug. 19 (gage height, 1.26 ft); minimum, 4.0 cfs Jan. 23, 24, Mar. 18, but may have been less during period of ice effect.

Period of record: Maximum discharge, 300 cfs May 13, 1941 (gage height, 3.12 ft, datum then in use); minimum, about 1.4 cfs Nov. 2, 1951, result of freezeup.

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

REVISIONS (WATER YEARS).--WSP 1512: 1912, 1916, 1949. WSP 1732: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	10	6.8	5.6	5.4	5.0	10	14	20	13	11	14
2	10	10	7.1	5.5	5.3	5.3	9.6	14	20	14	10	14
3	10	9.9	7.3	5.5	5.3	4.9	9.2	15	20	13	10	14
4	10	9.6	6.8	5.2	5.2	5.2	8.8	16	20	12	9.7	13
5	10	10	6.8	5.1	5.2	5.4	8.7	16	20	12	10	12
6	10	10	6.7	4.5	5.1	5.0	8.6	15	21	11	9.9	12
7	10	10	7.0	4.5	5.1	5.0	9.3	15	21	11	10	12
8	10	9.5	7.1	4.8	5.0	5.2	9.3	14	23	11	9.8	11
9	10	10	7.1	5.0	5.0	5.4	9.8	14	22	11	9.5	11
10	10	10	6.9	5.2	5.0	5.2	10	13	21	10	9.3	11
11	10	9.8	6.8	5.3	5.0	5.4	11	13	21	9.7	9.1	11
12	10	9.9	6.5	5.2	5.0	5.4	11	13	22	9.1	9.1	10
13	9.9	9.7	6.5	5.2	5.0	5.4	12	13	21	9.0	9.5	9.8
14	9.8	9.9	7.0	5.3	5.0	5.3	12	13	20	9.1	9.5	9.5
15	10	9.0	7.0	5.3	5.0	5.0	13	14	20	10	9.3	9.4
16	9.8	10	7.0	5.3	5.0	5.5	13	16	20	9.6	9.1	9.2
17	9.4	9.7	7.0	5.3	5.0	6.0	13	17	21	9.2	9.8	11
18	9.5	9.8	6.5	5.3	5.0	5.1	12	17	20	8.8	9.5	11
19	9.5	8.9	6.2	5.3	5.1	4.9	12	16	21	9.8	15	10
20	9.6	8.3	6.3	5.3	5.0	5.5	10	15	20	10	14	10
21	9.8	9.4	6.1	5.5	5.0	5.8	11	15	21	11	14	9.9
22	9.7	9.0	5.9	5.3	4.9	6.3	11	16	20	12	15	10
23	9.6	8.7	5.8	5.2	4.5	6.8	11	17	19	12	15	9.8
24	9.8	8.4	5.7	4.9	4.9	6.8	12	16	18	13	15	10
25	10	7.9	5.4	5.2	4.8	6.6	14	16	17	12	14	9.8
26	10	7.9	5.7	5.3	4.7	8.4	15	17	16	12	14	9.7
27	9.6	7.9	6.1	5.3	4.8	11	15	18	15	11	14	9.3
28	10	7.6	6.0	5.2	4.9	11	14	21	14	11	15	9.2
29	11	7.6	5.9	5.2	-----	10	14	21	13	13	15	9.7
30	10	7.4	5.9	5.2	-----	11	13	22	13	11	15	21
31	10	-----	5.8	5.2	-----	11	-----	21	-----	11	14	-----
TOTAL	308.0	275.8	200.7	161.2	140.2	199.8	342.3	493	580	341.3	363.1	333.3
MEAN	9.94	9.19	6.47	5.20	5.01	6.45	11.4	15.9	19.3	11.0	11.7	11.1
MAX	11	10	7.3	5.6	5.4	11	15	22	23	14	15	21
MIN	9.4	7.4	5.4	4.5	4.5	4.9	8.6	13	13	8.8	9.1	9.2
AC-FT	611	547	398	320	278	396	679	978	1,150	677	720	661

CAL YR 1970 TOTAL 6,062.6 MEAN 16.6 MAX 74 MIN 5.4 AC-FT 12,030
WTR YR 1971 TOTAL 3,738.7 MEAN 10.2 MAX 23 MIN 4.5 AC-FT 7,420

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

08271000 Rio Lucero near Arroyo Seco, N. Mex.

LOCATION.--Lat 36°30'30", long 105°31'49", Taos County, in Tract C Taos Pueblo Grant, on right bank 200 ft upstream from diversion dam for Tenorio and Indian ditches, 2.2 miles east of Arroyo Seco, and 7.4 miles northeast of Taos.

DRAINAGE AREA.--16.6 sq mi.

PERIOD OF RECORD.--April to December 1910 (discharge measurements and occasional gage heights), January 1911 to September 1915, March to December 1916 (fragmentary), October 1933 to December 1951, annual maximum, water years 1952-62, October 1962 (monthly discharge only), November 1962 to current year. Monthly discharge only for some periods, published in WSP 1312. Fragmentary records for October 1915 to February 1916, published in WSP 438, are unreliable and should not be used. Published as "near Taos," 1910-16.

GAGE.--Water-stage recorder. Concrete control since Nov. 21, 1962. Datum of gage is 8,051.44 ft above mean sea level. See WSP 1923 for history of changes prior to Nov. 21, 1962.

AVERAGE DISCHARGE.--32 calendar years (1911-15, 1934-51, 1963-71), 22.4 cfs (16,230 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 36 cfs Aug. 19 (gage height, 1.26 ft); minimum, 4.0 cfs Jan. 23, 24, Mar. 18, but may have been less during period of ice effect.

Period of record: Maximum discharge, 300 cfs May 13, 1941 (gage height, 3.12 ft, datum then in use); minimum, about 1.4 cfs Nov. 2, 1951, result of freezeup.

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

REVISIONS (WATER YEARS).--WSP 1512: 1912, 1916, 1949. WSP 1732: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	5.6	5.4	5.0	10	14	20	13	11	14	23	16	9.9
2	5.5	5.3	5.3	9.6	14	20	14	10	14	24	15	9.6
3	5.5	5.3	4.9	9.2	15	20	13	10	14	23	14	9.4
4	5.2	5.2	5.2	8.8	16	20	12	9.7	13	22	13	9.1
5	5.1	5.2	5.4	8.7	16	20	12	10	12	21	13	8.9
6	4.5	5.1	5.0	8.6	15	21	11	9.9	12	20	13	8.8
7	4.5	5.1	5.0	9.3	15	21	11	10	12	19	13	8.7
8	4.8	5.0	5.2	9.3	14	23	11	9.8	11	18	13	8.6
9	5.0	5.0	5.4	9.8	14	22	11	9.5	11	17	13	8.2
10	5.2	5.0	5.2	10	13	21	10	9.3	11	16	12	8.2
11	5.3	5.0	5.4	11	13	21	9.7	9.1	11	16	12	7.9
12	5.2	5.0	5.4	11	13	22	9.1	9.1	10	15	12	7.8
13	5.2	5.0	5.4	12	13	21	9.0	9.5	9.8	14	12	7.6
14	5.3	5.0	5.3	12	13	20	9.1	9.5	9.5	14	11	7.7
15	5.3	5.0	5.0	13	14	20	10	9.3	9.4	14	12	7.6
16	5.3	5.0	5.5	13	16	20	9.6	9.1	9.2	13	11	7.3
17	5.3	5.0	6.0	13	17	21	9.2	9.8	11	14	11	7.3
18	5.3	5.0	5.1	12	17	20	8.8	9.5	11	13	10	7.4
19	5.3	5.1	4.9	12	16	21	9.8	15	10	12	11	7.2
20	5.3	5.0	5.5	10	15	20	10	14	10	13	12	7.2
21	5.5	5.0	5.8	11	15	21	11	14	9.9	13	12	7.4
22	5.3	4.9	6.3	11	16	20	12	15	10	13	11	7.4
23	5.2	4.5	6.8	11	17	19	12	15	9.8	12	11	7.2
24	4.9	4.9	6.8	12	16	18	13	15	10	12	10	7.1
25	5.2	4.8	6.6	14	16	17	12	14	9.8	20	10	7.1
26	5.3	4.7	8.4	15	17	16	12	14	9.7	20	10	7.1
27	5.3	4.8	11	15	18	15	11	14	9.3	16	10	6.7
28	5.2	4.9	11	14	21	14	11	15	9.2	17	10	7.1
29	5.2	-----	10	14	21	13	13	15	9.7	18	10	6.9
30	5.2	-----	11	13	22	13	11	15	21	16	9.0	6.6
31	5.2	-----	11	-----	21	-----	11	14	-----	16	-----	6.2
TOTAL	161.2	140.2	199.8	342.3	493	580	341.3	363.1	333.3	514	352.0	241.2
MEAN	5.20	5.01	6.45	11.4	15.9	19.3	11.0	11.7	11.1	16.6	11.7	7.78
MAX	5.6	5.4	11	15	22	23	14	15	21	24	16	9.9
MIN	4.5	4.5	4.9	8.6	13	13	8.8	9.1	9.2	12	9.0	6.2
AC-FT	320	278	396	679	978	1,150	677	720	661	1,020	698	478

CAL YR 1971 TOTAL 4,061.4 MEAN 11.1 MAX 24 MIN 4.5 AC-FT 8,060

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

08275000 Rio Fernando de Taos near Taos, N. Mex.

LOCATION.--Lat 36°22'32", long 105°32'55", in W¹N¹W¹ sec.27, T.25 N., R.13 E., Taos County, in Carson National Forest, on right bank 175 ft upstream from Acequia Madre del Norte del Canon, 2.5 miles southeast of Taos, and 5.0 miles upstream from mouth.

DRAINAGE AREA.--71.7 sq mi.

PERIOD OF RECORD.--April to September 1910 (gage heights and discharge measurements only), October 1910 to June 1911 (discharge measurements only), October 1912 to September 1917, October 1927 to December 1928, October to November 1962 (monthly discharge only), December 1962 to current year.

GAGE.--Water-stage recorder. Concrete control since Dec. 13, 1962 (revised). Altitude of gage is 7,140 ft (from topographic map). See WSP 1923 for history of changes prior to Dec. 13, 1962.

AVERAGE DISCHARGE.--15 years (1912-17, 1927-28, 1962-71), 6.29 cfs (4,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 42 cfs Aug. 18 (gage height, 1.23 ft); minimum, 0.07 cfs July 14, Sept. 13, 14, 15, 16. 1962-71: Maximum discharge, 211 cfs Aug. 12, 1967 (gage height, 2.27 ft), from rating curve extended above 47 cfs on basis of slope-area measurements at gage heights 1.64 and 2.27 ft; minimum, 0.02 cfs Jan. 14-18, 1967. Peak discharge not determined prior to 1962; maximum daily discharge observed, 132 cfs May 2-6, 1914. A flood of undetermined magnitude occurred July 21, 1921.

REMARKS.--Records fair. A few very small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1512: 1914-15. WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	1.4	.91	1.2	1.1	1.2	2.5	2.8	2.0	.44	.81	.24
2	.72	1.1	1.0	1.5	1.2	1.5	2.7	2.5	1.6	.64	.64	.20
3	.72	1.4	1.4	1.5	1.4	1.4	2.7	2.5	1.6	.57	.81	.20
4	.72	1.2	.81	1.4	1.4	1.6	2.5	2.7	1.5	.44	.91	.14
5	.72	1.0	1.0	1.6	1.2	1.4	2.2	2.7	1.5	.32	.64	.14
6	.72	1.5	1.0	1.2	1.5	1.4	2.2	2.5	1.4	.28	.64	.14
7	.72	1.8	1.1	.81	1.0	1.2	2.5	2.8	1.1	.24	.64	.12
8	.81	1.8	1.2	.64	1.1	1.6	2.5	3.0	1.0	.32	.64	.12
9	1.0	1.4	1.5	.44	1.4	1.6	2.5	2.8	1.0	.28	.91	.12
10	1.0	1.2	1.5	.44	1.5	1.5	2.5	2.5	.91	.17	1.0	.10
11	1.1	1.5	1.2	.64	1.6	1.8	2.5	2.7	.81	.14	.72	.10
12	1.2	1.5	.72	.57	1.5	1.8	2.5	2.7	.91	.14	.72	.10
13	1.1	1.6	.81	.44	1.6	3.0	2.5	2.7	.81	.12	.91	.08
14	1.0	.91	.91	.38	1.6	5.5	2.8	2.5	.81	.10	.64	.08
15	1.1	.57	1.4	.44	1.5	3.2	2.7	2.5	.64	.10	.57	.08
16	1.1	.81	1.0	.44	1.5	2.5	2.8	2.3	.57	.10	.64	.08
17	1.1	.91	1.2	.50	1.5	2.5	2.7	2.2	.57	.10	.64	.43
18	1.2	.91	1.4	.57	1.6	2.3	2.7	2.2	.64	.10	2.4	.28
19	1.4	1.0	.91	.57	1.5	1.8	3.0	2.2	.57	.12	.81	.24
20	1.2	.91	1.2	.57	1.5	2.2	3.0	2.2	.50	.32	.64	.14
21	1.1	.91	1.4	.72	1.2	2.8	2.8	2.0	.57	.57	.81	.14
22	1.1	1.1	1.4	1.1	1.0	3.0	3.4	1.6	.57	.50	.81	.14
23	1.2	1.2	1.2	1.2	1.1	2.8	3.4	1.8	.57	.50	.72	.17
24	1.2	1.1	1.1	1.4	1.5	2.5	3.4	1.8	.57	1.5	.72	.20
25	1.2	1.6	1.4	1.5	1.5	2.0	3.2	1.6	.57	.91	.57	.17
26	1.5	1.6	1.2	1.4	1.2	2.0	3.2	1.5	.57	.50	.57	.14
27	1.5	1.8	1.4	1.4	1.2	2.3	3.2	1.5	.50	.50	.64	.12
28	.91	1.4	1.4	1.4	1.5	2.5	3.0	1.5	.44	.44	.50	.12
29	.81	1.8	1.2	1.2	-----	2.7	3.0	1.6	.38	.44	.50	.14
30	.91	1.8	1.4	1.5	-----	2.7	3.0	2.0	.32	1.4	.38	.50
31	1.0	-----	1.4	1.4	-----	2.8	-----	2.0	-----	1.1	.28	-----
TOTAL	31.78	38.73	36.67	30.07	38.4	69.1	83.6	69.9	25.50	13.40	22.83	4.97
MEAN	1.03	1.29	1.18	.97	1.37	2.23	2.79	2.25	.85	.43	.74	.17
MAX	1.5	1.8	1.5	1.6	1.6	5.5	3.4	3.0	2.0	1.5	2.4	.50
MIN	.72	.57	.72	.38	1.0	1.2	2.2	1.5	.32	.10	.28	.08
AC-FT	63	77	73	60	76	137	166	139	51	27	45	9.9

CAL YR 1970 TOTAL 1,345.43 MEAN 3.69 MAX 29 MIN .38 AC-FT 2,670
WTR YR 1971 TOTAL 464.95 MEAN 1.27 MAX 5.5 MIN .08 AC-FT 922

PEAK DISCHARGE (BASE, 25 CFS)

DATE TIME G. H. DISCHARGE

8-18 1900 1.23 42

08275000 Rio Fernando de Taos near Taos, N. Mex.

LOCATION.--Lat 36°22'32", long 105°32'55", in W¹SW⁴ sec.27, T.25 N., R.13 E., Taos County, in Carson National Forest, on right bank 175 ft upstream from Acequia Madre del Norte del Canon, 2.5 miles southeast of Taos, and 5.0 miles upstream from mouth.

DRAINAGE AREA.--71.7 sq mi.

PERIOD OF RECORD.--April to September 1910 (gage heights and discharge measurements only), October 1910 to June 1911 (discharge measurements only), October 1912 to September 1917, October 1927 to December 1928, October to November 1962 (monthly discharge only), December 1962 to current year.

GAGE.--Water-stage recorder. Concrete control since Dec. 13, 1962. Altitude of gage is 7,140 ft (from topographic map). See WSP 1923 for history of changes prior to Dec. 13, 1962.

AVERAGE DISCHARGE.--14 calendar years (1913-16, 1928, 1963-71), 6.41 cfs (4,640 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 42 cfs Aug. 18 (gage height, 1.23 ft); minimum, 0.07 cfs July 14, Sept. 13, 14, 15, 16, 1962-71: Maximum discharge, 211 cfs Aug. 12, 1967 (gage height, 2.27 ft), from rating curve extended above 47 cfs on basis of slope-area measurements at gage heights 1.64 and 2.27 ft; minimum, 0.02 cfs Jan. 14-18, 1967.
Peak discharge not determined prior to 1962; maximum daily discharge observed, 132 cfs May 2-6, 1914.
A flood of undetermined magnitude occurred July 21, 1921.

REMARKS.--Records fair. A few very small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1512: 1914-15. WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.2	1.1	1.2	2.5	2.8	2.0	.44	.81	.24	1.2	2.0	1.2
2	1.5	1.2	1.5	2.7	2.5	1.6	.64	.64	.20	.91	1.2	1.4
3	1.5	1.4	1.4	2.7	2.5	1.6	.57	.81	.20	.72	1.2	1.4
4	1.4	1.4	1.6	2.5	2.7	1.5	.44	.91	.14	.64	1.2	1.1
5	1.6	1.2	1.4	2.2	2.7	1.5	.32	.64	.14	.57	1.2	.81
6	1.2	1.5	1.4	2.2	2.5	1.4	.28	.64	.14	.57	1.2	1.0
7	.81	1.0	1.2	2.5	2.8	1.1	.24	.64	.12	.57	1.0	1.2
8	.64	1.1	1.6	2.5	3.0	1.0	.32	.64	.12	.57	1.4	1.4
9	.44	1.4	1.6	2.5	2.8	1.0	.28	.91	.12	.57	1.2	1.2
10	.44	1.5	1.5	2.5	2.5	.91	.17	1.0	.10	.57	1.1	1.4
11	.64	1.6	1.8	2.5	2.7	.81	.14	.72	.10	.57	1.2	1.2
12	.57	1.5	1.8	2.5	2.7	.91	.14	.72	.10	.57	1.4	1.1
13	.44	1.6	3.0	2.5	2.7	.81	.12	.91	.08	.57	1.2	1.2
14	.38	1.6	5.5	2.8	2.5	.81	.10	.64	.08	.57	1.0	1.2
15	.44	1.5	3.2	2.7	2.5	.64	.10	.57	.08	.57	1.2	1.1
16	.44	1.5	2.5	2.8	2.3	.57	.10	.64	.08	.57	1.5	1.1
17	.50	1.5	2.5	2.7	2.2	.57	.10	.64	.43	.64	1.5	1.1
18	.57	1.6	2.3	2.7	2.2	.64	.10	2.4	.28	.91	.72	1.1
19	.57	1.5	1.8	3.0	2.2	.57	.12	.81	.24	.81	.57	1.1
20	.57	1.5	2.2	3.0	2.2	.50	.32	.64	.14	.64	.72	1.0
21	.72	1.2	2.8	2.8	2.0	.57	.57	.81	.14	.72	.91	1.0
22	1.1	1.0	3.0	3.4	1.6	.57	.50	.81	.14	.72	1.1	1.0
23	1.2	1.1	2.8	3.4	1.8	.57	.50	.72	.17	.72	.91	1.0
24	1.4	1.5	2.5	3.4	1.8	.57	1.5	.72	.20	.72	1.0	1.0
25	1.5	1.5	2.0	3.2	1.6	.57	.91	.57	.17	1.6	1.0	.91
26	1.4	1.2	2.0	3.2	1.5	.57	.50	.57	.14	2.3	1.1	1.0
27	1.4	1.2	2.3	3.2	1.5	.50	.50	.64	.12	2.0	1.1	1.0
28	1.4	1.5	2.5	3.0	1.5	.44	.44	.50	.12	1.6	1.4	.91
29	1.2	-----	2.7	3.0	1.6	.38	.44	.50	.14	1.5	1.2	1.0
30	1.5	-----	2.7	3.0	2.0	.32	1.4	.38	.50	2.0	.64	.72
31	1.4	-----	2.8	-----	2.0	-----	1.1	.28	-----	1.2	-----	.81
TOTAL	30.07	38.4	69.1	83.6	69.9	25.50	13.40	22.83	4.97	28.39	34.07	33.66
MEAN	.97	1.37	2.23	2.79	2.25	.85	.43	.74	.17	.92	1.14	1.09
MAX	1.6	1.6	5.5	3.4	3.0	2.0	1.5	2.4	.50	2.3	2.0	1.4
MIN	.38	1.0	1.2	2.2	1.5	.32	.10	.28	.08	.57	.57	.72
AC-FT	60	76	137	166	139	51	27	45	9.9	56	68	67

CAL YR 1971 TOTAL 453.89 MEAN 1.24 MAX 5.5 MIN .08 AC-FT 900

PEAK DISCHARGE (BASE, 25 CFS)

DATE	TIME	G. H.	DISCHARGE
8-18	1900	1.23	42

08275300 Rio Pueblo de Taos near Ranchito, N. Mex.

LOCATION.--Lat 36°23'38", long 105°37'23", Taos County, in Gijosa Grant, on left bank 1,100 ft downstream from Rio Fernando de Taos, and 1.6 miles southwest of Ranchito.

DRAINAGE AREA.--199 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,747 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 27.4 cfs (19,850 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 30 cfs Feb. 11 (gage height, 2.28 ft); maximum gage height, 3.62 ft Jan. 6 (backwater from ice); minimum discharge, 0.65 cfs Sept. 12.

Period of record: Maximum discharge, 600 cfs May 13, 1958, from rating curve extended above 230 cfs; maximum gage height, 4.35 ft Dec. 29, 1966 (ice jam); minimum discharge, 0.65 cfs Sept. 12, 1971.

REMARKS.--Records fair. Diversions for irrigation of about 9,000 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	21	17	14	18	14	19	6.7	4.3	2.2	5.1	2.2
2	13	24	17	14	17	14	18	5.9	3.9	2.2	4.3	1.5
3	14	25	19	14	18	14	18	5.1	3.2	1.5	3.9	1.7
4	15	22	16	12	17	14	16	4.3	3.5	2.0	3.2	1.5
5	15	22	17	11	16	15	16	3.9	3.5	1.7	3.5	2.0
6	16	22	17	10	16	15	15	5.1	3.5	1.5	5.1	2.0
7	16	23	17	11	16	15	15	5.9	3.9	2.2	5.1	1.7
8	18	25	19	14	16	15	14	5.1	3.5	1.7	4.3	1.7
9	18	23	20	15	16	16	12	5.1	2.8	1.7	3.5	1.5
10	17	21	20	16	17	16	12	5.1	2.2	1.7	3.5	1.5
11	18	21	20	18	18	16	12	5.5	2.5	2.0	2.2	1.3
12	16	21	17	18	18	16	12	6.3	2.5	2.0	2.8	1.3
13	16	21	16	17	18	17	10	5.5	2.8	2.0	4.3	1.1
14	18	20	17	17	18	18	10	5.5	2.2	1.7	4.3	1.1
15	22	17	18	17	18	16	12	5.5	1.7	1.5	2.8	1.5
16	22	18	16	17	19	16	14	4.7	1.7	1.5	2.8	1.5
17	21	18	16	18	21	17	12	4.3	2.0	1.1	4.3	7.7
18	21	19	17	19	21	17	12	4.7	2.8	1.3	4.3	5.5
19	21	21	16	21	22	15	12	4.3	2.5	1.7	3.5	3.9
20	21	19	16	21	19	16	12	3.9	2.0	2.2	3.5	2.8
21	21	19	17	21	16	18	12	3.2	2.0	2.8	3.5	2.8
22	21	19	16	21	13	18	14	2.8	2.2	2.8	5.1	4.7
23	22	20	15	19	16	17	14	3.2	2.2	2.8	4.7	5.5
24	21	19	15	17	17	18	12	3.2	2.5	3.9	4.3	4.3
25	21	20	15	17	16	17	11	2.8	2.2	2.2	3.5	4.3
26	24	20	15	18	15	17	10	2.8	2.5	2.5	3.2	3.5
27	21	21	16	18	15	20	9.5	2.8	2.2	3.5	3.9	3.2
28	20	20	15	16	14	21	8.0	3.5	1.7	2.8	3.5	3.2
29	18	20	15	17	-----	18	7.5	4.7	1.5	3.2	3.9	3.9
30	21	20	15	18	-----	18	7.1	5.1	1.5	4.7	3.2	9.5
31	20	-----	14	18	-----	19	-----	3.9	-----	4.3	2.8	-----
TOTAL	581	621	516	514	481	513	378.1	140.4	77.5	70.9	117.9	89.9
MEAN	18.7	20.7	16.6	16.6	17.2	16.5	12.6	4.53	2.58	2.29	3.80	3.00
MAX	24	25	20	21	22	21	19	6.7	4.3	4.7	5.1	9.5
MIN	13	17	14	10	13	14	7.1	2.8	1.5	1.1	2.2	1.1
AC-FT	1,150	1,230	1,020	1,020	954	1,020	750	278	154	141	234	178

CAL YR 1970 TOTAL 8,362.4 MEAN 22.9 MAX 95 MIN 5.9 AC-FT 16,590

WTR YR 1971 TOTAL 4,100.7 MEAN 11.2 MAX 25 MIN 1.1 AC-FT 8,130

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

08275300 Rio Pueblo de Taos near Ranchito, N. Mex.

LOCATION.--Lat 36°23'38", long 105°37'23", Taos County, in Gijosa Grant, on left bank 1,100 ft downstream from Rio Fernando de Taos, and 1.6 miles southwest of Ranchito.

DRAINAGE AREA.--199 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,747 ft (from topographic map).

AVERAGE DISCHARGE.--14 calendar years, 26.8 cfs (19,420 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 60 cfs Dec. 26 (gage height, 2.57 ft); maximum gage height, 3.62 ft Jan. 6 (backwater from ice); minimum discharge, 0.65 cfs Sept. 12.

Period of record: Maximum discharge, 600 cfs May 13, 1958, from rating curve extended above 230 cfs; maximum gage height, 4.35 ft Dec. 29, 1966 (ice jam); minimum discharge, 0.65 cfs Sept. 12, 1971.

REMARKS.--Records fair. Diversions for irrigation of about 9,000 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	14	18	14	19	6.7	4.3	2.2	5.1	2.2	12	14	16
2	14	17	14	18	5.9	3.9	2.2	4.3	1.5	11	14	18
3	14	18	14	18	5.1	3.2	1.5	3.9	1.7	8.0	14	18
4	12	17	14	16	4.3	3.5	2.0	3.2	1.5	7.1	14	17
5	11	16	15	16	3.9	3.5	1.7	3.5	2.0	6.3	15	16
6	10	16	15	15	5.1	3.5	1.5	5.1	2.0	5.9	15	17
7	11	16	15	15	5.9	3.9	2.2	5.1	1.7	5.5	16	18
8	14	16	15	14	5.1	3.5	1.7	4.3	1.7	5.5	16	17
9	15	16	16	12	5.1	2.8	1.7	3.5	1.5	5.9	16	16
10	16	17	16	12	5.1	2.2	1.7	3.5	1.5	5.9	15	16
11	18	18	16	12	5.5	2.5	2.0	2.2	1.3	6.7	16	16
12	18	18	16	12	6.3	2.5	2.0	2.8	1.3	6.3	16	17
13	17	18	17	10	5.5	2.8	2.0	4.3	1.1	5.5	16	17
14	17	18	18	10	5.5	2.2	1.7	4.3	1.1	6.7	14	18
15	17	18	16	12	5.5	1.7	1.5	2.8	1.5	7.5	18	17
16	17	19	16	14	4.7	1.7	1.5	2.8	1.5	7.5	21	16
17	18	21	17	12	4.3	2.0	1.1	4.3	7.7	8.5	20	14
18	19	21	17	12	4.7	2.8	1.3	4.3	5.5	12	21	14
19	21	22	15	12	4.3	2.5	1.7	3.5	3.9	8.5	20	15
20	21	19	16	12	3.9	2.0	2.2	3.5	2.8	7.5	19	15
21	21	16	18	12	3.2	2.0	2.8	3.5	2.8	7.1	21	15
22	21	13	18	14	2.8	2.2	2.8	5.1	4.7	7.5	23	17
23	19	16	17	14	3.2	2.2	2.8	4.7	5.5	8.0	21	20
24	17	17	18	12	3.2	2.5	3.9	4.3	4.3	8.0	20	20
25	17	16	17	11	2.8	2.2	2.2	3.5	4.3	25	20	19
26	18	15	17	10	2.8	2.5	2.5	3.2	3.5	17	22	25
27	18	15	20	9.5	2.8	2.2	3.5	3.9	3.2	14	22	30
28	16	14	21	8.0	3.5	1.7	2.8	3.5	3.2	14	21	20
29	17	-----	18	7.5	4.7	1.5	3.2	3.9	3.9	13	19	21
30	18	-----	18	7.1	5.1	1.5	4.7	3.2	9.5	12	16	19
31	18	-----	19	-----	3.9	-----	4.3	2.8	-----	12	-----	18
TOTAL	514	481	513	378.1	140.4	77.5	70.9	117.9	89.9	287.4	535	552
MEAN	16.6	17.2	16.5	12.6	4.53	2.58	2.29	3.80	3.00	9.27	17.8	17.8
MAX	21	22	21	19	6.7	4.3	4.7	5.1	9.5	25	23	30
MIN	10	13	14	7.1	2.8	1.5	1.1	2.2	1.1	5.5	14	14
AC-FT	1,020	954	1,020	750	278	154	141	234	178	570	1,060	1,090

CAL YR 1971 TOTAL 3,757.1 MEAN 10.3 MAX 30 MIN 1.1 AC-FT 7,450

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

08275500 Rio Grande del Rancho near Talpa, N. Mex.

LOCATION.--Lat 36°17'52", long 105°34'55", Taos County, in Carson National Forest, Rancho del Rio Grande Grant, on left bank 1.4 miles downstream from Rito de la Olla (locally known as Pot Creek), 3.2 miles south of Talpa, and 4.3 miles upstream from Rio Chiquito.

DRAINAGE AREA.--83 sq mi, approximately.

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1955, published as Rio Grande del Rancho near Ranchos de Taos, and October 1955 to September 1960 as Rio Grande de Ranchos near Talpa.

GAGE.--Water-stage recorder. Altitude of gage is 7,238 ft (from topographic map). Prior to Nov. 11, 1952, nonrecording gage at site 1,035 ft downstream at lower datum. Nov. 11, 1952 to Nov. 5, 1968, water-stage recorder at site 1,000 ft downstream at lower datum.

AVERAGE DISCHARGE.--19 years, 19.4 cfs (14,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 23 cfs May 20 (gage height, 1.32 ft); minimum, 0.49 cfs Feb. 26, Mar. 6, 7, 19, result of freezeup.

Period of record: Maximum discharge, 435 cfs Sept. 10, 1964 (gage height, 4.01 ft; site and datum then in use); from rating curve extended above 180 cfs; minimum, 0.2 cfs Jan. 5, 1955, result of freezeup.

REMARKS.--Records good except those below 5 cfs, which are fair. Minor diversions upstream for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	5.8	4.3	6.4	5.0	3.9	10	13	19	6.2	5.6	5.3
2	6.2	6.0	4.6	6.5	4.9	5.2	9.9	13	18	11	5.0	4.9
3	6.0	5.9	5.7	7.0	5.0	4.5	10	14	17	8.6	4.8	4.6
4	5.9	5.3	4.4	5.2	4.4	5.4	10	15	16	6.3	4.5	4.4
5	6.0	5.4	4.8	4.0	3.9	4.3	10	17	15	5.4	4.7	4.4
6	6.1	6.2	4.3	3.0	4.3	3.4	9.6	19	15	5.0	5.4	4.2
7	5.9	6.4	5.0	3.0	3.4	4.2	10	20	14	4.9	6.0	3.8
8	6.9	6.5	5.6	3.5	4.0	5.1	9.9	19	14	4.7	6.2	3.8
9	6.6	5.8	6.1	4.5	4.9	4.9	10	19	14	5.0	5.3	3.7
10	6.5	6.0	6.1	5.5	5.3	4.1	10	18	13	4.3	5.1	3.6
11	6.7	6.3	5.5	5.0	5.5	4.5	11	19	12	4.0	4.6	3.5
12	6.5	6.6	3.2	5.5	4.7	4.7	11	19	11	3.6	5.9	3.4
13	6.4	6.7	3.6	5.8	4.8	5.0	12	19	11	3.4	6.4	3.8
14	6.3	5.6	4.5	5.2	4.8	5.1	12	17	10	3.5	5.1	3.6
15	6.4	3.2	6.5	5.0	4.6	4.4	13	17	9.7	3.4	5.8	3.5
16	6.5	4.7	4.3	4.5	4.7	4.7	13	17	10	4.3	4.8	3.5
17	6.3	5.2	6.0	4.0	4.6	5.1	13	19	9.6	3.5	4.7	6.8
18	5.9	5.6	6.6	3.8	4.8	4.4	14	20	9.1	4.2	4.5	8.2
19	5.9	6.6	4.0	3.7	4.6	3.6	15	21	8.6	4.9	4.7	6.4
20	5.9	5.7	5.9	4.2	4.5	4.8	13	21	8.3	9.3	5.8	5.9
21	5.8	6.1	6.7	4.6	3.8	5.5	13	20	8.2	10	4.7	5.8
22	6.0	6.7	6.0	4.9	3.1	5.8	14	19	7.9	7.4	5.1	6.2
23	6.3	6.5	5.1	4.6	4.6	6.0	13	20	7.6	6.7	6.6	6.6
24	6.0	6.2	4.2	4.6	5.0	6.5	13	19	7.6	6.8	5.6	3.5
25	5.8	6.5	5.8	4.8	5.1	7.2	13	18	7.2	5.5	7.0	6.5
26	6.2	6.6	5.9	4.8	3.5	7.8	15	18	6.9	5.8	6.3	5.9
27	5.8	6.6	7.2	5.0	3.4	9.8	15	18	6.3	8.0	6.1	5.5
28	5.0	6.3	5.7	4.8	4.9	12	14	18	5.9	6.0	5.9	5.1
29	4.3	6.5	4.8	4.8	-----	12	14	19	5.5	5.8	5.9	5.4
30	5.0	6.4	5.6	5.3	-----	11	13	20	5.4	6.3	5.6	9.6
31	5.6	-----	6.2	5.1	-----	11	-----	20	-----	6.1	5.6	-----
TOTAL	186.8	179.9	164.2	148.6	126.1	185.9	363.4	565	322.8	179.9	169.3	154.4
MEAN	6.03	6.00	5.30	4.79	4.50	6.00	12.1	18.2	10.8	5.80	5.46	5.15
MAX	6.9	6.7	7.2	7.0	5.5	12	15	21	19	11	7.0	9.6
MIN	4.3	3.2	3.2	3.0	3.1	3.4	9.6	13	5.4	3.4	4.5	3.4
AC-FT	371	357	326	295	250	369	721	1,120	640	357	336	306

CAL YR 1970 TOTAL 5,371.8 MEAN 14.7 MAX 128 MIN 3.2 AC-FT 10,650

WTR YR 1971 TOTAL 2,746.3 MEAN 7.52 MAX 21 MIN 3.0 AC-FT 5,450

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

08275500 Rio Grande del Rancho near Talpa, N. Mex.

LOCATION.--Lat 36°17'52", long 105°34'55", Taos County, in Carson National Forest, Rancho del Rio Grande Grant, on left bank 1.4 miles downstream from Rito de la Olla (locally known as Pot Creek), 3.2 miles south of Talpa, and 4.3 miles upstream from Rio Chiquito.

DRAINAGE AREA.--83 sq mi, approximately.

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1955, published as Rio Grande del Rancho near Ranchos de Taos, and October 1955 to September 1960 as Rio Grande de Ranchos near Talpa.

GAGE.--Water-stage recorder. Altitude of gage is 7,238 ft (from topographic map). Prior to Nov. 11, 1952, nonrecording gage at site 1,035 ft downstream at lower datum. Nov. 11, 1952 to Nov. 5, 1968, water-stage recorder at site 1,000 ft downstream at lower datum.

AVERAGE DISCHARGE.--19 calendar years, 19.4 cfs (14,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 23 cfs May 20 (gage height, 1.32 ft); minimum, 0.49 cfs Feb. 26, Mar. 6, 7, 19, result of freezeup.

Period of record: Maximum discharge, 435 cfs Sept. 10, 1964 (gage height, 4.01 ft, site and datum then in use), from rating curve extended above 180 cfs; minimum, 0.2 cfs Jan. 5, 1955, result of freezeup.

REMARKS.--Records good except those below 5 cfs, which are fair. Minor diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	6.4	5.0	3.9	10	13	19	6.2	5.6	5.3	11	7.0	4.7
2	6.5	4.9	5.2	9.9	13	18	11	5.0	4.9	10	6.3	5.2
3	7.0	5.0	4.5	10	14	17	8.6	4.8	4.6	8.3	5.9	5.0
4	5.2	4.4	5.4	10	15	16	6.3	4.5	4.4	7.6	6.0	3.3
5	4.0	3.9	4.3	10	17	15	5.4	4.7	4.4	7.1	5.8	2.4
6	3.0	4.3	3.4	9.6	19	15	5.0	5.4	4.2	6.4	5.7	3.4
7	3.0	3.4	4.2	10	20	14	4.9	6.0	3.8	6.3	5.2	5.7
8	3.5	4.0	5.1	9.9	19	14	4.7	6.2	3.8	6.2	6.0	5.2
9	4.5	4.9	4.9	10	19	14	5.0	5.3	3.7	6.1	5.5	3.3
10	5.5	5.3	4.1	10	18	13	4.3	5.1	3.6	6.1	5.2	4.3
11	5.0	5.5	4.5	11	19	12	4.0	4.6	3.5	6.1	5.4	3.8
12	5.5	4.7	4.7	11	19	11	3.6	5.9	3.4	5.9	5.5	3.0
13	5.8	4.8	5.0	12	19	11	3.4	6.4	3.8	5.8	5.4	4.7
14	5.2	4.8	5.1	12	17	10	3.5	5.1	3.6	5.8	4.4	4.8
15	5.0	4.6	4.4	13	17	9.7	3.4	5.8	3.5	5.8	5.6	3.4
16	4.5	4.7	4.7	13	17	10	4.3	4.8	3.5	5.8	5.7	2.9
17	4.0	4.6	5.1	13	19	9.6	3.5	4.7	6.8	6.2	5.6	3.3
18	3.8	4.8	4.4	14	20	9.1	4.2	4.5	8.2	7.6	4.8	4.5
19	3.7	4.6	3.6	15	21	8.6	4.9	4.7	6.4	6.0	2.2	5.3
20	4.2	4.5	4.8	13	21	8.3	9.3	5.8	5.9	5.6	2.3	4.9
21	4.6	3.8	5.5	13	20	8.2	10	4.7	5.8	5.4	4.2	4.7
22	4.9	3.1	5.8	14	19	7.9	7.4	5.1	6.2	5.5	6.3	4.8
23	4.6	4.6	6.0	13	20	7.6	6.7	6.6	6.6	5.3	3.9	5.0
24	4.6	5.0	6.5	13	19	7.6	6.8	5.6	6.5	5.3	4.0	4.0
25	4.8	5.1	7.2	13	18	7.2	5.5	7.0	6.5	13	4.5	3.8
26	4.8	3.5	7.8	15	18	6.9	5.8	6.3	5.9	15	5.2	4.2
27	5.0	3.4	9.8	15	18	6.3	8.0	6.1	5.5	13	5.7	4.6
28	4.8	4.9	12	14	18	5.9	6.0	5.9	5.1	11	5.9	3.8
29	4.8	-----	12	14	19	5.5	5.8	5.9	5.4	9.4	5.3	4.2
30	5.3	-----	11	13	20	5.4	6.3	5.6	9.6	8.4	2.7	2.8
31	5.1	-----	11	-----	20	-----	6.1	5.6	-----	6.3	-----	2.6
TOTAL	148.6	126.1	185.9	363.4	565	322.8	179.9	169.3	154.4	233.3	153.2	127.6
MEAN	4.79	4.50	6.00	12.1	18.2	10.8	5.80	5.46	5.15	7.53	5.11	4.12
MAX	7.0	5.5	12	15	21	19	11	7.0	9.6	15	7.0	5.7
MIN	3.0	3.1	3.4	9.6	13	5.4	3.4	4.5	3.4	5.3	2.2	2.4
AC-FT	295	250	369	721	1,120	640	357	336	306	463	304	253

CAL YR 1971 TOTAL 2,729.5 MEAN 7.48 MAX 21 MIN 2.2 AC-FT 5,410

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

08275600 Rio Chiquito near Talpa, N. Mex.

LOCATION.--Lat 36°19'55", long 105°34'42", Taos County, in Carson National Forest, Rancho del Rio Grande Grant, on right bank 1 mile southeast of Talpa, and 2.1 miles upstream from mouth.

DRAINAGE AREA.--37.0 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,223 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 8.04 cfs (5,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 41 cfs Aug. 18 (gage height, 2.08 ft); minimum, 0.22 cfs Mar. 19, result of freezeup.
Period of record: Maximum discharge, 193 cfs July 31, 1968 (gage height, 2.37 ft), from rating curve extended above 70 cfs; minimum, 0.22 cfs Mar. 19, 1971, result of freezeup.

REMARKS.--Records good except those for January, which are fair. No diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	4.0	1.8	3.5	2.6	2.7	4.2	4.6	3.9	1.8	2.7	1.9
2	3.0	3.7	2.2	3.5	2.5	3.0	4.1	4.6	3.8	2.7	2.3	1.8
3	2.9	3.8	3.2	3.1	2.6	3.3	4.1	4.6	3.7	2.4	2.4	1.8
4	3.1	3.3	2.0	2.5	2.5	3.3	4.2	4.6	3.5	2.0	2.3	1.6
5	3.1	3.4	2.4	1.8	2.3	2.3	3.9	4.7	3.3	1.6	2.2	1.6
6	3.2	4.1	2.0	1.5	2.6	2.1	3.7	4.8	3.2	1.5	2.4	1.6
7	3.1	4.0	2.3	1.5	1.6	2.3	3.8	5.0	3.1	1.5	2.7	1.4
8	3.7	4.2	2.8	1.7	2.1	2.5	3.8	5.2	3.2	1.4	2.8	1.4
9	3.6	3.0	3.2	1.9	2.8	2.2	3.7	5.3	3.3	1.7	2.4	1.3
10	4.1	3.4	2.7	2.5	2.7	2.1	3.8	4.9	3.0	1.5	2.6	1.3
11	4.3	3.7	2.5	2.3	2.6	2.2	3.8	5.0	3.1	1.3	2.4	1.2
12	4.3	3.5	1.2	2.5	2.5	2.3	3.9	5.1	2.9	1.1	2.2	1.2
13	4.1	3.7	1.5	2.6	2.5	2.4	4.0	5.2	2.8	1.0	2.0	1.1
14	4.0	2.7	1.7	2.5	2.4	2.5	4.1	5.0	2.6	1.1	1.9	1.0
15	4.1	1.3	2.6	2.3	2.4	2.2	4.3	4.9	2.5	1.0	3.0	.98
16	4.1	2.2	1.5	2.2	2.5	2.3	4.5	4.8	2.6	1.5	2.7	.98
17	4.0	2.6	2.3	2.1	2.4	2.5	4.4	4.8	2.5	1.3	2.5	2.0
18	3.7	2.8	3.1	2.0	2.4	2.2	4.5	4.8	2.3	1.5	4.1	2.8
19	3.9	3.2	2.1	2.0	2.4	1.4	4.8	4.8	2.3	1.9	2.4	2.0
20	3.9	2.5	2.6	2.2	2.3	2.5	4.0	4.7	2.1	4.6	2.9	2.0
21	3.8	2.8	2.7	2.3	2.0	2.7	4.5	4.4	2.3	6.0	2.5	2.0
22	3.8	2.8	2.5	2.4	1.9	2.9	4.9	4.2	2.3	3.8	2.6	2.2
23	4.0	2.7	2.0	2.5	2.8	2.9	4.6	4.2	2.4	3.5	2.7	2.3
24	3.8	2.7	1.8	2.4	3.1	3.0	5.0	4.2	2.2	3.5	2.4	2.2
25	4.1	2.8	2.3	2.6	2.7	3.2	5.4	3.9	2.0	2.8	3.2	2.4
26	4.2	2.8	2.5	2.5	2.1	3.3	5.5	3.8	1.9	2.7	3.0	2.0
27	3.8	2.8	2.7	2.7	2.0	4.2	5.1	3.7	1.8	3.9	2.8	1.9
28	2.9	2.6	2.4	2.6	2.7	5.0	4.9	3.7	1.6	2.9	2.5	1.7
29	2.9	2.9	2.2	2.5	-----	4.9	4.8	4.1	1.6	2.9	2.5	1.8
30	3.5	2.8	2.4	2.7	-----	4.7	4.7	4.7	1.5	3.8	2.3	3.0
31	3.7	-----	3.1	2.6	-----	5.0	-----	4.4	-----	3.2	2.1	-----
TOTAL	113.8	92.8	72.3	74.0	68.0	90.1	131.0	142.7	79.3	73.4	79.5	52.46
MEAN	3.67	3.09	2.33	2.39	2.43	2.91	4.37	4.60	2.64	2.37	2.56	1.75
MAX	4.3	4.2	3.2	3.5	3.1	5.0	5.5	5.3	3.9	6.0	4.1	3.0
MIN	2.9	1.3	1.2	1.5	1.6	1.4	3.7	3.7	1.5	1.0	1.9	.98
AC-FT	226	184	143	147	135	179	260	283	157	146	158	104

CAL YR 1970 TOTAL 2,224.90 MEAN 6.10 MAX 42 MIN 1.2 AC-FT 4,410
WTR YR 1971 TOTAL 1,069.36 MEAN 2.93 MAX 6.0 MIN .98 AC-FT 2,120

PEAK DISCHARGE (BASE, 25 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE
8-18	1730	2.08	41

08275600 Rio Chiquito near Talpa, N. Mex.

LOCATION.--Lat 36°19'55", long 105°34'42", Taos County, in Carson National Forest, Rancho del Rio Grande Grant, on right bank 1 mile southeast of Talpa, and 2.1 miles upstream from mouth.

DRAINAGE AREA.--37.0 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,223 ft (from topographic map).

AVERAGE DISCHARGE.--14 calendar years, 7.97 cfs (5,770 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 41 cfs Aug. 18 (gage height, 2.08 ft); minimum, 0.22 cfs Mar. 19, result of freezeup.
Period of record: Maximum discharge, 193 cfs July 31, 1968 (gage height, 2.37 ft), from rating curve extended above 70 cfs;
minimum, 0.22 cfs Mar. 19, 1971, result of freezeup.

REMARKS.--Records good except those for January, which are fair. No diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.5	2.6	2.7	4.2	4.6	3.9	1.8	2.7	1.9	3.6	3.6	2.7
2	3.5	2.5	3.0	4.1	4.6	3.8	2.7	2.3	1.8	3.9	3.0	2.9
3	3.1	2.6	3.3	4.1	4.6	3.7	2.4	2.4	1.8	3.0	2.8	2.7
4	2.5	2.5	3.3	4.2	4.6	3.5	2.0	2.3	1.6	2.7	2.8	1.9
5	1.8	2.3	2.3	3.9	4.7	3.3	1.6	2.2	1.6	2.5	2.7	1.2
6	1.5	2.6	2.1	3.7	4.8	3.2	1.5	2.4	1.6	2.2	2.8	1.6
7	1.5	1.6	2.3	3.8	5.0	3.1	1.5	2.7	1.4	2.1	2.4	3.4
8	1.7	2.1	2.5	3.8	5.2	3.2	1.4	2.8	1.4	2.0	2.9	3.0
9	1.9	2.8	2.2	3.7	5.3	3.3	1.7	2.4	1.3	1.9	2.5	2.2
10	2.5	2.7	2.1	3.8	4.9	3.0	1.5	2.6	1.3	1.9	2.4	2.7
11	2.3	2.6	2.2	3.8	5.0	3.1	1.3	2.4	1.2	1.8	2.6	2.4
12	2.5	2.5	2.3	3.9	5.1	2.9	1.1	2.2	1.2	1.8	2.8	2.0
13	2.6	2.5	2.4	4.0	5.2	2.8	1.0	2.0	1.1	1.8	2.7	2.9
14	2.5	2.4	2.5	4.1	5.0	2.6	1.1	1.9	1.0	1.9	1.9	2.8
15	2.3	2.4	2.2	4.3	4.9	2.5	1.0	3.0	.98	1.8	2.7	2.3
16	2.2	2.5	2.3	4.5	4.8	2.6	1.5	2.7	.98	1.8	2.8	2.0
17	2.1	2.4	2.5	4.4	4.8	2.5	1.3	2.5	2.0	1.9	2.6	2.0
18	2.0	2.4	2.2	4.5	4.8	2.3	1.5	4.1	2.8	2.7	2.1	2.5
19	2.0	2.4	1.4	4.8	4.8	2.3	1.9	2.4	2.0	2.1	1.1	3.0
20	2.2	2.3	2.5	4.0	4.7	2.1	4.6	2.9	2.0	2.5	1.4	2.4
21	2.3	2.0	2.7	4.5	4.4	2.3	6.0	2.5	2.0	2.1	3.2	2.1
22	2.4	1.9	2.9	4.9	4.2	2.3	3.8	2.6	2.2	2.5	4.0	2.2
23	2.5	2.8	2.9	4.6	4.2	2.4	3.5	2.7	2.3	2.4	2.6	2.3
24	2.4	3.1	3.0	5.0	4.2	2.2	3.5	2.4	2.2	2.4	2.7	2.1
25	2.6	2.7	3.2	5.4	3.9	2.0	2.8	3.2	2.4	3.5	3.0	1.9
26	2.5	2.1	3.3	5.5	3.8	1.9	2.7	3.0	2.0	4.6	3.2	2.1
27	2.7	2.0	4.2	5.1	3.7	1.8	3.9	2.8	1.9	4.2	3.1	2.1
28	2.6	2.7	5.0	4.9	3.7	1.6	2.9	2.5	1.7	3.7	2.9	2.1
29	2.5	-----	4.9	4.8	4.1	1.6	2.9	2.5	1.8	3.6	2.8	2.3
30	2.7	-----	4.7	4.7	4.7	1.5	3.8	2.3	3.0	3.7	1.4	1.6
31	2.6	-----	5.0	-----	4.4	-----	3.2	2.1	-----	2.8	-----	1.4
TOTAL	74.0	68.0	90.1	131.0	142.7	79.3	73.4	79.5	52.46	81.4	79.5	70.8
MEAN	2.39	2.43	2.91	4.37	4.60	2.64	2.37	2.56	1.75	2.63	2.65	2.28
MAX	3.5	3.1	5.0	5.5	5.3	3.9	6.0	4.1	3.0	4.6	4.0	3.4
MIN	1.5	1.6	1.4	3.7	3.7	1.5	1.0	1.9	.98	1.8	1.1	1.2
AC-FT	147	135	179	260	283	157	146	158	104	161	158	140

CAL YR 1971 TOTAL 1,022.16 MEAN 2.80 MAX 6.0 MIN .98 AC-FT 2,030

PEAK DISCHARGE (BASE, 75 CFS)

DATE TIME G. H. DISCHARGE

8-18 1730 2.08 41

08276300 Rio Pueblo de Taos below Los Cordovas, N. Mex.

LOCATION.--Lat 36°22'39", long 105°40'05", Taos County, in Gijosa Grant, on left bank 1.9 miles southwest of Los Cordovas, 2.5 miles downstream from Rio Grande del Rancho, and 5.1 miles upstream from mouth.

DRAINAGE AREA.--380 sq mi.

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

GAGE.--Water-stage recorder. Concrete control since July 16, 1963. Datum of gage is 6,652 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 47.7 cfs (34,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 261 cfs Sept. 17 (gage height, 3.18 ft); minimum, 2.5 cfs June 28-29.

Period of record: Maximum discharge, 2,380 cfs Aug. 24, 1957 (gage height, 5.80 ft), from rating curve extended above 900 cfs; minimum, 2.5 cfs June 28-29, 1971.

REMARKS.--Records good except those for January, which are fair. Diversions for irrigation of about 12,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1732: 1957(M). WSP 1923: 1957(P), 1958.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	30	27	28	30	24	24	9.8	6.5	3.3	6.8	5.5
2	19	34	27	28	30	22	25	9.5	6.5	4.4	6.3	4.8
3	19	35	29	28	30	23	25	8.6	6.3	4.8	5.8	4.7
4	20	34	27	26	30	24	25	7.7	6.0	4.3	5.3	4.5
5	20	31	28	22	29	26	21	7.0	5.4	4.0	5.1	4.8
6	21	32	27	18	27	24	21	8.2	5.1	3.7	6.0	4.9
7	21	32	28	15	25	24	21	9.3	5.4	3.8	7.3	4.7
8	23	35	31	15	26	25	19	8.7	5.6	3.9	7.3	4.6
9	23	31	31	18	29	27	18	7.8	5.1	4.0	7.0	4.3
10	21	31	31	22	30	25	16	7.8	5.0	3.8	7.3	4.3
11	21	31	32	26	32	25	16	8.3	5.2	4.0	6.5	4.3
12	21	30	29	28	29	24	16	9.3	5.1	4.0	6.5	4.1
13	21	31	28	30	29	24	15	8.7	5.1	3.9	8.4	4.1
14	22	28	28	28	29	24	14	8.5	5.0	3.6	9.2	4.1
15	27	26	29	27	28	22	15	7.9	4.7	3.5	7.7	4.1
16	26	25	29	27	29	22	18	7.7	4.5	3.6	7.0	4.2
17	26	27	31	25	29	22	16	7.0	4.8	3.4	7.3	23
18	26	27	29	16	30	21	16	7.3	5.1	3.6	7.3	10
19	27	28	29	17	30	21	18	7.7	5.0	3.9	6.9	8.1
20	26	27	28	20	29	23	18	7.8	4.5	4.6	7.0	7.0
21	27	27	30	25	28	24	17	7.0	4.3	4.8	7.1	6.6
22	27	27	30	24	25	24	19	6.8	3.7	5.1	16	7.1
23	30	27	29	25	28	24	22	6.5	3.7	6.2	11	9.2
24	28	26	28	25	31	23	16	6.3	3.6	6.5	12	9.1
25	28	27	27	27	30	23	14	5.9	3.6	5.0	9.2	8.1
26	33	28	28	28	26	23	13	5.4	3.6	5.2	7.0	7.7
27	30	29	30	30	26	26	12	6.5	3.5	5.9	6.1	7.3
28	29	27	30	31	26	27	11	6.3	2.9	5.6	5.6	7.3
29	28	28	30	28	-----	25	10	6.5	2.7	5.4	6.7	8.6
30	30	29	28	30	-----	25	10	7.0	3.2	6.2	6.2	30
31	30	-----	28	31	-----	25	-----	6.3	-----	6.5	5.7	-----
TOTAL	769	880	896	768	800	741	521	235.1	140.7	140.5	230.6	221.1
MEAN	24.8	29.3	28.9	24.8	28.6	23.9	17.4	7.58	4.69	4.53	7.44	7.37
MAX	33	35	32	31	32	27	25	9.8	6.5	6.5	16	30
MIN	19	25	27	15	25	21	10	5.4	2.7	3.3	5.1	4.1
AC-FT	1,530	1,750	1,780	1,520	1,590	1,470	1,030	466	279	279	457	439

CAL YR 1970 TOTAL 13,548.0 MEAN 37.1 MAX 202 MIN 10 AC-FT 26,870
WTR YR 1971 TOTAL 6,343.0 MEAN 17.4 MAX 35 MIN 2.7 AC-FT 12,580

PEAK DISCHARGE (BASE, 230 CFS)

DATE	TIME	G. H.	DISCHARGE
9-17	1415	3.18	261

08276300 Rio Pueblo de Taos below Los Cordovas, N. Mex.

LOCATION.--Lat 36°22'39", long 105°40'05", Taos County, in Gijosa Grant, on left bank 1.9 miles southwest of Los Cordovas, 2.5 miles downstream from Rio Grande del Rancho, and 5.1 miles upstream from mouth.

DRAINAGE AREA.--380 sq mi.

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

GAGE.--Water-stage recorder. Concrete control since July 16, 1963. Datum of gage is 6,652 ft above mean sea level.

AVERAGE DISCHARGE.--14 calendar years, 46.9 cfs (33,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 261 cfs Sept. 17 (gage height, 3.18 ft); minimum, 2.5 cfs June 28-29.
Period of record: Maximum discharge, 2,380 cfs Aug. 24, 1957 (gage height, 5.80 ft), from rating curve extended above 900 cfs; minimum, 2.5 cfs June 28-29, 1971.

REMARKS.--Records good except those for January, which are fair. Diversions for irrigation of about 12,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1732: 1957(M). WSP 1923: 1957(P), 1958.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	28	30	24	24	9.8	6.5	3.3	6.8	5.5	19	20	23
2	28	30	22	25	9.5	6.5	4.4	6.3	4.8	18	20	25
3	28	30	23	25	8.6	6.3	4.8	5.8	4.7	14	20	24
4	26	30	24	25	7.7	6.0	4.3	5.3	4.5	13	21	24
5	22	29	26	21	7.0	5.4	4.0	5.1	4.8	13	21	21
6	18	27	24	21	8.2	5.1	3.7	6.0	4.9	12	20	22
7	15	25	24	21	9.3	5.4	3.8	7.3	4.7	11	21	23
8	15	26	25	19	8.7	5.6	3.9	7.3	4.6	11	22	23
9	18	29	27	18	7.8	5.1	4.0	7.0	4.3	10	22	21
10	22	30	25	16	7.8	5.0	3.8	7.3	4.3	10	21	21
11	26	32	25	16	8.3	5.2	4.0	6.5	4.3	10	20	23
12	28	29	24	16	9.3	5.1	4.0	6.5	4.1	10	20	24
13	30	29	24	15	8.7	5.1	3.9	8.4	4.1	10	20	23
14	28	29	24	14	8.5	5.0	3.6	9.2	4.1	10	19	23
15	27	28	22	15	7.9	4.7	3.5	7.7	4.1	11	21	23
16	27	29	22	18	7.7	4.5	3.6	7.0	4.2	10	25	22
17	25	29	22	16	7.0	4.8	3.4	7.3	23	13	25	20
18	16	30	21	16	7.3	5.1	3.6	7.3	10	18	26	20
19	17	30	21	18	7.7	5.0	3.9	6.9	8.1	14	24	23
20	20	29	23	18	7.8	4.5	4.6	7.0	7.0	14	24	21
21	25	28	24	17	7.0	4.3	4.8	7.1	6.6	14	25	23
22	24	25	24	19	6.8	3.7	5.1	16	7.1	14	29	26
23	25	28	24	22	6.5	3.7	6.2	11	9.2	14	26	29
24	25	31	23	16	6.3	3.6	6.5	12	9.1	14	25	28
25	27	30	23	14	5.9	3.6	5.0	9.2	8.1	35	25	28
26	28	26	23	13	5.4	3.6	5.2	7.0	7.7	27	27	41
27	30	26	26	12	6.5	3.5	5.9	6.1	7.3	24	27	45
28	31	26	27	11	6.3	2.9	5.6	5.6	7.3	22	27	30
29	28	-----	25	10	6.5	2.7	5.4	6.7	8.6	21	26	30
30	30	-----	25	10	7.0	3.2	6.2	6.2	30	20	23	25
31	31	-----	25	-----	6.3	-----	6.5	5.7	-----	19	-----	23
TOTAL	768	800	741	521	235.1	140.7	140.5	230.6	221.1	475	692	777
MEAN	24.8	28.6	23.9	17.4	7.58	4.69	4.53	7.44	7.37	15.3	23.1	25.1
MAX	31	32	27	25	9.8	6.5	6.5	16	30	35	29	45
MIN	15	25	21	10	5.4	2.7	3.3	5.1	4.1	10	19	20
AC-FT	1,520	1,590	1,470	1,030	466	279	279	457	439	942	1,370	1,540

CAL YR 1971 TOTAL 5,742.0 MEAN 15.7 MAX 45 MIN 2.7 AC-FT 11,390

WTR YR 1971 TOTAL 6,343.0 MEAN 17.4 MAX 35 MIN 2.7 AC-FT 12,580

PEAK DISCHARGE (BASE, 230 CFS)

DATE	TIME	G. H.	DISCHARGE
9-17	1415	3.18	261

08276500 Rio Grande below Taos Junction Bridge, near Taos, N. Mex.

LOCATION.--Lat 36°19'12", long 105°45'14", in NW 1/4 sec. 15, T. 24 N., R. 11 E., Taos County, on left bank 1.7 miles downstream from bridge on State Highway 96, 2.0 miles downstream from Rio Pueblo de Taos, and 11.8 miles southwest of Taos.

DRAINAGE AREA.--9,730 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--July 1925 to current year. Prior to October 1930 monthly discharge only, published in WSP 1312. Published as "at Taos Junction Bridge, near Taos" prior to 1934.

GAGE.--Water-stage recorder. Datum of gage is 6,050.3 ft above mean sea level. Prior to Apr. 14, 1934, at bridge 1.7 miles upstream at different datum.

AVERAGE DISCHARGE.--46 years, 727 cfs (526,700 acre-ft per year); 20 calendar years (1951-70), 581 cfs (420,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,960 cfs Mar. 30 (gage height, 5.47 ft); minimum, 220 cfs Aug. 18-19, 25, 26.
 Period of record: Maximum discharge, 9,730 cfs June 7, 1948 (gage height, 9.18 ft), and June 22, 1949 (gage height, 9.23 ft); minimum, 155 cfs Sept. 21, 1956.
 Maximum flood known since at least 1888, about 14,000 cfs June 19, 1903, from records for Rio Grande at Embudo and estimated inflow. Other floods exceeding 10,000 cfs occurred June 9 (corrected), 1905, May 28 (corrected), 1920, and June 16, 1921, from comparison of records for stations near Lobatos and at Embudo.

REMARKS.--Records good. Diversions above station for irrigation of about 620,000 acres in Colorado and 30,000 acres in New Mexico.

REVISIONS (WATER YEARS).--WSP 788: 1934(M). WSP 828: Drainage area. WSP 1392: 1931-32, 1935, 1937, 1945, 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	511	811	779	624	719	658	1,440	281	297	300	353	264
2	475	840	774	622	741	578	1,100	276	301	293	351	277
3	447	852	761	631	765	579	950	269	307	288	367	293
4	426	989	669	569	788	619	800	262	329	287	341	283
5	426	1,180	680	556	720	756	700	249	311	293	335	276
6	436	1,190	698	520	686	755	600	244	299	291	314	269
7	446	1,200	706	480	782	746	550	251	283	288	318	284
8	450	1,240	704	450	675	729	500	260	285	287	302	279
9	469	1,260	686	450	673	795	475	258	297	298	283	278
10	481	1,240	726	460	713	825	460	266	299	299	276	273
11	621	1,210	800	470	738	854	440	273	297	324	275	255
12	730	1,220	757	480	723	809	440	269	307	328	264	246
13	619	1,190	684	500	720	810	445	263	312	298	265	247
14	569	1,000	611	510	736	808	464	261	313	286	267	249
15	562	930	592	520	744	846	475	260	324	275	264	253
16	560	890	599	540	770	873	476	260	333	270	247	245
17	558	852	504	550	805	820	454	253	348	249	235	302
18	624	812	564	560	844	780	437	245	336	252	223	254
19	643	810	622	591	873	772	414	260	332	257	233	255
20	759	828	575	608	831	739	408	270	348	279	261	251
21	813	826	606	628	790	754	407	282	342	305	283	260
22	816	801	659	658	538	769	384	310	345	330	292	272
23	824	783	588	658	627	787	379	317	337	330	244	296
24	820	787	597	670	741	876	404	295	320	389	239	302
25	813	810	560	686	794	1,000	380	284	311	379	227	315
26	822	820	518	686	801	1,150	360	281	305	367	227	315
27	810	819	575	680	747	1,190	350	278	302	395	256	317
28	802	812	600	675	680	1,340	330	277	292	414	251	312
29	795	804	622	675	-----	1,620	310	278	285	422	254	312
30	783	792	627	689	-----	1,830	289	281	303	390	281	475
31	804	-----	626	706	-----	1,860	-----	285	-----	366	268	-----
TOTAL	19,714	28,598	20,069	18,102	20,764	28,327	15,621	8,398	9,400	9,829	8,596	8,509
MEAN	636	953	647	584	742	914	521	271	313	317	277	284
MAX	824	1,260	800	706	873	1,860	1,440	317	348	422	367	475
MIN	426	783	504	450	538	578	289	244	283	249	223	245
AC-FT	39,100	56,720	39,810	35,910	41,190	56,190	30,980	16,660	18,640	19,500	17,050	16,880

CAL YR 1970 TOTAL 260,455 MEAN 714 MAX 2,230 MIN 227 AC-FT 516,600
 WTR YR 1971 TOTAL 195,927 MEAN 537 MAX 1,860 MIN 223 AC-FT 388,600

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE TIME G. H. DISCHARGE
 3-30 2130 5.47 1,960

08276500 Rio Grande below Taos Junction Bridge, near Taos, N. Mex.

LOCATION.--Lat 36°19'12", long 105°45'14", in NW¼NE¼ sec.15, T.24 N., R.11 E., Taos County, on left bank 1.7 miles downstream from bridge on State Highway 96, 2.0 miles downstream from Rio Pueblo de Taos, and 11.8 miles southwest of Taos.

DRAINAGE AREA.--9,730 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--July 1925 to current year. Prior to October 1930 monthly discharge only, published in WSP 1312. Published as "at Taos Junction Bridge, near Taos" prior to 1934.

GAGE.--Water-stage recorder. Datum of gage is 6,050.3 ft above mean sea level. Prior to Apr. 14, 1934, at bridge 1.7 miles upstream at different datum.

AVERAGE DISCHARGE.--46 calendar years, 727 cfs (526,700 acre-ft per year); 20 calendar years (1952-71), 590 cfs (427,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,960 cfs Mar. 30 (gage height, 5.47 ft); minimum, 220 cfs Aug. 18-19, 25, 26.
 Period of record: Maximum discharge, 9,730 cfs June 7, 1948 (gage height, 9.18 ft), and June 22, 1949 (gage height, 9.23 ft); minimum, 155 cfs Sept. 21, 1956.
 Maximum flood known since at least 1888, about 14,000 cfs June 19, 1903, from records for Rio Grande at Embudo and estimated inflow. Other floods exceeding 10,000 cfs occurred June 9, 1905, May 28, 1920, and June 16, 1921, from comparison of records for stations near Lobatos and at Embudo.

REMARKS.--Records good. Diversions above station for irrigation of about 620,000 acres in Colorado and 30,000 acres in New Mexico.

REVISIONS (WATER YEARS).--WSP 788: 1934(M). WSP 828: Drainage area. WSP 1392: 1931-32, 1935, 1937, 1945, 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	624	719	658	1,440	281	297	300	353	264	481	420	616
2	622	741	578	1,100	276	301	293	351	277	433	420	597
3	631	765	579	950	269	307	288	367	293	402	430	544
4	569	788	619	800	262	329	287	341	283	573	485	512
5	556	720	756	700	249	311	293	335	276	819	577	475
6	520	686	755	600	244	299	291	314	269	863	634	440
7	480	782	746	550	251	283	288	318	284	793	648	426
8	450	675	729	500	260	285	287	302	279	750	658	479
9	450	673	795	475	258	297	298	283	278	717	668	427
10	460	713	825	460	266	299	299	276	273	696	657	371
11	470	738	854	440	273	297	324	275	255	694	651	435
12	480	723	809	440	269	307	328	264	246	674	645	451
13	500	720	810	445	263	312	298	265	247	666	642	478
14	510	736	808	464	261	313	286	267	249	662	644	536
15	520	744	846	475	260	324	275	264	253	656	660	539
16	540	770	873	476	260	333	270	247	245	646	683	508
17	550	805	820	454	253	348	249	235	302	584	681	491
18	560	844	780	437	245	336	252	223	254	540	685	489
19	591	873	772	414	260	332	257	233	255	490	650	488
20	608	831	739	408	270	348	279	261	251	480	606	463
21	628	790	754	407	282	342	305	283	260	480	578	446
22	658	538	769	384	310	345	330	292	272	470	545	443
23	658	627	787	379	317	337	330	244	296	470	583	489
24	670	741	876	404	295	320	389	239	302	460	571	509
25	686	794	1,000	380	284	311	379	227	315	500	580	509
26	686	801	1,150	360	281	305	367	227	315	480	612	572
27	680	747	1,190	350	278	302	395	256	317	470	615	651
28	675	680	1,340	330	277	292	414	251	312	450	640	611
29	675	-----	1,620	310	278	285	422	254	312	440	654	630
30	689	-----	1,830	289	281	303	390	281	475	430	643	603
31	706	-----	1,860	-----	285	-----	366	268	-----	430	-----	569
TOTAL	18,102	20,764	28,327	15,621	8,398	9,400	9,829	8,596	8,509	17,699	18,165	15,797
MEAN	584	742	914	521	271	313	317	277	284	571	606	510
MAX	706	873	1,860	1,440	317	348	422	367	475	863	685	651
MIN	450	538	578	289	244	283	249	223	245	402	420	371
AC-FT	35,910	41,190	56,190	30,980	16,660	18,640	19,500	17,050	16,880	35,110	36,030	31,330

CAL YR 1971 TOTAL 179,207 MEAN 491 MAX 1,860 MIN 223 AC-FT 355,500

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE
3-30	2130	5.47	1,960

08279000 Embudo Creek at Dixon, N. Mex.

LOCATION.--Lat 36°12'39", long 105°54'47", in NE¼SE¼ sec.19, T.23 N., R.10 E., Rio Arriba County, on right bank 750 ft upstream from U.S. Highway 64, 0.5 mile upstream from mouth, 0.5 mile east of Embudo Post Office, and 1.7 miles northwest of Dixon. Prior to Sept. 2, 1971, at site 750 ft downstream.

DRAINAGE AREA.--305 sq mi.

PERIOD OF RECORD.--October 1923 to February 1926, October 1926 to September 1955, annual maximum, water years 1956-62, September 1962 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for July 6-25, 1932, published in WSP 733, and maximum discharges for water years 1931-33, 1935, 1937-38, 1941, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 5,858.60 ft above mean sea level. Prior to Nov. 30, 1938, at site about 1 mile upstream at different datums. Nov. 30, 1938 to Aug. 1, 1941, at site about 0.9 mile upstream at datum about 59.9 ft higher. Aug. 2, 1941 to Sept. 1, 1971, at site 750 ft downstream at datum 9.10 ft lower. April 1956 to Sept. 21, 1962, crest-stage gage.

AVERAGE DISCHARGE.--40 years (1923-25, 1926-55, 1962-71), 77.2 cfs (55,930 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 970 cfs Aug. 12 (gage height, 5.93 ft), from rating curve extended above 410 cfs on basis of slope-area measurement at gage height 7.39 ft; minimum, 5.6 cfs July 1, 3, 7. Period of record: Maximum discharge determined, 2,280 cfs Aug. 4, 1967 (gage height, 7.6 ft), from rating curve extended above 410 cfs on basis of slope-area measurement of peak flow; minimum, 0.06 cfs June 26, 27, 1950.

REMARKS.--Records poor prior to Sept. 2, good thereafter. Diversions above station for irrigation of about 6,500 acres, a small part of which is below gage.

REVISIONS (WATER YEARS).--WSP 1512: 1931-32, 1941, 1947(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	33	23	19	31	20	36	20	14	5.9	21	37
2	31	33	22	20	31	19	36	19	14	5.9	18	27
3	31	33	26	18	31	19	36	19	14	5.9	17	27
4	30	32	24	16	31	23	36	19	13	5.9	18	27
5	30	33	25	12	28	23	33	19	13	5.9	19	24
6	30	33	23	10	28	21	29	19	13	5.9	20	19
7	31	32	24	9.0	27	23	29	19	12	5.9	18	17
8	31	33	26	10	25	24	29	18	12	6.2	16	18
9	31	32	27	13	30	23	27	18	11	6.2	17	17
10	31	32	29	20	30	21	26	18	11	6.2	18	15
11	31	31	26	30	31	20	23	18	10	5.9	18	15
12	30	32	21	30	31	23	20	19	9.6	5.9	53	15
13	29	32	18	30	31	24	16	20	8.2	5.9	36	15
14	30	31	16	30	31	24	14	20	7.9	6.2	34	12
15	29	31	17	29	31	23	15	19	7.2	6.2	35	9.8
16	30	31	14	29	31	26	14	18	7.2	6.2	32	8.0
17	31	31	17	30	29	28	14	18	7.6	6.2	40	26
18	31	31	18	31	29	28	15	18	7.2	6.2	33	29
19	31	31	16	32	28	26	16	17	7.6	6.2	40	27
20	31	31	17	32	28	29	18	16	8.2	6.5	33	24
21	31	31	18	32	28	29	20	16	6.8	7.2	30	25
22	31	30	18	32	20	30	23	16	6.5	7.9	31	27
23	34	30	17	30	26	32	23	16	6.5	9.6	41	31
24	36	29	16	29	26	35	23	16	6.2	12	112	32
25	36	30	17	29	25	35	21	16	6.2	12	95	32
26	36	31	18	31	22	36	22	15	6.2	27	87	29
27	34	30	20	31	23	41	23	16	5.9	22	77	28
28	33	28	19	31	23	42	23	16	5.9	20	61	24
29	32	29	18	31	-----	40	22	14	5.9	18	54	26
30	32	29	19	31	-----	39	21	14	5.9	19	48	98
31	33	-----	18	31	-----	39	-----	14	-----	22	42	-----
TOTAL	978	935	627	788.0	785	865	703	540	269.7	298.0	1,214	760.8
MEAN	31.5	31.2	20.2	25.4	28.0	27.9	23.4	17.4	8.99	9.61	39.2	25.4
MAX	36	33	29	32	31	42	36	20	14	27	112	98
MIN	29	28	14	9.0	20	19	14	14	5.9	5.9	16	8.0
AC-FT	1,940	1,850	1,240	1,560	1,560	1,720	1,390	1,070	535	591	2,410	1,510
CAL YR 1970	TOTAL 18,212.0											
WTR YR 1971	TOTAL 8,763.5											
	MEAN 49.9											
	MAX 214											
	MIN 12											
	AC-FT 36,120											
	WTR YR 1971 AC-FT 17,380											

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE
8-12	1830	5.93	970.

08279000 Embudo Creek at Dixon, N. Mex.

LOCATION.--Lat 36°12'39", long 105°54'47", in NE¼SE¼ sec.19, T.23 N., R.10 E., Rio Arriba County, on right bank 750 ft upstream from U.S. Highway 64, 0.5 mile upstream from mouth, 0.5 mile east of Embudo Post Office, and 1.7 miles northwest of Dixon. Prior to Sept. 2, 1971, at site 750 ft downstream.

DRAINAGE AREA.--305 sq mi.

PERIOD OF RECORD.--October 1923 to February 1926, October 1926 to September 1955, annual maximum, water years 1956-62, September 1962 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for July 6-25, 1932, published in WSP 733, and maximum discharges for water years 1931-33, 1935, 1937-38, 1941, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 5,858.60 ft above mean sea level. Prior to Nov. 30, 1938, at site about 1 mile upstream at different datums. Nov. 30, 1938 to Aug. 1, 1941, at site about 0.9 mile upstream at datum about 59.9 ft higher. Aug. 2, 1941 to Sept. 1, 1971, at site 750 ft downstream at datum 9.10 ft lower. April 1956 to Sept. 21, 1962, crest-stage gage.

AVERAGE DISCHARGE.--39 calendar years (1924-25, 1927-54, 1963-71), 77.9 cfs (56,440 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 970 cfs Aug. 12 (gage height, 5.93 ft), from rating curve extended above 410 cfs on basis of slope-area measurement at gage height 7.39 ft; minimum, 5.6 cfs July 1, 3, 7. Period of record: Maximum discharge determined, 2,280 cfs Aug. 4, 1967 (gage height, 7.6 ft), from rating curve extended above 410 cfs on basis of slope-area measurement of peak flow; minimum, 0.06 cfs June 26, 27, 1950.

REMARKS.--Records poor prior to Sept. 2, good thereafter. Diversions above station for irrigation of about 6,500 acres, a small part of which is below gage.

REVISIONS (WATER YEARS).--WSP 1512: 1931-32, 1941, 1947(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	19	31	20	36	20	14	5.9	21	37	91	50	47
2	20	31	19	36	19	14	5.9	18	27	64	43	51
3	18	31	19	36	19	14	5.9	17	27	55	44	46
4	16	31	23	36	19	13	5.9	18	27	52	46	43
5	12	28	23	33	19	13	5.9	19	24	49	45	33
6	10	28	21	29	19	13	5.9	20	19	47	41	35
7	9.0	27	23	29	19	12	5.9	18	17	47	38	51
8	10	25	24	29	18	12	6.2	16	18	46	43	49
9	13	30	23	27	18	11	6.2	17	17	43	41	36
10	20	30	21	26	18	11	6.2	18	15	42	39	40
11	30	31	20	23	18	10	5.9	18	15	40	40	35
12	30	31	23	20	19	9.6	5.9	53	15	35	42	32
13	30	31	24	16	20	8.2	5.9	36	15	33	41	39
14	30	31	24	14	20	7.9	6.2	34	12	33	36	47
15	29	31	23	15	19	7.2	6.2	35	9.8	31	46	32
16	29	31	26	14	18	7.2	6.2	32	8.0	30	50	27
17	30	29	28	14	18	7.6	6.2	40	26	35	50	25
18	31	29	28	15	18	7.2	6.2	33	29	45	47	25
19	32	28	26	16	17	7.6	6.2	40	27	34	37	30
20	32	28	29	18	16	8.2	6.5	33	24	34	40	30
21	32	28	29	20	16	6.8	7.2	30	25	34	53	30
22	32	20	30	23	16	6.5	7.9	31	27	35	58	35
23	30	26	32	23	16	6.5	9.6	41	31	34	48	45
24	29	26	35	23	16	6.2	12	112	32	34	49	50
25	29	25	35	21	16	6.2	12	95	32	91	50	47
26	31	22	36	22	15	6.2	27	87	29	72	52	53
27	31	23	41	23	16	5.9	22	77	28	54	51	64
28	31	23	42	23	16	5.9	20	61	24	49	51	38
29	31	-----	40	22	14	5.9	18	54	26	51	50	47
30	31	-----	39	21	14	5.9	19	48	98	51	36	27
31	31	-----	39	-----	14	-----	22	42	-----	45	-----	21
TOTAL	788.0	785	865	703	540	269.7	298.0	1,214	760.8	1,436	1,357	1,210
MEAN	25.4	28.0	27.9	23.4	17.4	8.99	9.61	39.2	25.4	46.3	45.2	39.0
MAX	32	31	42	36	20	14	27	112	98	91	58	64
MIN	9.0	20	19	14	14	5.9	5.9	16	8.0	30	36	21
AC-FT	1,560	1,560	1,720	1,390	1,070	535	591	2,410	1,510	2,850	2,690	2,400

CAL YR 1971 TOTAL 10,226.5 MEAN 28.0 MAX 112 MIN 5.9 AC-FT 20,280

PEAK DISCHARGE (BASE, 800 CFS)

DATE TIME G. H. DISCHARGE

8-12 1830 5.93 970

08279500 Rio Grande at Embudo, N. Mex.

LOCATION.--Lat 36°12'20", long 105°57'49", in SW¼SW¼ sec.23, T.23 N., R.9 E., Rio Arriba County, on right bank 0.2 mile downstream from bridge at Embudo, and 2.8 miles downstream from Eubudo Creek.

DRAINAGE AREA.--10,400 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--January 1889 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for Oct. 4 to Nov. 30, 1896, published in WSP 358, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 5,789.14 ft above mean sea level. Jan. 1 to Feb. 28, 1889, nonrecording gage 1.2 miles upstream at different datum. March 1889 to December 1903, nonrecording gage 1,300 ft upstream at different datum. September 1912 to June 1914, water-stage recorder on downstream end of bridge pier at site 200 ft upstream at present datum.

AVERAGE DISCHARGE.--82 years, 1,011 cfs (732,500 acre-ft per year); 20 calendar years (1951-70), 650 cfs (470,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,860 cfs Mar. 31 (gage height, 4.88 ft); minimum, 219 cfs July 16, 17.
1889-1903, 1912-71: Maximum discharge, 16,200 cfs June 19, 1903 (gage height, about 15.9 ft); minimum daily, 130 cfs June 30, 1902.
A flood of about 14,000 cfs occurred between May 20 and June 10, 1905, from a comparison of records for Lobatos and Otowi Bridge. Another major flood occurred Sept. 29 or 30, 1904.

REMARKS.--Records good. Diversions above station for irrigation of about 620,000 acres in Colorado and 40,000 acres in New Mexico.

REVISIONS (WATER YEARS).--WSP 358: 1900-1902. WSP 828: Drainage area. WSP 878: 1915-16. WSP 1512: 1892-99, 1904, 1916, 1931-32, 1939, 1944-45, 1950. WSP 1712: 1903(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	527	801	769	623	726	666	1,460	293	284	286	361	287
2	493	826	763	618	746	581	1,150	288	293	283	346	284
3	462	832	765	641	776	571	945	283	292	271	367	309
4	438	909	661	588	792	576	842	275	316	269	346	302
5	431	1,130	667	488	728	763	722	267	307	272	355	290
6	446	1,150	683	475	694	745	618	260	295	272	318	280
7	456	1,180	691	488	793	740	551	263	276	267	322	280
8	466	1,200	701	444	688	728	505	275	272	267	328	295
9	484	1,220	683	462	672	775	489	274	279	267	295	281
10	494	1,210	726	470	711	830	471	285	292	278	287	281
11	589	1,190	785	508	740	861	447	291	285	287	281	262
12	755	1,190	749	493	716	817	429	299	292	315	353	252
13	653	1,160	673	507	711	817	434	289	299	276	350	250
14	589	1,010	594	521	740	817	449	289	305	262	286	250
15	581	909	595	531	745	842	482	282	306	254	328	251
16	586	877	585	551	775	880	489	275	314	249	266	245
17	576	848	536	566	799	836	459	270	332	228	280	334
18	628	802	529	586	851	781	456	266	322	225	250	310
19	660	797	610	602	866	775	438	267	316	240	261	280
20	740	806	580	623	837	734	422	285	329	258	280	275
21	811	815	595	644	807	745	432	290	328	291	308	283
22	823	788	663	677	551	781	409	302	331	296	258	294
23	813	774	600	672	576	793	405	332	325	357	330	328
24	804	764	581	677	740	880	418	310	309	374	301	330
25	801	794	552	694	787	997	410	291	296	393	286	351
26	815	812	538	705	805	1,180	386	284	289	426	270	355
27	806	818	580	701	745	1,230	374	281	282	420	294	353
28	793	806	604	680	688	1,320	354	280	278	428	279	347
29	782	802	619	680	-----	1,580	336	276	267	434	276	349
30	770	793	617	693	-----	1,750	310	280	281	403	299	626
31	791	-----	624	715	-----	1,800	-----	279	-----	379	294	-----
TOTAL	19,863	28,013	19,918	18,323	20,805	28,191	16,092	8,781	8,992	9,527	9,455	9,214
MEAN	641	934	643	591	743	909	536	283	300	307	305	307
MAX	823	1,220	785	715	866	1,800	1,460	332	332	434	367	626
MIN	431	764	529	444	551	571	310	260	267	225	250	245
AC-FT	39,400	55,560	39,510	36,340	41,270	55,920	31,920	17,420	17,840	18,900	18,750	18,280

CAL YR 1970 TOTAL 273,272 MEAN 749 MAX 2,160 MIN 237 AC-FT 542,000
WTR YR 1971 TOTAL 197,174 MEAN 540 MAX 1,800 MIN 225 AC-FT 391,100

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

08279500 Rio Grande at Embudo, N. Mex.

LOCATION.--Lat 36°12'20", long 105°57'49", in SW¼SW¼ sec.23, T.23 N., R.9 E., Rio Arriba County, on right bank 0.2 mile downstream from bridge at Embudo, and 2.8 miles downstream from Embudo Creek.

DRAINAGE AREA.--10,400 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--January 1889 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for Oct. 4 to Nov. 30, 1896, published in WSP 358, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 5,789.14 ft above mean sea level. Jan. 1 to Feb. 28, 1889, nonrecording gage 1.2 miles upstream at different datum. March 1889 to December 1903, nonrecording gage 1,300 ft upstream at different datum. September 1912 to June 1914, water-stage recorder on downstream end of bridge pier at site 200 ft upstream at present datum.

AVERAGE DISCHARGE.--83 calendar years, 1,009 cfs (731,000 acre-ft per year); 20 calendar years (1952-71), 659 cfs (477,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,860 cfs Mar. 31 (gage height, 4.88 ft); minimum, 219 cfs July 16, 17. 1889-1903, 1912-71: Maximum discharge, 16,200 cfs June 19, 1903 (gage height, about 15.9 ft); minimum daily, 130 cfs June 30, 1902.

A flood of about 14,000 cfs occurred between May 20 and June 10, 1905, from a comparison of records for Lobatos and Otowi Bridge. Another major flood occurred Sept. 29 or 30, 1904.

REMARKS.--Records good. Diversions above station for irrigation of about 620,000 acres in Colorado and 40,000 acres in New Mexico.

REVISIONS (WATER YEARS).--WSP 358: 1900-1902. WSP 828: Drainage area. WSP 878: 1915-16. WSP 1512: 1892-99, 1904, 1916, 1931-32, 1939, 1944-45, 1950. WSP 1712: 1903(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	623	726	666	1,460	293	284	286	361	287	676	493	654
2	618	746	581	1,150	288	293	283	346	284	527	479	644
3	641	776	571	945	283	292	271	367	309	494	498	602
4	588	792	576	842	275	316	269	346	302	629	503	554
5	488	728	763	722	267	307	272	355	290	883	602	499
6	475	694	745	618	260	295	272	318	280	954	686	499
7	488	793	740	551	263	276	267	322	280	848	703	455
8	444	688	728	505	275	272	267	328	295	791	713	506
9	462	672	775	489	274	279	267	295	281	766	721	490
10	470	711	830	471	285	292	278	287	281	742	710	409
11	508	740	861	447	291	285	287	281	262	743	700	450
12	493	716	817	429	299	292	315	353	252	725	696	475
13	507	711	817	434	289	299	276	350	250	704	689	499
14	521	740	817	449	289	305	262	286	250	706	684	572
15	531	745	842	482	282	306	254	328	251	698	711	562
16	551	775	880	489	275	314	249	266	245	689	742	531
17	566	799	836	459	270	332	228	280	334	672	745	504
18	586	851	781	456	266	322	225	250	310	641	751	525
19	602	866	775	438	267	316	240	261	280	551	712	530
20	623	837	734	422	285	329	258	280	275	493	646	500
21	644	807	745	432	290	328	291	308	283	484	654	474
22	677	551	781	409	302	331	296	258	294	517	617	465
23	672	576	793	405	332	325	357	330	328	493	651	512
24	677	740	880	418	310	309	374	301	330	466	626	552
25	694	787	997	410	291	296	393	286	351	623	636	546
26	705	805	1,180	386	284	289	426	270	355	586	671	580
27	701	745	1,230	374	281	282	420	294	353	546	683	724
28	680	688	1,320	354	280	278	428	279	347	513	698	639
29	680	-----	1,580	336	276	267	434	276	349	508	710	652
30	693	-----	1,750	310	280	281	403	299	626	503	677	619
31	715	-----	1,800	-----	279	-----	379	294	-----	494	-----	577
TOTAL	18,323	20,805	28,191	16,092	8,781	8,992	9,527	9,455	9,214	19,665	19,807	16,800
MEAN	591	743	909	536	283	300	307	305	307	634	660	542
MAX	715	866	1,800	1,460	332	332	434	367	626	954	751	724
MIN	444	551	571	310	260	267	225	250	245	466	479	409
AC-FT	36,340	41,270	55,920	31,920	17,420	17,840	18,900	18,750	18,280	39,010	39,290	33,320

CAL YR 1971 TOTAL 185,652 MEAN 509 MAX 1,800 MIN 225 AC-FT 368,200

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

08281100 Rio Grande above San Juan Pueblo, N. Mex.

LOCATION.--Lat 36°03'58", long 106°04'34", in NE¼SE¼ sec.10, T.21 N., R.8 E., Rio Arriba County, in San Juan Pueblo Grant, on left bank 0.8 mile upstream from bridge on State Highway 74, 1.0 mile northwest of San Juan Pueblo, 1.8 miles upstream from Rio Chama, and 5.1 miles north of Espanola.

DRAINAGE AREA.--10,550 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,630 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 670 cfs (485,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,000 cfs Mar. 31 (gage height, 3.22 ft); minimum, 180 cfs July 17, 18, 19.
Period of record: Maximum discharge, 4,900 cfs June 22, 1965 (gage height, 4.95 ft); minimum, 96 cfs Aug. 1, 1963.
For years of outstanding floods see records for Rio Grande at Embudo (sta 08279500).

REMARKS.--Records good except those for January, which are fair. Diversions above station for irrigation of about 620,000 acres in Colorado and 42,000 acres in New Mexico. San Juan lateral and San Juan Pueblo ditch, both on left bank, and Guique ditch, on right bank, bypass gage for irrigation of several hundred acres below station. See tabulation below for monthly and yearly diversion, as furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	486	758	730	579	679	648	1,560	245	253	237	321	255
2	461	782	718	571	696	550	1,160	243	259	253	306	244
3	428	791	728	593	730	514	937	240	255	225	303	253
4	415	829	625	601	747	508	816	230	272	238	294	245
5	407	1,070	640	480	705	696	696	232	269	242	292	233
6	421	1,100	648	430	655	705	593	230	255	229	295	226
7	423	1,130	653	420	713	696	514	229	234	213	280	223
8	426	1,180	662	400	663	679	462	231	229	224	305	244
9	455	1,200	649	450	624	705	437	236	234	213	280	229
10	462	1,180	696	460	655	782	413	235	241	228	267	232
11	519	1,160	730	460	688	818	390	244	236	235	246	221
12	689	1,150	716	470	688	782	356	255	247	257	314	217
13	618	1,130	635	480	673	782	346	250	259	230	357	220
14	547	1,000	571	488	691	782	351	252	263	208	291	211
15	538	872	560	488	703	800	390	249	259	198	298	215
16	540	835	534	501	732	864	401	239	253	194	263	214
17	522	816	547	514	764	836	373	233	271	189	279	242
18	559	775	473	535	827	782	378	224	267	188	239	332
19	599	756	571	550	845	773	373	222	277	198	275	282
20	652	757	557	564	818	747	373	236	294	247	281	279
21	743	768	543	586	809	755	375	241	289	271	289	284
22	765	742	616	616	593	800	356	253	288	282	267	282
23	785	723	584	616	528	809	354	289	286	324	297	304
24	782	712	542	624	688	921	357	277	274	323	270	310
25	773	745	535	640	730	1,060	346	254	261	342	264	320
26	782	766	528	648	764	1,280	321	253	251	414	235	321
27	783	780	528	648	713	1,330	322	252	238	394	250	319
28	772	768	557	632	655	1,400	311	257	234	385	240	317
29	755	757	564	632	-----	1,680	289	252	227	377	239	319
30	729	737	579	640	-----	1,880	268	253	225	355	255	547
31	746	-----	579	663	-----	1,880	-----	243	-----	337	270	-----
TOTAL	18,582	26,769	18,798	16,979	19,776	28,244	14,618	7,579	7,700	8,250	8,662	8,140
MEAN	599	892	606	548	706	911	487	244	257	266	279	271
MAX	785	1,200	730	663	845	1,880	1,560	289	294	414	357	547
MIN	407	712	473	400	528	508	268	222	225	188	235	211
AC-FT	36,860	53,100	37,290	33,680	39,230	56,020	28,990	15,030	15,270	16,360	17,180	16,150
(+)	47	58	0	0	0	0	50	71	40	107	79	118
(++)	166	189	0	0	0	0	210	486	492	400	457	556
(#)	386	503	56	0	0	0	24	88	213	352	297	336

CAL YR 1970 TOTAL 268,120 MEAN 735 MAX 2,080 MIN 222 AC-FT 531,800 † 510 †† 1,980 ‡ 2,430
WTR YR 1971 TOTAL 184,097 MEAN 504 MAX 1,880 MIN 188 AC-FT 365,200 † 571 †† 2,960 ‡ 2,260

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE TIME G. H. DISCHARGE
3-31 0415 3.22 2,000

† Diversion, in acre-feet, by San Juan lateral.
†† Diversion, in acre-feet, by San Juan Pueblo ditch.
‡ Diversion, in acre-feet, by Guique ditch.

08281100 Rio Grande above San Juan Pueblo, N. Mex.

LOCATION.--Lat 36°03'58", long 106°04'34", in NE¼SE¼ sec.10, T.21 N., R.8 E., Rio Arriba County, in San Juan Pueblo Grant, on left bank 0.8 mile upstream from bridge on State Highway 74, 1.0 mile northwest of San Juan Pueblo, 1.8 miles upstream from Rio Chama, and 5.1 miles north of Espanola.

DRAINAGE AREA.--10,550 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,630 ft (from topographic map).

AVERAGE DISCHARGE.--8 calendar years, 682 cfs (494,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,000 cfs Mar. 31 (gage height, 3.22 ft); minimum, 180 cfs July 17, 18, 19.
Period of record: Maximum discharge, 4,900 cfs June 22, 1965 (gage height, 4.95 ft); minimum, 96 cfs Aug. 1, 1963.
For years of outstanding floods see records for Rio Grande at Embudo (sta 08279500).

REMARKS.--Records good except those for January, which are fair. Diversions above station for irrigation of about 620,000 acres in Colorado and 42,000 acres in New Mexico. San Juan lateral and San Juan Pueblo ditch, both on left bank, and Guique ditch, on right bank, bypass gage for irrigation of several hundred acres below station. See tabulation below for monthly and yearly diversion, as furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	579	679	648	1,560	245	253	237	321	255	643	510	669
2	571	696	550	1,160	243	259	253	306	244	518	499	657
3	593	730	514	937	240	255	225	303	253	452	513	629
4	601	747	508	816	230	272	238	294	245	497	516	576
5	480	705	696	696	232	269	242	292	233	702	586	527
6	430	655	705	593	230	255	229	295	226	835	666	531
7	420	713	696	514	229	234	213	280	223	797	678	478
8	400	663	679	462	231	229	224	305	244	763	692	525
9	450	624	705	437	236	234	213	280	229	741	699	535
10	460	655	782	413	235	241	228	267	232	712	691	441
11	460	688	818	390	244	236	235	246	221	702	686	457
12	470	688	782	356	255	247	257	314	217	686	683	495
13	480	673	782	346	250	259	230	357	220	658	676	517
14	488	691	782	351	252	263	208	291	211	658	666	582
15	488	703	800	390	249	259	198	298	215	651	686	583
16	501	732	864	401	239	253	194	263	214	645	715	550
17	514	764	836	373	233	271	189	279	242	640	710	520
18	535	827	782	378	224	267	188	239	332	624	725	520
19	550	845	773	373	222	277	198	275	282	566	693	540
20	564	818	747	373	236	294	247	281	279	522	631	520
21	586	809	755	375	241	289	271	289	284	518	656	500
22	616	593	800	356	253	288	282	267	282	548	604	480
23	616	528	809	354	289	286	324	297	304	522	622	516
24	624	688	921	357	277	274	323	270	310	489	615	557
25	640	730	1,060	346	254	261	342	264	320	633	626	553
26	648	764	1,280	321	253	251	414	235	321	617	651	574
27	648	713	1,330	322	252	238	394	250	319	567	671	703
28	632	655	1,400	311	257	234	385	240	317	536	676	635
29	632	-----	1,680	289	252	227	377	239	319	529	702	649
30	640	-----	1,880	268	253	225	355	255	547	525	675	627
31	663	-----	1,880	-----	243	-----	337	270	-----	514	-----	589
TOTAL	16,979	19,776	28,244	14,618	7,579	7,700	8,250	8,662	8,140	19,010	19,419	17,235
MEAN	548	706	911	487	244	257	266	279	271	613	647	556
MAX	663	845	1,880	1,560	289	294	414	357	547	835	725	703
MIN	400	528	508	268	222	225	188	235	211	452	499	441
AC-FT	33,680	39,230	56,020	28,990	15,030	15,270	16,360	17,180	16,150	37,710	38,520	34,190
(+)	0	0	0	50	71	40	107	79	118	11	2.2	0
(++)	0	0	0	210	486	492	400	457	556	161	36	0
(‡)	0	0	0	24	88	213	352	297	336	215	67	2.4

CAL YR 1971 TOTAL 175,612 MEAN 481 MAX 1,880 MIN 188 AC-FT 348,300 + 479 ++ 2,800 ‡ 1,590

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	
3-31	0415	3.22	2,000	+ Diversion, in acre-feet, by San Juan lateral. ++ Diversion, in acre-feet, by San Juan Pueblo ditch. ‡ Diversion, in acre-feet, by Guique ditch.

08284100 Rio Chama near La Puente, N. Mex.

LOCATION.--Lat 36°39'45", long 106°37'57", Rio Arriba County, in Tierra Amarilla Grant, on right bank 0.7 mile downstream from Rito de Tierra Amarilla, 3.1 miles southwest of La Puente, 6.7 miles upstream from flow line of El Vado Reservoir, and at mile 91.4.

DRAINAGE AREA.--480 sq mi, approximately.

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

GAGE.--Water-stage recorder. Concrete control since Nov. 9, 1965. Altitude of gage is 7,083 ft (from river-profile map).

AVERAGE DISCHARGE.--16 years, 306 cfs (221,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,430 cfs Apr. 12 (gage height, 4.12 ft); minimum, 11 cfs Sept. 17.

Period of record: Maximum discharge, 8,040 cfs June 7, 1957 (gage height, 6.07 ft), from rating curve extended above 3,000 cfs on basis of an inflow-outflow study of El Vado Reservoir; minimum, 4.0 cfs Sept. 19, 1956.

A discharge of about 9,000 cfs occurred Apr. 16, 1937, based on flow of Rio Chama at Park View with allowance for tributary inflow. A peak on May 21 or 22, 1926, may have exceeded 10,000 cfs.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 10,300 acres above station (1962 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	97	62	52	70	55	843	747	384	64	41	39
2	90	95	55	50	75	55	713	814	346	97	34	37
3	86	83	65	50	80	55	717	867	323	93	33	37
4	85	80	60	50	75	58	681	874	309	74	39	38
5	86	84	55	50	65	65	694	769	293	59	41	33
6	93	89	60	45	60	50	800	763	281	50	40	29
7	90	97	53	45	60	55	900	767	286	53	44	26
8	96	90	60	50	58	65	818	847	283	45	60	37
9	98	83	65	55	55	81	871	740	276	40	64	45
10	107	98	75	55	55	85	986	642	264	31	52	32
11	110	95	73	55	56	90	1,020	643	237	31	49	26
12	107	92	52	55	60	100	1,060	669	224	31	50	22
13	100	92	40	55	65	118	1,010	677	220	24	48	21
14	94	82	45	55	75	105	947	649	212	19	44	18
15	93	72	55	55	80	77	940	680	201	16	40	15
16	99	75	50	60	90	73	874	721	199	18	37	15
17	103	81	45	60	90	86	855	781	196	19	35	13
18	99	78	60	60	85	79	752	682	192	18	35	18
19	92	81	45	60	80	71	665	583	190	20	34	20
20	88	71	43	60	75	92	511	520	180	30	87	18
21	89	79	60	65	60	125	566	493	168	46	85	18
22	103	80	55	70	50	147	609	490	153	47	64	22
23	112	78	50	65	50	183	537	482	144	90	69	24
24	113	77	48	60	55	247	593	455	133	100	53	30
25	109	77	50	55	60	230	730	427	123	89	49	31
26	112	84	55	55	55	305	832	408	109	68	41	28
27	102	80	55	55	55	578	648	408	97	65	46	23
28	89	76	55	55	55	776	677	440	90	52	58	21
29	88	84	53	60	-----	814	621	458	76	42	57	41
30	92	81	52	60	-----	919	628	496	65	40	61	476
31	94	-----	55	65	-----	1,080	-----	507	-----	42	48	-----
TOTAL	3,016	2,511	1,706	1,742	1,849	6,919	23,098	19,499	6,254	1,513	1,538	1,253
MEAN	97.3	83.7	55.0	56.2	66.0	223	770	629	208	48.8	49.6	41.8
MAX	113	98	75	70	90	1,080	1,060	874	384	100	87	476
MIN	85	71	40	45	50	50	511	408	65	16	33	13
AC-FT	5,980	4,980	3,380	3,460	3,670	13,720	45,810	38,680	12,400	3,000	3,050	2,490

CAL YR 1970 TOTAL 97,874 MEAN 268 MAX 3,220 MIN 40 AC-FT 194,100

WTR YR 1971 TOTAL 70,898 MEAN 194 MAX 1,080 MIN 13 AC-FT 140,600

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

08284100 Rio Chama near La Puente, N. Mex.

LOCATION.--Lat 36°39'45", long 106°37'57", Rio Arriba County, in Tierra Amarilla Grant, on right bank 0.7 mile downstream from Rito de Tierra Amarilla, 3.1 miles southwest of La Puente, 6.7 miles upstream from flow line of El Vado Reservoir, and at mile 91.4.

DRAINAGE AREA.--480 sq mi, approximately.

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

GAGE.--Water-stage recorder. Concrete control since Nov. 9, 1965. Altitude of gage is 7,083 ft (from river-profile map).

AVERAGE DISCHARGE.--16 calendar years, 307 cfs (222,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,430 cfs Apr. 12 (gage height, 4.12 ft); minimum, 11 cfs Sept. 17.
 Period of record: Maximum discharge, 8,040 cfs June 7, 1957 (gage height, 6.07 ft), from rating curve extended above 3,000 cfs on basis of an inflow-outflow study of El Vado Reservoir; minimum, 4.0 cfs Sept. 19, 1956.
 A discharge of about 9,000 cfs occurred Apr. 16, 1937, based on flow of Rio Chama at Park View with allowance for tributary inflow. A peak on May 21 or 22, 1926, may have exceeded 10,000 cfs.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 10,300 acres above station (1962 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	52	70	55	843	747	384	64	41	39	242	133	75
2	50	75	55	713	814	346	97	34	37	185	106	77
3	50	80	55	717	867	323	93	33	37	139	103	77
4	50	75	58	681	874	309	74	39	38	122	102	60
5	50	65	65	694	769	293	59	41	33	107	100	50
6	45	60	50	800	763	281	50	40	29	91	97	50
7	45	60	55	900	767	286	53	44	26	83	89	70
8	50	58	65	818	847	283	45	60	37	77	98	73
9	55	55	81	871	740	276	40	64	45	73	90	65
10	55	55	85	986	642	264	31	52	32	76	80	70
11	55	56	90	1,020	643	237	31	49	26	73	87	60
12	55	60	100	1,060	669	224	31	50	22	67	88	65
13	55	65	118	1,010	677	220	24	48	21	66	94	68
14	55	75	105	947	649	212	19	44	18	64	80	73
15	55	80	77	940	680	201	16	40	15	61	93	70
16	60	90	73	874	721	199	18	37	15	58	94	70
17	60	90	86	855	781	196	19	35	13	68	84	70
18	60	85	79	752	682	192	18	35	18	104	84	72
19	60	80	71	665	583	190	20	34	20	72	70	72
20	60	75	92	511	520	180	30	87	18	78	75	74
21	65	60	125	566	493	168	46	85	18	85	93	74
22	70	50	147	609	490	153	47	64	22	100	88	78
23	65	50	183	537	482	144	90	69	24	93	79	80
24	60	55	247	593	455	133	100	53	30	94	68	85
25	55	60	230	730	427	123	89	49	31	153	74	90
26	55	55	305	832	408	109	68	41	28	163	75	84
27	55	55	578	648	408	97	65	46	23	137	78	80
28	55	55	776	677	440	90	52	58	21	131	79	80
29	60	-----	814	621	458	76	42	57	41	124	75	78
30	60	-----	919	628	496	65	40	61	476	110	62	74
31	65	-----	1,080	-----	507	-----	42	48	-----	94	-----	70
TOTAL	1,742	1,849	6,919	23,098	19,499	6,254	1,513	1,538	1,253	3,190	2,618	2,234
MEAN	56.2	66.0	223	770	629	208	48.8	49.6	41.8	103	87.3	72.1
MAX	70	90	1,080	1,060	874	384	100	87	476	242	133	90
MIN	45	50	50	511	408	65	16	33	13	58	62	50
AC-FT	3,460	3,670	13,720	45,810	38,680	12,400	3,000	3,050	2,490	6,330	5,190	4,430

CAL YR 1971 TOTAL 71,707 MEAN 196 MAX 1,080 MIN 13 AC-FT 142,200

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

08284150 Willow Creek above Azotea Creek, near Park View, N. Mex.

LOCATION.--Lat 36°48'15", long 106°39'30", Rio Arriba County, in Tierra Amarilla Grant, on right bank 200 feet upstream from Azotea Creek, 7.1 miles northwest of Park View, and 8.3 miles southwest of Chama.

PERIOD OF RECORD.--April to December 1971.

DRAINAGE AREA.--42 sq mi, approximately.

GAGE.--Water-stage recorder and Parshall flume. Prior to Nov. 18, 1971, nonrecording gage. Datum of gage is 7,404.00 ft above mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Maximum daily discharge during period, 15 cfs Aug. 8; no flow Sept. 2-7, 13, 15, Oct. 14-17.

REMARKS.--Record represents natural runoff from the area.

COOPERATION.--Records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				.67	1.6	4.7	.43	1.1	.01	14	.85	.13
2				.67	1.3	4.2	.58	1.1	0	3.6	.54	.16
3				.67	1.0	1.6	2.8	1.0	0	2.0	.38	.13
4				.67	.70	1.8	1.9	2.3	0	1.5	.29	.13
5				.67	.70	2.5	1.8	3.7	0	.51	.21	.30
6				.67	1.5	2.5	1.4	4.3	0	.63	.19	.23
7				.67	1.5	3.3	1.5	3.8	0	.54	.10	.26
8				.67	1.5	4.6	.90	15	.71	.21	.04	.26
9				.53	1.5	6.2	.71	3.9	.35	.16	.06	.19
10				.53	1.6	5.8	.58	2.5	.35	.10	.06	.13
11				.37	1.0	4.3	.85	1.5	.32	.04	.04	.13
12				.35	1.6	2.7	.94	.67	.09	.02	.04	.13
13				.35	1.5	3.5	.63	.94	0	.02	.04	.13
14				.35	1.0	3.0	.50	1.5	.08	0	.02	.13
15				.35	.90	2.1	.54	1.2	0	0	.02	.13
16				.35	.70	2.7	.58	.67	.21	0	.04	.10
17				.35	.50	3.0	2.1	.67	.21	0	.12	.10
18				.35	.50	2.9	2.5	1.1	.32	3.6	.19	.10
19				.35	.35	4.4	2.3	.58	.21	4.2	.05	.10
20				.35	.30	3.8	2.7	13	.99	4.3	.02	.10
21				.35	.30	3.2	3.9	6.3	1.2	4.3	.02	.10
22				3.3	.30	2.3	7.4	7.9	1.5	5.5	.05	.18
23				5.4	.50	2.1	2.3	.51	1.2	2.1	.19	.26
24				5.4	.50	1.9	9.6	.50	.80	.90	.19	.42
25				5.4	.60	1.8	4.4	.30	1.6	4.6	.16	.58
26				7.1	.01	1.1	3.0	2.3	1.9	5.1	.13	.73
27				5.0	.60	1.8	4.1	8.2	1.6	5.5	.10	.89
28				3.0	1.2	1.5	2.4	1.2	1.3	5.8	.10	1.1
29		-----		3.0	1.7	1.5	1.6	.44	.71	1.9	.13	.92
30		-----		1.9	4.5	1.5	1.4	.24	12	1.8	.10	.80
31		-----		-----	4.5	-----	2.4	.03	-----	.63	-----	.68
TOTAL				49.79	35.96	88.3	68.74	88.45	27.66	73.56	4.47	9.73
MEAN				1.66	1.16	2.94	2.22	2.85	.92	2.37	.15	.31
MAX				7.1	4.5	6.2	9.6	15	12	14	.85	1.1
MIN				.35	.01	1.1	.43	.03	0	0	.02	.10
AC-FT				99	71	175	136	175	55	146	8.9	19

08284160 Azotea tunnel at outlet, near Chama, N. Mex.

LOCATION.--Lat 36°51'12", long 106°40'18", Rio Arriba County, in Tierra Amarilla Grant, on left bank at south portal, 0.2 mile upstream from Azotea Creek, and 6.2 miles southwest of Chama.

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

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 7,519.87 ft above mean sea level (levels by Bureau of Reclamation).

EXTREMES.--October to December 1970: Maximum daily discharge, 23 cfs Nov. 17; no flow most of time.

Calendar year 1971: Maximum discharge, 744 cfs June 18 (gage height, 4.96 ft); no flow at times.

REMARKS.--Records represent regulated diversions from Rio Blanco, Little Navajo River, and Navajo River in San Juan River basin.

COOPERATION.--Records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, 1970

Nov. 17..... 23 Dec. 11..... 2.5
Dec. 7..... 12

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1970.....	0	0	0	0	0
November.....	23	23	0	.77	46
December.....	14.5	12	0	.47	29

NOTE.--Flow occurred only on days listed above.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			0	108	142	236	168	21	51	125	70	17
2			0	89	137	268	140	18	36	65	58	17
3			0	58	144	258	137	17	35	50	60	23
4			0	54	210	326	117	42	27	40	72	16
5			0	72	195	351	102	87	18	21	74	1.6
6			0	93	155	411	77	50	13	33	62	6.4
7			0	120	149	454	94	44	11	19	58	17
8			0	143	161	476	84	35	56	18	60	16
9			0	154	133	421	81	22	20	15	54	3.3
10			0	171	118	441	60	18	9.3	13	48	6.1
11			0	190	116	370	50	12	7.5	13	55	16
12			0	222	152	378	50	7.7	5.7	12	54	8.9
13			0	310	180	366	37	11	4.4	12	56	13
14			0	319	192	421	28	11	3.5	12	44	19
15			0	313	213	446	25	7.0	1.2	9.5	50	12
16			0	290	277	486	26	12	.20	9.8	47	13
17			0	283	350	476	24	19	0	21	34	7.3
18			0	245	246	490	25	15	0	23	34	10
19			0	220	196	466	37	7.0	0	17	15	14
20			0	184	177	444	32	193	0	26	8.7	5.4
21			0	186	196	414	41	81	0	27	11	5.0
22			0	178	204	382	88	87	0	26	18	7.1
23			0	166	180	335	159	43	0	66	27	12
24			0	199	146	270	121	27	0	65	27	12
25			0	225	180	266	77	76	0	114	26	9.5
26			46	232	229	228	61	182	0	135	24	9.1
27			1.7	180	335	215	57	153	0	47	26	11
28			.33	178	451	187	38	165	0	44	26	7.0
29		-----	28	161	443	157	24	117	0	85	27	7.2
30		-----	119	166	376	126	26	75	169	70	19	6.3
31		-----	115	-----	268	-----	31	95	-----	63	-----	1.6
TOTAL	0	0	310.03	5,509	6,651	10,565	2,117	1,749.7	467.80	1,296.3	1,244.7	329.8
MEAN	0	0	10.0	184	215	352	68.3	56.4	15.6	41.8	41.5	10.6
MAX	0	0	119	319	451	490	168	193	169	135	74	23
MIN	0	0	0	54	116	126	24	7.0	0	9.5	8.7	1.6
AC-FT	0	0	615	10,930	13,190	20,960	4,200	3,470	928	2,570	2,470	654

CAL YR 1971 TOTAL 30,240.33 MEAN 82.9 MAX 490 MIN 0 AC-FT 59,980

08284200 Willow Creek above Heron Reservoir, near Park View, N. Mex.

LOCATION.--Lat 36°44'33", long 106°37'34", Rio Arriba County, in Tierra Amarilla Grant, on right bank 200 ft downstream from bridge, 0.2 mile downstream from Iron Spring Creek, 3.3 miles west of Park View, and at mile 9.7. Prior to Apr. 1, at site 900 ft downstream.

DRAINAGE AREA.--112 sq mi.

PERIOD OF RECORD.--October and November 1962 (monthly discharge only), December 1962 to current year

GAGE.--Water-stage recorder. Concrete control since June 6, 1963. Datum of gage is 7,196.29 ft above mean sea level (levels by Bureau of Reclamation). Prior to Apr. 1, 1971, at site 900 ft downstream at lower datum.

AVERAGE DISCHARGE.--8 years (1962-70), 10.5 cfs (7,610 acre-ft per year), prior to completion of Azotea tunnel.

EXTREMES.--Current year: Maximum discharge, 636 cfs June 18 (gage height, 3.86 ft); minimum daily, 0.10 cfs Jan. 5, 6, 13, 14. Period of record: Maximum discharge, 1,600 cfs Aug. 11, 1967 (gage height, 3.88 ft, site and datum then in use), prior to completion of Azotea tunnel; no flow at times most years prior to 1971.

REMARKS.--Prior to Apr. 1, records fair except those below 1.0 cfs and those for winter period, which are poor. Records represent inflow to Heron Reservoir and include San Juan River water imported through Azotea tunnel (see sta 08284160) beginning on Nov. 17, 1970. See table below for inflow from a small tributary that enters Willow Creek from left bank just downstream from site in use subsequent to Mar. 31, 1971; records furnished by Bureau of Reclamation. Natural flow at new gage plus tributary inflow is equivalent to natural flow at former site.

COOPERATION.--Subsequent to Mar. 31, 1971, records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.76	.34	.50	2.4	.50	117	154	251	176	26	68
2	.28	.67	.28	.45	4.7	.50	99	141	272	165	18	48
3	.28	.67	.23	.30	4.0	.75	66	141	254	151	21	44
4	.28	.58	.18	.20	2.3	.80	58	213	308	135	21	34
5	.28	.58	.18	.10	1.5	1.5	70	198	320	120	105	23
6	.28	.58	.34	.10	1.6	1.5	90	158	384	91	56	16
7	.28	.48	11	.15	1.6	2.2	108	157	457	99	94	13
8	.34	.48	2.4	.20	2.0	4.5	140	167	485	93	64	53
9	.41	.48	1.3	.20	2.2	36	147	140	430	92	34	29
10	.34	.48	.67	.20	2.5	42	167	123	470	65	28	12
11	.98	.48	.48	.20	2.8	50	185	117	357	55	15	9.2
12	.67	.48	2.0	.15	3.5	65	208	148	371	54	32	7.0
13	.48	.48	1.1	.10	4.5	51	282	177	351	42	14	5.4
14	.34	.41	.87	.10	6.8	26	301	195	412	31	14	4.0
15	.34	.28	1.1	.15	7.9	10	292	212	435	23	10	3.0
16	.48	.23	.76	.20	23	6.3	272	260	508	32	12	1.6
17	.67	17	.76	.20	22	9.0	281	342	498	23	25	1.4
18	1.2	5.1	.87	.20	12	9.0	249	254	522	27	19	1.2
19	.87	.87	.98	.20	8.4	5.8	227	205	484	38	8.0	.88
20	.58	.34	.48	.30	5.7	6.4	191	183	464	33	191	.67
21	.58	.23	.48	.30	3.7	15	182	186	411	42	85	.59
22	.76	.18	.58	.25	2.9	17	184	215	375	76	102	1.2
23	2.0	.23	.58	.20	2.4	20	167	194	339	164	54	1.4
24	1.6	.23	.55	.20	1.6	27	199	154	286	150	28	1.4
25	1.4	.23	.50	.40	1.5	16	230	183	276	92	77	1.5
26	1.4	.34	.50	.50	1.2	48	245	232	246	66	166	1.6
27	2.8	.76	.50	.50	.85	32	185	315	236	77	167	1.5
28	2.8	.58	.50	.50	.80	14	177	443	208	49	186	1.3
29	1.1	.58	.50	.65	-----	29	159	440	180	35	126	5.8
30	.87	.58	.55	.85	-----	99	161	368	145	25	87	245
31	.76	-----	.55	1.4	-----	112	-----	281	-----	44	97	-----
TOTAL	25.73	35.37	32.11	9.95	136.35	757.75	5,439	6,696	10,735	2,365	1,982.0	635.64
MEAN	.83	1.18	1.04	.32	4.87	24.4	181	216	358	76.3	63.9	21.2
MAX	2.8	17	11	1.4	23	112	301	443	522	176	191	245
MIN	.28	.18	.18	.10	.80	.50	58	117	145	23	8.0	.59
AC-FT	51	70	64	20	270	1,500	10,790	13,280	21,290	4,690	3,930	1,260
(+)	-	-	-	-	-	-	6.6	19	24	5.0	0	.3
CAL YR 1970	TOTAL	1,154.34	MEAN	3.16	MAX	64	MIN	0	AC-FT	2,290		
WTR YR 1971	TOTAL	28,849.90	MEAN	79.0	MAX	522	MIN	.10	AC-FT	57,220		

+ Inflow, in acre-feet, from tributary on left bank.

08284200 Willow Creek above Heron Reservoir, near Park View, N. Mex.

LOCATION.--Lat 36°44'33", long 106°37'34", Rio Arriba County, in Tierra Amarilla Grant, on right bank 200 ft downstream from bridge, 0.2 mile downstream from Iron Spring Creek, 3.3 miles west of Park View, and at mile 9.7. Prior to Apr. 1, 1971, at site 900 ft downstream.

DRAINAGE AREA.--112 sq mi.

PERIOD OF RECORD.--October and November 1962 (monthly discharge only), December 1962 to current year.

GAGE.--Water-stage recorder. Concrete control since June 6, 1963. Datum of gage is 7,196.29 ft above mean sea level (levels by Bureau of Reclamation). Prior to Apr. 1, 1971, at site 900 ft downstream at lower datum.

AVERAGE DISCHARGE.--7 calendar years (1963-69), 11.5 cfs (8,330 acre-ft per year), prior to completion of Azotea tunnel.

EXTREMES.--Current year: Maximum discharge, 636 cfs June 18 (gage height, 3.86 ft); minimum daily, 0.10 cfs Jan. 5, 6, 13, 14. Period of record: Maximum discharge, 1,600 cfs Aug. 11, 1967 (gage height, 3.88 ft, site and datum then in use), prior to completion of Azotea tunnel; no flow at times most years prior to 1971.

REMARKS.--Prior to April 1, records fair except those below 1.0 cfs and those for winter period, which are poor. Records represent inflow to Heron Reservoir and include San Juan River water imported through Azotea tunnel (see sta 08284160). See table below for inflow from a small tributary that enters Willow Creek from left bank just downstream from site in use subsequent to Mar. 31, 1971; records furnished by Bureau of Reclamation. Natural flow at new gage plus tributary inflow is equivalent to natural flow at former site.

COOPERATION.--Subsequent to Mar. 31, 1971, records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.50	2.4	.50	117	154	251	176	26	68	155	73	17
2	.45	4.7	.50	99	141	272	165	18	48	87	62	19
3	.30	4.0	.75	66	141	254	151	21	44	63	63	21
4	.20	2.3	.80	58	213	308	135	21	34	49	74	19
5	.10	1.5	1.5	70	198	320	120	105	23	24	81	7.1
6	.10	1.6	1.5	90	158	384	91	56	16	23	64	1.8
7	.15	1.6	2.2	108	157	457	99	94	13	23	63	12
8	.20	2.0	4.5	140	167	485	93	64	53	21	67	16
9	.20	2.2	36	147	140	430	92	34	29	16	55	12
10	.20	2.5	42	167	123	470	65	28	12	14	52	1.7
11	.20	2.8	50	185	117	357	55	15	9.2	11	60	10
12	.15	3.5	65	208	148	371	54	32	7.0	11	61	10
13	.10	4.5	51	282	177	351	42	14	5.4	10	62	8.5
14	.10	6.8	26	301	195	412	31	14	4.0	12	48	18
15	.15	7.9	10	292	212	435	23	10	3.0	10	57	17
16	.20	23	6.3	272	260	508	32	12	1.6	10	53	12
17	.20	22	9.0	281	342	498	23	25	1.4	17	40	8.3
18	.20	12	9.0	249	254	522	27	19	1.2	32	41	6.6
19	.20	8.4	5.8	227	205	484	38	8.0	.88	20	27	16
20	.30	5.7	6.4	191	183	464	33	191	.67	26	8.8	17
21	.30	3.7	15	182	186	411	42	85	.59	39	11	3.1
22	.25	2.9	17	184	215	375	76	102	1.2	41	16	6.0
23	.20	2.4	20	167	194	339	164	54	1.4	71	30	12
24	.20	1.6	27	199	154	286	150	28	1.4	67	29	18
25	.40	1.5	16	230	183	276	92	77	1.5	126	29	13
26	.50	1.2	48	245	232	246	66	166	1.6	149	26	13
27	.50	.85	32	185	315	236	77	167	1.5	62	30	18
28	.50	.80	14	177	443	208	49	186	1.3	60	29	8.9
29	.65	-----	29	159	440	180	35	126	5.8	90	31	14
30	.85	-----	99	161	368	145	25	87	245	75	27	7.1
31	1.4	-----	112	-----	281	-----	44	97	-----	65	-----	4.5
TOTAL	9.95	136.35	757.75	5,439	6,696	10,735	2,365	1,982.0	635.64	1,479	1,369.8	367.6
MEAN	.32	4.87	24.4	181	216	358	76.3	63.9	21.2	47.7	45.7	11.9
MAX	1.4	23	112	301	443	522	176	191	245	155	81	21
MIN	.10	.80	.50	58	117	145	23	8.0	.59	10	8.8	1.7
AC-FT	20	270	1,500	10,790	13,280	21,290	4,690	3,930	1,260	2,930	2,720	729
(†)	-	-	-	6.6	19	24	5.0	0	.3	.60	0	0

CAL YR 1971 TOTAL 31,973.09 MEAN 87.6 MAX 522 MIN .10 AC-FT 63,420

† Inflow, in acre-feet, from tributary on left bank.

08284300 Horse Lake Creek above Heron Reservoir, near Park View, N. Mex.

LOCATION.--Lat 36°42'24", long 106°44'42", Rio Arriba County, in Tierra Amarilla Grant, on right bank 3.7 miles northwest of Heron Dam, 7.8 miles downstream from Horse Lake, and 9.9 miles west of Park View. Prior to July 1 at site 1,100 ft upstream.

DRAINAGE AREA.--45 sq mi, approximately.

PERIOD OF RECORD.--October and November 1962 (monthly discharge only), December 1962 to current year.

GAGE.--Water-stage recorder. Concrete control since June 10, 1963. Datum of gage is 7,188.85 ft above mean sea level (levels by Bureau of Reclamation). Prior to July 1, 1971, at site 1,100 ft upstream at higher datums.

AVERAGE DISCHARGE.--9 years, 0.99 cfs (717 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 42 cfs Sept. 30 (gage height, 2.51 ft), from rating curve extended above 15 cfs; no flow many days.

Period of record: Maximum discharge, 3,960 cfs July 30, 1968 (gage height, 4.9 ft, site and datum then in use), from rating curve extended above 37 cfs on basis of slope-area measurements at gage heights 3.20 and 4.9 ft; no flow most of time.

REMARKS.--Records poor prior to July 1. Diversions above station for irrigation of meadows and for off-channel stock tanks.

COOPERATION.--Subsequent to June 30, 1971, records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					.40	0	0			0		.01
2					.95	0	0			0		.01
3					.34	0	0			.01		.01
4					.10	0	0			.01		0
5					0	0	0			.01		0
6					0	0	0			.01		0
7					0	0	0			.01		0
8					0	.05	0			.01		.02
9					0	.10	0			.01		.01
10					0	.15	0			.01		0
11					0	.30	0			.15		0
12					.05	.78	0			.48		0
13					.10	.78	0			.41		0
14					.20	.50	0			.01		0
15					.50	.20	0			.01		0
16					.90	.10	0			.01		0
17					1.7	.05	0			0		0
18					.97	0	0			0		0
19					.23	0	.05			0		0
20					.05	0	.10			.81		0
21					0	0	.12			.08		0
22					0	0	.10			.02		0
23					0	0	.02			.14		0
24					0	.01	0			.94		0
25					0	0	0			.10		0
26					0	0	0			.01		0
27					0	0	0			.08		0
28					0	0	0			1.7		0
29					-----	0	0			.88		2.2
30					-----	0	0			.08		6.0
31		-----			-----	0	-----		-----	.01	-----	
TOTAL	0	0	0	0	6.49	3.02	.39	0	0	0	6.00	8.26
MEAN	0	0	0	0	.23	.097	.013	0	0	0	.19	.28
MAX	0	0	0	0	1.7	.78	.12	0	0	0	1.7	6.0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	13	6.0	.8	0	0	0	12	16

CAL YR 1970 TOTAL 143.55 MEAN .39 MAX 42 MIN 0 AC-FT 285
WTR YR 1971 TOTAL 24.16 MEAN .066 MAX 6.0 MIN 0 AC-FT 48

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

08284300 Horse Lake Creek above Heron Reservoir, near Park View, N. Mex.

LOCATION.--Lat 36°42'24", long 106°44'42", Rio Arriba County, in Tierra Amarilla Grant, on right bank 3.7 miles northwest of Heron Dam, 7.8 miles downstream from Horse Lake, and 9.9 miles west of Park View. Prior to July 1, 1971, at site 1,100 ft upstream.

DRAINAGE AREA.--45 sq mi, approximately.

PERIOD OF RECORD.--October and November 1962 (monthly discharge only), December 1962 to current year.

GAGE.--Water-stage recorder. Concrete control since June 10, 1963. Datum of gage is 7,188.85 ft above mean sea level (levels by Bureau of Reclamation). Prior to July 1, 1971, at site 1,100 ft upstream at higher datums.

AVERAGE DISCHARGE.--9 calendar years, 0.99 cfs (717 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 42 cfs Sept. 30 (gage height, 2.51 ft), from rating curve extended above 15 cfs; no flow many days.

Period of record: Maximum discharge, 3,960 cfs July 30, 1968 (gage height, 4.9 ft, site and datum then in use), from rating curve extended above 37 cfs on basis of slope-area measurements at gage heights 3.20 and 4.9 ft; no flow most of time.

REMARKS.--Records poor prior to July 1. Diversions above station for irrigation of meadows and for off-channel stock tanks.

COOPERATION.--Subsequent to June 30, 1971, records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		.40	0	0				0	.01	3.3		0
2		.95	0	0				0	.01	.09		0
3		.34	0	0				.01	.01	.01		0
4		.10	0	0				.01	0	.01		0
5		0	0	0				.01	0	.01		0
6		0	0	0				.01	0	0		0
7		0	0	0				.01	0	0		0
8		0	.05	0				.01	.02	0		0
9		0	.10	0				.01	.01	0		0
10		0	.15	0				.01	0	0		0
11		0	.30	0				.15	0	0		0
12		.05	.78	0				.48	0	0		0
13		.10	.78	0				.41	0	0		0
14		.20	.50	0				.01	0	0		0
15		.50	.20	0				.01	0	0		0
16		.90	.10	0				.01	0	0		0
17		1.7	.05	0				0	0	0		0
18		.97	0	0				0	0	0		0
19		.23	0	.05				0	0	0		0
20		.05	0	.10				.81	0	0		0
21		0	0	.12				.08	0	0		0
22		0	0	.10				.02	0	0		0
23		0	0	.02				.14	0	0		0
24		0	.01	0				.94	0	.03		0
25		0	0	0				.10	0	1.4		.01
26		0	0	0				.01	0	3.1		.55
27		0	0	0				.08	0	.15		.77
28		0	0	0				1.7	0	.02		.19
29		-----	0	0				.88	2.2	.01		.14
30		-----	0	0				.08	6.0	.01		.04
31		-----	0	-----		-----		.01	-----	.01	-----	.01
TOTAL	0	6.49	3.02	.39	0	0	0	6.00	8.26	8.15	0	1.71
MEAN	0	.23	.097	.013	0	0	0	.19	.28	.26	0	.055
MAX	0	1.7	.78	.12	0	0	0	1.7	6.0	3.3	0	.77
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	13	6.0	.8	0	0	0	12	16	16	0	3.4

CAL YR 1971 TOTAL 34.02 MEAN .093 MAX 6.0 MIN 0 AC-FT 67

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

08284500 Willow Creek near Park View, N. Mex.

LOCATION.--Lat 36°40'05", long 106°42'15", Rio Arriba County, in Tierra Amarilla Grant, at Heron damsite, 0.4 mile above mouth, 0.7 mile downstream from Horse Lake Creek, and 8.6 miles southwest of Park View.

DRAINAGE AREA.--193 sq mi.

PERIOD OF RECORD.--May 1936 to September 1942 (no winter periods), October 1942 to February 1971 (discontinued). Monthly or yearly discharge only for some periods prior to 1943, published in WSP 1312.

GAGE.--Water-stage recorders 0.7 mile upstream on Horse Lake Creek at mouth and 3 miles upstream on Willow Creek at steel bridge (construction of Heron Dam prevented collection of a record at Heron damsite subsequent to Nov. 8, 1965). At Heron damsite, datum of gage at time of discontinuance was 6,944.99 ft above mean sea level (Bureau of Reclamation datum). Prior to Oct. 1, 1937, at datum 0.79 ft higher. Apr. 19, 1949 to Aug. 8, 1951, at different datums. Aug. 9, 1951 to Sept. 30, 1960, at datum 0.41 ft higher.

AVERAGE DISCHARGE.--33 years (1936-38, 1939-70), 20.7 cfs (15,000 acre-ft per year).

EXTREMES.--Maximum discharge during period October 1970 to February 1971, 152 cfs Nov. 17; minimum, 0.01 cfs Oct. 22.

Period of record: Maximum discharge, 4,500 cfs Apr. 23, 1942 (gage height, 10.45 ft, site and datum then in use), from rating curve extended above 1,400 cfs on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records poor. Small diversions above station for irrigation and stock tanks. Subsequent to Nov. 8, 1965, published record is the composite of Horse Lake Creek at mouth and Willow Creek at steel bridge pending construction of Heron Dam. Diversions through Azotea tunnel were made on Nov. 17, Dec. 7, 11, 1970.

REVISIONS (WATER YEARS).--WSP 858: 1936. WSP 1312: 1943(M), 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	9.5	3.5	.90	1.7							
2	2.8	9.5	2.5	.80	7.7							
3	2.8	5.8	2.0	.70	7.6							
4	3.0	5.3	1.7	.60	4.5							
5	3.7	3.7	1.3	.60	2.5							
6	3.5	4.0	1.4	.60	2.1							
7	3.2	5.0	1.6	.70	1.1							
8	3.2	12	7.3	.70	.81							
9	2.6	4.5	2.5	.60	.73							
10	2.6	1.2	1.7	.60	.65							
11	3.0	1.7	1.6	.60	.81							
12	4.5	3.5	1.5	.50	1.3							
13	2.6	4.0	2.0	.50	6.1							
14	1.7	2.5	1.8	.50	12							
15	1.6	.65	2.5	.60	13							
16	1.6	.81	2.3	.60	25							
17	3.0	12	2.3	.60	24							
18	3.5	18	2.5	.50	18							
19	3.2	5.8	2.0	.40	10							
20	2.3	6.0	1.5	.29	8.2							
21	1.6	5.3	1.0	.34	4.6							
22	2.0	4.2	.80	.58	-							
23	6.3	2.8	1.0	.73	-							
24	3.5	2.5	1.0	.65	-							
25	2.0	2.3	1.0	.73	-							
26	3.5	2.3	.90	.58	-							
27	3.0	4.2	.80	.51	-							
28	5.0	4.7	.80	.58	-							
29	3.0	4.7	.90	.65	-----							
30	6.3	4.2	1.0	.73	-----							
31	9.2	-----	1.0	.99	-----	-----						
TOTAL	102.6	152.66	70.10	18.96	-							
MEAN	3.31	5.09	2.26	.61	-							
MAX	9.2	18	16	.99	-							
MIN	1.6	.65	.80	.29	-							
AC-FT	204	303	139	38	-							

CAL YR 1970 TOTAL 2,640.75 MEAN 7.23 MAX 112 MIN .64 AC-FT 5,240

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

08284510 Heron Reservoir near Park View, N. Mex.

LOCATION.--Lat 36°39'56", long 106°42'13", Rio Arriba County, in Tierra Amarilla Grant, at Heron Dam on Willow Creek, 0.2 mile upstream from Rio Chama, 5.1 miles northeast of El Vado Dam, and 8.7 miles southwest of Park View.

DRAINAGE AREA.--193 sq mi.

PERIOD OF RECORD.--October 1970 to September 1971.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Mar. 24, 1971, nonrecording gage.

EXTREMES.--Current year: Maximum contents, 40,730 acre-ft, Sept. 13 (elevation 7,077.6 ft); no storage prior to Oct. 21.

REMARKS.--Reservoir is formed by earthfill dam; storage began Oct. 21, 1970. Total capacity 401,300 acre-ft at elevation 7,186.1 ft (low point on crest of uncontrolled spillway), including 1,340 acre-ft of dead storage at elevation 7,003.0 ft, invert of gate sill of outlet tunnel. Reservoir is used for storage of transmountain water from San Juan River basin and for recreation. Figures given herein represent total storage.

COOPERATION.--Records furnished by Bureau of Reclamation.

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

6,955	0	6,985	304	7,030	7,280
6,960	16	6,990	465	7,040	11,680
6,965	41	6,995	696	7,060	24,340
6,970	71	7,000	1,050	7,080	43,430
6,975	111	7,010	2,250		
6,980	189	7,020	4,250		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	-	457	-	569	856	2,400	11,480	24,110	37,200	36,270	40,290
2	0	-	461	-	574	864	2,560	11,790	24,580	36,990	36,270	40,290
3	0	146	465	-	592	864	2,630	12,040	25,060	36,780	36,380	40,400
4	0	157	465	543	602	864	2,700	12,410	25,700	36,480	36,380	40,400
5	0	168	-	543	607	864	2,660	12,830	26,260	36,270	36,580	40,510
6	0	178	-	543	-	-	2,520	13,150	26,910	35,870	36,680	40,510
7	0	189	473	543	-	-	2,340	13,480	27,830	35,560	36,990	40,510
8	0	201	493	543	617	871	2,160	13,800	28,670	35,260	37,100	40,620
9	0	217	497	-	617	885	2,180	14,030	29,450	35,460	37,100	40,620
10	0	228	505	-	617	947	2,500	14,250	30,330	35,660	37,100	40,620
11	0	239	509	547	617	1,040	2,860	14,480	30,960	35,660	37,200	40,620
12	0	248	-	551	617	1,130	3,280	14,700	31,610	35,760	37,200	40,620
13	0	258	-	551	-	1,260	3,810	15,050	32,350	35,870	37,300	40,730
14	0	271	513	551	-	1,350	4,400	15,460	32,070	35,970	37,300	40,620
15	0	281	517	551	-	1,390	4,970	15,870	31,880	35,970	37,300	40,620
16	0	291	517	-	691	1,400	5,490	16,350	31,790	36,070	37,300	40,510
17	0	304	522	-	744	1,420	6,060	16,960	31,790	36,070	37,300	39,960
18	0	359	522	556	788	1,440	6,550	17,470	31,610	36,070	37,410	39,420
19	0	378	-	556	808	1,450	7,030	17,850	32,540	35,760	37,410	38,990
20	0	387	-	556	-	1,470	7,390	18,170	33,400	35,360	37,720	38,460
21	0	-	526	556	-	1,480	7,770	18,490	34,180	35,060	37,930	37,930
22	11	-	530	556	842	1,510	8,160	18,880	34,860	34,960	38,030	37,410
23	12	400	530	-	849	1,540	8,480	19,220	35,560	35,260	38,140	36,890
24	23	407	530	-	849	1,580	8,860	19,480	36,070	35,560	38,250	36,680
25	45	414	-	560	849	1,620	9,290	19,820	36,580	35,760	38,350	36,680
26	56	-	-	565	856	1,670	9,840	20,230	37,100	35,870	38,670	36,680
27	68	428	-	565	-	1,780	10,160	20,790	37,510	35,970	39,100	36,680
28	85	-	534	565	856	1,790	10,550	21,640	37,720	36,070	39,530	36,680
29	91	-	538	565	-----	1,820	10,840	22,370	37,620	36,170	39,850	36,890
30	102	450	538	-	-----	1,950	11,180	23,120	37,410	36,170	39,960	37,620
31	113	-----	538	569	-----	2,190	-----	23,650	-----	36,270	40,180	-----
MAX	113	-	-	-	-	-	11,180	23,650	37,720	37,200	40,180	40,730
MIN	0	-	-	-	-	-	2,160	11,480	24,110	34,960	36,270	36,680
(+)	-	6,989.6	6,991.8	-	-	7,009.6	7,039.0	7,059.1	7,074.5	7,073.4	7,077.1	7,074.7
(#)	+113	+337	+88	+31	+287	+1,334	+8,990	+12,470	+13,760	-1,140	+3,910	-2,560

CAL YR 1970.....# +538

WTR YR 1971.....# +37,620

+ Elevation, in feet, at end of month.

Change in contents, in acre-feet.

NOTE.--Contents interpolated Oct. 31, Jan. 31, Feb. 28. Contents prior to Mar. 24 are at 1300 hrs.

08284510 Heron Reservoir near Park View, N. Mex.

LOCATION.--Lat 36°39'56", long 106°42'13", Rio Arriba County, in Tierra Amarilla Grant, at Heron Dam on Willow Creek, 0.2 mile upstream from Rio Chama, 5.1 miles northeast of El Vado Dam, and 8.7 miles southwest of Park View.

DRAINAGE AREA.--193 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Mar. 24, 1971, nonrecording gage.

EXTREMES.--Current year: Maximum contents, 42,630 acre-ft, Dec. 31 (elevation 7,079.3 ft); minimum, 543 acre-ft Jan. 4-8 (elevation, 6,991.9 ft).

Period of record: Maximum contents, 42,630 acre-ft Dec. 31, 1971 (elevation, 7,079.3 ft); no storage prior to Oct. 21, 1970.

REMARKS.--Reservoir is formed by earthfill dam; storage began Oct. 21, 1970. Total capacity 401,300 acre-ft at elevation 7,186.1 ft (low point on crest of uncontrolled spillway), including 1,340 acre-ft of dead storage at elevation 7,003.0 ft, invert of gate sill of outlet tunnel. Reservoir is used for storage of transmountain water from San Juan River basin and for recreation. Figures given herein represent total storage.

COOPERATION.--Records furnished by Bureau of Reclamation.

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

6,990	465	7,030	7,280
6,995	696	7,040	11,680
7,000	1,050	7,060	24,340
7,010	2,250	7,080	43,430
7,020	4,250		

CONTENTS, IN ACRE-FEET, AT 2400, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	-	569	856	2,400	11,480	24,110	37,200	36,270	40,290	37,720	39,740	41,950
2	-	574	864	2,560	11,790	24,580	36,990	36,270	40,290	37,720	39,850	41,950
3	-	592	864	2,630	12,040	25,060	36,780	36,380	40,400	37,620	39,960	42,060
4	543	602	864	2,700	12,410	25,700	36,480	36,380	40,400	37,620	40,070	42,060
5	543	607	864	2,660	12,830	26,260	36,270	36,580	40,510	37,620	40,290	42,060
6	543	-	-	2,520	13,150	26,910	35,870	36,680	40,510	37,720	40,400	42,060
7	543	-	-	2,340	13,480	27,830	35,560	36,990	40,510	37,720	40,510	42,060
8	543	617	871	2,160	13,800	28,670	35,260	37,100	40,620	37,720	40,510	42,060
9	-	617	885	2,180	14,030	29,450	35,460	37,100	40,620	37,820	40,620	42,180
10	-	617	947	2,560	14,250	30,330	35,660	37,100	40,620	37,820	40,730	42,060
11	547	617	1,040	2,860	14,480	30,960	35,660	37,200	40,620	37,820	40,840	42,180
12	551	617	1,130	3,280	14,700	31,610	35,760	37,200	40,620	37,930	40,950	42,180
13	551	-	1,260	3,810	15,050	32,350	35,870	37,300	40,730	37,930	41,060	42,180
14	551	-	1,350	4,400	15,460	32,070	35,970	37,300	40,620	37,930	41,170	42,180
15	551	-	1,390	4,970	15,870	31,880	35,970	37,300	40,620	37,930	41,280	42,290
16	-	691	1,400	5,490	16,350	31,790	36,070	37,300	40,510	37,930	41,390	42,290
17	-	744	1,420	6,060	16,960	31,790	36,070	37,300	39,960	38,030	41,390	42,290
18	556	788	1,440	6,550	17,470	31,610	36,070	37,410	39,420	38,030	41,500	42,290
19	556	808	1,450	7,030	17,850	32,540	35,760	37,410	38,990	38,030	41,500	42,290
20	556	-	1,470	7,390	18,170	33,400	35,360	37,720	38,460	38,030	41,500	42,290
21	556	-	1,480	7,770	18,490	34,180	35,060	37,930	37,930	38,140	41,500	42,290
22	556	842	1,510	8,160	18,880	34,860	34,960	38,030	37,410	38,140	41,620	42,290
23	-	849	1,540	8,480	19,220	35,560	35,260	38,140	36,890	38,250	41,620	42,290
24	-	849	1,580	8,860	19,480	36,070	35,560	38,250	36,680	38,460	41,620	42,290
25	560	849	1,620	9,290	19,820	36,580	35,760	38,350	36,680	38,780	41,620	42,400
26	565	856	1,670	9,840	20,230	37,100	35,870	38,670	36,680	39,100	41,730	42,520
27	565	-	1,780	10,160	20,790	37,510	35,970	39,100	36,680	39,200	41,730	42,520
28	565	856	1,790	10,550	21,640	37,720	36,070	39,530	36,680	39,200	41,840	42,520
29	565	-----	1,820	10,840	22,370	37,620	36,170	39,850	36,890	39,420	41,840	42,520
30	-	-----	1,950	11,180	23,120	37,410	36,170	39,960	37,620	39,530	41,950	42,520
31	569	-----	2,190	-----	23,650	-----	36,270	40,180	-----	39,640	-----	42,630
MAX	-	-	-	11,180	23,650	37,720	37,200	40,180	40,730	39,640	41,950	42,630
MIN	-	-	-	2,160	11,480	24,110	34,960	36,270	36,680	37,620	39,740	41,950
(+)	-	-	7,009.6	7,039.0	7,059.1	7,074.5	7,073.4	7,077.1	7,074.7	7,076.6	7,078.7	7,079.3
(#)	+31	+287	+1,334	+8,990	+12,470	+13,760	-1,140	+3,910	-2,560	+2,020	+2,310	+680

CAL YR 1971..... # +42,092

+ Elevation, in feet, at end of month.

Change in contents, in acre-feet.

NOTE.--Contents interpolated Jan. 31, Feb. 28. Contents prior to Mar. 24 are at 1300 hrs.

RIO GRANDE BASIN

08284520 Willow Creek below Heron Dam, N. Mex.

LOCATION.--Lat 36°39'56", long 106°42'13", Rio Arriba County, in Tierra Amarilla Grant, in outlet conduits of Heron Dam, 0.2 mile upstream from Rio Chama, 5.1 miles northeast of El Vado Dam, and 8.7 miles southwest of Park View.

DRAINAGE AREA.--193 sq mi.

PERIOD OF RECORD.--January to December 1971.

GAGE.--Totalizing flowmeters in each of two outlet conduits (one 14-inch diam, one 120-inch diam) in Heron Dam.

EXTREMES.--Current year: Maximum daily discharge, 514 cfs June 18; no flow at times.

REMARKS.--Flow regulated by Heron Dam since Oct. 21, 1970 (see sta 08284510). No releases from reservoir prior to Apr. 2, 1971.

COOPERATION.--Records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				0	2.5	8.0	256	4.0	2.0	73	6.6	2.0
2				11	2.5	13	256	5.0	1.5	101	2.0	2.0
3				25	5.2	13	256	3.5	1.5	88	2.0	4.0
4				25	6.2	8.3	256	5.5	1.5	34	2.5	0
5				83	3.8	3.4	256	8.1	1.5	.50	2.0	0
6				142	3.2	3.4	255	5.4	1.5	.50	2.0	2.5
7				192	4.3	5.2	256	8.7	3.0	.50	2.0	2.5
8				256	5.4	9.9	214	8.7	3.0	.50	2.0	2.0
9				120	5.4	16	3.2	23	2.5	.50	2.0	3.0
10				0	5.7	18	3.2	15	2.0	.50	2.0	4.0
11				0	5.8	13	3.2	4.5	2.0	.50	1.5	0
12				0	4.9	8.8	3.3	2.5	2.0	0	2.0	0
13				0	4.1	17	2.7	3.5	2.5	0	2.0	4.0
14				0	3.8	507	2.6	3.5	1.5	2.0	2.0	1.5
15				0	3.8	507	2.5	3.5	2.0	2.0	1.5	2.0
16				0	3.7	507	3.0	3.5	54	2.0	2.0	2.0
17				0	3.9	506	3.0	3.0	256	2.0	2.0	4.0
18				0	3.8	514	45	3.5	257	7.3	2.0	0
19				0	3.1	7.4	202	3.0	257	8.6	2.0	0
20				0	2.3	7.4	211	18	257	8.6	2.0	4.0
21				0	2.0	8.3	217	27	256	9.1	2.0	2.0
22				0	1.9	8.3	150	14	257	2.5	2.0	1.5
23				1.9	1.9	6.8	5.5	0	257	2.5	2.0	6.0
24				4.8	2.7	6.2	5.6	1.1	103	2.5	2.0	0
25				5.8	3.4	3.3	5.5	1.0	2.5	2.5	2.0	0
26				10	3.1	5.3	12	5.5	2.5	17	2.5	0
27				11	3.1	5.3	20	9.5	7.1	16	2.0	4.0
28				6.3	3.5	57	8.6	8.2	5.5	13	0	2.0
29		-----		4.9	3.6	255	4.0	2.8	3.0	9.1	2.0	2.0
30		-----		3.8	3.6	255	4.0	2.2	24	2.5	2.0	6.0
31		-----		-----	3.6	-----	4.0	3.0	-----	2.5	-----	0
TOTAL	0	0	0	902.5	115.8	3,303.3	2,925.9	209.7	2,028.6	411.20	62.6	63.0
MEAN	0	0	0	30.1	3.74	110	94.4	6.76	67.6	13.3	2.09	2.03
MAX	0	0	0	256	6.2	514	256	27	257	101	6.6	6.0
MIN	0	0	0	0	1.9	3.3	2.5	0	1.5	0	0	0
AC-FT	0	0	0	1,790	230	6,550	5,800	416	4,020	816	124	125

CAL YR 1971 TOTAL 10,022.60 MEAN 27.5 MAX 514 MIN 0 AC-FT 19,880

08285000 El Vado Reservoir near Tierra Amarilla, N. Mex.

LOCATION.--Lat 36°35'39", long 106°44'00", Rio Arriba County, in Tierra Amarilla Grant, at outlet tower of dam on Rio Chama, at village of El Vado, 12.4 miles southwest of Tierra Amarilla, and at mile 77.7.

DRAINAGE AREA.--873 sq mi, of which about 100 sq mi probably is noncontributing.

PERIOD OF RECORD.--January 1935 to September 1965 (monthend contents only), October 1965 to current year. Prior to October 1967, contents at about 0730 hrs.

GAGE.--Water-stage recorder. Prior to October 1967, nonrecording gage only below gage height 6,879.3 ft. Datum of gage is 8.21 ft above mean sea level.

EXTREMES.--Current year: Maximum contents, 23,620 acre-ft May 29, 30 (gage height, 6,814.4 ft); minimum, 1,060 acre-ft Mar. 18-21 (gage height, 6,775.0 ft).

Period of record: Maximum contents, 204,900 acre-ft June 4, 5, 1948 (gage height, 6,904.2 ft), of which 7,400 acre-ft was uncontrolled storage; no storage at times prior to December 1966.

REMARKS.--Reservoir is formed by rockfill dam, steel faced. Storage began in January 1935. Capacity 196,500 acre-ft between gage heights 6,759.0 and 6,902.0 ft (top of spillway gate), based on reservoir survey of January 1966. Dead storage, 1,060 acre-ft below 6,775.0 ft (sill of outlet works). Figures given herein represent total contents. Reservoir is used to impound water for irrigation by Middle Rio Grande Conservancy District. Rehabilitation of outlet works, completed in December 1966, increased valve-controlled release from about 1,750 to about 4,000 cfs.

COOPERATION.--Records furnished by Bureau of Reclamation.

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

6,775	1,060	6,790	6,510	6,805	15,770
6,780	2,190	6,795	9,240	6,810	19,730
6,785	4,100	6,800	12,290	6,815	24,180

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21,180	21,270	1,130	1,110	1,110	1,110	2,870	23,530	23,430	21,800	19,230	19,310
2	21,100	21,270	1,130	1,110	1,130	1,100	3,070	23,530	23,430	21,270	19,230	19,310
3	21,190	21,180	1,130	1,110	1,140	1,100	3,220	23,430	23,430	20,750	19,230	19,310
4	21,180	21,180	1,130	1,110	1,140	1,110	3,340	23,430	23,430	20,750	19,230	19,230
5	21,180	21,180	1,130	1,110	1,130	1,110	3,340	23,430	23,430	20,840	19,230	19,230
6	21,180	21,270	1,130	1,110	1,130	1,100	4,550	23,430	23,430	20,750	19,310	19,230
7	21,180	21,270	1,130	1,110	1,110	1,100	6,000	23,430	23,430	20,750	19,230	19,230
8	21,270	21,010	1,130	1,110	1,110	1,100	7,300	23,340	23,430	20,840	19,310	19,310
9	21,360	20,150	1,130	1,110	1,100	1,130	8,450	23,340	23,430	20,750	19,230	19,310
10	21,270	19,560	1,140	1,110	1,100	1,130	9,820	23,430	23,430	20,750	19,310	19,310
11	21,270	18,980	1,130	1,100	1,100	1,130	11,340	23,430	23,430	20,750	19,310	19,310
12	21,180	18,330	1,110	1,100	1,100	1,130	13,150	23,430	23,340	20,750	19,310	19,310
13	21,270	17,770	1,110	1,100	1,100	1,160	15,110	23,430	23,340	20,750	19,230	19,310
14	21,180	17,300	1,130	1,100	1,110	1,130	16,830	23,430	23,340	20,660	19,310	19,310
15	21,180	16,520	1,130	1,100	1,110	1,110	17,300	23,530	23,430	20,660	19,310	19,230
16	21,270	15,620	1,110	1,100	1,110	1,100	20,150	23,530	23,430	20,660	19,310	19,230
17	21,180	14,680	1,110	1,100	1,130	1,080	21,800	23,530	23,430	20,660	19,310	19,230
18	21,180	13,760	1,130	1,100	1,130	1,060	23,070	23,430	23,430	20,580	19,310	19,230
19	21,100	12,680	1,110	1,100	1,110	1,060	23,070	23,430	23,430	20,070	19,310	19,310
20	21,100	11,460	1,130	1,100	1,130	1,060	22,970	23,430	23,430	19,560	19,230	19,390
21	21,180	10,350	1,130	1,100	1,110	1,060	23,250	23,430	23,340	19,390	19,310	19,310
22	21,270	9,180	1,130	1,100	1,100	1,080	23,160	23,430	23,340	19,390	19,230	19,310
23	21,270	8,060	1,130	1,100	1,100	1,100	23,070	23,430	23,340	19,390	19,310	19,310
24	21,360	6,930	1,130	1,100	1,110	1,110	23,070	23,430	23,340	19,390	19,310	19,310
25	21,270	5,800	1,130	1,100	1,110	1,110	23,340	23,430	23,340	19,310	19,310	19,310
26	21,270	4,640	1,130	1,100	1,110	1,140	23,430	23,430	23,340	19,310	19,310	19,310
27	21,270	3,460	1,130	1,100	1,110	1,310	23,250	23,430	23,340	19,310	19,310	19,310
28	21,180	2,480	1,110	1,100	1,110	1,630	23,340	23,530	23,250	19,310	19,310	19,310
29	21,180	1,220	1,110	1,100	-----	1,890	23,340	23,620	22,790	19,310	19,310	19,310
30	21,180	1,140	1,110	1,100	-----	2,250	23,430	23,620	22,340	19,310	19,310	19,390
31	21,180	-----	1,110	1,100	-----	2,840	-----	23,530	-----	19,310	19,310	-----
MAX	21,360	21,270	1,140	1,110	1,140	2,840	23,430	23,620	23,430	21,800	19,310	19,390
MIN	21,100	1,140	1,110	1,100	1,100	1,060	2,870	23,340	22,340	19,310	19,230	19,230
(+)	6,811.7	6,775.5	6,775.3	6,775.2	6,775.3	6,781.9	6,814.2	6,814.3	6,813.0	6,809.5	6,809.5	6,809.6
(#)	-90	-20,040	-30	-10	+10	+1,730	+20,590	+100	-1,190	-3,030	0	+80

CAL YR 1970..... ± +10
WTR YR 1971..... ± -1,880

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

Change in contents, in acre-feet.

08285000 El Vado Reservoir near Tierra Amarilla, N. Mex.

LOCATION.--Lat 36°35'39", long 106°44'00", Rio Arriba County, in Tierra Amarilla Grant, at outlet tower of dam on Rio Chama, at village of El Vado, 12.4 miles southwest of Tierra Amarilla, and at mile 77.7.

DRAINAGE AREA.--873 sq mi, of which about 100 sq mi probably is noncontributing.

PERIOD OF RECORD.--January 1935 to September 1965 (monthend contents only), October 1965 to current year. Prior to October 1967, contents at about 0730 hrs.

GAGE.--Water-stage recorder. Prior to October 1967, nonrecording gage only below gage height 6,879.3 ft. Datum of gage is 8.21 ft above mean sea level.

EXTREMES.--Current year: Maximum contents, 23,620 acre-ft May 29, 30 (gage height, 6,814.4 ft); minimum, 1,060 acre-ft Mar. 18-21, Dec. 13 (gage height, 6,775.0 ft).

Period of record: Maximum contents, 204,900 acre-ft June 4, 5, 1948 (gage height, 6,904.2 ft), of which 7,400 acre-ft was uncontrolled storage; no storage at times prior to December 1966.

REMARKS.--Reservoir is formed by rockfill dam, steel faced. Storage began in January 1935. Capacity 196,500 acre-ft between gage heights 6,759.0 and 6,902.0 ft (top of spillway gate), based on reservoir survey of January 1966. Dead storage, 1,060 acre-ft below 6,775.0 ft (sill of outlet works). Figures given herein represent total contents. Reservoir is used to impound water for irrigation by Middle Rio Grande Conservancy District. Rehabilitation of outlet works, completed in December 1966, increased valve-controlled release from about 1,750 to about 4,000 cfs.

COOPERATION.--Records furnished by Bureau of Reclamation.

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

6,775	1,060	6,790	6,510	6,805	15,770
6,780	2,190	6,795	9,240	6,810	19,730
6,785	4,100	6,800	12,290	6,815	24,180

CONTENTS, IN ACRE-FEET, AT 2400, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1,110	1,110	1,110	2,870	23,530	23,430	21,800	19,230	19,310	19,310	19,310	1,200
2	1,110	1,130	1,100	3,070	23,530	23,430	21,270	19,230	19,310	19,310	18,980	1,200
3	1,110	1,140	1,100	3,220	23,430	23,430	20,750	19,230	19,310	19,310	18,170	1,190
4	1,110	1,140	1,110	3,340	23,430	23,430	20,750	19,230	19,230	19,310	17,220	1,110
5	1,110	1,130	1,110	3,340	23,340	23,430	20,840	19,230	19,230	19,310	15,480	1,110
6	1,110	1,130	1,100	4,550	23,430	23,430	20,750	19,310	19,230	19,310	13,830	1,110
7	1,110	1,110	1,100	6,000	23,430	23,430	20,750	19,230	19,230	19,390	12,290	1,100
8	1,110	1,110	1,100	7,300	23,340	23,430	20,840	19,310	19,310	19,310	10,900	1,100
9	1,110	1,100	1,130	8,450	23,340	23,430	20,750	19,230	19,310	19,310	9,640	1,100
10	1,110	1,100	1,130	9,820	23,430	23,430	20,750	19,310	19,310	19,310	8,450	1,080
11	1,100	1,100	1,130	11,340	23,430	23,430	20,750	19,310	19,310	19,390	7,570	1,080
12	1,100	1,100	1,130	13,150	23,430	23,430	20,750	19,310	19,310	19,390	6,200	1,080
13	1,100	1,100	1,160	15,110	23,430	23,340	20,750	19,230	19,310	19,310	4,880	1,060
14	1,100	1,110	1,130	16,830	23,430	23,340	20,660	19,310	19,310	19,310	3,550	1,080
15	1,100	1,110	1,110	17,300	23,530	23,430	20,660	19,310	19,230	19,310	1,760	1,100
16	1,100	1,110	1,100	20,150	23,530	23,430	20,660	19,310	19,230	19,310	1,240	1,100
17	1,100	1,130	1,080	21,800	23,530	23,430	20,660	19,310	19,230	19,310	1,220	1,110
18	1,100	1,130	1,060	23,070	23,430	23,430	20,580	19,310	19,230	19,310	1,220	1,110
19	1,100	1,110	1,060	23,070	23,430	23,430	20,070	19,310	19,310	19,310	1,200	1,110
20	1,100	1,130	1,060	22,970	23,430	23,430	19,560	19,230	19,390	19,310	1,200	1,130
21	1,100	1,110	1,060	23,250	23,430	23,340	19,390	19,310	19,310	19,390	1,220	1,130
22	1,100	1,100	1,080	23,160	23,430	23,340	19,390	19,230	19,310	19,310	1,240	1,130
23	1,100	1,100	1,100	23,070	23,430	23,340	19,390	19,310	19,310	19,310	1,220	1,130
24	1,100	1,110	1,110	23,070	23,430	23,340	19,390	19,310	19,310	19,310	1,200	1,130
25	1,100	1,110	1,110	23,340	23,430	23,340	19,310	19,310	19,310	19,390	1,200	1,110
26	1,100	1,110	1,140	23,430	23,430	23,340	19,310	19,310	19,310	19,390	1,200	1,110
27	1,100	1,110	1,310	23,250	23,430	23,340	19,310	19,310	19,310	19,310	1,200	1,110
28	1,100	1,110	1,630	23,340	23,530	23,250	19,310	19,310	19,310	19,310	1,200	1,110
29	1,100	-----	1,890	23,340	23,620	22,790	19,310	19,310	19,310	19,310	1,200	1,130
30	1,100	-----	2,250	23,430	23,620	22,340	19,310	19,310	19,390	19,310	1,190	1,130
31	1,100	-----	2,840	-----	23,530	-----	19,310	19,310	-----	19,310	-----	1,130
MAX	1,110	1,140	2,840	23,430	23,620	23,430	21,800	19,310	19,390	19,390	19,310	1,200
MIN	1,100	1,100	1,060	2,870	23,340	22,340	19,310	19,230	19,230	19,310	1,190	1,060
(+)	6,775.2	6,775.3	6,781.9	6,814.2	6,814.3	6,813.0	6,809.5	6,809.5	6,809.6	6,809.5	6,775.8	6,775.4
(#)	-10	+10	+1,730	+20,590	+100	-1,190	-3,030	0	+80	-80	-18,120	-60

CAL YR 1971.....† +20

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

‡ Change in contents, in acre-feet.

08285500 Rio Chama below El Vado Dam, N. Mex.

LOCATION.--Lat 36°34'48", long 106°43'24", Rio Arriba County, in Tierra Amarilla Grant, on left bank 1.5 miles downstream from El Vado Dam, 2.8 miles upstream from Rio Nuevas, 1.3 miles southwest of Tierra Amarilla, and at mile 76.2.

DRAINAGE AREA.--877 sq mi, of which about 100 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1913 to November 1915, April to November 1916, March, April 1920, September 1920 to August 1924, October 1935 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "Chama River" prior to 1935, as "near Tierra Amarilla" 1913-14, 1935-47, as "near El Vado" 1915-16, and as "at El Vado" 1920-24.

GAGE.--Water-stage recorder. Datum of gage is 6,696.12 ft above mean sea level. Prior to October 1935, at site 1.5 miles upstream at different datum. October 1935 to September 1938 at site 1.1 miles upstream at datum 30.34 ft higher.

AVERAGE DISCHARGE.--5 years (1913-15, 1920-23), 448 cfs (324,600 acre-ft per year), prior to completion of El Vado Dam; 36 years (1935-71), 369 cfs (267,300 acre-ft per year), after completion of El Vado Dam; 20 calendar years (1951-70), 327 cfs (236,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 984 cfs Apr. 1 (gage height, 3.46 ft); minimum, 19 cfs Aug. 3-5.

Period of record: Maximum discharge, 9,000 cfs May 22, 1920 (gage height, 12 ft, site and datum then in use), from rating curve extended above 3,500 cfs; no flow Mar. 25, 26, 31, 1955. Maximum discharge since construction of El Vado Dam in 1935, 6,010 cfs May 17, 1941 (gage height, 6.89 ft).

Flood of Oct. 4 or 5, 1911, was greater than floods in September 1904 and May 1920, from information by local residents.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated since 1935 by El Vado Reservoir (see sta 08285000). Diversions for irrigation of about 10,600 acres above station.

REVISIONS (WATER YEARS).--WSP 1312: 1914, 1949. WSP 1392: 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	49	81	60	76	65	868	558	460	558	39	53
2	122	78	61	55	83	61	645	796	327	627	37	37
3	85	142	74	55	88	59	684	912	336	544	27	29
4	65	95	65	55	83	65	671	920	362	314	19	29
5	83	69	61	55	72	78	775	824	314	281	19	27
6	85	51	65	55	65	57	736	710	302	297	38	23
7	63	77	59	50	67	57	358	762	302	280	156	23
8	63	230	65	50	63	63	419	824	302	260	111	23
9	63	524	72	55	59	83	447	730	358	75	96	23
10	105	410	85	60	59	85	205	621	310	45	31	21
11	154	405	78	60	63	95	208	633	285	35	41	21
12	125	405	59	60	67	106	212	697	269	35	72	21
13	88	405	47	60	74	125	219	652	257	35	47	21
14	119	400	51	60	83	130	219	664	681	31	30	21
15	76	455	67	60	88	93	223	639	690	20	31	21
16	69	591	57	65	98	78	227	704	684	20	30	37
17	125	652	51	65	103	83	230	775	678	20	30	242
18	129	639	69	65	98	83	313	684	684	59	30	238
19	106	658	51	65	85	76	690	603	207	439	30	230
20	85	684	49	65	83	78	574	492	174	465	97	253
21	76	678	72	70	67	108	434	530	184	358	90	277
22	76	664	65	78	59	139	620	444	148	197	138	253
23	76	671	61	72	57	171	565	502	139	69	59	265
24	85	704	57	63	63	242	414	465	122	106	45	164
25	129	697	61	61	69	245	475	439	111	88	31	45
26	133	710	63	61	63	269	733	410	100	78	36	30
27	124	697	63	61	63	423	749	395	93	63	63	25
28	125	730	65	61	63	686	627	450	112	53	78	25
29	72	644	61	65	-----	736	568	450	546	27	31	143
30	97	128	59	67	-----	730	455	465	541	46	51	458
31	88	-----	65	69	-----	882	-----	502	-----	97	53	-----
TOTAL	3,033	13,342	1,959	1,903	2,061	6,251	14,563	19,252	10,078	5,622	1,686	3,078
MEAN	97.8	445	63.2	61.4	73.6	202	485	621	336	181	54.4	103
MAX	154	730	85	78	103	882	868	920	690	627	156	458
MIN	63	49	47	50	57	57	205	395	93	20	19	21
AC-FT	6,020	26,460	3,890	3,770	4,090	12,400	28,890	38,190	19,990	11,150	3,340	6,110
CAL YR 1970	TOTAL	99,296	MEAN	272	MAX	3,620	MIN	42	AC-FT	197,000		
WTR YR 1971	TOTAL	82,828	MEAN	227	MAX	920	MIN	19	AC-FT	164,300		

08285500 Rio Chama below El Vado Dam, N. Mex.

LOCATION.--Lat 36°34'48", long 106°43'24", Rio Arriba County, in Tierra Amarilla Grant, on left bank 1.5 miles downstream from El Vado Dam, 2.8 miles upstream from Rio Nutrias, 13 miles southwest of Tierra Amarilla, and at mile 76.2.

DRAINAGE AREA.--877 sq mi, of which about 100 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1913 to November 1915, April to November 1916, March, April 1920, September 1920 to August 1924, October 1935 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "Chama River" prior to 1935, as "near Tierra Amarilla" 1913-14, 1935-47, as "near El Vado" 1915-16, and as "at El Vado" 1920-24.

GAGE.--Water-stage recorder. Datum of gage is 6,696.12 ft above mean sea level. Prior to October 1935, at site 1.5 miles upstream at different datum. October 1935 to September 1938 at site 1.1 miles upstream at datum 30.34 ft higher.

AVERAGE DISCHARGE.--36 calendar years (1936-71), 368 cfs (266,600 acre-ft per year); 20 calendar years (1952-71), 329 cfs (238,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 992 cfs Nov. 7 (gage height, 3.49 ft); minimum, 19 cfs Aug. 3-5.

Period of record: Maximum discharge, 9,000 cfs May 22, 1920 (gage height, 12 ft, site and datum then in use), from rating curve extended above 3,500 cfs; no flow Mar. 25, 26, 31, 1955. Maximum discharge since construction of El Vado Dam in 1935, 6,010 cfs May 17, 1941 (gage height, 6.89 ft).

Flood of Oct. 4 or 5, 1911, was greater than floods in September 1904 and May 1920, from information by local residents.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated since 1935 by El Vado Reservoir (see sta 08285000). Diversions for irrigation of about 10,600 acres above station.

REVISIONS (WATER YEARS).--WSP 1312: 1914, 1949. WSP 1392: 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	60	76	65	868	558	460	558	39	53	490	67	63
2	55	83	61	645	796	327	627	37	37	248	277	88
3	55	88	59	684	912	336	544	27	29	225	514	88
4	55	83	65	671	920	362	314	19	29	133	576	65
5	55	72	78	775	824	314	281	19	27	98	952	51
6	55	65	57	736	710	302	297	38	23	76	936	53
7	50	67	57	358	762	302	280	156	23	51	905	74
8	50	63	63	419	824	302	260	111	23	61	796	76
9	55	59	83	447	730	358	75	96	23	81	742	67
10	60	59	85	205	621	310	45	31	21	54	723	67
11	60	63	95	208	633	285	35	41	21	47	723	61
12	60	67	106	212	697	269	35	72	21	59	749	67
13	60	74	125	219	652	257	35	47	21	70	723	72
14	60	83	130	219	664	681	31	30	21	69	749	76
15	60	88	93	223	639	690	20	31	21	55	598	67
16	65	98	78	227	704	684	20	30	37	55	136	72
17	65	103	83	236	775	678	20	30	242	66	111	72
18	65	98	83	313	684	684	59	30	238	116	95	74
19	65	85	76	690	603	207	439	30	230	87	81	74
20	65	83	78	574	492	174	465	97	253	76	61	76
21	70	67	108	434	530	184	358	90	277	89	78	76
22	78	59	139	620	444	148	197	138	253	86	100	81
23	72	57	171	565	502	139	69	59	265	76	93	83
24	63	63	242	414	465	122	106	45	164	76	76	88
25	61	69	245	475	439	111	88	31	45	131	76	90
26	61	63	269	733	410	100	78	36	30	239	78	85
27	61	63	423	749	395	93	63	63	25	158	81	83
28	61	63	686	627	450	112	53	78	25	138	88	81
29	65	-----	736	568	450	546	27	31	143	144	85	81
30	67	-----	730	455	465	541	46	51	458	108	74	76
31	69	-----	882	-----	502	-----	97	53	-----	72	-----	69
TOTAL	1,903	2,061	6,251	14,563	19,252	10,078	5,622	1,686	3,078	3,534	11,343	2,296
MEAN	61.4	73.6	202	485	621	336	181	54.4	103	114	378	74.1
MAX	78	103	882	868	920	690	627	156	458	490	952	90
MIN	50	57	57	205	395	93	20	19	21	47	61	51
AC-FT	3,770	4,090	12,400	28,890	38,190	19,990	11,150	3,340	6,110	7,010	22,500	4,550

CAL YR 1971 TOTAL 81,667 MEAN 224 MAX 952 MIN 19 AC-FT 162,000

08286500 Rio Chama above Abiquiu Reservoir, N. Mex.

LOCATION.--Lat 36°19'06", long 106°35'50", Rio Arriba County, on left bank 40 ft downstream from site of former bridge, 7.7 miles downstream from Rio Gallina, 9 miles northwest of Youngsville, 15.6 miles upstream from Abiquiu Dam, 30.3 miles downstream from El Vado Dam, and at mile 47.4.

DRAINAGE AREA.--1,600 sq mi, of which about 100 sq mi is probably noncontributing.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,275 ft (from topographic map).

AVERAGE DISCHARGE.--10 calendar years, 338 cfs (244,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,000 cfs Sept. 30 (gage height, 5.45 ft); minimum, 18 cfs Sept. 16.
Period of record: Maximum discharge, 4,890 cfs Aug. 11, 1968 (gage height, 8.30 ft), from rating curve extended above 3,000 cfs on basis of slope-area measurement of peak flow; minimum, 7.5 cfs Oct. 17, 18, 1963.
Major floods probably occurred on Sept. 29, 1904, Oct. 4 or 5, 1911, and May 22, 1920.

REMARKS.--Records fair except those for winter periods, which are poor. Flow regulated by El Vado Reservoir (see sta 08285000). Diversions for irrigation of about 15,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	65	85	66	962	466	480	542	78	60	827	70	74
2	63	95	65	686	673	355	602	44	50	277	100	72
3	63	105	65	650	884	271	610	41	35	283	420	87
4	63	103	70	668	902	325	372	36	33	175	510	79
5	63	88	87	682	890	307	280	25	30	120	800	60
6	60	81	73	902	686	258	289	35	27	103	930	63
7	60	77	73	379	740	258	307	46	27	73	910	80
8	65	70	80	376	775	258	279	314	27	59	810	85
9	70	70	84	518	770	277	306	170	27	73	725	80
10	70	70	91	264	673	339	83	82	25	77	715	78
11	70	78	99	210	594	235	55	63	23	59	715	70
12	70	82	106	213	686	240	42	58	22	55	740	72
13	70	90	117	218	655	218	40	78	21	60	725	80
14	70	96	142	222	642	444	40	50	20	96	730	85
15	70	99	123	228	619	646	39	35	19	63	730	80
16	73	109	99	235	673	673	29	35	19	58	315	85
17	73	120	91	228	725	664	26	34	105	61	130	85
18	73	121	95	235	745	682	28	33	242	106	110	85
19	73	102	90	582	632	442	216	35	220	115	100	85
20	73	100	87	660	514	180	476	125	228	72	90	85
21	80	91	94	469	514	184	420	446	258	68	76	85
22	85	67	125	508	458	178	280	110	262	97	95	88
23	80	63	151	650	469	151	144	231	232	72	106	90
24	75	69	198	427	455	145	113	97	262	70	99	95
25	70	84	258	427	434	133	95	105	72	101	81	95
26	70	75	252	594	399	117	91	60	48	260	82	95
27	70	69	355	836	355	108	76	50	34	221	83	90
28	70	62	570	614	392	98	60	122	29	111	87	90
29	75	-----	740	619	413	359	52	66	155	156	92	90
30	75	-----	730	469	416	546	45	60	945	112	82	85
31	80	-----	795	-----	458	-----	70	60	-----	100	-----	80
TOTAL	2,187	2,421	6,071	14,731	18,707	9,571	6,107	2,824	3,557	4,180	11,258	2,553
MEAN	70.5	86.5	196	491	603	319	197	91.1	119	135	375	82.4
MAX	85	121	795	962	902	682	610	446	945	827	930	95
MIN	60	62	65	210	355	98	26	25	19	55	70	60
AC-FT	4,340	4,800	12,040	29,220	37,110	18,980	12,110	5,600	7,060	8,290	22,330	5,060

CAL YR 1971 TOTAL 84,167 MEAN 231 MAX 962 MIN 19 AC-FT 166,900

08286900 Abiquiu Reservoir near Abiquiu, N. Mex.

LOCATION.--Lat 36°14'24", long 106°25'44", Rio Arriba County, in Piedra Lumbre Grant, in operations building at Abiquiu Dam on Rio Chama, 6.6 miles northwest of Abiquiu, and at mile 32.1.

DRAINAGE AREA.--2,146 sq mi, of which about 100 sq mi is probably noncontributing.

PERIOD OF RECORD.--February 1963 to September 1965 (monthend contents only), October 1965 to current year. Prior to October 1969, contents at 2400 hours.

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

EXTREMES.--Current year: Maximum contents, 4,200 acre-ft Sept. 30 (elevation, 6,116.77 ft); minimum, 1,450 acre-ft Jan. 1 (elevation, 6,105.33 ft).

Period of record: Maximum contents, 99,580 acre-ft Sept. 13, 1965 (elevation, 6,186.61 ft); no storage at times prior to May 1968.

REMARKS.--Reservoir is formed by earthfill dam, completed Feb. 5, 1963. Capacity, 1,216,000 acre-ft (revised) between elevations 6,060 ft (invert of outlet tunnel) and 6,350 ft (crest of spillway), based on capacity table effective Jan. 1, 1971. No dead storage. Reservoir is normally used for flood control. From May 1965 to January 1966 storage normally held in El Vado Reservoir was held in Abiquiu Reservoir while outlet works at El Vado were being rehabilitated. A desilting pool of about 2,000 acre-ft has been maintained since May 1968.

COÖPERATION.--Records furnished by Corps of Engineers.

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

Oct. 1 to Dec. 31		Jan. 1 to Sept. 30	
6,104	1,850	6,105	1,410
6,108	2,850	6,110	2,200
		6,115	3,560
		6,120	5,510

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,390	2,430	2,100	1,460	1,630	1,930	2,390	1,900	2,100	2,010	2,100	2,240
2	2,480	2,250	2,030	1,460	1,650	1,950	2,350	2,150	2,060	2,170	2,010	2,230
3	2,440	2,240	2,010	1,490	1,710	1,990	2,080	2,210	1,970	2,170	1,990	2,230
4	2,320	2,420	2,010	1,480	1,780	1,990	2,080	2,180	2,020	2,110	1,990	2,190
5	2,310	2,410	2,060	1,480	1,820	2,070	2,100	2,120	2,130	2,050	2,050	2,190
6	2,350	2,350	2,090	1,490	1,860	1,990	2,160	1,970	2,020	1,970	2,350	2,200
7	2,490	2,350	2,030	1,500	1,880	1,960	2,080	2,030	1,990	1,980	2,100	2,210
8	2,480	2,350	2,100	1,520	1,870	1,970	1,960	2,060	1,980	2,020	2,420	2,230
9	2,430	2,480	2,090	1,510	1,920	1,990	1,960	2,200	1,980	2,220	2,540	2,200
10	2,380	2,560	2,070	1,530	1,950	2,010	2,070	1,980	2,030	1,950	2,100	2,200
11	2,380	2,460	2,070	1,530	1,960	2,030	1,960	1,930	1,960	1,990	2,190	2,200
12	2,450	2,500	2,040	1,520	1,990	2,030	1,950	2,000	1,990	1,900	2,060	2,210
13	2,360	2,480	1,990	1,510	2,000	2,050	1,940	2,030	2,000	1,920	2,120	2,220
14	2,410	2,470	1,910	1,510	2,010	2,090	1,980	2,050	1,960	1,940	2,090	2,220
15	2,470	2,440	1,980	1,500	2,040	2,260	1,990	2,060	1,960	1,960	2,040	2,220
16	2,380	2,510	2,100	1,500	2,080	2,440	2,000	2,010	1,890	1,990	2,070	2,180
17	2,370	2,610	2,160	1,500	2,090	2,590	2,020	2,040	2,000	1,980	2,080	2,190
18	2,420	2,650	2,110	1,500	2,110	2,720	2,030	2,120	2,030	1,950	2,090	2,230
19	2,460	2,650	2,120	1,520	2,060	2,850	2,060	2,000	2,040	1,920	2,210	2,190
20	2,400	2,630	2,090	1,530	2,020	2,260	2,120	1,940	2,030	2,280	2,130	2,190
21	2,440	2,540	2,150	1,560	2,000	2,090	1,990	1,950	2,000	2,290	2,640	2,220
22	2,410	2,520	2,170	1,570	1,960	2,180	1,950	2,000	1,990	2,060	2,240	2,210
23	2,450	2,480	2,140	1,580	1,960	2,410	2,130	1,900	1,970	2,080	2,270	2,200
24	2,420	2,500	2,110	1,600	1,960	2,150	2,030	2,000	1,950	1,890	2,250	2,240
25	2,350	2,500	2,120	1,610	1,990	2,070	1,920	2,030	1,960	2,050	2,250	2,210
26	2,420	2,350	2,140	1,600	2,000	2,110	2,010	2,060	1,950	2,000	2,190	2,190
27	2,560	2,390	2,180	1,600	1,970	2,090	2,230	2,060	1,930	1,980	2,220	2,180
28	2,100	2,180	2,280	1,600	1,940	2,130	2,100	2,040	1,930	1,950	2,240	2,170
29	2,230	2,130	2,250	1,600	-----	2,350	2,020	2,070	1,910	1,980	2,340	2,160
30	2,300	2,060	2,190	1,600	-----	2,300	1,970	2,040	1,990	1,950	2,210	3,660
31	2,290	-----	2,200	1,610	-----	2,240	-----	2,040	-----	2,030	2,240	-----
MAX	2,560	2,650	2,280	1,610	2,110	2,850	2,390	2,210	2,130	2,290	2,640	3,660
MIN	2,100	2,060	1,910	1,460	1,630	1,930	1,920	1,900	1,890	1,890	1,990	2,160
(+)	6,105.86	6,104.90	6,105.52	6,106.52	6,108.62	6,110.18	6,108.77	6,109.20	6,108.90	6,109.12	6,110.17	6,115.28
(#)	-90	-230	+140	+140	+330	+300	-270	+70	-50	+40	+210	+1,420

CAL YR 1970..... # +120

WTR YR 1971..... # +2,090

+ Elevation, in feet, at end of month.

Change in contents, in acre-feet.

NOTE.--Change in contents for January and for water year computed on basis of revised capacity table effective Jan. 1, 1971.

08286900 Abiquiu Reservoir near Abiquiu, N. Mex.

LOCATION.--Lat 36°14'24", long 106°25'44", Rio Arriba County, in Piedra Lumbre Grant, in operations building at Abiquiu Dam on Rio Chama, 6.6 miles northwest of Abiquiu, and at mile 32.1.

DRAINAGE AREA.--2,146 sq mi, of which about 100 sq mi is probably noncontributing.

PERIOD OF RECORD.--February 1963 to September 1965 (monthend contents only), October 1965 to current year. Prior to October 1969, contents at 2400 hours.

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

EXTREMES.--Current year: Maximum contents, 4,200 acre-ft Sept. 30 (elevation, 6,116.77 ft); minimum, 1,450 acre-ft Jan. 1 (elevation, 6,103.33 ft).

Period of record: Maximum contents, 99,580 acre-ft Sept. 13, 1965 (elevation, 6,186.61 ft); no storage at times prior to May 1968.

REMARKS.--Reservoir is formed by earthfill dam, completed Feb. 5, 1963. Capacity, 1,216,000 acre-ft between elevations 6,060 ft (invert of outlet tunnel) and 6,350 ft (crest of spillway), based on capacity table effective Jan. 1, 1971. No dead storage. Reservoir is normally used for flood control. From May 1965 to January 1966 storage normally held in El Vado Reservoir was held in Abiquiu Reservoir while outlet works at El Vado were being rehabilitated. A desilting pool of about 2,000 acre-ft has been maintained since May 1968.

COOPERATION.--Records furnished by Corps of Engineers.

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

6,105	1,410
6,110	2,200
6,115	3,560
6,120	5,510

CONTENTS, IN ACRE-FEET, AT 0800, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1,460	1,630	1,930	2,390	1,900	2,100	2,010	2,100	2,240	4,060	2,040	2,000
2	1,460	1,650	1,950	2,350	2,150	2,060	2,170	2,010	2,230	2,620	1,970	2,020
3	1,490	1,710	1,990	2,080	2,210	1,970	2,170	1,990	2,230	2,220	2,080	2,030
4	1,480	1,780	1,990	2,080	2,180	2,020	2,110	1,990	2,190	2,140	2,000	2,060
5	1,480	1,820	2,070	2,100	2,120	2,130	2,050	2,050	2,190	2,090	2,020	2,030
6	1,490	1,860	1,990	2,160	1,970	2,020	1,970	2,350	2,200	2,000	1,900	1,950
7	1,500	1,880	1,960	2,080	2,030	1,990	1,980	2,100	2,210	2,000	2,030	2,010
8	1,520	1,870	1,970	1,960	2,060	1,980	2,020	2,420	2,230	1,970	1,950	2,030
9	1,510	1,920	1,990	1,960	2,200	1,980	2,220	2,540	2,200	1,990	1,990	2,040
10	1,530	1,950	2,010	2,070	1,980	2,030	1,950	2,100	2,200	2,050	1,980	2,040
11	1,530	1,960	2,030	1,960	1,930	1,960	1,990	2,190	2,200	2,030	2,000	2,030
12	1,520	1,990	2,030	1,950	2,000	1,990	1,900	2,060	2,210	2,000	2,020	1,980
13	1,510	2,000	2,050	1,940	2,030	2,000	1,920	2,120	2,220	2,030	2,040	1,940
14	1,510	2,010	2,090	1,980	2,050	1,960	1,940	2,090	2,220	2,040	1,980	2,000
15	1,500	2,040	2,260	1,990	2,060	1,960	1,960	2,040	2,220	2,030	2,070	2,070
16	1,500	2,080	2,440	2,000	2,010	1,890	1,990	2,070	2,180	2,000	2,100	2,050
17	1,500	2,090	2,590	2,020	2,040	2,000	1,980	2,080	2,190	2,020	1,930	2,020
18	1,500	2,110	2,720	2,030	2,120	2,030	1,950	2,090	2,230	2,010	1,950	2,030
19	1,520	2,060	2,850	2,060	2,000	2,040	1,920	2,210	2,190	2,090	1,960	2,050
20	1,530	2,020	2,260	2,120	1,940	2,030	2,280	2,130	2,190	2,060	2,010	2,070
21	1,560	2,000	2,090	1,990	1,950	2,000	2,290	2,640	2,220	2,040	2,050	2,070
22	1,570	1,960	2,180	1,950	2,000	1,990	2,060	2,240	2,210	2,050	2,030	2,010
23	1,580	1,960	2,410	2,130	1,900	1,970	2,080	2,270	2,200	2,100	2,030	2,030
24	1,600	1,960	2,150	2,030	2,000	1,950	1,890	2,250	2,240	2,010	2,030	2,100
25	1,610	1,990	2,070	1,920	2,030	1,960	2,050	2,250	2,210	2,120	2,020	2,200
26	1,600	2,000	2,110	2,010	2,060	1,950	2,000	2,190	2,190	2,030	1,970	2,100
27	1,600	1,970	2,090	2,230	2,060	1,930	1,980	2,220	2,180	2,120	1,950	2,100
28	1,600	1,940	2,130	2,100	2,040	1,930	1,950	2,240	2,170	2,140	1,950	2,190
29	1,600	-----	2,350	2,020	2,070	1,910	1,980	2,340	2,160	2,070	1,960	2,120
30	1,600	-----	2,300	1,970	2,040	1,990	1,950	2,210	3,660	2,050	1,970	1,960
31	1,610	-----	2,240	-----	2,040	-----	2,030	2,240	-----	2,080	-----	2,040
MAX	1,610	2,110	2,850	2,390	2,210	2,130	2,290	2,640	3,660	4,060	2,100	2,200
MIN	1,460	1,630	1,930	1,920	1,900	1,890	1,890	1,990	2,160	1,970	1,900	1,940
(+)	6,106.52	6,108.62	6,110.18	6,108.77	6,109.20	6,108.90	6,109.12	6,110.17	6,115.28	6,109.39	6,108.81	6,109.15
(#)	+140	+330	+300	-270	+70	-50	+40	+210	+1,420	-1,580	-110	+70

CAL YR 1971..... # +570

+ Elevation, in feet, at end of month.

Change in contents, in acre-feet.

NOTE.--Change in contents for calendar year computed on basis of revised capacity table effective Jan. 1, 1971.

08287000 Rio Chama below Abiquiu Dam, N. Mex.

LOCATION.--Lat 36°14'12", long 106°24'59", in SE¼SE¼ sec.8, T.23 N., R.5 E., Rio Arriba County, on right bank 0.8 mile downstream from Abiquiu Dam, 5.9 miles northwest of Abiquiu, and at mile 31.3.

DRAINAGE AREA.--2,147 sq mi, of which about 100 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1961 to current year (monthly discharge only, October 1961).

GAGE.--Water-stage recorder. Concrete control since Jan. 25, 1966. Altitude of gage is 6,040 ft (from topographic map). Prior to Jan. 25, 1966, at datum 1.60 ft lower.

AVERAGE DISCHARGE.--10 years, 370 cfs (268,100 acre-feet per year).

EXTREMES.--Current year: Maximum discharge, 1,100 cfs Sept. 30 (gage height, 4.02 ft); minimum, about 2.4 cfs Oct. 28.

Period of record: Maximum discharge, 2,990 cfs July 1, 1965 (gage height, 6.69 ft); maximum gage height, 7.29 ft Jan. 14, 1967 (backwater from ice); minimum discharge, about 0.5 cfs Mar. 17, 1966.

REMARKS.--Records good. Flow controlled by El Vado Reservoir (see sta 08285000) 46.4 miles upstream and Abiquiu Reservoir (see sta 08286900) 0.8 mile upstream. Diversions for irrigation of about 17,600 acres above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	120	165	68	99	57	907	423	487	551	97	62
2	136	101	119	67	87	49	918	625	461	611	80	53
3	157	64	97	68	80	60	743	888	301	657	48	59
4	123	109	79	68	76	79	689	957	255	474	43	35
5	77	138	80	58	78	113	714	954	337	348	59	26
6	62	103	97	43	79	113	845	792	315	302	163	24
7	83	86	77	43	79	91	616	744	273	282	98	24
8	94	86	70	52	63	92	415	776	266	285	187	38
9	94	305	101	57	70	92	449	894	262	356	410	32
10	85	469	99	67	79	92	381	740	314	221	194	19
11	105	399	118	88	80	108	253	641	299	70	120	19
12	163	385	107	88	87	118	233	672	219	45	52	19
13	119	398	94	86	99	117	225	692	238	30	65	20
14	95	336	57	87	99	97	219	665	349	30	72	20
15	124	391	29	84	99	22	249	691	692	26	41	30
16	124	469	48	78	113	22	249	694	644	32	26	27
17	77	592	79	78	124	22	251	708	640	41	31	54
18	107	633	85	79	148	22	248	785	658	41	40	259
19	143	633	73	79	146	266	487	719	557	41	108	234
20	118	674	73	78	126	311	730	571	206	364	51	215
21	106	679	81	91	127	87	604	500	185	579	339	251
22	93	664	103	99	97	21	489	514	188	411	344	293
23	102	653	99	99	71	231	650	473	170	269	245	257
24	116	672	62	99	71	330	587	449	131	102	123	273
25	99	724	58	99	84	278	452	437	123	101	137	164
26	118	732	58	99	97	306	551	413	118	115	75	61
27	208	734	58	99	97	375	821	396	102	101	38	49
28	164	721	79	99	80	526	805	383	93	65	63	39
29	95	752	93	99	-----	725	682	432	197	60	141	60
30	95	420	77	99	-----	824	584	440	508	51	37	584
31	86	-----	68	99	-----	819	-----	442	-----	34	57	-----
TOTAL	3,467	13,302	2,583	2,497	2,635	6,465	16,046	19,510	9,588	6,695	3,584	3,300
MEAN	112	443	83.3	80.5	94.1	209	535	629	320	216	116	110
MAX	208	752	165	99	148	824	918	957	692	657	410	584
MIN	62	64	29	43	63	21	219	383	93	26	26	19
AC-FT	6,880	26,380	5,120	4,950	5,230	12,820	31,830	38,700	19,020	13,280	7,110	6,550
CAL YR 1970	TOTAL	115,669	MEAN	317	MAX	2,550	MIN	24	AC-FT	229,400		
WTR YR 1971	TOTAL	89,672	MEAN	246	MAX	957	MIN	19	AC-FT	177,900		

08287000 Rio Chama below Abiquiu Dam, N. Mex.

LOCATION.--Lat 36°14'12", long 106°24'59", in SE¼SE¼ sec.8, T.23 N., R.5 E., Rio Arriba County, on right bank 0.8 mile downstream from Abiquiu Dam, 5.9 miles northwest of Abiquiu, and at mile 31.3.

DRAINAGE AREA.--2,147 sq mi, of which about 100 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1961 to current year (monthly discharge only, October 1961).

GAGE.--Water-stage recorder. Concrete control since Jan. 25, 1966. Altitude of gage is 6,040 ft (from topographic map). Prior to Jan. 25, 1966, at datum 1.60 ft lower.

AVERAGE DISCHARGE.--10 calendar years, 363 cfs (263,000 acre-feet per year).

EXTREMES.--Current year: Maximum discharge, 1,580 cfs Oct. 1 (gage height, 4.57 ft); minimum, about 4.2 cfs Dec. 6.

Period of record: Maximum discharge, 2,990 cfs July 1, 1965 (gage height, 6.69 ft); maximum gage height, 7.29 ft Jan. 14, 1967 (backwater from ice); minimum discharge, about 0.5 cfs Mar. 17, 1966.

REMARKS.--Records good. Flow controlled by El Vado Reservoir (see sta 08285000) 46.4 miles upstream and Abiquiu Reservoir (see sta 08286900) 0.8 mile upstream. Diversions for irrigation of about 17,600 acres above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	68	99	57	907	423	487	551	97	62	1,350	124	78
2	67	87	49	918	625	461	611	80	53	938	72	76
3	68	80	60	743	888	301	657	48	59	280	397	81
4	68	76	79	689	957	255	474	43	35	274	560	89
5	58	78	113	714	954	337	348	59	26	179	846	89
6	43	79	113	845	792	315	302	163	24	119	962	53
7	43	79	91	616	744	273	282	98	24	108	939	57
8	52	63	92	415	776	266	285	187	38	72	870	87
9	57	70	92	449	894	262	356	410	32	60	786	84
10	67	79	92	381	740	314	221	194	19	86	759	84
11	88	80	108	253	641	299	70	120	19	88	746	84
12	88	87	118	233	672	219	45	52	19	49	758	84
13	86	99	117	225	692	238	30	65	20	58	770	61
14	87	99	97	219	665	349	30	72	20	87	742	47
15	84	99	22	249	691	692	26	41	30	95	727	69
16	78	113	22	249	694	644	32	26	27	60	450	82
17	78	124	22	251	708	640	41	31	54	70	186	66
18	79	148	22	248	785	658	41	40	259	81	118	56
19	79	146	266	487	719	557	41	108	234	118	93	56
20	78	126	311	730	571	206	364	51	215	115	74	65
21	91	127	87	604	500	185	579	339	251	77	85	82
22	99	97	21	489	514	188	411	344	293	73	109	78
23	99	71	231	650	473	170	269	245	257	113	109	67
24	99	71	330	587	449	131	102	123	273	75	117	67
25	99	84	278	452	437	123	101	137	164	149	115	136
26	99	97	306	551	413	118	115	75	61	219	103	154
27	99	97	375	821	396	102	101	38	49	280	96	163
28	99	80	526	805	383	93	65	63	39	195	96	183
29	99	-----	725	682	432	197	60	141	60	159	96	190
30	99	-----	824	584	440	508	51	37	584	158	88	114
31	99	-----	819	-----	442	-----	34	57	-----	120	-----	57
TOTAL	2,497	2,635	6,465	16,046	19,510	9,588	6,695	3,584	3,300	5,905	11,993	2,739
MEAN	80.5	94.1	209	535	629	320	216	116	110	190	400	88.4
MAX	99	148	824	918	957	692	657	410	584	1,350	962	190
MIN	43	63	21	219	383	93	26	26	19	49	72	47
AC-FT	4,950	5,230	12,820	31,830	38,700	19,020	13,280	7,110	6,550	11,710	23,790	5,430

CAL YR 1971 TOTAL 90,957 MEAN 249 MAX 1,350 MIN 19 AC-FT 180,400

08289000 Rio Ojo Caliente at La Madera, N. Mex.

LOCATION.--Lat 36°20'59", long 106°02'37", in NW¼NE¼ sec.1, T.24 N., R.8 E., Rio Arriba County, on left bank 400 ft upstream from bridge on State Highway 96, 2.4 miles south of La Madera, 2.6 miles downstream from confluence of Rio Vallecitos and Rio Tusas, and 3.1 miles north of Ojo Caliente.

DRAINAGE AREA.--419 sq mi.

PERIOD OF RECORD.--April 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,358.84 ft above mean sea level. Prior to Apr. 23, 1934, at site about 2.6 miles upstream at different datum. Apr. 23, 1934 to Apr. 21, 1936, at datum 12.58 ft lower and Apr. 22, 1936 to Oct. 26, 1956, at datum 13.84 ft lower, both at site 1,400 ft downstream.

AVERAGE DISCHARGE.--39 years, 67.8 cfs (49,120 acre-ft per year); 20 calendar years (1951-70), 58.5 cfs (42,380 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 595 cfs July 26 (gage height, 4.93 ft); minimum, 3.7 cfs July 14.

Period of record: Maximum discharge, 3,140 cfs Apr. 21, 1958 (gage height, 6.42 ft), from rating curve extended above 1,300 cfs; maximum gage height, 7.25 ft, from floodmarks, June 19, 1966; minimum discharge, 0.2 cfs Aug. 17, 1956.

The flood of Apr. 21, 1958, may have been exceeded by a flood in May 1920, from information by local resident.

REMARKS.--Records fair. Diversions above station for irrigation of about 3,500 acres (1962 determination).

REVISIONS (WATER YEARS).--WSP 1712: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	15	14	17	21	18	200	76	27	5.7	16	8.0
2	9.6	15	12	17	22	20	148	69	22	6.1	12	7.7
3	8.7	16	14	17	22	21	146	67	20	5.7	12	7.1
4	7.3	15	12	16	21	22	124	63	17	5.6	11	6.7
5	7.3	15	13	14	19	21	110	51	15	6.0	10	6.2
6	8.6	15	13	11	20	20	131	54	14	5.8	12	6.1
7	9.9	16	13	10	18	20	158	73	13	5.6	10	6.0
8	9.9	16	15	11	19	21	130	108	12	5.7	11	5.8
9	10	15	16	13	19	23	119	90	9.9	5.7	12	5.2
10	10	16	18	14	20	22	132	64	10	5.5	12	5.3
11	11	16	15	15	20	24	107	57	9.2	5.2	13	5.3
12	13	16	13	16	19	31	119	64	8.5	5.1	13	5.1
13	13	16	13	17	19	41	97	70	8.7	4.9	12	4.6
14	13	15	14	17	20	35	82	67	7.8	4.1	10	4.6
15	13	12	16	17	20	24	87	61	7.9	4.5	9.6	4.6
16	14	12	14	17	21	23	95	50	7.6	4.6	9.1	4.5
17	14	14	14	17	21	24	130	46	7.3	4.5	8.6	6.1
18	15	15	16	18	22	23	88	42	6.6	4.4	8.1	5.4
19	15	15	15	19	20	20	74	35	6.5	5.0	8.1	5.6
20	14	14	16	19	19	23	61	32	6.1	5.8	8.1	5.3
21	14	14	17	20	18	32	47	27	5.8	6.2	8.1	6.2
22	14	15	18	21	18	40	92	23	5.8	7.0	8.1	8.4
23	15	15	17	20	20	77	75	23	5.8	7.8	8.6	8.7
24	15	15	15	20	21	101	91	26	6.0	20	10	8.7
25	15	16	17	20	20	74	139	22	6.3	12	11	8.5
26	16	18	17	20	20	90	189	21	6.3	50	8.8	8.5
27	16	16	18	20	16	265	106	23	6.1	18	8.1	8.0
28	15	15	18	20	17	319	96	25	5.7	11	7.1	7.5
29	15	16	16	20	-----	224	82	24	5.5	8.2	8.9	10
30	15	16	17	20	-----	236	77	26	5.5	8.9	9.0	44
31	15	-----	17	21	-----	300	-----	35	-----	13	8.9	-----
TOTAL	390.5	455	473	534	552	2,234	3,332	1,514	294.9	267.6	314.2	233.7
MEAN	12.6	15.2	15.3	17.2	19.7	72.1	111	48.8	9.83	8.63	10.1	7.79
MAX	16	18	18	21	22	319	200	108	27	50	16	44
MIN	7.3	12	12	10	16	18	47	21	5.5	4.1	7.1	4.5
AC-FT	775	902	938	1,060	1,090	4,430	6,610	3,000	585	531	623	464

CAL YR 1970 TOTAL 18,234.0 MEAN 50.0 MAX 583 MIN 5.3 AC-FT 36,170
 WTR YR 1971 TOTAL 10,594.9 MEAN 29.0 MAX 319 MIN 4.1 AC-FT 21,010

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

08289000 Rio Ojo Caliente at La Madera, N. Mex.

LOCATION.--Lat 36°20'59", long 106°02'37", in NW 1/4 sec. 1, T.24 N., R.8 E., Rio Arriba County, on left bank 400 ft upstream from bridge on State Highway 96, 2.4 miles south of La Madera, 2.6 miles downstream from confluence of Rio Vallecitos and Rio Tusas, and 3.1 miles north of Ojo Caliente.

DRAINAGE AREA.--419 sq mi.

PERIOD OF RECORD.--April 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,358.84 ft above mean sea level. Prior to Apr. 23, 1934, at site about 2.6 miles upstream at different datum. Apr. 23, 1934 to Apr. 21, 1936, at datum 12.58 ft lower and Apr. 22, 1936 to Oct. 26, 1956, at datum 13.84 ft lower, both at site 1,400 ft downstream.

AVERAGE DISCHARGE.--39 calendar years, 67.9 cfs (49,190 acre-ft per year); 20 calendar years (1952-71), 58.8 cfs (42,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 595 cfs July 26 (gage height, 4.93 ft); minimum, 3.7 cfs July 14.
Period of record: Maximum discharge, 3,140 cfs Apr. 21, 1958 (gage height, 6.42 ft), from rating curve extended above 1,300 cfs; maximum gage height, 7.25 ft, from floodmarks, June 19, 1966; minimum discharge, 0.2 cfs Aug. 17, 1956.
The flood of Apr. 21, 1958, may have been exceeded by a flood in May 1920, from information by local resident.

REMARKS.--Records fair. Diversions above station for irrigation of about 3,500 acres (1962 determination).

REVISIONS (WATER YEARS).--WSP 1712: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	17	21	18	200	76	27	5.7	16	8.0	42	34	16
2	17	22	20	148	69	22	6.1	12	7.7	41	32	16
3	17	22	21	146	67	20	5.7	12	7.1	36	27	18
4	16	21	22	124	63	17	5.6	11	6.7	26	25	18
5	14	19	21	110	51	15	6.0	10	6.2	19	24	17
6	11	20	20	131	54	14	5.8	12	6.1	17	23	18
7	10	18	20	158	73	13	5.6	10	6.0	16	21	20
8	11	19	21	130	108	12	5.7	11	5.8	16	20	18
9	13	19	23	119	90	9.9	5.7	12	5.2	15	20	17
10	14	20	22	132	64	10	5.5	12	5.3	13	19	17
11	15	20	24	107	57	9.2	5.2	13	5.3	14	17	18
12	16	19	31	119	64	8.5	5.1	13	5.1	13	17	16
13	17	19	41	97	70	8.7	4.9	12	4.6	12	17	19
14	17	20	35	82	67	7.8	4.1	10	4.6	12	18	19
15	17	20	24	87	61	7.9	4.5	9.6	4.6	12	18	17
16	17	21	23	95	50	7.6	4.6	9.1	4.5	11	21	17
17	17	21	24	130	46	7.3	4.5	8.6	6.1	14	23	17
18	18	22	23	88	42	6.6	4.4	8.1	5.4	18	23	18
19	19	20	20	74	35	6.5	5.0	8.1	5.6	18	17	19
20	19	19	23	61	32	6.1	5.8	8.1	5.3	17	15	18
21	20	18	32	47	27	5.8	6.2	8.1	6.2	17	18	16
22	21	18	40	92	23	5.8	7.0	8.1	8.4	17	22	17
23	20	20	77	75	23	5.8	7.8	8.6	8.7	17	21	19
24	20	21	101	91	26	6.0	20	10	8.7	18	18	22
25	20	20	74	139	22	6.3	12	11	8.5	36	20	23
26	20	20	90	189	21	6.3	50	8.8	8.5	38	22	25
27	20	16	265	106	23	6.1	18	8.1	8.0	32	22	26
28	20	17	319	96	25	5.7	11	7.1	7.5	28	23	27
29	20	-----	224	82	24	5.3	8.2	8.9	10	28	20	31
30	20	-----	236	77	26	5.5	8.9	9.0	44	44	18	27
31	21	-----	300	-----	35	-----	13	8.9	-----	36	-----	23
TOTAL	534	552	2,234	3,332	1,514	294.9	267.6	314.2	233.7	693	635	609
MEAN	17.2	19.7	72.1	111	48.8	9.83	8.63	10.1	7.79	22.4	21.2	19.6
MAX	21	22	319	200	108	27	50	16	44	44	34	31
MIN	10	16	18	47	21	5.5	4.1	7.1	4.5	11	15	16
AC-FT	1,060	1,090	4,430	6,610	3,000	585	531	623	464	1,370	1,260	1,210

CAL YR 1971 TOTAL 11,213.4 MEAN 30.7 MAX 319 MIN 4.1 AC-FT 22,240

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

08290000 Rio Chama near Chamita, N. Mex.

LOCATION.--Lat 36°04'26", long 106°06'40", in NW¼NE¼ sec. 8, T.21 N., R.8 E., Rio Arriba County, San Juan Pueblo Grant, at downstream end of pier nearest left bank of bridge on U.S. Highway 285, 0.5 mile west of Chamita, 2.5 miles northwest of San Juan Pueblo, and at mile 2.8.

DRAINAGE AREA.--3,144 sq mi, of which about 100 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as Chama River near Chamita prior to 1928, and Chama River at Chamita 1929-30.

GAGE.--Water-stage recorder. Concrete control since Jan. 1, 1964. Datum of gage is 5,653.61 ft above mean sea level. Prior to Oct. 4, 1933, at railroad bridge 2.3 miles downstream at different datums. Oct. 4, 1933 to Mar. 1, 1942, at site 50 ft downstream at datum 0.22 ft higher. Mar. 2, 1942 to Dec. 31, 1963, at site 200 ft downstream, present datum.

AVERAGE DISCHARGE.--59 years, 536 cfs (388,300 acre-ft per year); 20 calendar years (1951-70), 422 cfs (305,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,880 cfs Aug. 18 (gage height, 6.41 ft); minimum, 1.1 cfs Sept. 16.
Period of record: Maximum discharge, 15,000 cfs May 22, 1920, from rating curve extended above 2,300 cfs; maximum gage height, 10.45 ft Aug. 22, 1961; no flow at times.
The floods of Sept. 29, 1904, and Oct. 4 or 5, 1911, probably exceeded 15,000 cfs. Another major flood occurred in 1884, from newspaper accounts.

REMARKS.--Records good except those for January and September, which are fair. Diversions above station for irrigation of about 27,600 acres. Chamita ditch, on left bank, and Hernandez ditch, on right bank, bypass gage for irrigation of several hundred acres below station; see tabulation below for monthly and yearly diversion, as furnished by Bureau of Reclamation. Flow partly regulated by El Vado Reservoir (see sta 08285000) and Abiquiu Reservoir (see sta 08286900), 74.9 and 29.3 miles upstream, respectively. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1913-15, 1934, 1936. WSP 1632: 1929(M). WSP 1732: 1931(M). WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	87	235	88	134	105	1,130	463	386	725	45	23
2	98	122	170	94	133	106	1,140	472	447	679	55	33
3	136	102	136	75	124	88	982	745	295	651	40	15
4	128	83	114	70	124	112	855	866	177	549	20	8.0
5	82	102	100	65	113	124	844	922	215	323	21	10
6	46	109	93	60	120	156	899	855	282	260	95	8.0
7	33	97	113	55	114	137	899	701	218	223	146	6.0
8	48	95	98	55	114	129	540	767	183	216	115	4.0
9	64	98	118	70	107	130	540	811	189	222	261	3.0
10	75	491	135	90	113	129	570	789	202	309	269	2.0
11	75	411	130	110	125	131	376	648	291	132	85	2.0
12	105	389	139	115	121	159	293	632	170	59	91	2.0
13	124	417	120	115	130	167	266	713	206	30	72	2.0
14	82	420	113	115	141	177	235	653	179	9.0	95	1.5
15	75	420	90	115	137	143	252	699	526	7.0	81	1.5
16	125	435	69	115	146	79	293	688	591	7.5	68	1.2
17	91	604	81	110	162	72	313	694	569	7.0	50	70
18	72	673	116	110	182	69	306	761	604	6.7	233	168
19	110	674	95	110	210	63	392	753	609	14	342	237
20	113	697	100	110	174	508	712	625	268	60	189	187
21	107	744	108	126	164	180	660	480	129	542	163	206
22	114	720	112	133	161	137	540	477	109	501	498	311
23	97	712	128	123	122	105	600	466	102	262	261	343
24	93	700	102	131	112	482	701	390	98	206	195	260
25	97	765	85	120	110	408	540	384	72	60	125	317
26	95	802	88	126	124	423	570	338	64	168	122	110
27	139	802	106	130	128	531	745	347	54	136	45	77
28	253	796	89	126	136	815	888	295	39	75	16	63
29	115	801	103	121	-----	834	701	349	40	45	62	76
30	92	741	119	122	-----	982	640	372	264	49	108	721
31	92	-----	92	128	-----	1,160	-----	364	-----	49	34	-----
TOTAL	3,052	14,109	3,497	3,233	3,781	8,841	18,422	18,519	7,578	6,582.2	4,002	3,268.2
MEAN	98.5	470	113	104	135	285	614	597	253	212	129	109
MAX	253	802	235	133	210	1,160	1,140	922	609	725	498	721
MIN	33	83	69	55	107	63	235	295	39	6.7	16	1.2
AC-FT	6,050	27,990	6,940	6,410	7,500	17,540	36,540	36,730	15,030	13,060	7,940	6,480
(+)	942	873	41	0	0	0	552	1,110	1,330	668	631	415
(#)	675	375	86	0	0	135	922	1,330	1,320	591	748	275
CAL YR 1970	TOTAL 125,041.0	MEAN 343	MAX 2,200	MIN 8.3	AC-FT 248,000	+ 7,520	+ 6,430					
WTR YR 1971	TOTAL 94,884.4	MEAN 260	MAX 1,160	MIN 1.2	AC-FT 188,200	+ 6,560	+ 6,450					

+ Diversion, in acre-feet, by Chamita ditch.

Diversion, in acre-feet, by Hernandez ditch.

08290000 Rio Chama near Chamita, N. Mex.

LOCATION.--Lat 36°04'26", long 106°06'40", in NE¼NE¼ sec.8, T.21 N., R.8 E., Rio Arriba County, San Juan Pueblo Grant, at downstream end of pier nearest left bank of bridge on U.S. Highway 285, 0.5 mile west of Chamita, 2.5 miles northwest of San Juan Pueblo, and at mile 2.8.

DRAINAGE AREA.--3,144 sq mi, of which about 100 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as Chama River near Chamita prior to 1928, and Chama River at Chamita 1929-30.

GAGE.--Water-stage recorder. Concrete control since Jan. 1, 1964. Datum of gage is 5,653.61 ft above mean sea level. Prior to Oct. 4, 1933, at railroad bridge 2.3 miles downstream at different datums. Oct. 4, 1933 to Mar. 1, 1942, at site 50 ft downstream at datum 0.22 ft higher. Mar. 2, 1942 to Dec. 31, 1963, at site 200 ft downstream, present datum.

AVERAGE DISCHARGE.--59 calendar years, 537 cfs (389,100 acre-ft per year); 20 calendar years (1952-71), 426 cfs (308,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,880 cfs Aug. 18 (gage height, 6.41 ft); minimum, 1.1 cfs Sept. 16.

Period of record: Maximum discharge, 15,000 cfs May 22, 1920, from rating curve extended above 2,300 cfs; maximum gage height, 10.45 ft Aug. 22, 1961; no flow at times.

The floods of Sept. 29, 1904, and Oct. 4 or 5, 1911, probably exceeded 15,000 cfs. Another major flood occurred in 1884, from newspaper accounts.

REMARKS.--Records good except those for January and September, which are fair. Diversions above station for irrigation of about 27,600 acres. Chamita ditch, on left bank, and Hernandez ditch, on right bank, bypass gage for irrigation of several hundred acres below station; see tabulation below for monthly and yearly diversion, as furnished by Bureau of Reclamation. Flow partly regulated by El Vado Reservoir (see sta 08285000) and Abiquiu Reservoir (see sta 08286900), 74.9 and 29.3 miles upstream, respectively. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1913-15, 1934, 1936. WSP 1632: 1929(M). WSP 1732: 1931(M). WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	88	134	105	1,130	463	386	725	45	23	1,310	174	117
2	94	133	106	1,140	472	447	679	55	33	1,420	149	120
3	75	124	88	982	745	295	651	40	15	336	167	117
4	70	124	112	855	866	177	549	20	8.0	493	670	124
5	65	113	124	844	922	215	323	21	10	294	726	120
6	60	120	156	899	855	282	260	95	8.0	246	1,090	117
7	55	114	137	899	701	218	223	146	6.0	179	1,010	91
8	55	114	129	540	767	183	216	115	4.0	140	999	114
9	70	107	130	540	811	189	222	261	3.0	105	898	123
10	90	113	129	570	789	202	309	269	2.0	99	856	124
11	110	125	131	376	648	291	132	85	2.0	119	813	127
12	115	121	159	293	632	170	59	91	2.0	118	816	118
13	115	130	167	266	713	206	30	72	2.0	82	813	122
14	115	141	177	235	653	179	9.0	95	1.5	86	823	104
15	115	137	143	252	699	526	7.0	81	1.5	119	823	89
16	115	146	79	293	688	591	7.5	68	1.2	105	706	108
17	110	162	72	313	694	569	7.0	50	70	101	366	99
18	110	182	69	306	761	604	6.7	233	168	139	216	93
19	110	210	63	392	753	609	14	342	237	136	158	106
20	110	174	508	712	625	268	60	189	187	187	121	110
21	126	164	180	660	480	129	542	163	206	146	104	110
22	133	161	137	540	477	109	501	498	311	109	121	132
23	123	122	105	600	466	102	262	261	343	106	142	120
24	131	112	482	701	390	98	206	195	260	136	142	118
25	120	110	408	540	384	72	60	125	317	145	145	123
26	126	124	423	570	338	64	168	122	110	225	131	191
27	130	128	531	745	347	54	136	45	77	372	113	218
28	126	136	815	888	295	39	75	16	63	259	117	232
29	121	-----	834	701	349	40	45	62	76	195	124	281
30	122	-----	982	640	372	264	49	108	721	252	120	245
31	128	-----	1,160	-----	364	-----	49	34	-----	169	-----	115
TOTAL	3,233	3,781	8,841	18,422	18,519	7,578	6,582.2	4,002	3,268.2	7,928	13,653	4,128
MEAN	104	135	285	614	597	253	212	129	109	256	455	133
MAX	133	210	1,160	1,140	922	609	725	498	721	1,420	1,090	281
MIN	55	107	63	235	295	39	6.7	16	1.2	82	104	89
AC-FT	6,410	7,500	17,540	36,540	36,730	15,030	13,060	7,940	6,480	15,730	27,080	8,190
(+)	0	0	0	552	1,110	1,330	668	631	415	466	228	0
(#)	0	0	135	922	1,330	1,320	591	748	275	110	375	187

CAL YR 1971 TOTAL 99,935.4 MEAN 274 MAX 1,420 MIN 1.2 AC-FT 198,200 + 5,400 + 5,990

+ Diversion, in acre-feet, by Chamita ditch.

Diversion, in acre-feet, by Hernandez ditch.

08291000 Santa Cruz River at Cundiyo, N. Mex.

LOCATION.--Lat 35°57'53", long 105°54'14", in SE¼NW¼ sec.17, T.20 N., R.10 E., Santa Fe County, on left bank 135 ft downstream from bridge on State Highway 4, 200 ft downstream from confluence of Rio Medio and Rio Prioles, 0.6 mile northwest of Cundiyo, and 1.8 miles upstream from Santa Cruz Dam.

DRAINAGE AREA.--86 sq mi, approximately.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1953, published as Rio Santa Cruz at Cundiyo.

GAGE.--Water-stage recorder. Concrete control since Jan. 3, 1954. Altitude of gage is 6,460 ft (from topographic map). Sept. 1, 1930 to Aug. 12, 1932, water-stage recorder at site about 1 mile downstream at different datum. Aug. 13, 1932 to Oct. 29, 1934, water-stage recorder at site 35 ft upstream at datum 0.42 ft higher. Oct. 30, 1934 to Jan. 2, 1954, water-stage recorder at present site at datum 0.64 ft lower.

AVERAGE DISCHARGE.--41 years, 28.5 cfs (20,650 acre-ft per year); 20 calendar years (1951-70), 25.1 cfs (18,180 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 126 cfs Aug. 19 (gage height, 2.49 ft); minimum, 0.76 cfs Mar. 7, result of freezeup. Period of record: Maximum discharge, 2,420 cfs Sept. 24, 1931 (gage height, 7.8 ft, site and datum then in use), from rating curve extended above 170 cfs; minimum, 0.19 cfs Mar. 13, 1954, result of freezeup.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1392: 1931(M), 1932-33, 1934-39(M), 1942, 1943(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	15	6.8	11	9.4	8.4	16	18	24	13	12	20
2	14	15	9.4	11	9.0	7.8	15	18	24	23	9.4	18
3	14	11	9.8	9.8	8.5	9.3	13	18	22	17	8.2	18
4	14	10	9.0	9.8	7.7	8.9	11	19	20	12	6.8	19
5	14	14	9.0	9.0	9.0	7.4	9.3	19	20	7.1	11	18
6	14	13	7.1	8.2	9.6	7.4	9.4	20	20	5.4	17	15
7	13	13	7.8	5.1	11	8.0	12	20	19	6.1	21	14
8	15	12	12	6.1	10	8.6	11	19	18	11	24	15
9	14	10	12	7.1	9.2	8.2	11	17	17	12	14	14
10	15	13	9.8	7.8	11	8.3	11	17	18	9.8	11	14
11	17	12	7.5	8.2	9.0	8.7	12	21	17	9.4	9.8	13
12	15	13	8.5	8.5	8.4	9.4	12	21	17	9.4	12	12
13	15	13	11	8.5	8.7	10	13	21	16	3.9	15	12
14	15	11	12	8.2	8.5	9.4	13	21	15	4.6	17	14
15	15	5.3	11	8.2	7.8	7.8	13	21	16	7.5	21	13
16	15	11	11	8.5	8.2	8.1	14	24	15	9.8	13	13
17	15	13	11	9.0	8.2	9.4	14	25	13	9.4	13	16
18	15	12	10	9.0	8.5	7.8	15	25	13	9.4	11	24
19	14	13	13	9.4	8.2	6.3	15	24	14	4.9	35	17
20	14	10	14	9.4	8.2	9.8	14	23	15	8.5	39	17
21	14	11	10	9.8	7.8	8.0	18	24	17	15	29	17
22	14	12	11	9.4	6.6	9.4	17	20	14	15	29	16
23	15	11	8.9	8.5	10	11	15	20	13	24	25	15
24	15	12	10	8.5	8.1	12	16	20	14	29	24	16
25	15	12	11	8.2	9.1	12	17	20	12	15	23	15
26	15	12	11	9.4	7.0	14	19	20	11	14	26	14
27	14	12	10	9.4	8.3	20	17	18	10	14	26	13
28	10	10	11	9.0	9.6	22	17	20	9.4	13	24	12
29	13	11	11	9.0	-----	19	16	27	8.5	12	24	13
30	15	11	10	8.2	-----	17	17	26	9.8	12	21	41
31	15	-----	11	9.0	-----	18	-----	25	-----	12	24	-----
TOTAL	446	353.3	316.6	270.2	244.6	331.4	422.7	651	471.7	368.2	595.2	488
MEAN	14.4	11.8	10.2	8.72	8.74	10.7	14.1	21.0	15.7	11.9	19.2	16.3
MAX	17	15	14	11	11	22	19	27	24	29	39	41
MIN	10	5.3	6.8	5.1	6.6	6.3	9.3	17	8.5	3.9	6.8	12
AC-FT	885	701	628	536	485	657	838	1,290	936	730	1,180	968

CAL YR 1970 TOTAL 6,321.4 MEAN 17.3 MAX 56 MIN 4.4 AC-FT 12,540
WTR YR 1971 TOTAL 4,958.9 MEAN 13.6 MAX 41 MIN 3.9 AC-FT 9,840

PEAK DISCHARGE (BASE, 100 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE
8-19	1600	2.49	126

08291000 Santa Cruz River at Cundiyo, N. Mex.

LOCATION.--Lat 35°57'53", long 105°54'14", in SE¼NW¼ sec.17, T.20 N., R.10 E., Santa Fe County, on left bank 135 ft downstream from bridge on State Highway 4, 200 ft downstream from confluence of Rio Medio and Rio Frijoles, 0.6 mile northwest of Cundiyo, and 1.8 miles upstream from Santa Cruz Dam.

DRAINAGE AREA.--86 sq mi, approximately.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1953, published as Rio Santa Cruz at Cundiyo.

GAGE.--Water-stage recorder. Concrete control since Jan. 3, 1954. Altitude of gage is 6,460 ft (from topographic map). Sept. 1, 1930 to Aug. 12, 1932, water-stage recorder at site about 1 mile downstream at different datum. Aug. 13, 1932 to Oct. 29, 1934, water-stage recorder at site 35 ft upstream at datum 0.42 ft higher. Oct. 30, 1934 to Jan. 2, 1954, water-stage recorder at present site at datum 0.64 ft lower.

AVERAGE DISCHARGE.--41 calendar years, 28.5 cfs (20,650 acre-ft per year); 20 calendar years (1952-71), 25.3 cfs (18,330 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 126 cfs Aug. 19 (gage height, 2.49 ft); maximum gage height, 3.20 ft Dec. 18, backwater from ice; minimum discharge, 0.76 cfs Mar. 7, result of freezeup.
Period of record: Maximum discharge, 2,420 cfs Sept. 24, 1931 (gage height, 7.8 ft, site and datum then in use), from rating curve extended above 170 cfs; minimum, 0.19 cfs Mar. 13, 1954, result of freezeup.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 1,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1392: 1931(M), 1932-33, 1934-39(M), 1942, 1943(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	11	9.4	8.4	16	18	24	13	12	20	27	26	16
2	11	9.0	7.8	15	18	24	23	9.4	18	24	21	16
3	9.8	8.5	9.3	13	18	22	17	8.2	18	21	20	17
4	9.8	7.7	8.9	11	19	20	12	6.8	19	20	20	18
5	9.0	9.0	7.4	9.3	19	20	7.1	11	18	18	19	16
6	8.2	9.6	7.4	9.4	20	20	5.4	17	15	17	19	18
7	5.1	11	8.0	12	20	19	6.1	21	14	17	17	20
8	6.1	10	8.6	11	19	18	11	24	15	17	18	18
9	7.1	9.2	8.2	11	17	17	12	14	14	16	16	17
10	7.8	11	8.3	11	17	18	9.8	11	14	15	16	17
11	8.2	9.0	8.7	12	21	17	9.4	9.8	13	14	17	16
12	8.5	8.4	9.4	12	21	17	9.4	12	12	14	17	18
13	8.5	8.7	10	13	21	16	3.9	15	12	14	17	18
14	8.2	8.5	9.4	13	21	15	4.6	17	14	13	15	15
15	8.2	7.8	7.8	13	21	16	7.5	21	13	13	19	15
16	8.5	8.2	8.1	14	24	15	9.8	13	13	13	18	14
17	9.0	8.2	9.4	14	25	13	9.4	13	16	14	17	15
18	9.0	8.5	7.8	15	25	13	9.4	11	24	18	14	15
19	9.4	8.2	6.3	15	24	14	4.9	35	17	13	10	15
20	9.4	8.2	9.8	14	23	15	8.5	39	17	13	16	15
21	9.8	7.8	8.0	18	24	17	15	29	17	14	20	14
22	9.4	6.6	9.4	17	20	14	15	29	16	13	20	14
23	8.5	10	11	15	20	13	24	25	15	13	19	14
24	8.5	8.1	12	16	20	14	29	24	16	14	20	13
25	8.2	9.1	12	17	20	12	15	23	15	30	22	13
26	9.4	7.0	14	19	20	11	14	26	14	39	21	14
27	9.4	8.3	20	17	18	10	14	26	13	31	21	18
28	9.0	9.6	22	17	20	9.4	13	24	12	27	21	16
29	9.0	-----	19	16	27	8.5	12	24	13	31	21	15
30	8.2	-----	17	17	26	9.8	12	21	41	32	17	12
31	9.0	-----	18	-----	25	-----	12	24	-----	26	-----	14
TOTAL	270.2	244.6	331.4	422.7	651	471.7	368.2	595.2	488	601	554	486
MEAN	8.72	8.74	10.7	14.1	21.0	15.7	11.9	19.2	16.3	19.4	18.5	15.7
MAX	11	11	22	19	27	24	29	39	41	39	26	20
MIN	5.1	6.6	6.3	9.3	17	8.5	3.9	6.8	12	13	10	12
AC-FT	536	485	657	838	1,290	936	730	1,180	968	1,190	1,100	964

CAL YR 1971 TOTAL 5,484.0 MEAN 15.0 MAX 41 MIN 3.9 AC-FT 10,880

PEAK DISCHARGE (BASE, 100 CFS)

DATE TIME G. H. DISCHARGE

8-19 1600 2.49 126

08294300 Rio Nambe at Nambe Falls, near Nambe, N. Mex.

LOCATION.--Lat 35°50'46", long 105°54'29", in NW¼SW¼ sec.29, T.19 N., R.10 E., Santa Fe County, in Nambe Indian Reservation, on left bank 800 ft downstream from Nambe Falls, 2.4 miles upstream from confluence of Rio Nambe and Rio En Medio, 4.2 miles southeast of Nambe Pueblo and 5.2 miles southeast of Nambe.

DRAINAGE AREA.--25.1 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,550 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 9.32 cfs (6,750 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 56 cfs Sept. 29 (gage height, 1.10 ft); minimum determined, 0.50 cfs Mar. 19, but may have been less during periods of ice effect.

Period of record: Maximum discharge, 1,090 cfs Aug. 8, 1967 (gage height, about 6.0 ft, from floodmarks), from rating curve extended above 44 cfs on basis of field estimate of peak flow; minimum determined, 0.50 cfs Mar. 19, 1971, but may have been less during periods of ice effect.

COOPERATION.--Records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	5.4	4.0	4.0	4.0	4.0	6.1	4.8	8.9	5.4	7.6	12
2	9.4	5.4	4.5	4.0	3.5	3.5	5.1	5.4	8.9	8.5	6.8	10
3	8.5	4.2	5.0	3.5	3.5	4.0	6.1	6.1	8.5	8.2	5.8	10
4	8.5	3.5	4.5	3.0	3.5	4.0	5.8	6.5	8.5	5.4	6.7	9.8
5	8.5	5.1	4.5	2.5	3.0	3.8	4.8	6.1	8.5	4.8	8.0	8.5
6	9.4	5.8	4.0	2.0	3.5	2.9	5.1	6.5	8.5	4.8	15	8.5
7	8.5	5.8	4.0	2.0	3.5	3.5	5.8	6.5	8.0	4.8	15	8.0
8	8.0	5.8	4.5	2.5	3.5	3.3	5.4	6.5	8.0	5.1	12	8.0
9	8.0	5.1	4.5	3.0	3.5	2.9	5.4	6.5	8.0	4.8	9.0	7.2
10	8.5	6.5	4.5	3.5	3.5	3.5	5.4	6.1	8.0	4.5	8.0	6.8
11	8.5	6.1	4.5	3.5	3.5	3.1	6.5	6.5	8.0	4.0	7.0	6.5
12	8.0	5.8	4.5	3.5	3.5	3.5	7.2	7.2	7.6	3.8	9.0	6.5
13	8.0	5.4	4.0	3.5	3.5	3.8	6.5	7.6	7.6	3.5	11	6.1
14	8.0	5.4	4.0	3.5	3.5	3.8	6.5	8.0	7.2	3.5	13	5.8
15	7.6	4.5	4.5	3.5	3.5	3.5	6.8	8.0	7.2	3.1	12	5.4
16	7.2	5.0	4.0	3.5	4.0	3.5	6.8	8.5	6.8	3.3	10	5.4
17	7.6	5.5	4.0	4.0	4.0	3.8	7.2	8.9	6.8	3.5	9.0	7.2
18	7.6	5.5	4.5	4.0	4.0	3.5	7.2	8.5	6.8	3.3	8.0	11
19	6.8	5.5	4.0	4.0	4.0	2.7	6.5	8.5	6.8	3.5	20	8.5
20	6.8	5.0	4.0	4.0	3.5	4.0	6.8	8.0	6.8	5.8	20	7.6
21	6.8	5.5	4.0	4.0	3.5	4.0	6.1	8.0	6.8	6.1	17	8.0
22	6.8	6.0	3.5	4.0	3.5	4.5	5.8	8.0	6.5	5.4	17	7.2
23	6.5	6.0	3.5	3.5	3.0	4.8	5.4	8.0	6.5	8.5	15	8.0
24	6.8	6.1	4.0	3.5	3.5	4.5	5.4	8.0	6.1	11	14	8.9
25	6.8	6.0	4.0	3.5	3.5	4.5	5.8	8.0	5.8	8.9	13	9.4
26	6.8	6.0	4.0	4.0	2.5	6.1	5.8	8.0	5.4	8.9	15	8.5
27	6.1	6.0	4.0	4.0	3.5	7.6	4.5	8.0	5.1	13	15	8.5
28	3.1	5.0	4.0	4.0	4.3	8.0	4.8	9.8	4.8	9.8	13	8.5
29	3.5	5.5	4.0	4.0	-----	7.2	4.8	11	4.5	8.0	13	8.5
30	5.8	5.5	4.0	4.0	-----	6.8	4.8	10	4.5	7.2	12	17
31	5.8	-----	4.0	4.0	-----	7.2	-----	9.4	-----	7.6	13	-----
TOTAL	227.6	163.9	129.0	109.5	99.3	135.8	176.2	236.9	211.4	188.0	369.9	251.3
MEAN	7.34	5.46	4.16	3.53	3.55	4.38	5.87	7.64	7.05	6.06	11.9	8.38
MAX	9.4	6.5	5.0	4.0	4.3	8.0	7.2	11	8.9	13	20	17
MIN	3.1	3.5	3.5	2.0	2.5	2.7	4.5	4.8	4.5	3.1	5.8	5.4
AC-FT	451	325	256	217	197	269	349	470	419	373	734	498

CAL YR 1970 TOTAL 3,190.9 MEAN 8.74 MAX 25 MIN 3.1 AC-FT 6,330
WTR YR 1971 TOTAL 2,298.8 MEAN 6.30 MAX 20 MIN 2.0 AC-FT 4,560

PEAK DISCHARGE (BASE, 40 CFS)

DATE TIME G. H. DISCHARGE

9-29 2330 1.10 56

08294300 Rio Nambé at Nambé Falls, near Nambé, N. Mex.

LOCATION.--Lat 35°50'46", long 105°54'29", in NW¼SW¼ sec.29, T.19 N., R.10 E., Santa Fe County, in Nambé Indian Reservation, on left bank 800 ft downstream from Nambé Falls, 2.4 miles upstream from confluence of Rio Nambé and Rio En Medio, 4.2 miles southeast of Nambé Pueblo and 5.2 miles southeast of Nambé.

DRAINAGE AREA.--25.1 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,550 ft (from topographic map).

AVERAGE DISCHARGE.--8 calendar years, 9.36 cfs (6,780 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 56 cfs Sept. 29 (gage height, 1.10 ft); minimum determined, 0.50 cfs Mar. 19, but may have been less during periods of ice effect.

Period of record: Maximum discharge, 1,090 cfs Aug. 8, 1967 (gage height, about 6.0 ft, from floodmarks), from rating curve extended above 44 cfs on basis of field estimate of peak flow; minimum determined, 0.50 cfs Mar. 19, 1971, but may have been less during periods of ice effect.

COOPERATION.--Records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	4.0	4.0	4.0	6.1	4.8	8.9	5.4	7.6	12	12	9.5	6.5
2	4.0	3.5	3.5	5.1	5.4	8.9	8.5	6.8	10	11	8.5	6.5
3	3.5	3.5	4.0	6.1	6.1	8.5	8.2	5.8	10	9.8	8.0	6.5
4	3.0	3.5	4.0	5.8	6.5	8.5	5.4	6.7	9.8	9.8	8.0	6.5
5	2.5	3.0	3.8	4.8	6.1	8.5	4.8	8.0	8.5	9.4	7.5	6.5
6	2.0	3.5	2.9	5.1	6.5	8.5	4.8	15	8.5	8.9	7.5	6.5
7	2.0	3.5	3.5	5.8	6.5	8.0	4.8	15	8.0	8.5	7.0	7.0
8	2.5	3.5	3.3	5.4	6.5	8.0	5.1	12	8.0	8.0	7.0	6.5
9	3.0	3.5	2.9	5.4	6.5	8.0	4.8	9.0	7.2	7.6	7.0	6.0
10	3.5	3.5	3.5	5.4	6.1	8.0	4.5	8.0	6.8	7.2	6.5	6.5
11	3.5	3.5	3.1	6.5	6.5	8.0	4.0	7.0	6.5	6.8	6.5	8.5
12	3.5	3.5	3.5	7.2	7.2	7.6	3.8	9.0	6.5	6.5	6.5	6.8
13	3.5	3.5	3.8	6.5	7.6	7.6	3.5	11	6.1	6.1	6.5	8.5
14	3.5	3.5	3.8	6.5	8.0	7.2	3.5	13	5.8	6.1	6.0	7.0
15	3.5	3.5	3.5	6.8	8.0	7.2	3.1	12	5.4	5.8	7.0	6.5
16	3.5	4.0	3.5	6.8	8.5	6.8	3.3	10	5.4	5.8	7.0	6.0
17	4.0	4.0	3.8	7.2	8.9	6.8	3.5	9.0	7.2	7.2	7.0	6.0
18	4.0	4.0	3.5	7.2	8.5	6.8	3.3	8.0	11	7.2	6.5	6.0
19	4.0	4.0	2.7	6.5	8.5	6.8	3.5	20	8.5	6.5	5.0	6.0
20	4.0	3.5	4.0	6.8	8.0	6.8	5.8	20	7.6	6.5	5.5	6.0
21	4.0	3.5	4.0	6.1	8.0	6.8	6.1	17	8.0	7.2	7.0	6.0
22	4.0	3.5	4.5	5.8	8.0	6.5	5.4	17	7.2	6.8	7.0	6.0
23	3.5	3.0	4.8	5.4	8.0	6.5	8.5	15	8.0	6.8	7.0	6.0
24	3.5	3.5	4.5	5.4	8.0	6.1	11	14	8.9	7.2	7.0	5.5
25	3.5	3.5	4.5	5.8	8.0	5.8	8.9	13	9.4	13	7.0	5.5
26	4.0	2.5	6.1	5.8	8.0	5.4	8.9	15	8.5	13	7.0	5.5
27	4.0	3.5	7.6	4.5	8.0	5.1	13	15	8.5	11	7.0	7.5
28	4.0	4.3	8.0	4.8	9.8	4.8	9.8	13	8.5	10	7.0	6.5
29	4.0	-----	7.2	4.8	11	4.5	8.0	13	8.5	10	7.0	6.0
30	4.0	-----	6.8	4.8	10	4.5	7.2	12	17	12	7.0	5.0
31	4.0	-----	7.2	-----	9.4	-----	7.6	13	-----	11	-----	5.0
TOTAL	109.5	99.3	135.8	176.2	236.9	211.4	188.0	369.9	251.3	264.7	210.0	196.8
MEAN	3.53	3.55	4.38	5.87	7.64	7.05	6.06	11.9	8.38	8.54	7.00	6.35
MAX	4.0	4.3	8.0	7.2	11	8.9	13	20	17	13	9.5	8.5
MIN	2.0	2.5	2.7	4.5	4.8	4.5	3.1	5.8	5.4	5.8	5.0	5.0
AC-FT	217	197	269	349	470	419	373	734	498	525	417	390

CAL YR 1971 TOTAL 2,449.8 MEAN 6.71 MAX 20 MIN 2.0 AC-FT 4,860

PEAK DISCHARGE (BASE, 40 CFS)

DATE TIME G. H. DISCHARGE

9-29 2330 1.10 56

NOTE.--No gage-height record Oct. 30 to Nov. 30.

08295200 Rio En Medio near Santa Fe, N. Mex.

LOCATION.--Lat 35°47'30", long 105°47'38", Santa Fe County, in Santa Fe National Forest, on right bank 300 ft east of Ski Basin parking area, and 10.8 miles northeast of Santa Fe.

DRAINAGE AREA.--0.63 sq mi.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 10,600 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 0.760 cfs (551 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9.00 cfs Aug. 19 (gage height, 1.36 ft); minimum, 0.14 cfs Feb. 18.

Period of record: Maximum discharge, 16.3 cfs July 16, 1965 (gage height, 1.70 ft), from rating curve extended above 4.50 cfs on basis of theoretical rating; minimum, 0.14 cfs Feb. 18, 1971.

REMARKS.--Records good.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	.62	.44	.26	.23	.20	.34	.44	.64	.55	.57	.84
2	.66	.62	.44	.26	.23	.20	.35	.47	.62	.56	.52	.80
3	.66	.59	.44	.27	.22	.20	.34	.49	.60	.48	.52	.83
4	.69	.57	.41	.26	.22	.20	.31	.52	.60	.44	.54	.77
5	.69	.57	.41	.27	.22	.20	.34	.51	.60	.40	.78	.73
6	.66	.57	.41	.26	.21	.20	.35	.52	.60	.39	1.03	.69
7	.66	.54	.41	.25	.22	.20	.34	.52	.60	.39	1.17	.73
8	.69	.57	.41	.26	.21	.20	.36	.49	.60	.42	1.11	.73
9	.69	.56	.41	.26	.22	.21	.40	.48	.57	.39	1.02	.69
10	.69	.54	.40	.26	.22	.20	.41	.47	.57	.36	.93	.66
11	.66	.54	.40	.27	.21	.21	.44	.49	.56	.35	1.02	.66
12	.69	.54	.37	.28	.21	.22	.47	.52	.57	.34	1.00	.67
13	.69	.52	.35	.28	.21	.22	.48	.52	.56	.34	.97	.66
14	.66	.51	.33	.28	.21	.21	.49	.61	.56	.33	.97	.64
15	.66	.51	.34	.27	.21	.21	.49	.59	.54	.33	.93	.62
16	.66	.51	.34	.26	.21	.23	.52	.60	.54	.33	.89	.60
17	.62	.49	.34	.26	.21	.23	.49	.69	.54	.34	.89	.66
18	.66	.51	.31	.25	.21	.21	.47	.66	.54	.36	.93	.67
19	.66	.48	.30	.25	.21	.21	.44	.66	.51	.35	1.75	.64
20	.66	.48	.29	.24	.21	.22	.45	.64	.52	.56	1.59	.62
21	.66	.48	.29	.24	.22	.24	.42	.62	.56	.48	1.53	.59
22	.59	.47	.29	.23	.22	.24	.41	.62	.56	.48	1.47	.57
23	.62	.47	.29	.23	.23	.23	.41	.62	.56	.69	1.36	.57
24	.66	.47	.29	.23	.23	.23	.45	.62	.52	.77	1.31	.60
25	.66	.45	.27	.22	.22	.24	.47	.60	.49	.60	1.21	.57
26	.66	.45	.27	.23	.21	.37	.44	.60	.47	.65	1.11	.56
27	.64	.45	.28	.22	.20	.41	.41	.60	.44	.68	1.11	.54
28	.66	.45	.27	.22	.20	.37	.42	.64	.41	.64	1.02	.51
29	.66	.47	.27	.22	-----	.38	.42	.73	.40	.59	1.02	.54
30	.64	.47	.28	.22	-----	.42	.42	.69	.40	.57	.93	1.35
31	.64	-----	.28	.23	-----	.37	-----	.66	-----	.57	.92	-----
TOTAL	20.60	15.47	10.63	7.74	6.03	7.68	12.55	17.89	16.25	14.73	32.12	20.31
MEAN	.665	.516	.343	.250	.215	.248	.418	.577	.542	.475	1.036	.677
MAX	.80	.62	.44	.28	.23	.42	.52	.73	.64	.77	1.75	1.35
MIN	.59	.45	.27	.22	.20	.20	.31	.44	.40	.33	.52	.51
AC-FT	40.9	30.7	21.1	15.4	12.0	15.2	24.9	35.5	32.2	29.2	63.7	40.3

CAL YR 1970: TOTAL 251.43 MEAN .689 MAX 2.10 MIN .20 AC-FT 499
WTR YR 1971: TOTAL 182.00 MEAN .499 MAX 1.75 MIN .20 AC-FT 361

PEAK DISCHARGE (BASE, 5.00 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-19	1500	1.36	9.00	9-30	0130	1.08	5.01

08295200 Rio En Medio near Santa Fe, N. Mex.

LOCATION.--Lat 35°47'30", long 105°47'38", Santa Fe County, in Santa Fe National Forest, on right bank 300 ft east of Santa Fe Ski Basin parking area, and 10.8 miles northeast of Santa Fe.

DRAINAGE AREA.--0.63 sq mi.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 10,600 ft (from topographic map).

AVERAGE DISCHARGE.--8 calendar years, 0.758 cfs (549 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9.00 cfs Aug. 19 (gage height, 1.36 ft); minimum, 0.14 cfs Feb. 18.

Period of record: Maximum discharge, 16.3 cfs July 16, 1965 (gage height, 1.70 ft), from rating curve extended above 4.50 cfs on basis of theoretical rating; minimum, 0.14 cfs Feb. 18, 1971.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.26	.23	.20	.34	.44	.64	.55	.57	.84	.93	.66	.54
2	.26	.23	.20	.35	.47	.62	.56	.52	.80	.84	.66	.52
3	.27	.22	.20	.34	.49	.60	.48	.52	.83	.80	.66	.52
4	.26	.22	.20	.31	.52	.60	.44	.54	.77	.77	.66	.54
5	.27	.22	.20	.34	.51	.60	.40	.78	.73	.77	.67	.52
6	.26	.21	.20	.35	.52	.60	.39	1.03	.69	.77	.66	.52
7	.25	.22	.20	.34	.52	.60	.39	1.17	.73	.73	.66	.51
8	.26	.21	.20	.36	.49	.60	.42	1.11	.73	.77	.66	.51
9	.26	.22	.21	.40	.48	.57	.39	1.02	.69	.77	.64	.51
10	.26	.22	.20	.41	.47	.57	.36	.93	.66	.73	.64	.49
11	.27	.21	.21	.44	.49	.56	.35	1.02	.66	.69	.64	.49
12	.28	.21	.22	.47	.52	.57	.34	1.00	.67	.69	.64	.48
13	.28	.21	.22	.48	.52	.56	.34	.97	.66	.66	.62	.48
14	.28	.21	.21	.49	.61	.56	.33	.97	.64	.66	.60	.48
15	.27	.21	.21	.49	.59	.54	.33	.93	.62	.64	.62	.47
16	.26	.21	.23	.52	.60	.54	.33	.89	.60	.62	.62	.47
17	.26	.21	.23	.49	.69	.54	.34	.89	.66	.67	.63	.47
18	.25	.21	.21	.47	.66	.54	.36	.93	.67	.62	.62	.47
19	.25	.21	.21	.44	.66	.51	.35	1.75	.64	.62	.60	.45
20	.24	.21	.22	.45	.64	.52	.56	1.59	.62	.64	.62	.45
21	.24	.22	.24	.42	.62	.56	.48	1.53	.59	.62	.59	.44
22	.23	.22	.24	.41	.62	.56	.48	1.47	.57	.62	.59	.44
23	.23	.23	.23	.41	.62	.56	.69	1.36	.57	.62	.59	.45
24	.23	.23	.23	.45	.62	.52	.77	1.31	.60	.66	.57	.45
25	.22	.22	.24	.47	.60	.49	.60	1.21	.57	.73	.56	.44
26	.23	.21	.37	.44	.60	.47	.65	1.11	.56	.71	.56	.42
27	.22	.20	.41	.41	.60	.44	.68	1.11	.54	.71	.56	.44
28	.22	.20	.37	.42	.64	.41	.64	1.02	.51	.73	.56	.42
29	.22	-----	.38	.42	.73	.40	.59	1.02	.54	.73	.56	.44
30	.22	-----	.42	.42	.69	.40	.57	.93	1.35	.69	.56	.42
31	.23	-----	.37	-----	.66	-----	.57	.92	-----	.67	-----	.42
TOTAL	7.74	6.03	7.68	12.55	17.89	16.25	14.73	32.12	20.31	21.88	18.48	14.67
MEAN	.250	.215	.248	.418	.577	.542	.475	1.036	.677	.706	.616	.473
MAX	.28	.23	.42	.52	.73	.64	.77	1.75	1.35	.93	.67	.54
MIN	.22	.20	.20	.31	.44	.40	.33	.52	.51	.62	.56	.42
AC-FT	15.4	12.0	15.2	24.9	35.5	32.2	29.2	63.7	40.3	43.4	36.7	29.1

CAL YR 1971 TOTAL 190.33 MEAN .521 MAX 1.75 MIN .20 AC-FT 378

PEAK DISCHARGE (BASE, 5.00 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-19	1500	1.36	9.00	9-30	0130	1.08	5.01

08302200 North Fork Tesuque Creek near Santa Fe, N. Mex.

LOCATION.--Lat 35°46'12", long 105°48'31", Santa Fe County, in Santa Fe National Forest, on left bank 60 ft upstream from culvert on State Highway 475, 250 ft upstream from Middle Fork Tesuque Creek, and 9.2 miles northeast of Santa Fe.

DRAINAGE AREA.--1.60 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 9,670 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 1.424 cfs (1,030 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6.01 cfs Aug. 19 (gage height, 1.12 ft); minimum, 0.17 cfs Feb. 18, result of freezeup.
Period of record: Maximum discharge, 32.9 cfs Aug. 1, 1966 (gage height, 2.25 ft), from rating curve extended above 8.50 cfs on basis of theoretical rating; minimum determined, 0.09 cfs Nov. 16, 1962, result of freezeup.

REMARKS.--Records good.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.02	.77	.57	.45	.45	.38	.70	1.06	1.26	1.02	.77	1.71
2	.93	.77	.59	.45	.44	.42	.69	1.11	1.26	.93	.77	1.65
3	.93	.67	.56	.45	.42	.45	.68	1.16	1.21	.73	.77	1.71
4	.93	.60	.56	.45	.42	.39	.63	1.16	1.21	.69	.80	1.59
5	.93	.62	.57	.44	.42	.37	.65	1.21	1.21	.64	.99	1.47
6	.89	.64	.56	.44	.42	.35	.66	1.21	1.21	.66	1.55	1.42
7	.84	.66	.54	.44	.42	.37	.66	1.31	1.26	.66	1.42	1.42
8	.84	.66	.54	.42	.42	.40	.69	1.31	1.26	.66	1.26	1.36
9	.89	.66	.52	.42	.42	.45	.69	1.21	1.21	.62	1.21	1.31
10	.89	.66	.51	.42	.42	.45	.71	1.21	1.16	.60	1.26	1.26
11	.93	.71	.52	.42	.40	.57	.73	1.21	1.16	.59	1.31	1.21
12	.84	.71	.52	.44	.41	.82	.75	1.21	1.16	.56	1.36	1.21
13	.84	.69	.52	.44	.41	.70	.77	1.11	1.11	.56	1.31	1.16
14	.84	.66	.51	.44	.41	.48	.84	1.37	1.11	.54	1.36	1.11
15	.84	.66	.51	.44	.40	.48	.84	1.36	1.06	.57	1.36	1.06
16	.80	.69	.51	.45	.40	.56	.93	1.42	1.06	.54	1.36	1.06
17	.80	.69	.48	.47	.40	.57	.94	1.47	1.02	.57	1.36	1.16
18	.80	.69	.48	.48	.38	.46	.93	1.47	.97	.60	1.31	1.11
19	.80	.66	.48	.47	.44	.49	.87	1.47	.97	.66	1.78	1.06
20	.84	.66	.48	.48	.40	.51	1.06	1.47	.97	.73	1.65	1.06
21	.84	.64	.48	.47	.40	.67	.97	1.42	1.02	.64	1.71	1.02
22	.80	.62	.48	.45	.40	.71	.93	1.42	.93	.67	1.78	1.02
23	.84	.60	.48	.44	.39	.65	.93	1.42	.93	.81	1.84	1.02
24	.89	.62	.47	.42	.39	.64	1.04	1.42	.89	.71	1.97	1.02
25	.89	.60	.47	.44	.40	.65	1.11	1.36	.80	.67	1.90	.97
26	.89	.60	.47	.44	.40	.84	1.11	1.31	.77	.75	1.90	.93
27	.80	.59	.47	.44	.40	.90	1.11	1.31	.77	.75	1.90	.93
28	.77	.60	.47	.44	.37	.84	1.11	1.36	.73	.77	1.90	.93
29	.73	.60	.47	.44	-----	.80	1.11	1.31	.69	.71	1.84	1.03
30	.73	.57	.47	.44	-----	.80	1.02	1.31	.73	.77	1.84	1.54
31	.77	-----	.47	.47	-----	.80	-----	1.26	-----	.80	1.84	-----
TOTAL	26.37	19.57	15.73	13.80	11.45	17.97	25.86	40.41	31.10	21.18	45.38	36.51
MEAN	.851	.652	.507	.445	.409	.580	.862	1.304	1.037	.683	1.464	1.217
MAX	1.02	.77	.59	.48	.45	.90	1.11	1.47	1.26	1.02	1.97	1.71
MIN	.73	.57	.47	.42	.37	.35	.63	1.06	.69	.54	.77	.93
AC-FT	52.3	38.8	31.2	27.4	22.7	35.6	51.3	80.2	61.7	42.0	90.0	72.4

CAL YR 1970: TOTAL 443.36 MEAN 1.215 MAX 4.66 MIN .40 AC-FT 879
WTR YR 1971: TOTAL 305.33 MEAN .837 MAX 1.97 MIN .35 AC-FT 606

PEAK DISCHARGE (BASE, 5.00 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE
8-19	1430	1.12	6.01

08302200 North Fork Tesuque Creek near Santa Fe, N. Mex.

LOCATION.--Lat 35°46'12", long 105°48'31", Santa Fe County, in Santa Fe National Forest, on left bank 60 ft upstream from culvert on State Highway 475, 250 ft upstream from Middle Fork Tesuque Creek, and 9.2 miles northeast of Santa Fe.

DRAINAGE AREA.--1.60 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 9,670 ft (from topographic map).

AVERAGE DISCHARGE.--9 calendar years, 1.435 cfs (1,040 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6.01 cfs Aug. 19 (gage height, 1.12 ft); minimum, 0.08 cfs Nov. 17, result of freezeup. Period of record: Maximum discharge, 32.9 cfs Aug. 1, 1966 (gage height, 2.25 ft), from rating curve extended above 8.50 cfs on basis of theoretical rating; minimum, 0.08 cfs Nov. 17, 1971, result of freezeup.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.45	.45	.38	.70	1.06	1.26	1.02	.77	1.71	1.06	1.06	.75
2	.45	.44	.42	.69	1.11	1.26	.93	.77	1.65	.97	.97	.75
3	.45	.42	.45	.68	1.16	1.21	.73	.77	1.71	.97	.97	.71
4	.45	.42	.39	.63	1.16	1.21	.69	.80	1.59	.97	.97	.69
5	.44	.42	.37	.65	1.21	1.21	.64	.99	1.47	.97	.97	.67
6	.44	.42	.35	.66	1.21	1.21	.66	1.55	1.42	.97	.93	.66
7	.44	.42	.37	.66	1.31	1.26	.66	1.42	1.42	.97	.93	.67
8	.42	.42	.40	.69	1.31	1.26	.66	1.26	1.36	.97	.89	.67
9	.42	.42	.45	.69	1.21	1.21	.62	1.21	1.31	.97	.89	.66
10	.42	.42	.45	.71	1.21	1.16	.60	1.26	1.26	.97	.84	.64
11	.42	.40	.57	.73	1.21	1.16	.59	1.31	1.21	.97	.84	.62
12	.44	.41	.82	.75	1.21	1.16	.56	1.36	1.21	.97	.84	.62
13	.44	.41	.70	.77	1.11	1.11	.56	1.31	1.16	.97	.84	.62
14	.44	.41	.48	.84	1.37	1.11	.54	1.36	1.11	.93	.80	.62
15	.44	.40	.48	.84	1.36	1.06	.57	1.36	1.06	.93	.84	.62
16	.45	.40	.56	.93	1.42	1.06	.54	1.36	1.06	.93	.84	.62
17	.47	.40	.57	.94	1.47	1.02	.57	1.36	1.16	1.06	.66	.62
18	.48	.38	.46	.93	1.47	.97	.60	1.31	1.11	.97	.93	.60
19	.47	.44	.49	.87	1.47	.97	.66	1.78	1.06	.93	.84	.59
20	.48	.40	.51	1.06	1.47	.97	.73	1.65	1.06	.97	.84	.57
21	.47	.40	.67	.97	1.42	1.02	.64	1.71	1.02	.97	.84	.57
22	.45	.40	.71	.93	1.42	.93	.67	1.78	1.02	.93	.80	.57
23	.44	.39	.65	.93	1.42	.93	.81	1.84	1.02	.93	.80	.60
24	.42	.39	.64	1.04	1.42	.89	.71	1.97	1.02	.97	.80	.59
25	.44	.40	.65	1.11	1.36	.80	.67	1.90	.97	1.36	.80	.59
26	.44	.40	.84	1.11	1.31	.77	.75	1.90	.93	1.31	.80	.51
27	.44	.40	.90	1.11	1.31	.77	.75	1.90	.93	1.16	.80	.64
28	.44	.37	.84	1.11	1.36	.73	.77	1.90	.93	1.21	.80	.60
29	.44	-----	.80	1.11	1.31	.69	.71	1.84	1.03	1.26	.77	.59
30	.44	-----	.80	1.02	1.31	.73	.77	1.84	1.54	1.11	.77	.59
31	.47	-----	.80	-----	1.26	-----	.80	1.84	-----	1.11	-----	.57
TOTAL	13.80	11.45	17.97	25.86	40.41	31.10	21.18	45.38	36.51	31.74	25.67	19.39
MEAN	.445	.409	.580	.862	1.304	1.037	.683	1.464	1.217	1.024	.856	.625
MAX	.48	.45	.90	1.11	1.47	1.26	1.02	1.97	1.71	1.36	1.06	.75
MIN	.42	.37	.35	.63	1.06	.69	.54	.77	.93	.93	.66	.51
AC-FT	27.4	22.7	35.6	51.3	80.2	61.7	42.0	90.0	72.4	63.0	50.9	38.5

CAL YR 1971 TOTAL 320.46 MEAN .878 MAX 1.97 MIN .35 AC-FT 636

PEAK DISCHARGE (BASE, 5.00 CFS)

DATE	TIME	G. H.	DISCHARGE
8-19	1430	1.12	6.01

08302300 Middle Fork Tesuque Creek near Santa Fe, N. Mex.

LOCATION.--Lat 35°46'03", long 105°48'25", Santa Fe County, in Santa Fe National Forest, on right bank 800 ft upstream from culvert on State Highway 475, 950 ft upstream from mouth, and 9.2 miles northeast of Santa Fe.

DRAINAGE AREA.--0.43 sq mi.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 9,770 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 0.282 cfs (204 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3.41 cfs Aug. 6 (gage height, 1.14 ft); minimum, 0.023 cfs Oct. 22.

Period of record: Maximum discharge, 4.55 cfs Aug. 24, 1966 (gage height, 1.27 ft), from rating curve extended above 2.20 cfs on basis of theoretical rating; minimum, 0.020 cfs Nov. 1, 1968, result of freezeup.

REMARKS.--Records good.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.14	.11	.090	.078	.070	.099	.15	.15	.27	.099	.38
2	.18	.13	.11	.090	.078	.063	.095	.16	.15	.18	.099	.38
3	.17	.13	.11	.090	.078	.063	.090	.17	.15	.13	.099	.39
4	.18	.12	.11	.090	.078	.063	.082	.17	.15	.11	.11	.37
5	.17	.12	.11	.090	.078	.063	.082	.17	.15	.11	.17	.35
6	.17	.13	.11	.086	.078	.063	.090	.16	.15	.11	.49	.34
7	.16	.13	.11	.082	.074	.063	.082	.14	.15	.11	.32	.33
8	.16	.13	.10	.082	.074	.063	.090	.13	.16	.11	.25	.32
9	.17	.12	.10	.082	.074	.063	.099	.14	.16	.10	.20	.30
10	.18	.12	.10	.082	.074	.063	.10	.14	.15	.099	.18	.28
11	.17	.12	.10	.082	.074	.063	.11	.15	.15	.099	.16	.27
12	.17	.12	.10	.082	.074	.067	.11	.18	.15	.095	.21	.27
13	.18	.12	.10	.082	.074	.070	.11	.17	.15	.090	.18	.25
14	.18	.12	.095	.082	.074	.067	.11	.21	.14	.090	.18	.24
15	.17	.12	.10	.082	.074	.067	.11	.20	.14	.099	.19	.23
16	.16	.12	.090	.082	.074	.063	.12	.21	.13	.099	.20	.22
17	.16	.12	.090	.082	.074	.063	.12	.21	.13	.10	.23	.25
18	.16	.12	.095	.082	.074	.063	.11	.20	.13	.10	.23	.25
19	.16	.12	.095	.086	.078	.063	.090	.18	.12	.11	.31	.23
20	.16	.11	.095	.086	.078	.067	.099	.18	.13	.15	.29	.22
21	.16	.11	.095	.086	.078	.070	.099	.18	.15	.12	.26	.22
22	.13	.11	.095	.086	.074	.082	.086	.16	.13	.14	.27	.22
23	.17	.12	.095	.086	.074	.082	.099	.16	.14	.18	.29	.22
24	.17	.12	.090	.082	.074	.082	.14	.16	.13	.13	.33	.22
25	.16	.12	.090	.082	.074	.095	.14	.16	.12	.11	.33	.20
26	.16	.12	.090	.082	.074	.15	.13	.16	.12	.14	.34	.20
27	.15	.12	.095	.082	.074	.16	.13	.16	.12	.13	.35	.19
28	.14	.11	.090	.082	.070	.15	.12	.18	.11	.12	.37	.19
29	.14	.11	.090	.078	-----	.13	.13	.17	.11	.11	.38	.24
30	.14	.11	.090	.078	-----	.13	.14	.16	.12	.10	.38	.43
31	.13	-----	.090	.078	-----	.11	-----	.15	-----	.11	.40	-----
TOTAL	5.05	3.61	3.040	2.594	2.104	2.531	3.212	5.22	4.14	3.751	7.897	8.20
MEAN	.163	.120	.0981	.0837	.0751	.0816	.107	.168	.138	.121	.255	.273
MAX	.19	.14	.11	.090	.078	.16	.14	.21	.16	.27	.49	.43
MIN	.13	.11	.090	.078	.070	.063	.082	.13	.11	.090	.099	.19
AC-FT	10.0	7.16	6.03	5.15	4.17	5.02	6.37	10.4	8.21	7.44	15.7	16.3
CAL YR 1970: TOTAL	77.036		MEAN	.211	MAX	.60	MIN	.078	AC-FT	153		
WTR YR 1971: TOTAL	51.349		MEAN	.141	MAX	.49	MIN	.063	AC-FT	102		

PEAK DISCHARGE (BASE, 1.70 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 1	2200	0.94	2.11	8-19	1500	0.95	2.16
8- 6	1300	1.14	3.41	9-30	0030	1.03	2.71

08302300 Middle Fork Tesuque Creek near Santa Fe, N. Mex.

LOCATION.--Lat 35°46'03", long 105°48'25", Santa Fe County, in Santa Fe National Forest, on right bank 800 ft upstream from culvert on State Highway 475, 950 ft upstream from mouth, and 9.2 miles northeast of Santa Fe.

DRAINAGE AREA.--0.43 sq mi.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 9,770 ft (from topographic map).

AVERAGE DISCHARGE.--10 calendar years, 0.284 cfs (206 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3.41 cfs Aug. 6 (gage height, 1.14 ft); minimum, 0.039 cfs Apr. 19.

Period of record: Maximum discharge, 4.55 cfs Aug. 24, 1966 (gage height, 1.27 ft), from rating curve extended above 2.20 cfs on basis of theoretical rating; minimum, 0.020 cfs Nov. 1, 1968, result of freezeup.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.090	.078	.070	.099	.15	.15	.27	.099	.38	.24	.19	.15
2	.090	.078	.063	.095	.16	.15	.18	.099	.38	.21	.18	.15
3	.090	.078	.063	.090	.17	.15	.13	.099	.39	.20	.17	.15
4	.090	.078	.063	.082	.17	.15	.11	.11	.37	.20	.17	.15
5	.090	.078	.063	.082	.17	.15	.11	.17	.35	.18	.17	.15
6	.086	.078	.063	.090	.16	.15	.11	.49	.34	.18	.16	.15
7	.082	.074	.063	.082	.14	.15	.11	.32	.33	.18	.16	.15
8	.082	.074	.063	.090	.13	.16	.11	.25	.32	.18	.16	.15
9	.082	.074	.063	.099	.14	.16	.10	.20	.30	.18	.16	.15
10	.082	.074	.063	.10	.14	.15	.099	.18	.28	.18	.16	.15
11	.082	.074	.063	.11	.15	.15	.099	.16	.27	.18	.16	.15
12	.082	.074	.067	.11	.18	.15	.095	.21	.27	.17	.16	.15
13	.082	.074	.070	.11	.17	.15	.090	.18	.25	.17	.16	.14
14	.082	.074	.067	.11	.21	.14	.090	.18	.24	.17	.16	.14
15	.082	.074	.067	.11	.20	.14	.099	.19	.23	.16	.16	.14
16	.082	.074	.063	.12	.21	.13	.099	.20	.22	.17	.16	.14
17	.082	.074	.063	.12	.21	.13	.10	.23	.25	.19	.16	.13
18	.082	.074	.063	.11	.20	.13	.10	.23	.25	.18	.16	.13
19	.086	.078	.063	.090	.18	.12	.11	.31	.23	.18	.16	.13
20	.086	.078	.067	.099	.18	.13	.15	.29	.22	.18	.16	.13
21	.086	.078	.070	.099	.18	.15	.12	.26	.22	.18	.15	.13
22	.086	.074	.082	.086	.16	.13	.14	.27	.22	.18	.16	.13
23	.086	.074	.082	.099	.16	.14	.18	.29	.22	.19	.16	.13
24	.082	.074	.082	.14	.16	.13	.13	.33	.22	.22	.16	.13
25	.082	.074	.095	.14	.16	.12	.11	.33	.20	.34	.16	.13
26	.082	.074	.15	.13	.16	.12	.14	.34	.20	.31	.16	.13
27	.082	.074	.16	.13	.16	.12	.13	.35	.19	.28	.16	.13
28	.082	.070	.15	.12	.18	.11	.12	.37	.19	.26	.16	.13
29	.078	-----	.13	.13	.17	.11	.11	.38	.24	.29	.16	.13
30	.078	-----	.13	.14	.16	.12	.10	.38	.43	.26	.15	.13
31	.078	-----	.11	-----	.15	-----	.11	.40	-----	.20	-----	.12
TOTAL	2.594	2.104	2.531	3.212	5.22	4.14	3.751	7.897	8.20	6.39	4.86	4.30
MEAN	.0837	.0751	.0816	.107	.168	.138	.121	.255	.273	.206	.162	.139
MAX	.090	.078	.16	.14	.21	.16	.27	.49	.43	.34	.19	.15
MIN	.078	.070	.063	.082	.13	.11	.090	.099	.19	.16	.15	.12
AC-FT	5.15	4.17	5.02	6.37	10.4	8.21	7.44	15.7	16.3	12.7	9.64	8.53

CAL YR 1971 TOTAL 55.199 MEAN .151 MAX .49 MIN .063 AC-FT 109

PEAK DISCHARGE (BASE, 1.70 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7 -1	2200	0.94	2.11	8-19	1500	0.95	2.16
8 -6	1300	1.14	3.41	9-30	0030	1.03	2.71

08302400 South Fork Tesuque Creek near Santa Fe, N. Mex.

LOCATION.--Lat 35°45'37", long 105°48'39", Santa Fe County, in Santa Fe National Forest, on left bank 150 ft upstream from culvert on State Highway 475, 2,700 ft upstream from mouth, and 8.7 miles northeast of Santa Fe.

DRAINAGE AREA.--0.47 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 9,740 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 0.235 cfs (170 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1.08 cfs Sept. 30 (gage height, 0.68 ft); minimum recorded, 0.063 cfs June 19, but may have been less during winter period.

Period of record: Maximum discharge 2.78 cfs Aug. 24, 1966 (gage height, 1.04 ft); maximum gage height, 1.16 ft June 2, 1969 (backwater from debris); minimum discharge recorded, 0.063 cfs Mar. 4-7, 1969, June 19, 1971, but may have been less during winter periods.

REMARKS.--Records good except those for winter period, which are poor.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.14	.11	.10	.078	.090	.11	.11	.086	.18	.099	.25
2	.15	.14	.11	.10	.078	.090	.11	.12	.086	.15	.099	.26
3	.14	.13	.11	.10	.078	.090	.11	.12	.086	.12	.099	.28
4	.14	.13	.11	.10	.078	.095	.10	.12	.082	.11	.10	.27
5	.13	.13	.11	.095	.078	.090	.099	.12	.082	.11	.12	.26
6	.13	.13	.11	.090	.078	.090	.099	.11	.082	.11	.31	.25
7	.13	.13	.11	.078	.074	.090	.099	.11	.086	.11	.26	.25
8	.13	.12	.12	.078	.074	.095	.099	.11	.086	.11	.25	.25
9	.13	.12	.12	.078	.074	.095	.099	.11	.082	.10	.24	.24
10	.13	.12	.11	.078	.074	.095	.10	.11	.082	.099	.22	.23
11	.13	.12	.11	.078	.074	.095	.11	.11	.078	.099	.19	.22
12	.14	.12	.10	.078	.074	.095	.11	.11	.078	.095	.20	.22
13	.14	.12	.099	.078	.074	.099	.11	.12	.078	.095	.19	.22
14	.14	.12	.099	.078	.074	.099	.11	.15	.074	.095	.18	.21
15	.14	.11	.11	.078	.074	.099	.11	.15	.074	.099	.17	.20
16	.14	.11	.11	.078	.074	.099	.12	.15	.074	.099	.16	.19
17	.13	.12	.11	.078	.074	.099	.12	.13	.074	.099	.18	.21
18	.13	.11	.11	.082	.074	.099	.12	.13	.074	.099	.18	.20
19	.13	.11	.11	.086	.078	.099	.10	.11	.070	.11	.19	.19
20	.13	.11	.11	.086	.082	.099	.12	.11	.067	.13	.20	.18
21	.13	.11	.11	.082	.080	.099	.099	.11	.082	.12	.20	.18
22	.13	.11	.11	.082	.090	.099	.099	.11	.074	.13	.20	.18
23	.14	.12	.11	.082	.099	.10	.099	.10	.082	.15	.20	.18
24	.15	.12	.10	.082	.099	.10	.10	.10	.082	.12	.20	.19
25	.14	.12	.10	.078	.099	.10	.11	.095	.082	.11	.18	.18
26	.14	.12	.10	.078	.099	.11	.11	.095	.086	.11	.18	.16
27	.13	.12	.11	.078	.095	.12	.11	.095	.090	.12	.18	.16
28	.13	.11	.10	.078	.090	.12	.11	.099	.095	.11	.19	.16
29	.13	.11	.10	.078	-----	.11	.10	.099	.095	.10	.22	.18
30	.13	.12	.10	.078	-----	.11	.10	.095	.099	.10	.23	.29
31	.13	-----	.10	.078	-----	.11	-----	.086	-----	.10	.26	-----
TOTAL	4.18	3.60	3.328	2.571	2.267	3.080	3.192	3.494	2.448	3.489	5.877	6.44
MEAN	.135	.120	.107	.0829	.0810	.0994	.106	.113	.0816	.113	.190	.215
MAX	.15	.14	.12	.10	.099	.12	.12	.15	.099	.18	.31	.29
MIN	.13	.11	.099	.078	.074	.090	.099	.086	.067	.095	.099	.16
AC-FT	8.29	7.14	6.60	5.10	4.50	6.11	6.33	6.93	4.86	6.92	11.7	12.8

CAL YR 1970: TOTAL 56.917 MEAN .156 MAX .45 MIN .099 AC-FT 113
 WTR YR 1971: TOTAL 43.966 MEAN .120 MAX .31 MIN .067 AC-FT 87.2

PEAK DISCHARGE (BASE, 0.75 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7- 1	2200	0.65	0.97	9-30	0030	0.68	1.08
8- 6	1330	.65	.97				

08302400 South Fork Tesuque Creek near Santa Fe, N. Mex.

LOCATION.--Lat 35°45'37", long 105°48'39", Santa Fe County, in Santa Fe National Forest, on left bank 150 ft upstream from culvert on State Highway 475, 2,700 ft upstream from mouth, and 8.7 miles northeast of Santa Fe.

DRAINAGE AREA.--0.47 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 9,740 ft (from topographic map).

AVERAGE DISCHARGE.--9 calendar years, 0.235 cfs (170 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1.08 cfs Sept. 30 (gage height, 0.68 ft); minimum recorded, 0.063 cfs June 19, but may have been less during winter period.

Period of record: Maximum discharge 2.78 cfs Aug. 24, 1966 (gage height, 1.04 ft); maximum gage height, 1.16 ft June 2, 1969 (backwater from debris); minimum discharge recorded, 0.063 cfs Mar. 4-7, 1969, June 19, 1971, but may have been less during winter periods.

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

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.10	.078	.090	.11	.11	.086	.18	.099	.25	.18	.16	.12
2	.10	.078	.090	.11	.12	.086	.15	.099	.26	.16	.15	.12
3	.10	.078	.090	.11	.12	.086	.12	.099	.28	.16	.15	.12
4	.10	.078	.095	.10	.12	.082	.11	.10	.27	.15	.15	.12
5	.095	.078	.090	.099	.12	.082	.11	.12	.26	.15	.15	.12
6	.090	.078	.090	.099	.11	.082	.11	.31	.25	.15	.14	.12
7	.078	.074	.090	.099	.11	.086	.11	.26	.25	.15	.14	.12
8	.078	.074	.095	.099	.11	.086	.11	.25	.25	.15	.14	.12
9	.078	.074	.095	.099	.11	.082	.10	.24	.24	.14	.13	.12
10	.078	.074	.095	.10	.11	.082	.099	.22	.23	.14	.13	.12
11	.078	.074	.095	.11	.11	.078	.099	.19	.22	.14	.13	.12
12	.078	.074	.095	.11	.11	.078	.095	.20	.22	.13	.13	.12
13	.078	.074	.099	.11	.12	.078	.095	.19	.22	.13	.13	.12
14	.078	.074	.099	.11	.15	.074	.095	.18	.21	.13	.13	.12
15	.078	.074	.099	.11	.15	.074	.099	.17	.20	.13	.13	.12
16	.078	.074	.099	.12	.15	.074	.099	.16	.19	.13	.13	.11
17	.078	.074	.099	.12	.13	.074	.099	.18	.21	.15	.13	.11
18	.082	.074	.099	.12	.13	.074	.099	.18	.20	.14	.13	.12
19	.086	.078	.099	.10	.11	.070	.11	.19	.19	.13	.13	.12
20	.086	.082	.099	.12	.11	.067	.13	.20	.18	.13	.13	.11
21	.082	.080	.099	.099	.11	.082	.12	.20	.18	.13	.13	.11
22	.082	.090	.099	.099	.11	.074	.13	.20	.18	.13	.13	.11
23	.082	.099	.10	.099	.10	.082	.15	.20	.18	.13	.13	.11
24	.082	.099	.10	.10	.10	.082	.12	.20	.19	.15	.13	.11
25	.078	.099	.10	.11	.095	.082	.11	.18	.18	.23	.12	.11
26	.078	.099	.11	.11	.095	.086	.11	.18	.16	.22	.12	.11
27	.078	.095	.12	.11	.095	.090	.12	.18	.16	.18	.12	.11
28	.078	.090	.12	.11	.099	.095	.11	.19	.16	.17	.13	.11
29	.078	-----	.11	.10	.099	.095	.10	.22	.18	.18	.12	.11
30	.078	-----	.11	.10	.095	.099	.10	.23	.29	.16	.12	.11
31	.078	-----	.11	-----	.086	-----	.10	.26	-----	.16	-----	.10
TOTAL	2.571	2.267	3.080	3.192	3.494	2.448	3.489	5.877	6.44	4.71	3.99	3.57
MEAN	.0829	.0810	.0994	.106	.113	.0816	.113	.190	.215	.152	.133	.115
MAX	.10	.099	.12	.12	.15	.099	.18	.31	.29	.23	.16	.12
MIN	.078	.074	.090	.099	.086	.067	.095	.099	.16	.13	.12	.10
AC-FT	5.10	4.50	6.11	6.33	6.93	4.86	6.92	11.7	12.8	9.34	7.91	7.08

CAL YR 1971 TOTAL 45.128 MEAN .124 MAX .31 MIN .067 AC-FT 89.5

PEAK DISCHARGE (BASE, 0.75 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7 -1	2200	0.65	0.97	9-30	0030	0.68	1.08
8 -6	1330	.65	.97				

08304100 Little Tesuque Creek near Santa Fe, N. Mex.

LOCATION.--Lat 35°44'48", long 105°49'39", in NW 1/4 sec.36, T.18 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on right bank 1,200 ft upstream from east boundary of Hyde State Park, 0.25 mile (by access road) east of State Highway 475, and 7.4 miles northeast of Santa Fe.

DRAINAGE AREA.--0.64 sq mi.

PERIOD OF RECORD.--June 1962 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 9,020 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 0.159 cfs (115 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1.36 cfs Sept. 30 (gage height, 0.78 ft); minimum, 0.007 cfs July 15.
Period of record: Maximum discharge, 2.28 cfs July 30, 1965 (gage height, 0.97 ft), from rating curve extended above 0.93 cfs on basis of theoretical rating; minimum, 0.007 cfs July 5, 6, 10, 11, 1967, July 15, 1971.

REMARKS.--Records good.

REVISIONS.--WRD N. Mex. 1969: Drainage area.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.090	.067	.057	.047	.057	.060	.086	.074	.042	.14	.023	.082
2	.067	.070	.057	.044	.057	.060	.078	.082	.039	.15	.018	.082
3	.060	.060	.057	.044	.057	.060	.070	.086	.034	.042	.016	.090
4	.067	.063	.053	.040	.057	.060	.070	.078	.034	.027	.020	.086
5	.063	.063	.057	.038	.057	.060	.067	.074	.032	.021	.041	.074
6	.060	.067	.050	.037	.057	.060	.067	.063	.032	.020	.24	.070
7	.060	.067	.057	.036	.060	.060	.063	.067	.029	.020	.26	.074
8	.070	.067	.057	.036	.060	.060	.063	.063	.032	.023	.18	.074
9	.070	.063	.053	.044	.053	.060	.067	.063	.029	.021	.13	.070
10	.070	.067	.053	.047	.053	.060	.070	.060	.025	.016	.099	.063
11	.070	.067	.050	.047	.053	.060	.082	.067	.023	.015	.078	.063
12	.067	.063	.047	.047	.053	.063	.086	.072	.025	.012	.17	.067
13	.067	.067	.039	.047	.057	.060	.086	.090	.023	.011	.15	.063
14	.063	.063	.039	.050	.057	.060	.082	.12	.023	.010	.11	.057
15	.070	.060	.050	.050	.057	.060	.086	.11	.021	.012	.086	.057
16	.067	.063	.050	.053	.057	.057	.10	.10	.020	.015	.074	.053
17	.067	.063	.050	.057	.057	.060	.11	.095	.018	.012	.074	.082
18	.067	.060	.050	.060	.057	.060	.095	.078	.018	.015	.078	.086
19	.067	.060	.047	.060	.060	.060	.070	.067	.018	.022	.10	.078
20	.070	.060	.050	.057	.060	.060	.067	.060	.018	.078	.11	.074
21	.070	.060	.047	.060	.060	.060	.063	.057	.041	.036	.099	.070
22	.070	.060	.047	.057	.060	.067	.063	.053	.029	.050	.11	.070
23	.074	.060	.042	.057	.060	.070	.067	.057	.032	.067	.12	.082
24	.070	.060	.042	.060	.060	.074	.078	.050	.025	.044	.12	.095
25	.070	.060	.044	.057	.060	.078	.086	.047	.020	.027	.11	.078
26	.070	.057	.047	.057	.060	.090	.090	.047	.016	.029	.10	.063
27	.063	.057	.050	.057	.060	.12	.078	.050	.015	.046	.10	.057
28	.063	.057	.047	.057	.060	.12	.074	.060	.012	.042	.099	.057
29	.063	.057	.047	.057	-----	.10	.067	.063	.011	.027	.095	.075
30	.067	.057	.044	.057	-----	.099	.070	.053	.012	.025	.095	.36
31	.070	-----	.047	.057	-----	.10	-----	.044	-----	.027	.10	-----
TOTAL	2.102	1.865	1.527	1.574	1.616	2.178	2.301	2.150	.748	1.102	3.205	2.452
MEAN	.0678	.0622	.0493	.0508	.0577	.0703	.0767	.0694	.0249	.0355	.103	.0817
MAX	.090	.070	.057	.060	.060	.12	.11	.12	.042	.15	.26	.36
MIN	.060	.057	.039	.036	.053	.057	.063	.044	.011	.010	.016	.053
AC-FT	4.17	3.70	3.03	3.12	3.21	4.32	4.56	4.26	1.48	2.19	6.36	4.86

CAL YR 1970: TOTAL 31.282 MEAN .0857 MAX .28 MIN .039 AC-FT 62.0
WTR YR 1971: TOTAL 22.820 MEAN .0625 MAX .36 MIN .010 AC-FT 45.3

PEAK DISCHARGE (BASE, 1.00 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-1	2300	0.70	1.04	9-30	0100	0.78	1.36

08304100 Little Tesuque Creek near Santa Fe, N. Mex.

LOCATION.--Lat 35°44'48", long 105°49'39", in NW¼NE¼ sec.36, T.18 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on right bank 1,200 ft upstream from east boundary of Hyde State Park, 0.25 mile (by access road) east of State Highway 475, and 7.4 miles northeast of Santa Fe.

DRAINAGE AREA.--0.64 sq mi.

PERIOD OF RECORD.--June 1962 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 9,020 ft (from topographic map).

AVERAGE DISCHARGE.--9 calendar years, 0.160 cfs (116 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1.36 cfs Sept. 30 (gage height, 0.78 ft); minimum, 0.007 cfs July 15.

Period of record: Maximum discharge, 2.28 cfs July 30, 1965 (gage height, 0.97 ft), from rating curve extended above 0.93 cfs on basis of theoretical rating; minimum, 0.007 cfs July 5, 6, 10, 11, 1967, July 15, 1971.

REMARKS.--Records good.

REVISIONS.--WRD N. Mex. 1969: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.047	.057	.060	.086	.074	.042	.14	.023	.082	.12	.11	.090
2	.044	.057	.060	.078	.082	.039	.15	.018	.082	.095	.095	.086
3	.044	.057	.060	.070	.086	.034	.042	.016	.090	.086	.086	.086
4	.040	.057	.060	.070	.078	.034	.027	.020	.086	.086	.082	.082
5	.038	.057	.060	.067	.074	.032	.021	.041	.074	.082	.082	.078
6	.037	.057	.060	.067	.063	.032	.020	.24	.070	.082	.082	.078
7	.036	.060	.060	.063	.067	.029	.020	.26	.074	.078	.078	.078
8	.036	.060	.060	.063	.063	.032	.023	.18	.074	.074	.078	.074
9	.044	.053	.060	.067	.063	.029	.021	.13	.070	.074	.078	.074
10	.047	.053	.060	.070	.060	.025	.016	.099	.063	.074	.074	.074
11	.047	.053	.060	.082	.067	.023	.015	.078	.063	.070	.074	.074
12	.047	.053	.063	.086	.072	.025	.012	.17	.067	.063	.074	.074
13	.047	.057	.060	.086	.090	.023	.011	.15	.063	.067	.074	.074
14	.050	.057	.060	.082	.12	.023	.010	.11	.057	.063	.074	.074
15	.050	.057	.060	.086	.11	.021	.012	.086	.057	.063	.078	.074
16	.053	.057	.057	.10	.10	.020	.015	.074	.053	.063	.082	.070
17	.057	.057	.060	.11	.095	.018	.012	.074	.082	.085	.065	.067
18	.060	.057	.060	.095	.078	.018	.015	.078	.086	.074	.099	.067
19	.060	.060	.060	.070	.067	.018	.022	.10	.078	.067	.082	.067
20	.057	.060	.060	.067	.060	.018	.078	.11	.074	.067	.086	.067
21	.060	.060	.060	.063	.057	.041	.036	.099	.070	.067	.095	.067
22	.057	.060	.067	.063	.053	.029	.050	.11	.070	.067	.090	.067
23	.057	.060	.070	.067	.057	.032	.067	.12	.082	.067	.090	.067
24	.060	.060	.074	.078	.050	.025	.044	.12	.095	.079	.095	.067
25	.057	.060	.078	.086	.047	.020	.027	.11	.078	.36	.095	.067
26	.057	.060	.090	.090	.047	.016	.029	.10	.063	.31	.099	.070
27	.057	.060	.12	.078	.050	.015	.046	.10	.057	.17	.099	.070
28	.057	.060	.12	.074	.060	.012	.042	.099	.057	.13	.099	.070
29	.057	-----	.10	.067	.063	.011	.027	.095	.075	.17	.095	.070
30	.057	-----	.099	.070	.053	.012	.025	.095	.36	.15	.090	.070
31	.057	-----	.10	-----	.044	-----	.027	.10	-----	.12	-----	.070
TOTAL	1.574	1.616	2.178	2.301	2.150	.748	1.102	3.205	2.452	3.223	2.580	2.263
MEAN	.0508	.0577	.0703	.0767	.0694	.0249	.0355	.103	.0817	.104	.0860	.073
MAX	.060	.060	.12	.11	.12	.042	.15	.26	.36	.36	.11	.090
MIN	.036	.053	.057	.063	.044	.011	.010	.016	.053	.063	.065	.067
AC-FT	3.12	3.21	4.32	4.56	4.26	1.48	2.19	6.36	4.86	6.39	5.12	4.49

CAL YR 1971 TOTAL 25.392 MEAN .0696 MAX .36 MIN .010 AC-FT 50.4

PEAK DISCHARGE (BASE, 1.00 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7 -1	2300	0.70	1.04	9-30	0100	0.78	1.36

08304200 Little Tesuque Creek tributary No. 4 near Santa Fe, N. Mex.

LOCATION.--Lat 35°44'07", long 105°49'59", in NE 1/4 sec.1, T.17 N., R.10 E., Santa Fe County, on right bank in Hyde State Park, 1,000 ft upstream from mouth and State Highway 475, and 6.8 miles northeast of Santa Fe.

DRAINAGE AREA.--0.69 sq mi.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 8,600 ft (from topographic map). Prior to Aug. 6, 1968, at datum 0.20 ft lower.

AVERAGE DISCHARGE.--7 years, 0.0963 cfs (69.8 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 0.22 cfs Aug. 8 (gage height, 0.375 ft); no flow many days.

Period of record: Maximum discharge, 2.98 cfs July 28, 1968 (gage height, 1.27 ft), from rating curve extended above 0.65 cfs on basis of theoretical rating; no flow many days most years.

REMARKS.--Records fair.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.011	.013	.004	.015	.016	.060	.027	.002	0		.018
2	0	.011	.013	.004	.016	.016	.047	.025	.002	0		.015
3	0	.011	.012	.004	.016	.018	.039	.025	.001	0		.013
4	0	.011	.012	.003	.016	.018	.036	.021	.001	0		.011
5	0	.010	.012	.003	.018	.016	.034	.021	0	0		.009
6	0	.009	.011	.003	.018	.016	.032	.020	0	0		.008
7	0	.009	.012	.006	.018	.016	.029	.018	0		.019	.006
8	0	.010	.011	.006	.016	.016	.029	.018	0		.17	.005
9	0	.011	.009	.007	.016	.016	.027	.016	0		.12	.005
10	0	.011	.008	.008	.016	.016	.027	.016	0		.078	.004
11	0	.011	.009	.009	.016	.016	.027	.015	0		.060	.003
12	0	.011	.010	.009	.016	.018	.029	.015	0		.084	.002
13	0	.011	.010	.009	.016	.018	.032	.016	0		.13	.002
14	0	.011	.010	.010	.018	.020	.034	.018	0		.086	.002
15	0	.011	.008	.010	.018	.018	.034	.021	0		.067	.001
16	0	.011	.006	.010	.016	.020	.039	.025	0		.057	.001
17	0	.011	.007	.010	.016	.020	.053	.023	0		.050	.001
18	0	.011	.007	.011	.016	.020	.053	.018	0		.057	0
19	0	.010	.006	.012	.018	.018	.050	.015	0		.073	0
20	0	.010	.007	.013	.018	.020	.044	.012	0		.088	0
21	0	.010	.008	.015	.020	.020	.039	.011	0		.063	0
22	0	.010	.008	.015	.020	.020	.036	.010	0		.050	0
23	0	.010	.008	.015	.020	.021	.034	.009	0		.044	0
24	0	.011	.008	.016	.018	.027	.034	.006	0		.044	0
25	0	.011	.006	.018	.018	.034	.039	.006	0		.044	0
26	0	.012	.004	.016	.018	.047	.047	.005	0		.039	0
27	.006	.012	.004	.016	.018	.095	.047	.004	0		.036	0
28	.011	.012	.005	.016	.018	.099	.042	.004	0		.032	0
29	.011	.013	.005	.016	-----	.078	.036	.003	0		.027	.002
30	.011	.015	.005	.016	-----	.067	.032	.002	0		.023	.079
31	.011	-----	.005	.015	-----	.067	-----	.002	-----		.020	-----
TOTAL	.050	.328	.259	.325	.483	.927	1.141	.447	.006	0	1.561	.187
MEAN	.0016	.0109	.0084	.0105	.0172	.0299	.0380	.0144	.0002	0	.0504	.0062
MAX	.011	.015	.013	.018	.020	.099	.060	.027	.002	0	.17	.079
MIN	0	.009	.004	.003	.015	.016	.027	.002	0	0	0	0
AC-FT	.099	.65	.51	.64	.96	1.84	2.26	.89	.012	0	3.10	.37
CAL YR 1970	TOTAL	8.305	MEAN	.0228	MAX	.15	MIN	0	AC-FT	16.5		
WTR YR 1971	TOTAL	5.714	MEAN	.0157	MAX	.17	MIN	0	AC-FT	11.3		

PEAK DISCHARGE (BASE, 1.00 CFS, REVISED).--No peak above base.

08304200 Little Tesuque Creek tributary No. 4 near Santa Fe, N. Mex.

LOCATION.--Lat 35°44'07", long 105°49'59", in NE¼ sec.1, T.17 N., R.10 E., Santa Fe County, on right bank in Hyde State Park, 1,000 ft upstream from mouth and State Highway 475, and 6.8 miles northeast of Santa Fe.

DRAINAGE AREA.--0.69 sq mi.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 8,600 ft (from topographic map). Prior to Aug. 6, 1968, at datum 0.20 ft lower.

AVERAGE DISCHARGE.--7 calendar years, 0.0963 cfs (69.8 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 0.97 cfs Oct. 25 (gage height, 0.70 ft); no flow many days.
Period of record: Maximum discharge, 2.98 cfs July 28, 1968 (gage height, 1.27 ft), from rating curve extended above 0.65 cfs on basis of theoretical rating; no flow many days most years.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.004	.015	.016	.060	.027	.002		0	.018	.070	.086	.060
2	.004	.016	.016	.047	.025	.002		0	.015	.047	.074	.057
3	.004	.016	.018	.039	.025	.001		0	.013	.036	.063	.053
4	.003	.016	.018	.036	.021	.001		0	.011	.029	.057	.047
5	.003	.018	.016	.034	.021	0		0	.009	.025	.050	.044
6	.003	.018	.016	.032	.020	0		0	.008	.023	.047	.042
7	.006	.018	.016	.029	.018	0		.019	.006	.021	.044	.039
8	.006	.016	.016	.029	.018	0		.17	.005	.020	.039	.039
9	.007	.016	.016	.027	.016	0		.12	.005	.018	.036	.038
10	.008	.016	.016	.027	.016	0		.078	.004	.016	.034	.037
11	.009	.016	.016	.027	.015	0		.060	.003	.016	.034	.036
12	.009	.016	.018	.029	.015	0		.084	.002	.015	.034	.035
13	.009	.016	.018	.032	.016	0		.13	.002	.013	.032	.034
14	.010	.018	.020	.034	.018	0		.086	.002	.012	.032	.032
15	.010	.018	.018	.034	.021	0		.067	.001	.012	.029	.031
16	.010	.016	.020	.039	.025	0		.057	.001	.011	.029	.030
17	.010	.016	.020	.053	.023	0		.050	.001	.012	.034	.029
18	.011	.016	.020	.053	.018	0		.057	0	.011	.036	.028
19	.012	.018	.018	.050	.015	0		.073	0	.018	.039	.027
20	.013	.018	.020	.044	.012	0		.088	0	.021	.042	.026
21	.015	.020	.020	.039	.011	0		.063	0	.016	.074	.025
22	.015	.020	.020	.036	.010	0		.050	0	.016	.078	.025
23	.015	.020	.021	.034	.009	0		.044	0	.016	.074	.025
24	.016	.018	.027	.034	.006	0		.044	0	.016	.070	.027
25	.018	.018	.034	.039	.006	0		.044	0	.35	.070	.032
26	.016	.018	.047	.047	.005	0		.039	0	.40	.070	.039
27	.016	.018	.095	.047	.004	0		.036	0	.18	.070	.040
28	.016	.018	.099	.042	.004	0		.032	0	.12	.070	.040
29	.016	-----	.078	.036	.003	0		.027	.002	.13	.070	.040
30	.016	-----	.067	.032	.002	0		.023	.079	.13	.063	.040
31	.015	-----	.067	-----	.002	-----		.020	-----	.10	-----	.040
TOTAL	.325	.483	.927	1.141	.447	.006	0	1.561	.187	1.920	1.580	1.137
MEAN	.0105	.0172	.0299	.0380	.0144	.0002	0	.0504	.0062	.0619	.0527	.0367
MAX	.018	.020	.099	.060	.027	.002	0	.17	.079	.40	.086	.060
MIN	.003	.015	.016	.027	.002	0	0	0	0	.011	.029	.025
AC-FT	.64	.96	1.84	2.26	.89	.012	0	3.10	.37	3.81	3.13	2.26

CAL YR 1971 TOTAL 9.714 MEAN .0266 MAX .40 MIN 0 AC-FT 19.3

PEAK DISCHARGE (BASE, 1.00 CFS).--No peak above base.

08304300 Little Tesuque Creek tributary No. 3 near Santa Fe, N. Mex.

LOCATION.--Lat 35°43'35", long 105°50'01", in SE¼SW¼ sec.1, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on right bank 1,900 ft upstream from mouth and State Highway 475, and 6.5 miles northeast of Santa Fe.

DRAINAGE AREA.--0.65 sq mi.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 8,460 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 0.0310 cfs (22.5 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 0.095 cfs Aug. 8 (gage height, 0.265 ft); no flow most of time.

Period of record: Maximum discharge 1.89 cfs Apr. 21, 1969 (gage height, 0.89 ft), from rating curve extended above 0.48 cfs on basis of theoretical rating; maximum gage height, 0.92 ft Apr. 21, 1969 (backwater from debris); no flow most of time.

REMARKS.--Records fair.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											0	
2											0	
3											0	
4											0	
5											0	
6											0	
7											0	
8											.041	
9											.060	
10											.070	
11											.053	
12											.042	
13											.034	
14											.021	
15											.011	
16											.002	
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	.334	0
MEAN	0	0	0	0	0	0	0	0	0	0	.0108	0
MAX	0	0	0	0	0	0	0	0	0	0	.070	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	.66	0
CAL YR 1970:	TOTAL 0.362			MEAN .0010	MAX .034	MIN 0	AC-FT .72					
WTR YR 1971:	TOTAL 0.334			MEAN .0009	MAX .070	MIN 0	AC-FT .66					

PEAK DISCHARGE (BASE, 0.40 CFS).--No peak above base.

08304300 Little Tesuque Creek tributary No. 3 near Santa Fe, N. Mex.

LOCATION.--Lat 35°43'35", long 105°50'01", in SE¼SW¼ sec.1, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on right bank 1,900 ft upstream from mouth and State Highway 475, and 6.5 miles northeast of Santa Fe.

DRAINAGE AREA.--0.65 sq mi.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 8,460 ft (from topographic map).

AVERAGE DISCHARGE.--8 calendar years, 0.0315 cfs (22.8 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 0.20 cfs Oct. 26 (gage height, 0.355 ft); no flow most of time.
Period of record: Maximum discharge 1.89 cfs Apr. 21, 1969 (gage height, 0.89 ft), from rating curve extended above 0.48 cfs on basis of theoretical rating; maximum gage height, 0.92 ft Apr. 21, 1969 (backwater from debris); no flow most of time.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1								0		0	.067	.030
2								0		0	.050	.020
3								0		0	.036	.010
4								0		0	.025	0
5								0		0	.015	0
6								0		0	.007	0
7								0		0	0	0
8								.041		0	0	0
9								.060		0	0	0
10								.070		0	0	0
11								.053		0	0	0
12								.042		0	0	0
13								.034		0	0	0
14								.021		0	0	0
15								.011		0	0	0
16								.002		0	0	0
17								0		0	0	0
18								0		0	0	0
19								0		0	0	0
20								0		0	0	0
21								0		0	0	0
22								0		0	0	0
23								0		0	.016	0
24								0		0	.032	0
25								0		0	.047	0
26								0		.14	.063	0
27								0		.16	.070	0
28								0		.13	.067	.032
29								0		.11	.053	.030
30								0		.090	.040	.020
31								0		.078	-----	.010
TOTAL	0	0	0	0	0	0	0	.334	0	.708	.588	.152
MEAN	0	0	0	0	0	0	0	.0108	0	.0228	.0196	.0049
MAX	0	0	0	0	0	0	0	.070	0	.16	.070	.032
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	.66	0	1.40	1.17	.30

CAL YR 1971 TOTAL 1.782 MEAN .0049 MAX .16 MIN 0 AC-FT 3.53

PEAK DISCHARGE (BASE, 0.40 CFS).--No peak above base.

08304400 Little Tesuque Creek tributary No. 2 near Santa Fe, N. Mex.

LOCATION.--Lat 35°43'34", long 105°51'24", in SW¼SW¼ sec.2, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on right bank 150 ft upstream from mouth, 200 ft south of State Highway 475, and 5.3 miles northeast of Santa Fe.

DRAINAGE AREA.--0.45 sq mi.

PERIOD OF RECORD.--June 1962 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 7,960 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 0.0092 cfs (6.67 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 0.015 cfs Aug. 20 (gage height, 0.125 ft); no flow many days.

Period of record: Maximum discharge, 0.31 cfs Aug. 2, 1966 (gage height, 0.44 ft), from rating curve extended above 0.11 cfs on basis of theoretical rating; no flow many days each year.

REMARKS.--Records fair.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.001	.001	.002	.002	.004	.002	.001	0	.003	.001
2	0	0	.001	.001	.002	.002	.004	.002	.001	0	.002	.001
3	0	.001	.001	.002	.002	.002	.004	.002	.001	0	.002	.001
4	0	.001	.001	.002	.002	.002	.004	.002	.001	0	.002	.001
5	0	.001	.001	.002	.002	.002	.004	.002	0	0	.002	.001
6	0	.001	.001	.002	.002	.002	.004	.002	0	0	.002	0
7	0	.001	.001	.002	.002	.002	.004	.002	0	0	.003	0
8	0	.001	.001	.002	.002	.002	.004	.002	0	0	.004	0
9	0	.001	.001	.002	.002	.002	.004	.002	0	0	.004	0
10	0	.002	.001	.002	.002	.002	.003	.002	0	0	.004	0
11	0	.002	.001	.002	.002	.003	.003	.002	0	0	.004	0
12	0	.002	.001	.002	.002	.004	.003	.002	0	0	.004	0
13	0	.001	.001	.002	.002	.004	.003	.002	0	0	.004	0
14	0	.001	.001	.002	.002	.004	.003	.002	0	0	.004	0
15	0	.001	.001	.002	.002	.004	.003	.002	0	0	.003	0
16	0	.001	.001	.002	.002	.004	.004	.002	0	0	.003	0
17	0	.001	.001	.002	.002	.004	.004	.002	0	0	.003	0
18	0	.001	.001	.002	.002	.004	.004	.002	0	0	.003	0
19	0	.001	.001	.002	.002	.004	.003	.002	0	0	.006	0
20	0	.001	.001	.002	.002	.004	.003	.002	0	.008	.013	0
21	0	.001	.001	.002	.002	.004	.003	.002	0	.006	.008	0
22	0	.001	.001	.002	.002	.004	.004	.001	0	.006	.005	0
23	0	.001	.001	.002	.002	.004	.004	.001	0	.007	.005	0
24	0	.001	.001	.002	.002	.005	.004	.001	0	.007	.004	0
25	0	.001	.001	.002	.002	.005	.004	.001	0	.006	.004	0
26	0	.001	.001	.002	.002	.004	.004	.001	0	.005	.003	0
27	0	.001	.001	.002	.002	.004	.004	.001	0	.004	.002	0
28	.001	.001	.001	.002	.002	.004	.004	.001	0	.004	.002	0
29	0	.001	.001	.002	-----	.004	.004	.001	0	.004	.002	0
30	0	.001	.001	.002	-----	.004	.003	.001	0	.004	.002	.001
31	0	-----	.001	.002	-----	.004	-----	.001	-----	.003	.001	-----
TOTAL	.001	.031	.031	.060	.056	.105	.110	.052	.004	.064	.113	.006
MEAN	.00003	.0010	.0010	.0019	.0020	.0034	.0037	.0017	.0001	.0021	.0036	.0002
MAX	.001	.002	.001	.002	.002	.005	.004	.002	.001	.008	.013	.001
MIN	0	0	.001	.001	.002	.002	.003	.001	0	0	.001	0
AC-FT	.002	.061	.061	.12	.11	.21	.22	.10	.008	.13	.22	.012

CAL YR 1970 TOTAL 1.234 MEAN .0034 MAX .015 MIN 0 AC-FT 2.45
WTR YR 1971 TOTAL 0.633 MEAN .0017 MAX .013 MIN 0 AC-FT 1.26

PEAK DISCHARGE (BASE, 0.09 CFS).--No peak above base.

08304400 Little Tesuque Creek tributary No. 2 near Santa Fe, N. Mex.

LOCATION.--Lat 35°43'34", long 105°51'24", in SW¼SW¼ sec.2, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on right bank 150 ft upstream from mouth, 200 ft south of State Highway 475, and 5.3 miles northeast of Santa Fe.

DRAINAGE AREA.--0.45 sq mi.

PERIOD OF RECORD.--June 1962 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 7,960 ft (from topographic map).

AVERAGE DISCHARGE.--9 calendar years, 0.0091 cfs (6.59 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 0.047 cfs Oct. 26 (gage height, 0.200 ft); no flow many days.

Period of record: Maximum discharge, 0.31 cfs Aug. 2, 1966 (gage height, 0.44 ft), from rating curve extended above 0.11 cfs on basis of theoretical rating; no flow many days each year.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.001	.002	.002	.004	.002	.001	0	.003	.001	.001	.008	.002
2	.001	.002	.002	.004	.002	.001	0	.002	.001	.001	.007	.002
3	.002	.002	.002	.004	.002	.001	0	.002	.001	.001	.006	.002
4	.002	.002	.002	.004	.002	.001	0	.002	.001	.001	.005	.002
5	.002	.002	.002	.004	.002	0	0	.002	.001	.001	.004	.002
6	.002	.002	.002	.004	.002	0	0	.002	0	.001	.004	.002
7	.002	.002	.002	.004	.002	0	0	.003	0	0	.003	.002
8	.002	.002	.002	.004	.002	0	0	.004	0	0	.002	.002
9	.002	.002	.002	.004	.002	0	0	.004	0	0	.002	.002
10	.002	.002	.002	.003	.002	0	0	.004	0	0	.002	.002
11	.002	.002	.003	.003	.002	0	0	.004	0	0	.002	.002
12	.002	.002	.004	.003	.002	0	0	.004	0	0	.002	.002
13	.002	.002	.004	.003	.002	0	0	.004	0	0	.002	.002
14	.002	.002	.004	.003	.002	0	0	.004	0	0	.002	.002
15	.002	.002	.004	.003	.002	0	0	.003	0	0	.002	.002
16	.002	.002	.004	.004	.002	0	0	.003	0	0	.002	.002
17	.002	.002	.004	.004	.002	0	0	.003	0	0	.002	.002
18	.002	.002	.004	.004	.002	0	0	.003	0	.001	.002	.002
19	.002	.002	.004	.003	.002	0	0	.006	0	0	.002	.002
20	.002	.002	.004	.003	.002	0	.008	.013	0	0	.002	.002
21	.002	.002	.004	.003	.002	0	.006	.008	0	0	.002	.002
22	.002	.002	.004	.004	.001	0	.006	.005	0	0	.003	.002
23	.002	.002	.004	.004	.001	0	.007	.005	0	0	.003	.002
24	.002	.002	.005	.004	.001	0	.007	.004	0	0	.003	.002
25	.002	.002	.005	.004	.001	0	.006	.004	0	.017	.003	.002
26	.002	.002	.004	.004	.001	0	.005	.003	0	.036	.003	.005
27	.002	.002	.004	.004	.001	0	.004	.002	0	.020	.003	.025
28	.002	.002	.004	.004	.001	0	.004	.002	0	.013	.003	.025
29	.002	-----	.004	.004	.001	0	.004	.002	0	.011	.003	.020
30	.002	-----	.004	.003	.001	0	.004	.002	.001	.009	.003	.016
31	.002	-----	.004	-----	.001	-----	.003	.001	-----	.009	-----	.012
TOTAL	.060	.056	.105	.110	.052	.004	.064	.113	.006	.122	.092	.153
MEAN	.0019	.0020	.0034	.0037	.0017	.0001	.0021	.0036	.0002	.0039	.0031	.0049
MAX	.002	.002	.005	.004	.002	.001	.008	.013	.001	.036	.008	.025
MIN	.001	.002	.002	.003	.001	0	0	.001	0	0	.002	.002
AC-FT	.12	.11	.21	.22	.10	.008	.13	.22	.012	.24	.18	.30

CAL YB 1971 TOTAL 0.937 MEAN .0026 MAX .036 MIN 0 AC-FT 1.86

PEAK DISCHARGE (BASE, 0.09 CFS).--No peak above base.

08313000 Rio Grande at Otowi Bridge, near San Ildefonso, N. Mex.

LOCATION.--Lat 35°52'29", long 106°08'30", in SW¼SW¼ sec.18, T.19 N., R.8 E., Santa Fe County, in San Ildefonso Pueblo Grant, near right bank on downstream end of pier of former railway bridge, 400 ft downstream from bridge on State Highway 4, 1.8 miles southwest of San Ildefonso Pueblo, 2.5 miles downstream from Pojoaque River, and 6.8 miles west of Pojoaque.

DRAINAGE AREA.--14,300 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--February 1895 to December 1905, June 1909 to current year. Monthly discharge only for some periods, published in WSP 1312. In early reports this record was published as "at Water Tank," as "at Rio Grande," and as "near Buckman."

GAGE.--Water-stage recorder. Datum of gage is 5,488.48 ft above mean sea level. See WSP 1312, 1732, or 1923 for history of changes prior to June 1, 1910.

AVERAGE DISCHARGE.--72 years (1895-1905, 1909-71), 1,520 cfs (1,101,000 acre-ft per year); 20 calendar years (1951-70), 1,105 cfs (800,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,820 cfs July 26 (gage height, 7.53 ft); minimum, 200 cfs July 17-18.
Period of record: Maximum discharge, 24,400 cfs May 23, 1920; maximum gage height, 14.5 ft Sept. 29, 1904 (present site and datum); minimum daily discharge, 60 cfs July 4, 5, 1902.
The 1920 flood is greatest since at least 1884 and probably since 1741; information from W. H. Yeo's file on floods.

REMARKS.--Records good. Flow partly regulated by El Vado and Abiquiu Reservoirs (see sta 08285000, 08286900) on Rio Chama which contributes about 40 percent of total flow. Diversions above station for irrigation of about 620,000 acres in Colorado and 75,000 acres in New Mexico. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 828: Drainage area. WSP 1512: 1895-99, 1904-6, 1911-12, 1914, 1931(M), 1935. WSP 1712: 1904(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	682	900	1,060	711	864	758	2,700	852	654	907	457	312
2	664	930	967	722	871	705	2,410	722	728	1,240	446	303
3	658	967	952	746	897	643	1,990	1,060	616	897	414	285
4	658	945	839	676	924	654	1,750	1,220	510	864	368	281
5	605	1,240	778	585	890	795	1,610	1,220	515	649	363	256
6	565	1,310	798	550	845	864	1,560	1,200	575	554	452	252
7	543	1,320	832	530	852	878	1,580	988	501	510	463	225
8	538	1,350	825	520	839	845	1,130	1,080	469	520	508	256
9	576	1,370	818	580	782	845	1,060	1,120	464	492	525	244
10	611	1,680	894	600	807	910	1,100	1,160	478	585	694	244
11	652	1,660	916	620	845	959	890	988	530	409	399	240
12	852	1,580	923	640	852	959	782	966	464	351	335	221
13	902	1,610	825	660	852	952	722	1,050	469	288	519	232
14	732	1,520	752	680	878	959	716	988	469	256	349	218
15	695	1,380	707	680	884	945	776	1,000	688	232	358	225
16	720	1,330	634	680	904	917	864	980	852	219	321	228
17	707	1,430	664	720	945	884	820	959	820	214	312	240
18	688	1,460	594	752	1,020	826	788	973	845	210	307	531
19	785	1,460	707	758	1,060	801	814	1,040	858	219	1,120	519
20	866	1,500	701	770	1,010	1,120	1,190	910	660	294	537	468
21	945	1,560	707	801	980	980	1,220	740	464	689	474	468
22	952	1,540	758	839	832	917	1,020	728	430	1,190	855	555
23	960	1,500	771	826	682	871	1,020	782	425	665	661	674
24	967	1,490	707	820	801	1,230	1,230	711	401	580	591	579
25	974	1,550	682	839	839	1,380	1,030	676	362	510	409	661
26	997	1,600	652	852	897	1,510	995	616	334	1,260	394	485
27	1,030	1,630	670	845	884	1,710	1,140	616	313	770	340	430
28	1,110	1,600	682	839	826	1,800	1,380	575	294	561	281	419
29	974	1,580	688	826	-----	2,210	1,110	616	279	531	342	409
30	902	1,610	714	832	-----	2,670	1,040	649	387	491	404	1,430
31	900	-----	726	852	-----	2,860	-----	643	-----	463	358	-----
TOTAL	24,410	42,602	23,943	22,351	24,562	35,357	36,437	27,828	15,854	17,620	14,356	11,890
MEAN	787	1,420	772	721	877	1,141	1,215	898	528	568	463	396
MAX	1,110	1,680	1,060	852	1,060	2,860	2,700	1,220	858	1,260	1,120	1,430
MIN	538	900	594	520	682	643	716	575	279	210	281	218
AC-FT	48,420	84,500	47,490	44,330	48,720	70,130	72,270	55,200	31,450	34,950	28,480	23,580

CAL YR 1970 TOTAL 418,283 MEAN 1,146 MAX 3,530 MIN 258 AC-FT 829,700
WTR YR 1971 TOTAL 297,210 MEAN 814 MAX 2,860 MIN 210 AC-FT 589,500

PEAK DISCHARGE (BASE, 5,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-22	2000	6.45	5,370	7-26	1630	7.53	7,820

08313000 Rio Grande at Otowi Bridge, near San Ildefonso, N. Mex.

LOCATION.--Lat 35°52'29", long 106°08'30", in SW¼SW¼ sec.18, T.19 N., R.8 E., Santa Fe County, in San Ildefonso Pueblo Grant, near right bank on downstream end of pier of former railway bridge, 400 ft downstream from bridge on State Highway 4, 1.8 miles southwest of San Ildefonso Pueblo, 2.5 miles downstream from Pojoaque River, and 6.8 miles west of Pojoaque.

DRAINAGE AREA.--14,300 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--February 1895 to December 1905, June 1909 to current year. Monthly discharge only for some periods, published in WSP 1312. In early reports this record was published as "at Water Tank," as "at Rio Grande," and as "near Buckman."

GAGE.--Water-stage recorder. Datum of gage is 5,488.48 ft above mean sea level. See WSP 1312, 1732, or 1923 for history of changes prior to June 1, 1910.

AVERAGE DISCHARGE.--72 calendar years (1896-1905, 1910-71), 1,519 cfs (1,101,000 acre-ft per year); 20 calendar years (1952-71), 1,118 cfs (810,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,820 cfs July 26 (gage height, 7.53 ft); minimum, 200 cfs July 17-18.

Period of record: Maximum discharge, 24,400 cfs May 23, 1920; maximum gage height, 14.5 ft Sept. 29, 1904 (present site and datum); minimum daily discharge, 60 cfs July 4, 5, 1902.

The 1920 flood is greatest since at least 1884 and probably since 1741; information from W. H. Yeo's file on floods.

REMARKS.--Records good. Flow partly regulated by Heron, El Vado and Abiquiu Reservoirs (see sta 08284510, 08285000, 08286900) on Rio Chama which contributes about 40 percent of total flow. Diversions above station for irrigation of about 620,000 acres in Colorado and 75,000 acres in New Mexico. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 828: Drainage area. WSP 1512: 1895-99, 1904-6, 1911-12, 1914, 1931(M), 1935. WSP 1712: 1904(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	711	864	758	2,700	852	654	907	457	312	1,980	694	848
2	722	871	705	2,410	722	728	1,240	446	303	2,000	674	819
3	746	897	643	1,990	1,060	616	897	414	285	885	648	805
4	676	924	654	1,750	1,220	510	864	368	281	946	1,150	728
5	585	890	795	1,610	1,220	515	649	363	256	1,100	1,220	707
6	550	845	864	1,560	1,200	575	554	452	252	1,200	1,800	668
7	530	852	878	1,580	988	501	510	463	225	1,080	1,660	623
8	520	839	845	1,130	1,080	469	520	508	256	994	1,730	668
9	580	782	845	1,060	1,120	464	492	525	244	915	1,600	694
10	600	807	910	1,100	1,160	478	585	694	244	855	1,570	598
11	620	845	959	890	988	530	409	399	240	862	1,540	591
12	640	852	959	782	966	464	351	335	221	855	1,530	629
13	660	852	952	722	1,050	469	288	519	232	783	1,560	648
14	680	878	959	716	988	469	256	349	218	769	1,540	707
15	680	884	945	776	1,000	688	232	358	225	790	1,550	681
16	680	904	917	864	980	852	219	321	228	790	1,520	674
17	720	945	884	820	959	820	214	312	240	805	1,180	648
18	752	1,020	826	788	973	845	210	307	531	805	1,030	668
19	758	1,060	801	814	1,040	858	219	1,120	519	707	962	655
20	770	1,010	1,120	1,190	910	660	294	537	468	661	855	674
21	801	980	980	1,220	740	464	689	474	468	642	870	616
22	839	832	917	1,020	728	430	1,190	855	555	642	826	629
23	826	682	871	1,020	782	425	665	661	674	604	841	688
24	820	801	1,230	1,230	711	401	580	591	579	623	819	735
25	839	839	1,380	1,030	676	362	510	409	661	870	862	721
26	852	897	1,510	995	616	334	1,260	394	485	930	862	848
27	845	884	1,710	1,140	616	313	770	340	430	946	870	1,040
28	839	826	1,800	1,380	575	294	561	281	419	833	855	994
29	826	-----	2,210	1,110	616	279	531	342	409	797	878	1,030
30	832	-----	2,670	1,040	649	387	491	404	1,430	790	848	962
31	852	-----	2,860	-----	643	-----	463	358	-----	748	-----	797
TOTAL	22,351	24,562	35,357	36,437	27,828	15,854	17,620	14,356	11,890	28,207	34,544	22,793
MEAN	721	877	1,141	1,215	898	528	568	463	396	910	1,151	735
MAX	852	1,060	2,860	2,700	1,220	858	1,260	1,120	1,430	2,000	1,800	1,040
MIN	520	682	643	716	575	279	210	281	218	604	648	591
AC-FT	44,330	48,720	70,130	72,270	55,200	31,450	34,950	28,480	23,580	55,950	68,520	45,210

CAL YR 1971 TOTAL 291,799 MEAN 799 MAX 2,860 MIN 210 AC-FT 578,800

PEAK DISCHARGE (BASE, 5,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-22	2000	6.45	5,370	7-26	1630	7.53	7,820

08315500 McClure Reservoir near Santa Fe, N. Mex.

LOCATION.--Lat 35°41'18", long 105°50'06", in NE¼SW¼ sec.24, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on outlet tower at McClure Dam on Santa Fe River, 2.1 miles upstream from Nichols Reservoir, and 5.8 miles east of Santa Fe.

DRAINAGE AREA.--17.4 sq mi.

PERIOD OF RECORD.--September 1929, July to October 1930, April 1931 to June 1946, September 1947 to current year. Prior to October 1947, published in WSP 1312. Prior to October 1965, monthend contents only.

GAGE.--Water-stage recorder. Altitude of gage is 7,788 ft (from topographic map). Prior to Oct. 1, 1947, nonrecording gages at same site and various datums all referred to the Public Service Co. of New Mexico assumed datum, 165.9 ft lower.

EXTREMES.--Current year: Maximum contents, 1,040 acre-ft Oct. 22 to Nov. 4 (gage height, 69.6 ft); minimum, 242 acre-ft July 21-25 (gage height, 42.5 ft).

Period of record: Maximum contents, 3,140 acre-ft June 25, 1960 (gage height, 103.7 ft); no contents Jan. 25 to May 8, 1951.

REMARKS.--Reservoir is formed by earthfill dam, completed in 1926 (capacity, 503 acre-ft), raised 5 ft in 1935 (capacity, 650 acre-ft), and raised 36.5 ft more in 1947. Capacities and changes in height of dam are for effective height of spillway which includes 1 ft of flash boards above concrete crest 1926 to July 1935, 2 ft August 1935 to September 1947, and varying heights of sandbag bulkheads from October 1947 to May 1953 when spillway was equipped with radial gates which open automatically. Capacity, 3,060 acre-ft between gage heights -0.2 ft (bottom of lowest outlet tube) and 102.6 ft. No dead storage. Water is for municipal use of city of Santa Fe.

COOPERATION.--Supplementary stage readings and capacity table furnished by Public Service Co. of New Mexico.

Capacity table (gage height, in feet, and usable contents, in acre-feet)
(Based on survey by Public Service Co. of New Mexico in 1947)

40	201	55	519
45	288	60	668
50	394	70	1,050

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,030	1,040	1,020	1,010	1,010	1,010	1,010	718	735	367	269	410
2	1,030	1,040	1,020	1,010	1,010	1,010	1,010	718	721	367	269	406
3	1,030	1,040	1,020	1,010	1,010	1,010	1,010	718	711	360	267	401
4	1,030	1,030	1,020	1,010	1,010	1,010	1,010	721	698	351	267	394
5	1,030	1,030	1,020	1,010	1,010	1,010	1,010	725	684	343	267	387
6	1,030	1,030	1,020	1,010	1,010	1,010	1,010	728	671	336	280	382
7	1,030	1,030	1,020	1,010	1,010	1,010	1,010	732	658	326	278	376
8	1,030	1,030	1,020	1,010	1,010	1,010	1,010	735	646	318	314	369
9	1,030	1,030	1,020	1,010	1,010	1,010	1,010	739	633	310	322	362
10	1,030	1,030	1,020	1,010	1,010	1,010	1,010	742	618	302	330	356
11	1,030	1,030	1,020	1,010	1,010	1,010	1,010	746	606	294	334	347
12	1,030	1,030	1,020	1,010	1,010	1,010	1,010	749	591	286	338	341
13	1,030	1,030	1,020	1,010	1,010	1,010	1,010	753	579	278	343	334
14	1,030	1,030	1,020	1,010	1,010	1,010	1,010	757	564	269	345	326
15	1,030	1,030	1,020	1,010	1,010	1,010	1,010	760	553	264	347	320
16	1,030	1,030	1,020	1,010	1,010	1,010	984	764	539	258	347	314
17	1,030	1,030	1,020	1,010	1,010	1,010	963	771	525	255	351	308
18	1,030	1,030	1,020	1,010	1,010	1,010	946	775	511	248	360	302
19	1,030	1,030	1,020	1,010	1,010	1,010	925	782	497	244	371	296
20	1,030	1,030	1,020	1,010	1,010	1,010	905	786	484	244	385	290
21	1,030	1,030	1,020	1,010	1,010	1,010	881	790	474	242	394	284
22	1,040	1,030	1,020	1,010	1,010	1,010	866	793	461	242	401	280
23	1,040	1,030	1,020	1,010	1,010	1,010	842	797	451	242	408	275
24	1,040	1,030	1,020	1,010	1,010	1,010	827	801	439	242	412	271
25	1,040	1,030	1,020	1,010	1,010	1,010	804	808	429	244	417	265
26	1,040	1,030	1,020	1,010	1,010	1,010	790	804	417	249	419	260
27	1,040	1,030	1,020	1,010	1,010	1,010	767	793	406	260	419	256
28	1,040	1,030	1,010	1,010	1,010	1,010	749	782	394	264	419	253
29	1,040	1,030	1,010	1,010	-----	1,010	728	771	382	265	419	251
30	1,040	1,030	1,010	1,010	-----	1,010	718	760	371	267	417	256
31	1,040	-----	1,010	1,010	-----	1,010	-----	749	-----	267	412	-----
MAX	1,040	1,040	1,020	1,010	1,010	1,010	1,010	808	735	367	419	410
MIN	1,030	1,030	1,010	1,010	1,010	1,010	718	718	371	242	267	251
(+)	69.6	69.4	69.1	69.0	69.0	69.0	61.5	62.4	49.0	43.9	50.8	43.3
(#)	+10	-10	-20	0	0	0	-292	+31	-378	-104	+145	-156

CAL YR 1970.....# -810

WTR YR 1971.....# -774

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

Change in contents, in acre-feet.

08315500 McClure Reservoir near Santa Fe, N. Mex.

LOCATION.--Lat 35°41'18", long 105°50'06", in NE¼SW¼ sec.24, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on outlet tower at McClure Dam on Santa Fe River, 2.1 miles upstream from Nichols Reservoir, and 5.8 miles east of Santa Fe.

DRAINAGE AREA.--17.4 sq mi.

PERIOD OF RECORD.--September 1929, July to October 1930, April 1931 to June 1946, September 1947 to current year. Prior to October 1947, published in WSP 1312. Prior to October 1965, monthend contents only.

GAGE.--Water-stage recorder. Altitude of gage is 7,788 ft (from topographic map). Prior to Oct. 1, 1947, nonrecording gages at same site and various datums all referred to the Public Service Co. of New Mexico assumed datum, 165.9 ft lower.

EXTREMES.--Current year: Maximum contents, 1,040 acre-ft Oct. 22 to Nov. 4 (gage height, 69.6 ft); minimum, 232 acre-ft Oct. 20-24 (gage height, 41.9 ft).
Period of record: Maximum contents, 3,140 acre-ft June 25, 1960 (gage height, 103.7 ft); no contents Jan. 25 to May 8, 1951.

REMARKS.--Reservoir is formed by earthfill dam, completed in 1926 (capacity, 503 acre-ft), raised 5 ft in 1935 (capacity, 650 acre-ft), and raised 36.5 ft more in 1947. Capacities and changes in height of dam are for effective height of spillway which includes 1 ft of flash boards above concrete crest 1926 to July 1935, 2 ft August 1935 to September 1947, and varying heights of sandbag bulkheads from October 1947 to May 1953 when spillway was equipped with radial gates which open automatically. Capacity, 3,060 acre-ft between gage heights -0.2 ft (bottom of lowest outlet tube) and 102.6 ft. No dead storage. Water is for municipal use of city of Santa Fe.

COOPERATION.--Supplementary stage readings and capacity table furnished by Public Service Co. of New Mexico.

Capacity table (gage height, in feet, and usable contents, in acre-feet)
(Based on survey by Public Service Co. of New Mexico in 1947)

40	201	55	519
45	288	60	668
50	394	70	1,050

CONTENTS, IN ACRE-FEET, AT 2400, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1,010	1,010	1,010	1,010	718	735	367	269	410	260	382	639
2	1,010	1,010	1,010	1,010	718	721	367	269	406	262	394	646
3	1,010	1,010	1,010	1,010	718	711	360	267	401	262	406	655
4	1,010	1,010	1,010	1,010	721	698	351	267	394	262	415	662
5	1,010	1,010	1,010	1,010	725	684	343	267	387	262	424	665
6	1,010	1,010	1,010	1,010	728	671	336	280	382	260	431	675
7	1,010	1,010	1,010	1,010	732	658	326	278	376	258	439	681
8	1,010	1,010	1,010	1,010	735	646	318	314	369	256	448	688
9	1,010	1,010	1,010	1,010	739	633	310	322	362	256	454	694
10	1,010	1,010	1,010	1,010	742	618	302	330	356	255	461	701
11	1,010	1,010	1,010	1,010	746	606	294	334	347	253	469	711
12	1,010	1,010	1,010	1,010	749	591	286	338	341	251	474	718
13	1,010	1,010	1,010	1,010	753	579	278	343	334	248	482	725
14	1,010	1,010	1,010	1,010	757	564	269	345	326	246	487	728
15	1,010	1,010	1,010	1,010	760	553	264	347	320	242	495	732
16	1,010	1,010	1,010	984	764	539	258	347	314	241	503	732
17	1,010	1,010	1,010	963	771	525	255	351	308	242	508	735
18	1,010	1,010	1,010	946	775	511	248	360	302	237	516	735
19	1,010	1,010	1,010	925	782	497	244	371	296	236	522	735
20	1,010	1,010	1,010	905	786	484	244	385	290	232	533	735
21	1,010	1,010	1,010	881	790	474	242	394	284	232	539	742
22	1,010	1,010	1,010	866	793	461	242	401	280	232	550	753
23	1,010	1,010	1,010	842	797	451	242	408	275	232	559	760
24	1,010	1,010	1,010	827	801	439	242	412	271	234	567	767
25	1,010	1,010	1,010	804	808	429	244	417	265	265	579	778
26	1,010	1,010	1,010	790	804	417	249	419	260	290	588	790
27	1,010	1,010	1,010	767	793	406	260	419	256	306	597	804
28	1,010	1,010	1,010	749	782	394	264	419	253	322	609	816
29	1,010	-----	1,010	728	771	382	265	419	251	338	618	831
30	1,010	-----	1,010	718	760	371	267	417	256	353	627	838
31	1,010	-----	1,010	-----	749	-----	267	412	-----	369	-----	846
MAX	1,010	1,010	1,010	1,010	808	735	367	419	410	369	627	846
MIN	1,010	1,010	1,010	718	718	371	242	267	251	232	382	639
(+)	69.0	69.0	69.0	61.5	62.4	49.0	43.9	50.8	43.3	48.9	58.7	65.0
(#)	0	0	0	-292	+31	-378	-104	+145	-156	+113	+258	+219

CAL YR 1971..... # -164

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

LOCATION.--Lat 35°41'12", long 105°50'35", in NE¼SE¼ sec.23, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on left bank 0.4 mile downstream from McClure Dam, and 5.3 miles east of Santa Fe.

PERIOD OF RECORD.--June 1910, January 1913 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1953, published as Santa Fe Creek near Santa Fe.

AVERAGE DISCHARGE.—58 years, 8.03 cfs (5,820 acre-ft per year); 20 calendar years (1951-70), 5.76 cfs (4,170 acre-ft per year).

REMARKS.--Records excellent. Flow regulated by McClure Reservoir (see sta 08315500), completed in 1926, raised in 1935 and again in 1947.

REVISIONS (WATER YEARS).--WSP 1512: 1933, 1936-37(M), 1942, drainage area. WSP 1732: 1923, 1925.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.9	1.6	1.3	1.3	1.1	1.8	1.8	9.4	6.7	4.7	7.3
2	2.2	1.9	1.5	1.3	1.3	1.1	1.8	1.8	9.4	6.7	4.5	7.3
3	2.2	1.9	1.5	1.3	1.3	1.1	1.8	1.8	9.4	6.4	4.5	7.3
4	2.2	1.9	1.5	1.3	1.3	1.1	1.8	1.8	9.4	6.4	4.5	7.0
5	2.1	1.8	1.4	1.3	1.3	1.1	1.8	1.8	9.4	6.2	4.5	7.0
6	2.1	1.8	1.4	1.3	1.3	1.1	1.8	1.8	9.4	5.9	4.7	6.7
7	2.1	1.9	1.3	1.3	1.3	1.1	1.8	1.8	9.1	5.9	4.9	6.7
8	2.1	2.1	1.3	1.2	1.3	1.1	1.8	1.8	9.1	5.9	5.2	6.7
9	2.1	2.1	1.3	1.2	1.3	1.1	1.8	1.8	9.1	5.6	5.4	6.7
10	2.1	1.9	1.4	1.2	1.3	1.1	1.8	1.8	8.8	5.4	5.6	6.4
11	2.1	1.9	1.3	1.2	1.3	1.1	1.8	1.9	9.1	5.4	5.6	6.2
12	2.1	1.9	1.3	1.2	1.3	1.1	1.9	1.9	8.8	5.2	5.9	6.2
13	1.9	1.9	1.3	1.2	1.3	1.1	2.1	1.9	8.4	5.2	5.9	5.9
14	1.9	1.9	1.3	1.2	1.3	1.1	2.1	1.9	8.4	4.9	5.9	5.6
15	1.9	1.8	1.3	1.1	1.3	1.1	8.6	1.9	8.4	4.9	5.9	5.6
16	2.1	1.8	1.3	1.1	1.3	1.1	15	1.9	8.1	4.7	6.2	5.6
17	2.1	1.8	1.3	1.1	1.3	1.1	14	1.9	8.1	4.7	6.2	5.6
18	2.1	1.8	1.3	1.1	1.3	1.1	14	1.9	8.1	4.3	6.2	5.2
19	2.1	1.7	1.3	1.1	1.3	1.1	14	1.9	8.1	4.3	6.4	5.2
20	2.1	1.7	1.3	1.1	1.3	1.1	14	1.9	8.1	4.3	6.4	5.2
21	2.1	1.7	1.3	1.1	1.3	1.1	14	1.9	7.8	4.3	6.7	4.9
22	2.1	1.7	1.3	1.1	1.3	1.1	13	1.9	7.8	4.3	6.7	4.9
23	2.2	1.6	1.3	1.1	1.3	1.2	13	1.9	7.6	4.3	7.0	4.7
24	2.2	1.6	1.3	1.2	1.3	1.2	13	1.9	7.6	4.5	7.0	4.5
25	2.2	1.6	1.3	1.2	1.3	1.2	12	1.9	7.3	4.5	7.0	4.5
26	2.4	1.6	1.3	1.2	1.3	1.3	12	5.8	7.3	4.5	7.0	4.3
27	2.2	1.6	1.3	1.2	1.2	1.3	12	9.4	6.7	4.7	7.0	4.3
28	2.2	1.6	1.3	1.2	1.1	1.5	12	9.4	6.7	4.7	7.0	4.1
29	2.1	1.6	1.3	1.2	-----	1.7	12	9.4	6.4	4.7	7.3	4.1
30	2.1	1.6	1.3	1.2	-----	1.8	6.7	9.8	6.4	4.7	7.3	4.3
31	2.1	-----	1.3	1.2	-----	1.8	-----	9.8	-----	4.7	7.3	-----
TOTAL	65.6	53.6	41.5	37.0	36.1	37.2	225.2	100.1	247.7	158.9	186.4	170.0
MEAN	2.12	1.79	1.34	1.19	1.29	1.20	7.51	3.23	8.26	5.13	6.01	5.67
MAX	2.4	2.1	1.6	1.3	1.3	1.8	15	9.8	9.4	6.7	7.3	7.3
MIN	1.9	1.6	1.3	1.1	1.1	1.1	1.8	1.8	6.4	4.3	4.5	4.1
AC-FT	130	106	82	73	72	74	447	199	491	315	370	337
CAL YR 1970	TOTAL 1,710.74		MEAN 4.69	MAX 14	MIN 1.50	AC-FT 3,390						
WTR YR 1971	TOTAL 1,359.30		MEAN 3.72	MAX 15	MIN 1.1	AC-FT 2,700						

08316000 Santa Fe River near Santa Fe, N. Mex.

LOCATION.--Lat 35°41'12", long 105°50'35", in NE¼SE¼ sec.23, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on left bank 0.4 mile downstream from McClure Dam, and 5.3 miles east of Santa Fe.

DRAINAGE AREA.--18.2 sq mi.

PERIOD OF RECORD.--June 1910, January 1913 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1953, published as Santa Fe Creek near Santa Fe.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,718 ft (from topographic map). See WSP 1312 for history of changes prior to Oct. 1, 1947.

AVERAGE DISCHARGE.--59 calendar years, 8.01 cfs (5,800 acre-ft per year); 20 calendar years (1952-71), 5.86 cfs (4,250 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 17 cfs Apr. 15 (gage height, 2.09 ft); minimum, 0.13 cfs Oct. 23-24.

Period of record: Maximum discharge, 1,500 cfs Aug. 14, 1921 (gage height, 5.17 ft, site and datum then in use), from rating curve extended above 150 cfs; minimum, 0.08 cfs July 31, Aug. 1, 1951.

Peaks which probably exceeded 1,000 cfs occurred Aug. 19, 1872, and Sept. 29 or 30, 1904. Without regulation the flood of Sept. 23, 1929, might have exceeded 1,500 cfs.

REMARKS.--Records excellent except those below 1.0 cfs, which are fair. Flow regulated by McClure Reservoir (see sta 08315500), completed in 1926, raised in 1935 and again in 1947.

REVISIONS (WATER YEARS).--WSP 1512: 1933, 1936-37(M), 1942, drainage area. WSP 1732: 1923, 1925.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.3	1.3	1.1	1.8	1.8	9.4	6.7	4.7	7.3	4.3	.21	.38
2	1.3	1.3	1.1	1.8	1.8	9.4	6.7	4.5	7.3	4.3	.21	.38
3	1.3	1.3	1.1	1.8	1.8	9.4	6.4	4.5	7.3	4.3	.21	.34
4	1.3	1.3	1.1	1.8	1.8	9.4	6.4	4.5	7.0	4.3	.17	.34
5	1.3	1.3	1.1	1.8	1.8	9.4	6.2	4.5	7.0	4.3	.17	.34
6	1.3	1.3	1.1	1.8	1.8	9.4	5.9	4.7	6.7	4.3	.17	.34
7	1.3	1.3	1.1	1.8	1.8	9.1	5.9	4.9	6.7	4.3	.17	.34
8	1.2	1.3	1.1	1.8	1.8	9.1	5.9	5.2	6.7	4.3	.17	.34
9	1.2	1.3	1.1	1.8	1.8	9.1	5.6	5.4	6.7	4.3	.17	.38
10	1.2	1.3	1.1	1.8	1.8	8.8	5.4	5.6	6.4	4.3	.17	.38
11	1.2	1.3	1.1	1.8	1.9	9.1	5.4	5.6	6.2	4.3	.17	.38
12	1.2	1.3	1.1	1.9	1.9	8.8	5.2	5.9	6.2	4.3	.21	.38
13	1.2	1.3	1.1	2.1	1.9	8.4	5.2	5.9	5.9	4.1	.21	.38
14	1.2	1.3	1.1	2.1	1.9	8.4	4.9	5.9	5.6	3.9	.21	.38
15	1.1	1.3	1.1	8.6	1.9	8.4	4.9	5.9	5.6	3.9	.25	.38
16	1.1	1.3	1.1	15	1.9	8.1	4.7	6.2	5.6	3.6	.25	.34
17	1.1	1.3	1.1	14	1.9	8.1	4.7	6.2	5.6	3.6	.29	.34
18	1.1	1.3	1.1	14	1.9	8.1	4.3	6.2	5.2	3.6	.25	.34
19	1.1	1.3	1.1	14	1.9	8.1	4.3	6.4	5.2	3.6	.21	.34
20	1.1	1.3	1.1	14	1.9	8.1	4.3	6.4	5.2	3.6	.21	.34
21	1.1	1.3	1.1	14	1.9	7.8	4.3	6.7	4.9	1.3	.29	.34
22	1.1	1.3	1.1	13	1.9	7.8	4.3	6.7	4.9	.21	.38	.34
23	1.1	1.3	1.2	13	1.9	7.6	4.3	7.0	4.7	.13	.38	.34
24	1.2	1.3	1.2	13	1.9	7.6	4.5	7.0	4.5	.13	.38	.34
25	1.2	1.3	1.2	12	1.9	7.3	4.5	7.0	4.5	.34	.38	.34
26	1.2	1.3	1.3	12	5.8	7.3	4.5	7.0	4.3	.38	.38	.44
27	1.2	1.2	1.3	12	9.4	6.7	4.7	7.0	4.3	.34	.38	.68
28	1.2	1.1	1.5	12	9.4	6.7	4.7	7.0	4.1	.29	.34	.68
29	1.2	-----	1.7	12	9.4	6.4	4.7	7.3	4.1	.25	.34	.62
30	1.2	-----	1.8	6.7	9.8	6.4	4.7	7.3	4.3	.21	.34	.62
31	1.2	-----	1.8	-----	9.8	-----	4.7	7.3	-----	.21	-----	1.3
TOTAL	37.0	36.1	37.2	225.2	100.1	247.7	158.9	186.4	170.0	85.29	7.67	13.20
MEAN	1.19	1.29	1.20	7.51	3.23	8.26	5.13	6.01	5.67	2.75	.26	.43
MAX	1.3	1.3	1.8	15	9.8	9.4	6.7	7.3	7.3	4.3	.38	1.3
MIN	1.1	1.1	1.1	1.8	1.8	6.4	4.3	4.5	4.1	.13	.17	.34
AC-FT	73	72	74	447	199	491	315	370	337	169	15	26

CAL YR 1971 TOTAL 1,304.76 MEAN 3.57 MAX 15 MIN .13 AC-FT 2,590

08316500 Nichols Reservoir near Santa Fe, N. Mex.

LOCATION.--Lat 35°41'24", long 105°52'46", in SE 1/4 sec. 21, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on outlet tower at Nichols Dam on Santa Fe River, 0.6 mile east of Twomile Reservoir, 2.5 miles downstream from McClure Dam, and 3.3 miles east of Santa Fe.

DRAINAGE AREA.--22.8 sq mi.

PERIOD OF RECORD.--March 1943 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,313.2 ft above mean sea level.

EXTREMES.--Current year: Maximum contents, 561 acre-ft Sept. 30 (gage height, 162.6 ft); minimum, 211 acre-ft Apr. 15 (gage height, 145.6 ft).

Period of record: Maximum contents, 836 acre-ft June 8, 1952 (gage height, 171.8 ft); minimum, 16 acre-ft Feb. 11 to Mar. 10, 1944, Feb. 1-19, 1948.

REMARKS.--Reservoir is formed by earthfill dam. No storage prior to Mar. 16, 1943. Capacity, 685 acre-ft between gage heights 121.2 ft (bottom of lower operational gate) and 167.0 ft (crest of spillway). Dead storage, 14 acre-ft. Water is for municipal use of city of Santa Fe.

COOPERATION.--Supplementary stage readings and survey to compute capacity table furnished by Public Service Co. of New Mexico.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on survey by Public Service Co. of New Mexico in 1943)

145	202	160	491
150	279	165	625
155	375		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	296	331	352	377	391	356	461	263	279	336	484
2	294	298	333	354	377	391	325	458	263	281	338	486
3	290	298	333	354	380	391	294	452	263	290	336	486
4	285	300	333	354	380	391	270	438	263	298	342	486
5	279	302	335	356	380	391	254	424	263	306	348	486
6	274	304	335	358	382	391	248	412	263	313	354	489
7	270	306	335	358	382	391	242	400	263	321	358	489
8	265	306	335	358	384	391	236	389	262	327	360	489
9	263	308	336	360	384	391	231	377	262	333	363	489
10	262	310	336	362	384	391	226	367	262	333	369	489
11	262	310	336	362	384	391	222	358	260	319	375	489
12	262	312	336	362	384	391	219	348	260	308	384	489
13	262	313	338	363	386	391	216	344	260	296	391	489
14	263	313	338	365	386	391	212	344	260	288	396	489
15	265	315	340	365	386	391	219	344	259	281	396	489
16	266	317	340	365	389	394	239	346	257	274	394	489
17	270	317	340	367	389	394	256	344	257	268	398	489
18	271	319	342	367	389	394	273	335	256	262	405	499
19	273	319	342	369	389	394	290	327	254	260	414	504
20	274	321	342	369	389	394	306	319	254	262	424	510
21	276	321	344	369	391	394	321	310	257	266	428	515
22	277	321	344	369	391	396	336	302	268	271	435	520
23	279	323	344	371	391	396	354	294	279	274	440	526
24	281	325	346	371	391	396	369	281	290	281	444	531
25	283	325	348	371	391	398	386	265	304	286	449	536
26	286	327	348	371	391	400	405	256	313	294	454	542
27	286	327	350	373	391	400	421	257	319	302	458	544
28	288	329	350	373	391	403	438	259	313	310	465	550
29	290	329	350	375	-----	405	456	260	300	315	470	555
30	292	331	350	375	-----	400	465	260	288	321	475	561
31	294	-----	350	375	-----	382	-----	262	-----	329	479	-----
MAX	300	331	350	375	391	405	465	461	319	333	479	561
MIN	262	296	331	352	377	382	212	256	254	260	336	484
(+)	150.8	152.7	153.7	155.0	155.7	155.3	158.9	148.9	150.5	152.6	159.5	162.6
(#)	-12	+37	+19	+25	+16	-9	+83	-203	+26	+41	+150	+82

CAL YR 1970..... + 37
WTR YR 1971..... + 255

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

08316500 Nichols Reservoir near Santa Fe, N. Mex.

LOCATION.--Lat 35°41'24", long 105°52'46", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.21, T.17 N., R.10 E., Santa Fe County, in Santa Fe National Forest, on outlet tower at Nichols Dam on Santa Fe River, 0.6 mile east of Twomile Reservoir, 2.5 miles downstream from McClure Dam, and 3.3 miles east of Santa Fe.

DRAINAGE AREA.--22.8 sq mi.

PERIOD OF RECORD.--March 1943 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,313.2 ft above mean sea level.

EXTREMES.--Current year: Maximum contents, 640 acre-ft Oct. 21 (gage height, 165.5 ft); minimum, 211 acre-ft Apr. 15 (gage height, 145.6 ft).

Period of record: Maximum contents, 836 acre-ft June 8, 1952 (gage height, 171.8 ft); minimum, 16 acre-ft Feb. 11 to Mar. 10, 1944, Feb. 1-19, 1948.

REMARKS.--Reservoir is formed by earthfill dam. No storage prior to Mar. 16, 1943. Capacity, 685 acre-ft between gage heights 121.2 ft (bottom of lower operational gate) and 167.0 ft (crest of spillway). Dead storage, 14 acre-ft. Water is for municipal use of city of Santa Fe.

COOPERATION.--Supplementary stage readings and survey to compute capacity table furnished by Public Service Co. of New Mexico.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on survey by Public Service Co. of New Mexico in 1943)

145	202	160	491
150	279	165	625
155	375	170	776

CONTENTS, IN ACRE-FEET, AT 2400, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	352	377	391	356	461	263	279	336	484	558	631	585
2	354	377	391	325	458	263	281	338	486	558	628	585
3	354	380	391	294	452	263	290	336	486	563	625	582
4	354	380	391	270	438	263	298	342	486	569	622	582
5	356	380	391	254	424	263	306	348	486	571	620	579
6	358	382	391	248	412	263	313	354	489	577	617	577
7	358	382	391	242	400	263	321	358	489	579	617	577
8	358	384	391	236	389	262	327	360	489	585	614	577
9	360	384	391	231	377	262	333	363	489	587	612	574
10	362	384	391	226	367	262	333	369	489	593	609	571
11	362	384	391	222	358	260	319	375	489	595	606	569
12	362	384	391	219	348	260	308	384	489	601	606	569
13	363	386	391	216	344	260	296	391	489	603	603	566
14	365	386	391	212	344	260	288	396	489	609	601	566
15	365	386	391	219	344	259	281	396	489	614	598	563
16	365	389	394	239	346	257	274	394	489	617	598	561
17	367	389	394	256	344	257	268	398	489	625	598	561
18	367	389	394	273	335	256	262	405	499	628	598	558
19	369	389	394	290	327	254	260	414	504	634	595	555
20	369	389	394	306	319	254	262	424	510	637	593	555
21	369	391	394	321	310	257	266	428	515	640	593	555
22	369	391	396	336	302	268	271	435	520	637	593	552
23	371	391	396	354	294	279	274	440	526	634	590	550
24	371	391	396	369	281	290	281	444	531	634	590	550
25	371	391	398	386	265	304	286	449	536	634	590	547
26	371	391	400	405	256	313	294	454	542	637	587	544
27	373	391	400	421	257	319	302	458	544	637	587	550
28	373	391	403	438	259	313	310	465	550	637	587	552
29	375	-----	405	456	260	300	315	470	555	637	587	555
30	375	-----	400	465	260	288	321	475	561	634	585	558
31	375	-----	382	-----	262	-----	329	479	-----	634	-----	558
MAX	375	391	405	465	461	319	333	479	561	640	631	585
MIN	352	377	382	212	256	254	260	336	484	558	585	544
(+)	155.0	155.7	155.3	158.9	148.9	150.5	152.6	159.5	162.6	165.3	163.5	162.5
(#)	+25	+16	-9	+83	-203	+26	+41	+150	+82	+73	-49	-27

CAL YR 1971..... # +208

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

083172-0 Santa Fe River above Cochiti Lake, N. Mex.
(Formerly published as Santa Fe River above Cochiti Reservoir)

LOCATION.--Lat 35°32'49", long 106°13'41", in NW¼ sec.8, T.15 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, on right bank at foot of La Bajada Hill, 5.0 miles upstream from Cochiti Dam, and 6.3 miles east of Pena Blanca.

DRAINAGE AREA.--231 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,505 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 11,400 cfs July 26 (gage height, 9.58 ft), from rating curve extended above 43 cfs on basis of slope-area measurements at gage heights 5.69 and 9.58 ft; no flow July 16-18.

Period of record: Maximum discharge, 11,400 cfs July 26, 1971 (gage height, 9.58 ft), from rating curve extended above 43 cfs on basis of slope-area measurements at gage heights 5.69 and 9.58 ft; no flow July 16-18, 1971.

REVISIONS.--The maximum discharge for water year 1970 has been revised to 664 cfs Aug. 3, 1970 (gage height, 3.60 ft), superseding figure published in WRD N. Mex., 1970.

REMARKS.--Records fair. Surface and ground-water diversions and returns for municipal supply of city of Santa Fe in upper part of basin. Diversions for irrigation of about 400 acres above station. See tabulation below for the results of discharge measurements, made at point adjacent to gage, of an unnamed ditch on right bank which diverts water 0.4 mile upstream and bypasses gage; ditch flow not included in record.

REVISIONS.--The figures of peak discharge for water year 1970 have been revised as shown in the following table. They supersede figures published in WRD N. Mex., 1970.

REVISED PEAK DISCHARGE.--1970: July 23 (1715) 629 cfs (3.55 ft); Aug. 3 (1530) 664 cfs (3.60 ft).

DISCHARGE MEASUREMENTS, IN CUBIC FEET PER SECOND, OF DITCH

WATER YEAR OCTOBER 1970 TO SEPTEMBER 1970

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Oct. 13	*0.01	Apr. 21	0	July 7	*1.5	Aug. 20	0.37
Nov. 25	0	May 11	1.1	20	0	Sept. 9	.88
Feb. 18	0	May 26	0	27	0	29	0
Mar. 31	0	June 11	.83	Aug. 11	.32	30	.35

* Estimated.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	6.9	5.4	7.1	6.9	7.0	5.2	1.4	1.6	1.9	2.2	1.1
2	4.0	6.9	5.7	6.8	7.0	7.6	4.6	2.3	1.3	8.6	1.6	1.0
3	4.4	7.3	6.6	5.0	7.1	7.9	3.9	2.0	1.1	2.1	1.3	1.2
4	3.7	6.9	6.3	3.0	7.3	8.4	4.6	1.4	.92	1.8	1.2	1.1
5	3.7	6.1	6.5	3.0	7.2	8.2	3.2	.94	1.2	.91	1.6	1.9
6	3.8	6.2	5.9	3.0	7.2	7.2	2.3	2.4	1.0	.39	1.1	.88
7	3.8	6.1	6.9	3.0	6.5	7.2	3.0	2.3	1.1	.96	1.1	.87
8	4.6	6.2	7.3	3.0	7.0	7.0	3.3	2.5	1.7	.52	1.6	1.1
9	4.5	5.7	7.0	3.0	7.2	6.9	3.7	2.4	1.3	.06	1.2	1.1
10	5.1	5.2	7.8	3.8	7.3	7.0	3.1	2.2	.97	.14	1.5	1.4
11	5.0	5.6	7.3	4.8	7.6	7.2	3.3	1.7	.78	.04	1.7	1.3
12	4.9	5.4	7.3	6.9	7.0	7.0	1.9	3.6	.56	.04	2.5	1.8
13	4.6	6.0	7.2	8.0	7.1	5.7	1.7	4.8	1.4	.02	2.0	2.0
14	4.6	6.3	7.1	7.5	6.9	6.1	1.5	3.6	1.2	.01	1.7	1.6
15	5.6	6.2	7.9	7.7	7.0	6.2	2.9	2.8	.69	.01	2.1	1.5
16	6.0	6.1	7.6	7.9	7.2	6.3	6.0	2.7	.78	0	2.2	1.5
17	6.3	6.3	7.3	8.9	6.8	5.0	4.7	1.6	.89	0	2.9	3.4
18	6.2	6.3	7.0	9.8	7.0	5.5	4.5	1.7	1.1	0	3.0	7.4
19	6.0	6.4	6.8	9.9	7.6	5.0	5.9	2.8	1.3	2.5	4.1	5.7
20	5.7	6.2	7.0	9.6	7.6	5.3	6.4	2.3	2.7	147	2.7	4.6
21	6.3	6.2	6.9	9.1	7.6	5.9	5.3	2.3	1.8	5.3	1.8	4.1
22	6.6	6.2	6.5	8.8	6.8	5.3	5.5	2.3	1.5	4.6	4.7	4.9
23	6.9	5.3	5.9	7.6	7.1	5.2	4.3	3.1	1.7	24	4.5	5.6
24	6.5	6.1	5.6	7.1	7.7	6.0	4.5	2.8	1.3	9.8	2.6	6.3
25	6.0	6.4	6.3	6.9	7.6	5.9	3.6	2.7	1.3	4.1	2.9	5.4
26	5.9	6.2	6.2	6.9	7.5	5.2	2.9	2.0	.71	600	2.4	4.7
27	6.5	5.6	8.2	7.1	6.9	5.2	2.0	1.8	.85	38	1.7	4.5
28	6.3	6.3	6.8	6.6	7.2	4.9	1.9	2.5	1.6	4.2	1.3	3.6
29	6.6	6.1	7.1	6.4	-----	4.1	2.1	1.1	.69	2.6	1.5	3.6
30	6.6	5.8	7.2	6.9	-----	4.4	1.4	1.8	.67	3.1	1.8	23
31	6.5	-----	7.4	6.7	-----	4.9	-----	1.2	-----	4.8	1.7	-----
TOTAL	166.7	184.5	212.0	201.8	200.9	190.7	109.2	71.04	35.71	867.50	66.2	108.15
MEAN	5.38	6.15	6.84	6.51	7.18	6.15	3.64	2.29	1.19	28.0	2.14	3.61
MAX	6.9	7.3	8.2	9.9	7.7	8.4	6.4	4.8	2.7	600	4.7	23
MIN	3.5	5.2	5.4	3.0	6.5	4.1	1.4	.94	.56	0	1.1	.87
AC-FT	331	366	421	400	398	378	217	141	71	1,720	131	215

WTR YR 1971 TOTAL 2,414.40 MEAN 6.61 MAX 600 MIN 0 AC-FT 4,790

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	0145	5.69	2,750	7-26	1930	9.58	11,400

08317200 Santa Fe River above Cochiti Lake, N. Mex.

LOCATION.--Lat 35°32'49", long 106°13'41", in NW¼ sec.8, T.15 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, on right bank at foot of La Bajada Hill, 5.0 miles upstream from Cochiti Dam, and 6.3 miles east of Pena Blanca.

DRAINAGE AREA.--231 sq mi.

PERIOD OF RECORD.--March 1970 to current year. Published as "above Cochiti Reservoir" prior to October 1970.

GAGE.--Water-stage recorder. Altitude of gage is 5,505 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 11,400 cfs July 26 (gage height, 9.58 ft), from rating curve extended above 43 cfs on basis of slope-area measurements at gage heights 5.69 and 9.58 ft; no flow July 16-18.

Period of record: Maximum discharge, 11,400 cfs July 26, 1971 (gage height, 9.58 ft), from rating curve extended above 43 cfs on basis of slope-area measurements at gage heights 5.69 and 9.58 ft; no flow July 16-18, 1971.

REMARKS.--Records fair. Surface and ground-water diversions and returns for municipal supply of city of Santa Fe in upper part of basin. Diversions for irrigation of about 400 acres above station. See tabulation below for the results of discharge measurements, made at point adjacent to gage, of an unnamed ditch on right bank which diverts water 0.4 mile upstream and bypasses gage; ditch flow not included in record.

REVISIONS (WATER YEARS).--WRD N. Mex., 1971: 1970(P).

DISCHARGE MEASUREMENTS, IN CUBIC FEET PER SECOND, OF DITCH

CALENDAR YEAR 1971							
Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Feb. 18	0	June 11	0.83	Aug. 11	0.32	Sept. 30	0.35
Mar. 31	0	July 7	*1.5	20	.37	Oct. 19	.04
Apr. 21	0	20	0	Sept. 9	.88	Dec. 1	0
May 11	1.1	27	0	29	0	20	0
26	0						

*Estimated.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	7.1	6.9	7.0	5.2	1.4	1.6	1.9	2.2	1.1	8.3	4.2	8.3
2	6.8	7.0	7.6	4.6	2.3	1.3	8.6	1.6	1.0	5.0	3.7	7.9
3	5.0	7.1	7.9	3.9	2.0	1.1	2.1	1.3	1.2	4.6	4.7	8.0
4	3.0	7.3	8.4	4.6	1.4	.92	1.8	1.2	1.1	4.1	5.1	7.2
5	3.0	7.2	8.2	3.2	.94	1.2	.91	1.6	1.9	3.4	5.1	6.5
6	3.0	7.2	7.2	2.3	2.4	1.0	.39	1.1	.88	3.2	4.5	6.7
7	3.0	6.5	7.2	3.0	2.3	1.1	.96	1.1	.87	4.2	4.6	7.6
8	3.0	7.0	7.0	3.3	2.5	1.7	.52	1.6	1.1	4.0	4.9	7.8
9	3.0	7.2	6.9	3.7	2.4	1.3	.06	1.2	1.1	3.4	4.1	7.3
10	3.8	7.3	7.0	3.1	2.2	.97	.14	1.5	1.4	3.7	5.0	6.9
11	4.8	7.6	7.2	3.3	1.7	.78	.04	1.7	1.3	3.7	5.3	7.4
12	6.9	7.0	7.0	1.9	3.6	.56	.04	2.5	1.8	3.1	5.1	7.1
13	8.0	7.1	5.7	1.7	4.8	1.4	.02	2.0	2.0	2.8	5.5	7.4
14	7.5	6.9	6.1	1.5	3.6	1.2	.01	1.7	1.6	3.4	5.5	8.6
15	7.7	7.0	6.2	2.9	2.8	.69	.01	2.1	1.5	3.8	7.5	6.3
16	7.9	7.2	6.3	6.0	2.7	.78	0	2.2	1.5	4.0	8.2	4.1
17	8.9	6.8	5.0	4.7	1.6	.89	0	2.9	3.4	5.1	10	4.9
18	9.8	7.0	5.5	4.5	1.7	1.1	0	3.0	7.4	5.9	11	5.7
19	9.9	7.6	5.0	5.9	2.8	1.3	2.5	4.1	5.7	5.3	7.6	7.2
20	9.6	7.6	5.3	6.4	2.3	2.7	147	2.7	4.6	5.2	6.7	7.1
21	9.1	7.6	5.9	5.3	2.3	1.8	5.3	1.8	4.1	5.2	7.4	7.3
22	8.8	6.8	5.3	5.5	2.3	1.5	4.6	4.7	4.9	5.3	8.1	9.5
23	7.6	7.1	5.2	4.3	3.1	1.7	24	4.5	5.6	4.9	7.5	9.6
24	7.1	7.7	6.0	4.5	2.8	1.3	9.8	2.6	6.3	4.2	7.1	9.5
25	6.9	7.6	5.9	3.6	2.7	1.3	4.1	2.9	5.4	28	7.1	8.8
26	6.9	7.5	5.2	2.9	2.0	.71	600	2.4	4.7	12	6.8	10
27	7.1	6.9	5.2	2.0	1.8	.85	38	1.7	4.5	5.2	7.2	13
28	6.6	7.2	4.9	1.9	2.5	1.6	4.2	1.3	3.6	4.7	7.1	9.3
29	6.4	-----	4.1	2.1	1.1	.69	2.6	1.5	3.6	4.3	7.4	12
30	6.9	-----	4.4	1.4	1.8	.67	3.1	1.8	23	4.0	7.1	9.4
31	6.7	-----	4.9	-----	1.2	-----	4.8	1.7	-----	4.2	-----	8.2
TOTAL	201.8	200.9	190.7	109.2	71.04	35.71	867.50	66.2	108.15	168.2	191.1	246.6
MEAN	6.51	7.18	6.15	3.64	2.29	1.19	28.0	2.14	3.61	5.43	6.37	7.95
MAX	9.9	7.7	8.4	6.4	4.8	2.7	600	4.7	23	28	11	13
MIN	3.0	6.5	4.1	1.4	.94	.56	0	1.1	.87	2.8	3.7	4.1
AC-FT	400	398	378	217	141	71	1,720	131	215	334	379	489

CAL YR 1971 TOTAL 2,457.10 MEAN 6.73 MAX 600 MIN 0 AC-FT 4,870

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	0145	5.69	2,750	7-26	1930	9.58	11,400

08317400 Rio Grande below Cochiti Dam, N. Mex.

LOCATION.--Lat 35°35'47", long 106°20'48", in SE¼SW¼ sec.19, T.16 N., R.6 E., Sandoval County, in Pueblo de Cochiti Grant, on left bank 0.3 mile upstream from Peralta Canyon, 0.5 mile downstream from Santa Fe River, 0.9 mile south of Cochiti Pueblo, and 2.5 miles downstream from Cochiti Dam.

DRAINAGE AREA.--14,900 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--October 1970 to September 1971.

GAGE.--Water-stage recorder. Altitude of gage is 5,210 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 10,300 cfs July 26 (gage height, 7.90 ft); minimum, 94 cfs July 17, 19.

The flood of May 15, 1941, reached a discharge of 23,400 cfs at site about 2.3 miles upstream. The flood of May 23, 1920, probably exceeded 23,400 cfs, and is likely the highest since 1905.

REMARKS.--Records fair. Diversions above station for irrigation of about 620,000 acres in Colorado and about 81,000 acres in New Mexico. Cochiti eastside main canal, on left bank, and Sili main canal, on right bank, bypass gage for irrigation of about 6,000 acres below station; see tabulation below for monthly and yearly diversion, as furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP.
1	608	926	1,240	715	829	706	2,550	914	525	570	475	190
2	556	954	1,020	725	816	698	2,150	773	593	1,420	331	178
3	563	987	952	750	808	665	1,770	962	589	875	346	166
4	600	935	942	680	881	673	1,450	1,180	436	885	283	180
5	578	1,120	880	590	825	732	1,320	1,220	407	658	261	183
6	533	1,280	883	560	807	832	1,250	1,200	502	453	298	151
7	519	1,260	841	540	789	823	1,310	1,010	467	372	366	128
8	498	1,330	854	530	825	795	1,010	997	354	361	474	125
9	533	1,230	837	590	770	776	846	1,060	349	373	346	139
10	570	1,350	852	610	772	814	869	1,130	356	408	619	127
11	608	1,520	852	630	839	880	799	923	361	469	475	138
12	681	1,450	876	650	863	921	638	883	458	244	331	152
13	785	1,420	832	670	840	894	557	928	387	180	518	136
14	673	1,470	757	690	858	903	540	916	396	135	299	125
15	608	1,330	733	690	880	871	573	904	417	115	305	119
16	616	1,280	636	690	902	823	699	924	842	105	289	131
17	673	1,330	672	730	923	810	670	852	784	102	217	143
18	624	1,430	630	760	971	740	677	833	765	122	243	335
19	698	1,450	705	765	1,010	686	668	887	798	110	668	462
20	767	1,470	708	775	1,020	841	864	810	769	254	586	430
21	842	1,590	705	805	947	1,060	1,060	681	392	357	437	395
22	851	1,580	731	840	880	846	962	610	280	860	645	429
23	842	1,510	776	833	665	751	904	685	282	1,020	642	548
24	823	1,490	715	812	689	892	1,080	653	267	602	462	527
25	842	1,560	723	922	823	1,180	989	567	229	537	371	550
26	851	1,630	681	934	861	1,250	918	562	214	1,380	289	505
27	870	1,640	669	932	880	1,470	1,010	477	233	1,070	229	354
28	920	1,590	725	897	832	1,730	1,290	542	190	622	186	312
29	890	1,580	681	842	-----	1,940	1,150	541	157	513	227	295
30	823	1,600	715	805	-----	2,350	1,060	562	148	437	299	1,110
31	851	-----	730	807	-----	2,570	-----	575	-----	433	244	-----
TOTAL	21,696	41,292	24,553	22,769	23,805	31,922	31,633	25,761	12,947	16,042	11,761	8,763
MEAN	700	1,376	792	734	850	1,030	1,054	831	432	517	379	292
MAX	920	1,640	1,240	934	1,020	2,570	2,550	1,220	842	1,420	668	1,110
MIN	498	926	630	530	665	665	540	477	148	102	186	119
AC-FT	43,030	81,900	48,700	45,160	47,220	63,320	62,740	51,100	25,680	31,820	23,330	17,380
(+)	4,860	0	0	0	79	4,500	5,190	5,500	5,620	5,840	5,540	5,750
(#)	2,080	0	0	0	0	778	1,930	1,870	2,010	2,000	1,350	1,510

WTR YR 1971 TOTAL 272,944 MEAN 748 MAX 2,570 MIN 102 AC-FT 541,400 + 42,880 # 13,530

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE
7-26	2115	7.90	10,300

+ Diversion, in acre-feet, by Cochiti eastside main canal.
Diversion, in acre-feet, by Sili main canal.

08317400 Rio Grande below Cochiti Dam, N. Mex.

LOCATION.--Lat 35°35'47", long 106°20'48", in SE¼SW¼ sec.19, T.16 N., R.6 E., Sandoval County, in Pueblo de Cochiti Grant, on left bank 0.3 mile upstream from Peralta Canyon, 0.5 mile downstream from Santa Fe River, 0.9 mile south of Cochiti Pueblo, and 2.5 miles downstream from Cochiti Dam.

DRAINAGE AREA.--14,900 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,210 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 10,300 cfs July 26 (gage height, 7.90 ft); minimum, 94 cfs July 17, 19.

The flood of May 15, 1941, reached a discharge of 23,400 cfs at site about 2.3 miles upstream. The flood of May 23, 1920, probably exceeded 23,400 cfs, and is likely the highest since 1905.

REMARKS.--Records fair. Diversions above station for irrigation of about 620,000 acres in Colorado and about 81,000 acres in New Mexico. Cochiti eastside main canal, on left bank, and Sili main canal, on right bank, bypass gage for irrigation of about 6,000 acres below station; see tabulation below for monthly and yearly diversion, as furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	715	829	706	2,550	914	525	570	475	190	1,590	720	878
2	725	816	698	2,150	773	593	1,420	331	178	2,040	680	837
3	750	808	665	1,770	962	589	875	346	166	1,160	660	835
4	680	881	673	1,450	1,180	436	885	283	180	736	1,000	759
5	590	825	732	1,320	1,220	407	658	261	183	816	1,200	732
6	560	807	832	1,250	1,200	502	453	298	151	880	1,500	689
7	540	789	823	1,310	1,010	467	372	366	128	885	1,700	689
8	530	825	795	1,010	997	354	361	474	125	803	1,700	665
9	590	770	776	846	1,060	349	373	346	139	729	1,650	715
10	610	772	814	869	1,130	356	408	619	127	705	1,580	640
11	630	839	880	799	923	361	469	475	138	689	1,560	648
12	650	863	921	638	883	458	244	331	152	692	1,570	689
13	670	840	894	557	928	387	180	518	136	669	1,610	698
14	690	858	903	540	916	396	135	299	125	648	1,570	724
15	690	880	871	573	904	417	115	305	119	662	1,580	681
16	690	902	823	699	924	842	105	289	131	684	1,660	706
17	730	923	810	670	852	784	102	217	143	690	1,380	632
18	760	971	740	677	833	765	122	243	335	689	1,130	657
19	765	1,010	686	668	887	798	110	668	462	621	979	648
20	775	1,020	841	864	810	769	254	586	430	588	906	732
21	805	947	1,060	1,060	681	392	357	437	395	612	904	698
22	840	880	846	962	610	280	860	645	429	599	862	706
23	833	665	751	904	685	282	1,020	642	548	606	881	741
24	812	689	892	1,080	653	267	602	462	527	642	898	750
25	922	823	1,180	989	567	229	537	371	550	782	919	750
26	934	861	1,250	918	562	214	1,380	289	505	849	918	814
27	932	880	1,470	1,010	477	233	1,070	229	354	870	917	950
28	897	832	1,730	1,290	542	190	622	186	312	770	898	970
29	842	-----	1,940	1,150	541	157	513	227	295	720	890	950
30	805	-----	2,350	1,060	562	148	437	299	1,110	760	880	890
31	807	-----	2,570	-----	575	-----	433	244	-----	750	-----	804
TOTAL	22,769	23,805	31,922	31,633	25,761	12,947	16,042	11,761	8,763	24,936	35,302	23,277
MEAN	734	850	1,030	1,054	831	432	517	379	292	804	1,177	751
MAX	934	1,020	2,570	2,550	1,220	842	1,420	668	1,110	2,040	1,700	970
MIN	530	665	665	540	477	148	102	186	119	588	660	632
AC-FT	45,160	47,220	63,320	62,740	51,100	25,680	31,820	23,330	17,380	49,460	70,020	46,170
(+)	0	79	4,500	5,190	5,500	5,620	5,840	5,540	5,750	5,330	0	0
(#)	0	0	778	1,930	1,870	2,010	2,000	1,350	1,510	1,370	0	0

CAL YR 1971 TOTAL 268,918 MEAN 737 MAX 2,570 MIN 102 AC-FT 533,400 + 43,350 ± 12,820

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE
7-26	2115	7.90	10,300

† Diversion, in acre-feet, by Cochiti eastside main canal.
 # Diversion, in acre-feet, by Sili main canal.

08317850 Galisteo Creek above Galisteo Reservoir, N. Mex.

LOCATION.--Lat 35°26'58", long 106°09'08", in NE¼NW¼ sec.13, T.14 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, on right bank at abandoned railroad bridge at Waldo, 800 ft downstream from Waldo Gulch, 1.8 miles northwest of Cerrillos, and 4.0 miles upstream from Galisteo Dam.

DRAINAGE AREA.--567 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,595 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 7,460 cfs July 26 (gage height, 8.00 ft), from rating curve extended above 200 cfs; minimum daily, 0.15 cfs May 30 to June 2.

Period of record: Maximum discharge, 7,460 cfs July 26, 1971 (gage height, 8.00 ft), from rating curve extended above 200 cfs; minimum daily, 0.15 cfs May 30 to June 2, 1971.

REMARKS.--Records poor. Diversions for irrigation of about 50 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	2.1	1.2	2.1	1.8	1.0	.58	.58	.15	10	16	2.1
2	.50	2.1	1.2	1.8	1.8	1.0	.58	.58	.15	.50	12	1.9
3	.76	2.1	1.4	1.6	1.7	1.0	.76	.50	.20	.50	33	1.7
4	.86	2.1	1.4	1.4	1.7	1.2	.76	.50	.25	.36	33	1.6
5	1.1	1.9	1.6	1.2	1.6	1.2	.76	.50	.25	.30	10	1.2
6	.95	1.9	1.7	1.2	1.6	1.4	.86	.50	.25	.30	19	1.1
7	.85	1.9	1.7	1.2	1.5	1.4	.86	.43	.25	.30	10	1.1
8	.85	1.9	1.9	1.4	1.5	1.4	1.1	.43	.30	.30	8.0	1.1
9	.86	1.9	1.9	1.7	1.4	1.6	.98	.36	.30	.30	6.0	1.1
10	.86	1.9	2.1	2.0	1.4	1.4	1.1	.36	.30	.30	4.8	.98
11	.86	1.6	2.1	2.5	1.4	1.2	.98	.30	.30	.30	7.9	.86
12	.86	1.6	2.2	3.0	1.4	1.4	1.1	.25	.30	.25	3.7	.76
13	1.2	1.4	2.2	3.0	1.3	1.4	1.2	.20	.30	.25	21	.76
14	1.2	1.2	2.4	3.0	1.3	1.6	1.2	.20	.30	.25	15	.76
15	1.7	1.2	2.4	2.9	1.3	1.4	1.2	.25	.30	.25	7.2	.76
16	2.9	1.1	2.4	2.9	1.2	.98	1.2	.25	.30	.25	6.0	.76
17	2.7	1.1	2.7	2.9	1.1	.98	1.4	.25	.30	.25	56	4.1
18	2.9	1.1	2.5	2.9	1.4	.98	1.4	.25	.30	.25	11	4.7
19	3.4	1.1	2.4	2.9	1.6	.98	1.6	.25	.25	166	6.6	1.1
20	3.1	.98	2.3	2.9	1.6	.98	1.4	.20	.20	412	18	.76
21	3.1	.98	2.1	2.9	1.2	.86	1.4	.25	.25	24	6.8	.67
22	2.7	.86	2.2	2.7	1.0	.76	1.4	.25	.25	11	12	.58
23	2.2	.98	2.2	2.7	1.0	.58	1.2	.25	.20	67	10	.58
24	2.1	.98	2.2	2.6	1.0	.67	1.2	.25	.20	143	16	1.1
25	2.1	1.1	2.2	2.5	1.0	.58	1.1	.25	.20	29	8.0	.76
26	1.9	.98	2.2	2.4	1.0	.58	1.1	.23	.20	873	3.0	.58
27	1.9	1.1	2.4	2.3	1.0	.58	.98	.20	.20	156	2.0	.58
28	2.1	1.1	2.1	2.2	1.0	.67	.98	.20	.20	229	2.0	.58
29	1.9	1.2	2.2	2.1	-----	.58	.86	.20	.20	120	10	1.8
30	1.7	1.2	2.2	2.0	-----	.50	.76	.15	33	25	8.0	123
31	1.7	-----	2.2	1.9	-----	.58	-----	.15	-----	20	2.2	-----
TOTAL	52.17	42.66	63.9	70.8	37.8	31.44	32.00	9.52	40.15	2,290.21	384.2	159.43
MEAN	1.68	1.42	2.06	2.28	1.35	1.01	1.07	.31	1.34	73.9	12.4	5.31
MAX	3.4	2.1	2.7	3.0	1.8	1.6	1.6	.58	33	873	56	123
MIN	.36	.86	1.2	1.2	1.0	.50	.58	.15	.15	.25	2.0	.58
AC-FT	103	85	127	140	75	62	63	19	80	4,540	762	316

WTR YR 1971 TOTAL 3,214.28 MEAN 8.81 MAX 873 MIN .15 AC-FT 6,380

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-19	2200	5.92	3,400	7-28	2130	5.35	2,500
7-26	2000	8.00	7,460				

08317850 Galisteo Creek above Galisteo Reservoir, N. Mex.

LOCATION.--Lat 35°26'58", long 106°09'08", in NE¼NW¼ sec.13, T.14 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, on right bank at site of former railroad bridge at Waldo, 800 ft downstream from Waldo Gulch, 1.8 miles northwest of Cerrillos, and 4.0 miles upstream from Galisteo Dam.

DRAINAGE AREA.--567 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,595 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 7,460 cfs July 26 (gage height, 8.00 ft), from rating curve extended above 200 cfs; minimum daily, 0.15 cfs May 30 to June 2.
Period of record: Maximum discharge, 7,460 cfs July 26, 1971 (gage height, 8.00 ft), from rating curve extended above 200 cfs; minimum daily, 0.15 cfs May 30 to June 2, 1971.

REMARKS.--Records poor. Diversions for irrigation of about 50 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.1	1.8	1.0	.58	.58	.15	10	16	2.1	12	2.9	3.1
2	1.8	1.8	1.0	.58	.58	.15	.50	12	1.9	5.6	2.7	2.9
3	1.6	1.7	1.0	.76	.50	.20	.50	33	1.7	3.1	2.4	2.9
4	1.4	1.7	1.2	.76	.50	.25	.36	33	1.6	2.2	2.4	2.9
5	1.2	1.6	1.2	.76	.50	.25	.30	10	1.2	1.6	2.2	2.7
6	1.2	1.6	1.4	.86	.50	.25	.30	19	1.1	1.6	2.2	2.9
7	1.2	1.5	1.4	.86	.43	.25	.30	10	1.1	1.6	2.1	2.7
8	1.4	1.5	1.4	1.1	.43	.30	.30	8.0	1.1	1.6	2.1	2.7
9	1.7	1.4	1.6	.98	.36	.30	.30	6.0	1.1	1.6	1.9	2.4
10	2.0	1.4	1.4	1.1	.36	.30	.30	4.8	.98	1.6	1.9	2.4
11	2.5	1.4	1.2	.98	.30	.30	.30	7.9	.86	1.6	1.9	3.4
12	3.0	1.4	1.4	1.1	.25	.30	.25	3.7	.76	1.6	1.9	2.7
13	3.0	1.3	1.4	1.2	.20	.30	.25	21	.76	1.6	1.9	3.7
14	3.0	1.3	1.6	1.2	.20	.30	.25	15	.76	1.6	1.7	2.4
15	2.9	1.3	1.4	1.2	.25	.30	.25	7.2	.76	1.6	1.7	2.9
16	2.9	1.2	.98	1.2	.25	.30	.25	6.0	.76	1.6	2.2	3.7
17	2.9	1.1	.98	1.4	.25	.30	.25	56	4.1	1.6	3.4	4.0
18	2.9	1.4	.98	1.4	.25	.30	.25	11	4.7	1.6	5.6	4.0
19	2.9	1.6	.98	1.6	.25	.25	166	6.6	1.1	1.6	5.2	3.4
20	2.9	1.6	.98	1.4	.20	.20	412	18	.76	1.6	4.0	3.1
21	2.9	1.2	.86	1.4	.25	.25	24	6.8	.67	1.6	4.0	5.2
22	2.7	1.0	.76	1.4	.25	.25	11	12	.58	1.4	4.0	5.2
23	2.7	1.0	.58	1.2	.25	.20	67	10	.58	1.4	4.4	4.8
24	2.6	1.0	.67	1.2	.25	.20	143	16	1.1	1.4	3.7	2.9
25	2.5	1.0	.58	1.1	.25	.20	29	8.0	.76	152	3.4	2.2
26	2.4	1.0	.58	1.1	.23	.20	873	3.0	.58	96	3.4	3.7
27	2.3	1.0	.58	.98	.20	.20	156	2.0	.58	14	3.1	6.0
28	2.2	1.0	.67	.98	.20	.20	229	2.0	.58	7.2	2.9	6.8
29	2.1	-----	.58	.86	.20	.20	120	10	1.8	4.4	2.7	6.4
30	2.0	-----	.50	.76	.15	33	25	8.0	123	3.1	2.4	3.7
31	1.9	-----	.58	-----	.15	-----	20	2.2	-----	3.1	-----	3.7
TOTAL	70.8	37.8	31.44	32.00	9.52	40.15	2,290.21	384.2	159.43	334.1	86.3	111.5
MEAN	2.28	1.35	1.01	1.07	.31	1.34	73.9	12.4	5.31	10.8	2.88	3.60
MAX	3.0	1.8	1.6	1.6	.58	33	873	56	123	152	5.6	6.8
MIN	1.2	1.0	.50	.58	.15	.15	.25	2.0	.58	1.4	1.7	2.2
AC-FT	140	75	62	63	19	80	4,540	762	316	663	171	221

CAL YR 1971 TOTAL 3,587.45 MEAN 9.83 MAX 873 MIN .15 AC-FT 7,120

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-19	2200	5.92	3,400	7-28	2130	5.35	2,500
7-26	2000	8.00	7,460				

08317900 Galisteo Reservoir near Cerrillos, N. Mex.

LOCATION.--Lat 35°27'44", long 106°12'30", in NW¼ sec.9, T.14 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, at Galisteo Dam on Galisteo Creek, and 5.0 miles northwest of Cerrillos.

DRAINAGE AREA.--596 sq mi.

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

GAGE.--Water-stage recorder above elevation 5,500.00 ft, nonrecording below. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--October to December 1970: No storage.

Calendar year 1971: Maximum contents, 2,510 acre-ft July 26 (elevation, 5,517.00 ft); no storage most of time.

REMARKS.--Reservoir is formed by an earthfill dam, completed Oct. 11, 1970. Capacity 89,420 acre-ft between elevations 5,496.0 ft (sill of ungated outlet conduit) and 5,608.0 ft (crest of uncontrolled spillway). No dead storage. Reservoir is used for flood control.

COOPERATION.--Records furnished by Corps of Engineers.

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

5,496	0	5,508	1,050
5,498	120	5,512	1,610
5,500	260	5,516	2,310
5,502	420	5,520	3,160
5,504	600		

CONTENTS, IN ACRE-FEET, AT 2400, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0					
2							0					
3							0					
4							0					
5							0					
6							0					
7							0					
8							0					
9							0					
10							0					
11							0					
12							0					
13							0					
14							0					
15							0					
16							0					
17							0					
18							0					
19							1,150					
20							328					
21							284					
22							0					
23							483					
24							0					
25							0					
26							2,490					
27							413					
28							1,120					
29		-----					253					
30		-----					282					
31		-----		-----		-----	0		-----		-----	
MAX	0	0	0	0	0	0	2,490	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
(+)	-	-	-	-	-	-	-	-	-	-	-	-
(±)	0	0	0	0	0	0	0	0	0	0	0	0

CAL YR 1971..... ± 0

± Elevation, in feet, at end of month.

± Change in contents, in acre-feet.

NOTE.--Record began Oct. 11, 1970; no storage Oct. 11 to Dec. 31, 1970.

08317950 Galisteo Creek below Galisteo Dam, N. Mex.

LOCATION.--Lat 35°27'56", long 106°12'57", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.5, T.14 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, on right bank, 0.6 mile downstream from Galisteo Dam, and 5.5 miles northwest of Cerrillos.

DRAINAGE AREA.--597 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,450 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 2,000 cfs July 27 (gage height, 7.00 ft); maximum gage height, 7.33 ft July 20; no flow many days.

Period of record: Maximum discharge, 2,000 cfs July 27, 1971 (gage height, 7.00 ft); maximum gage height, 7.33 ft July 20, 1971; no flow many days.

REMARKS.--Records fair except those below 1 cfs, which are poor. Flow regulated by Galisteo Reservoir 0.6 mile upstream. Diversions for irrigation of about 50 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	2.0	1.3	1.5	1.0	.11	0			21	13	.86
2	.18	1.7	1.3	1.3	.68	.11	0			.86	6.5	.63
3	.05	1.8	1.4	.80	.68	.11	0			.23	19	.63
4	.46	1.5	1.3	.40	.68	.52	0			.03	36	.48
5	.17	1.8	1.3	.10	.68	.86	0			0	4.5	.43
6	.08	1.8	1.3	.10	.52	.62	0			0	27	.43
7	.04	1.8	1.5	.10	.52	.39	0			0	12	.39
8	.04	2.3	1.5	.50	.52	.30	0			0	5.5	.39
9	.06	2.1	1.8	1.0	.52	.30	0			0	3.4	.31
10	.09	2.0	1.7	1.2	.68	.23	0			0	3.0	.30
11	.20	1.9	1.1	1.3	.69	.18	0			0	11	.30
12	.26	1.7	.86	1.4	.56	.18	0			0	3.6	.25
13	.29	1.8	1.1	1.5	.39	.14	0			0	24	.25
14	.49	2.0	1.3	1.5	.30	.11	0			0	22	.25
15	.50	1.5	1.5	1.5	.23	.06	0			0	7.5	.25
16	2.1	1.6	1.5	1.5	.23	.05	0			0	6.0	.25
17	2.1	1.4	1.5	1.5	.14	.06	0			0	76	4.3
18	2.0	1.3	1.3	1.5	.09	.03	0			0	35	11
19	1.8	1.3	1.3	1.5	.09	.02	.12			34	76	2.3
20	1.5	1.1	1.5	1.5	.11	.02	.52			948	19	1.1
21	1.3	1.1	1.8	1.5	.09	.02	.52			41	6.8	.63
22	1.3	1.1	1.8	1.5	.09	.01	.39			15	9.6	.58
23	2.7	.65	1.5	1.5	.14	.01	.11			26	8.6	.98
24	2.4	.86	1.5	1.5	.23	0	.03			227	15	3.8
25	2.0	1.1	1.5	1.5	.23	0	0			7.9	6.9	1.4
26	2.3	1.0	1.5	1.5	.18	0	0			361	1.6	1.0
27	2.4	1.2	1.5	1.5	.14	0	0			1,170	.86	.90
28	2.5	1.5	1.5	1.6	.11	0	0			62	.80	.75
29	2.2	1.5	1.5	1.4	-----	0	0			401	11	.63
30	1.9	1.5	1.5	1.2	-----	0	0			17	10	101
31	1.8	-----	1.5	1.1	-----	0	-----			76	2.3	-----
TOTAL	35.33	45.91	44.46	37.50	10.52	4.44	1.69	0	0	3,408.02	483.46	136.77
MEAN	1.14	1.53	1.43	1.21	.38	.14	.056	0	0	110	15.6	4.56
MAX	2.7	2.3	1.8	1.6	1.0	.86	.52	0	0	1,170	76	101
MIN	.04	.65	.86	.10	.09	0	0	0	0	0	.80	.25
AC-FT	70	91	88	74	21	8.8	3.4	0	0	6,760	959	271

WTR YR 1971 TOTAL 4,208.10 MEAN 11.5 MAX 1,170 MIN 0 AC-FT 8,350

08317950 Galisteo Creek below Galisteo Dam, N. Mex.

LOCATION.--Lat 35°27'56", long 106°12'57", in SE¼SE¼ sec.5, T.14 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, on right bank, 0.6 mile downstream from Galisteo Dam, and 5.5 miles northwest of Cerrillos.

DRAINAGE AREA.--597 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,450 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 2,000 cfs July 27 (gage height, 7.00 ft); maximum gage height, 7.33 ft July 20; no flow many days.

Period of record: Maximum discharge, 2,000 cfs July 27, 1971 (gage height, 7.00 ft); maximum gage height, 7.33 ft July 20, 1971; no flow many days.

REMARKS.--Records fair except those below 1 cfs, which are poor. Flow regulated by Galisteo Reservoir 0.6 mile upstream. Diversions for irrigation of about 50 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.5	1.0	.11	0			21	13	.86	9.6	2.5	2.0
2	1.3	.68	.11	0			.86	6.5	.63	2.0	2.0	2.0
3	.80	.68	.11	0			.23	19	.63	1.0	1.5	2.0
4	.40	.68	.52	0			.03	36	.48	1.0	1.0	2.0
5	.10	.68	.86	0			0	4.5	.43	1.0	.75	1.8
6	.10	.52	.62	0			0	27	.43	1.0	.75	1.8
7	.10	.52	.39	0			0	12	.39	1.0	.50	1.8
8	.50	.52	.30	0			0	5.5	.39	1.0	.50	1.6
9	1.0	.52	.30	0			0	3.4	.31	1.0	.53	1.6
10	1.2	.68	.23	0			0	3.0	.30	1.0	.63	1.6
11	1.3	.69	.18	0			0	11	.30	1.0	.74	1.6
12	1.4	.56	.18	0			0	3.6	.25	1.0	.86	1.6
13	1.5	.39	.14	0			0	24	.25	1.0	.74	1.8
14	1.5	.30	.11	0			0	22	.25	1.0	.63	2.0
15	1.5	.23	.06	0			0	7.5	.25	1.0	1.9	1.8
16	1.5	.23	.05	0			0	6.0	.25	1.0	3.2	1.6
17	1.5	.14	.06	0			0	76	4.3	1.0	4.9	1.8
18	1.5	.09	.03	0			0	35	11	1.0	8.4	2.0
19	1.5	.09	.02	.12			34	76	2.3	.98	8.9	2.0
20	1.5	.11	.02	.52			948	19	1.1	.92	5.2	2.0
21	1.5	.09	.02	.52			41	6.8	.63	.92	5.2	2.2
22	1.5	.09	.01	.39			15	9.6	.58	.92	6.0	2.4
23	1.5	.14	.01	.11			26	8.6	.98	.92	6.8	2.6
24	1.5	.23	0	.03			227	15	3.8	.98	6.8	2.4
25	1.5	.23	0	0			7.9	6.9	1.4	127	4.9	2.2
26	1.5	.18	0	0			361	1.6	1.0	128	4.3	2.4
27	1.5	.14	0	0			1,170	.86	.90	16	3.2	3.8
28	1.6	.11	0	0			62	.80	.75	9.6	1.9	12
29	1.4	-----	0	0			401	11	.63	6.0	1.9	14
30	1.2	-----	0	0			17	10	101	4.6	1.8	5.6
31	1.1	-----	0	-----		-----	76	2.3	-----	3.5	-----	5.2
TOTAL	37.50	10.52	4.44	1.69	0	0	3,408.02	483.46	136.77	327.94	88.93	91.2
MEAN	1.21	.38	.14	.056	0	0	110	15.6	4.56	10.6	2.96	2.94
MAX	1.6	1.0	.86	.52	0	0	1,170	76	101	128	8.9	14
MIN	.10	.09	0	0	0	0	0	.80	.25	.92	.50	1.6
AC-FT	74	21	8.8	3.4	0	0	6,760	959	271	650	176	181

CAL YR 1971 TOTAL 4,590.47 MEAN 12.6 MAX 1,170 MIN 0 AC-FT 9,110

08318000 Galisteo Creek at Domingo, N. Mex.

LOCATION.--Lat 35°30'43", long 106°19'01", in SW¼SW¼ sec.21, T.15 N., R.6 E., Sandoval County, in Santo Domingo Pueblo Grant, on left bank 160 ft downstream from highway bridge, 0.2 mile northeast of Domingo, 2.8 miles east of Santo Domingo Pueblo, and 4 miles upstream from mouth.

DRAINAGE AREA.--640 sq mi, approximately.

PERIOD OF RECORD.--October 1941 to June 1971 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 5,255.50 ft above mean sea level. Prior to July 20, 1956, at site 160 ft upstream at same datum.

AVERAGE DISCHARGE.--29 years (1942-70), 10.2 cfs (7,390 acre-ft per year); 20 calendar years (1951-70), 11.2 cfs (8,110 acre-ft per year).

EXTREMES.--Maximum daily discharge during period October to June, 0.46 cfs Dec. 24; no flow most of time.

Period of record: Maximum discharge, 22,800 cfs Aug. 2, 1966, (gage height, 8.08 ft inside, 10.4 ft from floodmarks), from rating curve extended above 1,000 cfs on basis of field estimate of peak flow; no flow most of time.

The floods of Sept. 23, 1929, and Aug. 20, 1935, probably exceeded 20,000 cfs. Discharge for the flood of Aug. 20, 1935, was estimated as 24,300 cfs by H. W. Yeo.

REMARKS.--Records poor. Flow regulated by Galisteo Dam, 8.5 miles upstream. Diversions for irrigation of about 50 acres above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1148: 1942, 1943(M), 1944, 1945⁶, 1946-47. WRD N. Mex. 1970: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.22		.02	0					
2	0	0	0	.18		.01	0					
3	0	0	0	0		0	0					
4	0	0	.02	0		0	0					
5	0	0	.03	0		0	0					
6	0	0	.04	0		0	0					
7	0	0	.04	0		0	0					
8	0	0	.02	0		0	0					
9	0	0	0	0		0	0					
10	0	0	0	0		0	0					
11	0	0	.01	0		0	0					
12	0	0	.06	0		0	0					
13	0	0	.06	0		0	0					
14	0	0	.11	0		0	0					
15	.05	0	0	0		0	.06					
16	0	0	.07	0		0	0					
17	0	0	.08	0		0	0					
18	0	.01	.05	0		0	0					
19	0	0	.25	0		0	.02					
20	0	.01	.15	0		0	0					
21	0	.02	0	0		0	0					
22	0	0	.07	0		0	0					
23	0	0	.33	0		0	0					
24	0	.05	.46	0		0	0					
25	0	0	.35	0		0	0					
26	0	0	.25	0		0	0					
27	.08	0	.15	0		0	0					
28	.01	0	.07	0		0	0					
29	0	0	.30	0	-----	0	0					
30	0	0	.25	0	-----	0	0					
31	0	-----	.19	0	-----	0	-----		-----			-----
TOTAL	.14	.09	3.41	.40	0	.03	.08	0	0			
MEAN	.005	.003	.11	.013	0	.001	.003	0	0			
MAX	.08	.05	.46	.22	0	.02	.06	0	0			
MIN	0	0	0	0	0	0	0	0	0			
AC-FT	.3	.2	6.8	.8	0	.06	.2	0	0			

CAL YR 1970 TOTAL 2,734.89 MEAN 7.49 MAX 495 MIN 0 AC-FT 5,420

08319000 Rio Grande at San Felipe, N. Mex.

LOCATION.--Lat 35°26'39", long 106°26'23", in SW¼NW¼ sec. 17, T.14 N., R.5 E., Sandoval County, in San Felipe Grant, on right bank 200 ft downstream from Tonque Arroyo, 1,800 ft downstream from steel highway bridge, 0.8 mile upstream from San Felipe Pueblo, and 11 miles northeast of Bernalillo.

DRAINAGE AREA.--16,100 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 5,115.73 ft above mean sea level. Prior to Sept. 27, 1957, at site 1,800 ft downstream at datum 5.35 ft lower, except period May 16, 1945 to Sept. 30, 1946 when it was 5.94 ft lower than present datum.

AVERAGE DISCHARGE.-- 6 years, 1,375 cfs (996,200 acre-ft per year); 20 calendar years (1951-70), 1,095 cfs (793,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,540 cfs July 27 (gage height, 7.20 ft); minimum, 92 cfs July 19.

Period of record: Maximum discharge, 27,300 cfs June 26, 1937 (gage height, 11.13 ft, site and datum then in use), from rating curve extended above 15,000 cfs; minimum, 32 cfs July 7, 1934.
Other major floods occurred in 1874, 1884 and 1904.

REMARKS.--Records good except those for July and August, which are fair. Diversions for irrigation of about 705,000 acres above station, some of which is irrigated below by Cochiti eastside main canal and San Felipe eastside acequia, which bypass station. Flow partly regulated by El Vado Reservoir (see sta 08285000 and Abiquiu Reservoir (see sta 08286900), 133 and 87 miles upstream, respectively.

REVISIONS (WATER YEARS).--WSP 1312: 1926-30, WSP 1392: 1937(M), WSP 1512: 1931-32, 1933(M), 1934-36, 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	660	1,000	1,700	875	996	841	2,890	995	521	498	440	218
2	620	985	1,200	864	996	837	2,510	787	544	1,630	370	193
3	600	1,050	1,100	820	1,020	744	2,170	849	621	1,060	377	184
4	640	1,020	930	720	1,040	739	1,840	1,140	455	1,030	352	184
5	688	1,160	820	620	1,050	774	1,610	1,190	371	830	391	180
6	571	1,350	820	450	974	963	1,500	1,200	448	502	467	170
7	537	1,390	820	300	941	948	1,570	1,060	465	412	576	150
8	502	1,440	842	300	1,000	905	1,240	981	340	391	647	135
9	536	1,450	820	350	911	882	1,050	1,040	308	467	558	130
10	602	1,620	853	400	885	923	960	1,100	314	449	732	135
11	652	1,870	897	560	918	950	847	967	308	692	743	145
12	735	1,840	963	670	948	976	857	927	400	391	775	150
13	976	1,780	996	720	927	952	711	941	327	300	950	150
14	833	1,730	963	750	937	970	677	958	331	224	853	140
15	742	1,600	875	798	947	948	704	926	291	200	448	106
16	754	1,500	809	798	943	898	879	949	767	150	347	103
17	838	1,540	798	853	970	875	839	883	805	146	246	113
18	759	1,650	721	908	1,020	805	842	861	747	175	261	271
19	831	1,680	776	919	1,100	727	842	917	811	501	727	440
20	955	1,670	842	886	1,120	818	1,020	876	879	1,250	930	392
21	1,020	1,740	831	900	1,060	1,150	1,290	758	500	875	700	352
22	1,050	1,730	853	940	988	905	1,190	616	344	950	760	374
23	1,060	1,500	941	880	736	803	1,080	664	328	1,050	718	531
24	1,040	1,450	897	940	750	856	1,200	677	335	1,240	490	520
25	1,060	1,600	853	1,030	897	1,220	1,180	561	308	1,050	383	478
26	1,050	1,760	787	1,010	943	1,290	999	596	266	853	307	490
27	1,060	1,600	776	1,010	977	1,540	1,080	490	289	2,560	270	300
28	1,110	1,600	842	974	909	1,850	1,310	537	246	787	220	341
29	1,120	1,800	842	941	-----	2,150	1,270	523	185	721	200	425
30	967	1,800	864	930	-----	2,610	1,120	524	157	349	205	1,590
31	947	-----	897	941	-----	2,860	-----	561	-----	433	263	-----
TOTAL	25,515	45,905	27,928	24,057	26,903	34,709	37,277	26,054	13,011	22,166	15,706	9,090
MEAN	823	1,530	901	776	961	1,120	1,243	840	434	715	507	303
MAX	1,120	1,870	1,700	1,030	1,120	2,860	2,890	1,200	879	2,560	950	1,590
MIN	502	985	721	300	736	727	677	490	157	146	200	103
AC-FT	50,610	91,050	55,400	47,720	53,360	68,850	73,940	51,680	25,810	43,970	31,150	18,030
(+)	1,710	0	0	0	0	3,070	2,870	2,660	2,510	3,040	3,240	3,090
CAL YR 1970	TOTAL 439,364	MEAN 1,204	MAX 3,380	MIN 176	AC-FT 871,500	† 15,440						
WTR YR 1971	TOTAL 308,321	MEAN 845	MAX 2,890	MIN 103	AC-FT 611,600	† 22,190						

PEAK DISCHARGE (BASE, 5,000 CFS).--July 19 (2345) 5,940 cfs (6.22 ft); July 27 (0130) 6,540 cfs (7.20 ft).

† Monthly diversion, in acre-ft, of Cochiti Eastside Canal; record of this flow is furnished by Bureau of Reclamation.

08319000 Rio Grande at San Felipe, N. Mex.

LOCATION.--Lat 35°26'39", long 106°26'23", in SW¼ sec. 17, T.14 N., R.5 E., Sandoval County, in San Felipe Grant, on right bank 200 ft downstream from Tonque Arroyo, 1,800 ft downstream from steel highway bridge, 0.8 mile upstream from San Felipe Pueblo, and 11 miles northeast of Bernalillo.

DRAINAGE AREA.--16,100 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 5,115.73 ft above mean sea level. Prior to Sept. 27, 1957, at site 1,800 ft downstream at datum 5.35 ft lower, except period May 16, 1945 to Sept. 30, 1946 when it was 5.94 ft lower than present datum.

AVERAGE DISCHARGE.--46 calendar years, 1,375 cfs (996,200 acre-ft per year); 20 calendar years (1952-71), 1,112 cfs (805,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,540 cfs July 27 (gage height, 7.20 ft); minimum, 92 cfs July 19.

Period of record: Maximum discharge, 27,300 cfs June 26, 1937 (gage height, 11.13 ft, site and datum then in use), from rating curve extended above 15,000 cfs; minimum, 32 cfs July 7, 1934.

Other major floods occurred in 1874, 1884 and 1904.

REMARKS.--Records good except those for July and August, which are fair. Diversions for irrigation of about 705,000 acres above station, some of which is irrigated below by Cochiti eastside main canal and San Felipe eastside acequia, which bypass station. Flow partly regulated by El Vado Reservoir (see sta 08285000 and Abiquiu Reservoir (see sta 08286900), 133 and 87 miles upstream, respectively.

REVISIONS (WATER YEARS).--WSP 1312: 1926-30, WSP 1392: 1937(M), WSP 1512: 1931-32, 1933(M), 1934-36, 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	875	996	841	2,890	995	521	498	440	218	1,630	840	1,020
2	864	996	837	2,510	787	544	1,630	370	193	2,130	840	974
3	820	1,020	744	2,170	849	621	1,060	377	184	1,530	737	930
4	720	1,040	739	1,840	1,140	455	1,030	352	184	926	977	853
5	620	1,050	774	1,610	1,190	371	830	391	180	1,060	1,330	809
6	450	974	963	1,500	1,200	448	502	467	170	1,200	1,650	701
7	300	941	948	1,570	1,060	465	412	576	150	1,180	1,740	674
8	300	1,000	905	1,240	981	340	391	647	135	1,030	1,750	611
9	350	911	882	1,050	1,040	308	467	558	130	912	1,660	721
10	400	885	923	960	1,100	314	449	732	135	846	1,650	647
11	560	918	950	847	967	308	692	743	145	773	1,640	575
12	670	948	976	857	927	400	391	775	150	785	1,650	638
13	720	927	952	711	941	327	300	950	150	733	1,700	656
14	750	937	970	677	958	331	224	853	140	687	1,740	743
15	798	947	948	704	926	291	200	448	106	717	1,740	700
16	798	943	898	879	949	767	150	347	103	758	1,790	680
17	853	970	875	839	883	805	146	246	113	771	1,560	620
18	908	1,020	805	842	861	747	175	261	271	790	1,300	593
19	919	1,100	727	842	917	811	501	727	440	713	1,150	584
20	886	1,120	818	1,020	876	879	1,250	930	392	637	1,060	653
21	900	1,060	1,150	1,290	758	500	875	700	352	622	566	619
22	940	988	905	1,190	616	344	950	760	374	612	944	609
23	880	736	803	1,080	664	328	1,050	718	531	595	930	683
24	940	750	856	1,200	677	335	1,240	490	520	585	952	743
25	1,030	897	1,220	1,180	561	308	1,050	383	478	610	963	801
26	1,010	943	1,290	999	596	266	853	307	490	952	974	878
27	1,010	977	1,540	1,080	490	289	2,560	270	300	877	1,020	1,080
28	974	909	1,850	1,310	537	246	787	220	341	941	1,010	1,220
29	941	-----	2,150	1,270	523	185	721	200	425	812	1,030	1,170
30	930	-----	2,610	1,120	524	157	349	205	1,590	849	1,050	1,220
31	941	-----	2,860	-----	561	-----	433	263	-----	950	-----	1,070
TOTAL	24,057	26,903	34,709	37,277	26,054	13,011	22,166	15,706	9,090	28,213	38,343	24,475
MEAN	776	961	1,120	1,243	840	434	715	507	303	910	1,278	790
MAX	1,030	1,120	2,860	2,890	1,200	879	2,560	950	1,590	2,130	1,790	1,220
MIN	300	736	727	677	490	157	146	200	103	585	737	575
AC-FT	47,720	53,360	68,850	73,940	51,680	25,810	43,970	31,150	18,030	55,960	76,050	48,550
(t)	0	Q	3,070	2,870	2,660	2,510	3,040	3,240	3,090	3,140	0	0

CAL YR 1971 TOTAL 300,004 MEAN 822 MAX 2,890 MIN 103 AC-FT 595,100 + 23,620
WTR YR 1971 TOTAL 308,321 MEAN 845 MAX 2,890 MIN 103 AC-FT 611,600 + 22,190

PEAK DISCHARGE (BASE, 5,000 CFS).--July 19 (2345) 5,940 cfs (6.22 ft); July 27 (0130) 6,540 cfs (7.20 ft).

+ Monthly diversion, in acre-ft, of Cochiti Eastside Canal; record of this flow is furnished by Bureau of Reclamation.

08321500 Jemez River below East Fork, near Jemez Springs, N. Mex.

LOCATION.--Lat 35°49'39", long 106°38'52", in NW¼ sec.5, T.18 N., R.3 E., Sandoval County, on left bank 0.4 mile downstream from East Fork and boundary of Santa Fe National Forest, and 5.3 miles northeast of Jemez Springs.

DRAINAGE AREA.--173 sq mi.

PERIOD OF RECORD.--July 1949 to October 1950 (gaged separately above East Fork), May 1951 to September 1957 (irrigation seasons only), March 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,702.7 ft above mean sea level. Prior to May 1951, at sites 3,000 ft upstream, at different datums and on separate channels.

AVERAGE DISCHARGE.--14 years (1949-50, 1958-71), 25.4 cfs (18,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 175 cfs July 31 (gage height, 2.17 ft); minimum, 1.8 cfs Nov. 15.

Period of record: Maximum discharge recorded, 2,520 cfs Apr. 21, 1958 (gage height, 7.35 ft), from rating curve extended above 1,100 cfs on basis of slope-area and contracted-opening measurements of peak flow; minimum, 0.91 cfs Jan. 24, 1969, result of freezeup.

REMARKS.--Records good except for winter months which are fair. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1512: 1951-54(M), 1955, 1956(M). WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	21	8.5	11	22	15	14	17	12	8.5	10	13
2	18	20	9.0	12	22	10	15	16	12	10	9.5	12
3	16	19	11	12	19	12	16	15	12	12	9.0	12
4	21	18	7.3	11	14	14	15	14	10	9.5	9.0	12
5	23	19	9.5	10	17	18	15	14	9.5	8.5	14	12
6	19	17	8.0	9.5	12	17	16	14	9.5	8.0	16	11
7	23	18	8.5	10	12	18	16	16	9.5	8.5	18	12
8	19	19	10	11	19	15	16	15	9.5	9.5	28	13
9	20	17	12	12	18	17	15	14	9.5	9.5	17	12
10	19	19	12	11	12	18	16	12	9.5	9.0	14	12
11	19	16	6.6	12	16	24	16	12	9.5	8.5	12	12
12	18	15	6.9	12	15	27	16	13	9.5	7.6	11	12
13	17	14	11	12	15	26	16	12	9.5	7.6	13	12
14	17	12	8.0	12	16	20	16	11	9.5	7.3	12	12
15	17	6.9	12	12	17	22	18	10	9.5	6.9	10	12
16	18	10	15	12	17	17	21	10	9.0	7.3	9.5	12
17	19	11	11	12	18	19	23	10	9.5	7.3	13	14
18	21	12	13	14	18	14	22	12	9.0	7.3	16	17
19	21	10	19	14	14	14	23	12	9.0	9.0	29	16
20	19	9.0	11	15	19	13	23	12	9.0	21	17	14
21	19	11	14	16	12	14	19	12	9.0	23	20	13
22	20	12	14	18	14	15	23	10	10	25	22	13
23	25	12	17	17	13	17	28	11	12	31	26	16
24	27	12	13	17	15	19	26	11	10	34	19	16
25	25	12	15	16	18	18	25	11	10	16	16	14
26	26	12	13	16	18	17	27	12	9.5	12	15	13
27	25	14	14	16	20	20	23	12	8.5	12	14	11
28	20	12	13	17	20	20	20	12	8.0	12	14	11
29	20	15	18	16	-----	16	19	12	8.0	10	15	12
30	20	14	15	17	-----	16	18	12	7.6	10	15	21
31	21	-----	12	19	-----	16	-----	12	-----	17	14	-----
TOTAL	629	428.9	367.3	421.5	462	538	576	388	288.6	384.8	477.0	394
MEAN	20.3	14.3	11.8	13.6	16.5	17.4	19.2	12.5	9.62	12.4	15.4	13.1
MAX	27	21	19	19	22	27	28	17	12	34	29	21
MIN	16	6.9	6.6	9.5	12	10	14	10	7.6	6.9	9.0	11
AC-FT	1,250	851	729	836	916	1,070	1,140	770	572	763	946	782

CAL YR 1970 TOTAL 10,278.2 MEAN 28.2 MAX 292 MIN 6.6 AC-FT 20,390

WTR YR 1971 TOTAL 5,355.1 MEAN 14.7 MAX 34 MIN 6.6 AC-FT 10,620

PEAK DISCHARGE (BASE, 100 CFS).--July 31 (1600) 175 cfs (2.17 ft); Aug. 19 (1530) 123 cfs (1.95 ft).

RIO GRANDE BASIN

08321500 Jemez River below East Fork, near Jemez Springs, N. Mex.

LOCATION.--Lat 35°49'39", long 106°38'52", in NW¼ sec.5, T.18 N., R.3 E., Sandoval County, on left bank 0.4 mile downstream from East Fork and boundary of Santa Fe National Forest, and 5.3 miles northeast of Jemez Springs.

DRAINAGE AREA.--173 sq mi.

PERIOD OF RECORD.--July 1949 to October 1950 (gaged separately above East Fork), May 1951 to September 1957 (irrigation seasons only), March 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,702.7 ft above mean sea level. Prior to May 1951, at sites 3,000 ft upstream, at different datums and on separate channels.

AVERAGE DISCHARGE.--13 calendar years (1958-71), 26.1 cfs (18,910 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 175 cfs July 31 (gage height, 2.17 ft); minimum, 6.6 cfs July 16, Nov. 19, 30.
Period of record: Maximum discharge recorded, 2,520 cfs Apr. 21, 1958 (gage height, 7.35 ft), from rating curve extended above 1,100 cfs on basis of slope-area and contracted-opening measurements of peak flow; minimum, 0.91 cfs Jan. 24, 1969, result of freezeup.

REMARKS.--Records good except for winter months which are fair. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1512: 1951-54(M), 1955, 1956(M). WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	11	22	15	14	17	12	8.5	10	13	14	22	20
2	12	22	10	15	16	12	10	9.5	12	22	19	18
3	12	19	12	16	15	12	12	9.0	12	24	16	22
4	11	14	14	15	14	10	9.5	9.0	12	21	17	16
5	10	17	18	15	14	9.5	8.5	14	12	20	16	28
6	9.5	12	17	16	14	9.5	8.0	16	11	19	16	29
7	10	12	18	16	16	9.5	8.5	18	12	17	15	22
8	11	19	15	16	15	9.5	9.5	28	13	17	15	20
9	12	18	17	15	14	9.5	9.5	17	12	16	15	22
10	11	12	18	16	12	9.5	9.0	14	12	15	14	16
11	12	16	24	16	12	9.5	8.5	12	12	14	15	18
12	12	15	27	16	13	9.5	7.6	11	12	13	14	20
13	12	15	26	16	12	9.5	7.6	13	12	13	15	22
14	12	16	20	16	11	9.5	7.3	12	12	12	14	18
15	12	17	22	18	10	9.5	6.9	10	12	12	17	18
16	12	17	17	21	10	9.0	7.3	9.5	12	12	23	14
17	12	18	19	23	10	9.5	7.3	13	14	19	23	13
18	14	18	14	22	12	9.0	7.3	16	17	36	19	14
19	14	14	14	23	12	9.0	9.0	29	16	21	19	12
20	15	19	13	23	12	9.0	21	17	14	14	17	12
21	16	12	14	19	12	9.0	23	20	13	13	21	15
22	18	14	15	23	10	10	25	22	13	11	24	12
23	17	13	17	28	11	12	31	26	16	11	18	14
24	17	15	19	26	11	10	34	19	16	12	18	16
25	16	18	18	25	11	10	16	16	14	86	17	16
26	16	18	17	27	12	9.5	12	15	13	67	19	17
27	16	20	20	23	12	8.5	12	14	11	32	21	19
28	17	20	20	20	12	8.0	12	14	11	24	19	18
29	16	-----	16	19	12	8.0	10	15	12	24	19	20
30	17	-----	16	18	12	7.6	10	15	21	44	18	19
31	19	-----	16	-----	12	-----	17	14	-----	26	-----	18
TOTAL	421.5	462	538	576	388	288.6	384.8	477.0	394	701	535	558
MEAN	13.6	16.5	17.4	19.2	12.5	9.62	12.4	15.4	13.1	22.6	17.8	18.0
MAX	19	22	27	28	17	12	34	29	21	86	24	29
MIN	9.5	12	10	14	10	7.6	6.9	9.0	11	11	14	12
AC-FT	836	916	1,070	1,140	770	572	763	946	782	1,390	1,060	1,110

CAL YR 1971 TOTAL 5,723.9 MEAN 15.7 MAX 86 MIN 6.9 AC-FT 11,350
WTR YR 1971 TOTAL 5,355.1 MEAN 14.7 MAX 34 MIN 6.6 AC-FT 10,620

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-31	1600	2.17	175	10-25	1430	1.99	119
8-19	1530	1.95	123				

08323000 Rio Guadalupe at Box Canyon, near Jemez, N. Mex.

LOCATION.--Lat 35°43'52", long 106°45'44", Sandoval County, in Canon de San Diego Grant, on left bank at downstream end of Guadalupe Box Canyon, 4.8 miles upstream from mouth, 5 miles southwest of Jemez Springs, and 7 miles north of Jemez.

DRAINAGE AREA.--235 sq mi.

PERIOD OF RECORD.--May 1951 to September 1957 (irrigation seasons only), May 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,015.5 ft above mean sea level.

AVERAGE DISCHARGE.--13 years (1958-71), 31.5 cfs (22,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 404 cfs July 23 (gage height, 5.32 ft); minimum, 3.4 cfs Dec. 13.
Period of record: Maximum discharge determined, 1,440 cfs Apr. 21, 1958 (gage height, 7.6 ft, from floodmarks), from rating curve extended above 750 cfs on basis of slope-area measurements of peak flow; minimum, 2.8 cfs Dec. 9, 1967.
The flood of May 13 or 14, 1941, exceeded all other observed floods at this location. The discharge for that flood was computed to be 3,190 cfs at a downstream station, Rio Guadalupe near Jemez Springs (drainage area, 239 sq mi.).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated to some extent since October 1958 by San Gregorio Reservoir on Clear Creek, 24 miles upstream (capacity, 345 acre-ft), and by trans-mountain diversion into Rio Puerco Basin for irrigation of 200 to 300 acres in vicinity of Cuba.

REVISIONS.--WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	14	8.4	15	17	11	62	45	21	5.2	9.4	19
2	11	14	8.1	14	17	10	51	41	18	5.3	10	16
3	11	13	9.0	11	17	11	53	41	17	5.5	8.7	15
4	12	12	9.5	10	15	12	50	39	16	7.9	8.7	14
5	12	13	8.4	9.0	18	14	43	38	14	5.9	10	12
6	13	13	8.9	7.0	16	15	49	37	13	4.6	13	11
7	12	13	9.1	8.0	17	15	54	37	12	4.3	14	11
8	13	15	8.1	8.5	18	15	44	39	12	4.5	16	12
9	13	12	8.6	9.0	14	13	41	34	11	4.6	15	11
10	14	12	10	9.0	16	15	41	31	11	4.9	14	9.2
11	14	13	8.8	10	13	17	39	31	10	5.4	11	8.6
12	13	12	9.6	11	13	20	36	39	9.6	5.2	9.7	7.9
13	13	12	11	12	13	30	36	52	9.3	5.2	9.3	7.8
14	12	12	13	14	13	28	38	43	8.7	4.8	12	7.3
15	12	9.3	11	14	13	16	40	37	8.6	4.8	10	6.9
16	13	8.5	15	14	15	15	47	36	8.5	5.1	11	6.2
17	13	8.9	15	14	13	15	67	35	8.1	5.4	28	7.4
18	13	9.0	12	15	14	15	47	34	8.1	5.6	16	16
19	13	9.0	15	16	12	14	46	32	7.9	6.2	23	14
20	13	8.0	12	16	13	14	39	29	7.4	8.7	66	12
21	12	8.2	13	18	12	16	38	27	7.6	14	34	11
22	13	8.5	14	25	12	18	44	25	7.6	16	38	12
23	16	9.3	15	20	11	21	42	24	7.1	30	34	15
24	14	8.9	17	18	12	24	45	27	7.5	38	27	15
25	14	9.0	16	16	14	23	54	23	7.2	20	33	18
26	16	5.4	15	16	14	26	73	22	6.6	14	32	16
27	16	10	15	16	13	55	59	22	6.1	12	33	14
28	14	9.8	13	16	12	74	62	21	5.7	10	30	13
29	13	10	18	16	-----	71	55	21	5.4	8.4	26	18
30	14	10	15	16	-----	69	44	21	5.0	7.9	23	110
31	14	-----	16	16	-----	77	-----	21	-----	12	20	-----
TOTAL	407	325.8	377.5	429.5	397	789	1,439	1,004	297.0	291.4	644.8	466.3
MEAN	13.1	10.9	12.2	13.9	14.2	25.5	48.0	32.4	9.90	9.40	20.8	15.5
MAX	16	15	18	25	18	77	73	52	21	38	66	110
MIN	11	8.0	8.1	7.0	11	10	36	21	5.0	4.3	8.7	6.2
AC-FT	807	646	749	852	787	1,560	2,850	1,990	589	578	1,280	925

CAL YR 1970 TOTAL 13,292.5 MEAN 36.4 MAX 329 MIN 7.9 AC-FT 26,370
WTR YR 1971 TOTAL 6,868.3 MEAN 18.8 MAX 110 MIN 4.3 AC-FT 13,620

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-27	2300	4.20	108	8-22	1430	4.79	240
7-23	1400	5.32	404	9-30	1300	4.51	180

08323000 Rio Guadalupe at Box Canyon, near Jemez, N. Mex.

LOCATION.--Lat 35°43'52", long 106°45'44", Sandoval County, in Canon de San Diego Grant, on left bank at downstream end of Guadalupe Box Canyon, 4.8 miles upstream from mouth, 5 miles southwest of Jemez Springs, and 7 miles north of Jemez.

DRAINAGE AREA.--235 sq mi.

PERIOD OF RECORD.--May 1951 to September 1957 (irrigation seasons only), May 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,015.5 ft above mean sea level.

AVERAGE DISCHARGE.--13 calendar years (1958-71), 31.8 cfs (23,040 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 404 cfs July 23 (gage height, 5.32 ft); minimum, 4.2 cfs July 7.

Period of record: Maximum discharge determined, 1,440 cfs Apr. 21, 1958 (gage height, 7.6 ft, from floodmarks), from rating curve extended above 750 cfs on basis of slope-area measurements of peak flow; minimum, 2.8 cfs Dec. 9, 1967.

The flood of May 13 or 14, 1941, exceeded all other observed floods at this location. The discharge for that flood was computed to be 3,190 cfs at a downstream station, Rio Guadalupe near Jemez Springs (drainage area, 239 sq mi.).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated to some extent since October 1958 by San Gregorio Reservoir on Clear Creek, 24 miles upstream (capacity, 345 acre-ft), and by trans-mountain diversion into Rio Puerco Basin for irrigation of 200 to 300 acres in vicinity of Cuba.

REVISIONS.--WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	15	17	11	62	45	21	5.2	9.4	19	67	38	20
2	14	17	10	51	41	18	5.3	10	16	70	31	18
3	11	17	11	53	41	17	5.5	8.7	15	55	29	18
4	10	15	12	50	39	16	7.9	3.7	14	41	30	18
5	9.0	18	14	43	38	14	5.9	10	12	35	29	21
6	7.0	16	15	49	37	13	4.6	13	11	31	28	25
7	8.0	17	15	54	37	12	4.3	14	11	28	25	24
8	8.5	18	15	44	39	12	4.5	16	12	31	27	22
9	9.0	14	13	41	34	11	4.6	15	11	28	25	22
10	9.0	16	15	41	31	11	4.9	14	9.2	24	24	20
11	10	13	17	39	31	10	5.4	11	8.6	23	27	19
12	11	13	20	36	39	9.6	5.2	9.7	7.9	21	26	18
13	12	13	30	36	52	5.3	5.2	9.3	7.8	19	27	20
14	14	13	28	38	43	8.7	4.8	12	7.3	18	23	22
15	14	13	16	40	37	8.6	4.8	10	6.9	18	27	18
16	14	15	15	47	36	8.5	5.1	11	6.2	17	29	12
17	14	13	15	67	35	8.1	5.4	28	7.4	20	25	9.0
18	15	14	15	47	34	8.1	5.6	16	16	31	23	13
19	16	12	14	46	32	7.9	6.2	23	14	25	15	17
20	16	13	14	39	29	7.4	8.7	66	12	21	22	20
21	18	12	16	38	27	7.6	14	34	11	21	24	21
22	25	12	18	44	25	7.6	16	38	12	22	24	19
23	20	11	21	42	24	7.1	30	34	15	21	21	19
24	18	12	24	45	27	7.5	38	27	15	20	20	20
25	16	14	23	54	23	7.2	20	33	18	46	19	21
26	16	14	26	73	22	6.6	14	32	16	57	20	22
27	16	13	55	59	22	6.1	12	33	14	45	19	26
28	16	12	74	62	21	5.7	10	30	13	42	20	22
29	16	-----	71	55	21	5.4	8.4	26	18	45	19	23
30	16	-----	69	44	21	5.0	7.9	23	110	46	14	20
31	16	-----	77	-----	21	-----	12	20	-----	39	-----	24
TOTAL	429.5	397	789	1,439	1,004	297.0	291.4	644.8	466.3	1,027	730	613.0
MEAN	13.9	14.2	25.5	48.0	32.4	9.90	9.40	20.8	15.5	33.1	24.3	19.8
MAX	25	18	77	73	52	21	38	66	110	70	38	26
MIN	7.0	11	10	36	21	5.0	4.3	8.7	6.2	17	14	9.0
AC-FT	852	787	1,560	2,850	1,990	589	578	1,280	925	2,040	1,450	1,220

CAL YR 1971 TOTAL 8,128.0 MEAN 22.3 MAX 110 MIN 4.3 AC-FT 16,120

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-27	2300	4.20	108	8-22	1430	4.79	240
7-23	1400	5.32	404	9-30	1300	4.51	180

08324000 Jemez River near Jemez, N. Mex.

LOCATION.--Lat 35°39'42", long 106°44'34", Sandoval County, in Canyon de San Diego Grant, on left bank 0.7 mile downstream from Rio Guadalupe and 3.5 miles north of Jemez.

DRAINAGE AREA.--470 sq mi.

PERIOD OF RECORD.--June 1936 to May 1941, August 1949 to October 1950, May 1951 to September 1952 (irrigation seasons only), March 1953 to current year. Monthly discharge only for some periods, published in WSP 1732. Published as Jemez Creek near Jemez, 1936-41.

GAGE.--Water-stage recorder. Concrete control since Dec. 6, 1966. Datum of gage is 5,622.3 ft above mean sea level. June 22, 1936, to Mar. 11, 1937, at site 60 ft upstream at datum 0.50 ft higher. Mar. 12, 1937, to July 8, 1938, at present site at datum 0.7 ft higher. July 9, 1938, to May 6, 1941, at site 60 ft upstream at datum 0.70 ft higher.

AVERAGE DISCHARGE.--23 years (1936-40, 1949-50, 1953-71), 64.3 cfs (46,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,330 cfs Aug. 5 (gage height, 8.48 ft); minimum, 5.9 cfs Feb. 27, result of freezeup. Period of record: Maximum discharge, 5,900 cfs Apr. 21, 1958, from rating curve extended above 2,200 cfs on basis of contracted-opening measurement; maximum gage height, 8.6 ft May 6, 1941, present datum; minimum discharge, 5.5 cfs Jan. 2, 1961. Maximum flood since at least 1890 occurred between May 6 and 15, 1941, after gage was destroyed (discharge probably exceeded 6,000 cfs), from information by local residents.

REMARKS.--Records good. Diversions for irrigation of about 300 acres above station.

REVISIONS (WATER YEARS).--WSP 1712: Drainage area. WSP 1923, Vol. 2: 1957-58.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	37	26	27	40	18	77	59	33	9.7	36	33
2	26	37	21	28	41	23	71	57	30	11	28	29
3	28	34	27	26	42	26	71	56	26	12	22	25
4	33	31	21	19	38	30	69	55	23	11	24	24
5	39	35	24	15	28	37	62	50	22	11	172	23
6	39	34	22	17	30	33	67	45	20	9.6	46	21
7	38	35	23	21	27	28	71	47	21	10	40	20
8	38	40	25	23	24	30	63	50	17	11	42	23
9	41	36	27	22	29	32	58	45	17	12	32	21
10	41	37	31	24	29	33	57	39	17	11	25	18
11	40	38	22	27	33	45	56	38	15	10	20	17
12	37	36	20	29	31	62	53	52	14	9.1	17	16
13	30	37	19	28	30	101	53	69	14	8.6	17	16
14	29	36	20	26	33	90	55	63	14	9.0	21	16
15	29	26	29	24	33	48	57	54	13	9.0	18	16
16	32	27	22	25	37	39	65	49	11	11	16	15
17	36	29	23	26	33	38	91	42	9.9	11	32	21
18	40	28	29	28	34	37	69	41	10	10	30	37
19	41	28	21	32	30	29	69	41	11	29	72	37
20	39	23	25	35	33	32	64	34	11	38	109	27
21	36	26	30	40	28	34	55	30	11	49	61	22
22	36	28	32	45	19	36	68	31	11	85	70	26
23	49	29	27	40	30	41	67	32	12	122	75	39
24	46	28	23	37	32	45	78	37	11	96	58	38
25	44	28	31	35	31	46	87	33	12	58	60	38
26	46	29	30	35	29	46	93	29	12	44	52	30
27	46	32	34	35	21	66	82	28	12	32	51	24
28	40	30	32	36	24	91	80	30	11	28	49	21
29	36	34	22	34	-----	90	73	28	9.2	21	46	58
30	38	33	26	35	-----	85	60	31	9.3	19	44	242
31	39	-----	27	39	-----	90	-----	36	-----	95	39	-----
TOTAL	1,154	961	790	913	869	1,481	2,031	1,331	458.4	902.0	1,424	993
MEAN	37.2	32.0	25.5	29.5	31.0	47.8	67.7	42.9	15.3	29.1	45.9	33.1
MAX	46	40	34	45	42	101	93	69	33	122	172	242
MIN	26	23	18	15	19	18	53	28	8.3	8.6	16	15
AC-FT	2,290	1,910	1,570	1,810	1,720	2,940	4,030	2,640	909	1,790	2,820	1,970

CAL YR 1970 TOTAL 23,665.0 MEAN 64.8 MAX 464 MIN 15 AC-FT 46,940
WTR YR 1971 TOTAL 13,307.4 MEAN 36.5 MAX 242 MIN 8.3 AC-FT 26,400

PEAK DISCHARGE (BASE, 1,000 CFS).--Aug. 5 (1630) 4,330 cfs (8.48 ft).

08324000 Jemez River near Jemez, N. Mex.

LOCATION.--Lat 35°39'42", long 106°44'34", Sandoval County, in Canyon de San Diego Grant, on left bank 0.7 mile downstream from Rio Guadalupe and 3.5 miles north of Jemez.

DRAINAGE AREA.--470 sq mi.

PERIOD OF RECORD.--June 1936 to May 1941, August 1949 to October 1950, May 1951 to September 1952 (irrigation seasons only), March 1953 to current year. Monthly discharge only for some periods, published in WSP 1732. Published as Jemez Creek near Jemez, 1936-41.

GAGE.--Water-stage recorder. Concrete control since Dec. 6, 1966. Datum of gage is 5,622.3 ft above mean sea level. June 22, 1936, to Mar. 11, 1937, at site 60 ft upstream at datum 0.50 ft higher. Mar. 12, 1937, to July 8, 1938, at present site at datum 0.7 ft higher. July 9, 1938, to May 6, 1941, at site 60 ft upstream at datum 0.70 ft higher.

AVERAGE DISCHARGE.--22 calendar years (1936-40, 1953-71), 66.0 cfs (47,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,330 cfs Aug. 5 (gage height, 8.48 ft); minimum, 5.9 cfs Feb. 27, result of freezeup. Period of record: Maximum discharge, 5,900 cfs Apr. 21, 1958, from rating curve extended above 2,200 cfs on basis of contracted-opening measurement; maximum gage height, 8.6 ft May 6, 1941, present datum; minimum discharge, 5.5 cfs Jan. 2, 1961. Maximum flood since at least 1890 occurred between May 6 and 15, 1941, after gage was destroyed (discharge probably exceeded 6,000 cfs), from information by local residents.

REMARKS.--Records good. Diversions for irrigation of about 300 acres above station.

REVISIONS (WATER YEARS).--WSP 1712: Drainage area. WSP 1923, Vol. 2: 1957-58.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	27	40	18	77	59	33	9.7	36	33	121	98	40
2	28	41	23	71	57	30	11	28	29	118	92	38
3	26	42	26	71	56	26	12	22	25	87	85	45
4	19	38	30	69	55	23	11	24	24	78	84	35
5	15	28	37	62	50	22	11	172	23	67	80	21
6	17	30	33	67	45	20	9.6	46	21	58	73	28
7	21	27	28	71	47	21	10	40	20	53	68	47
8	23	24	30	63	50	17	11	42	23	51	68	45
9	22	29	32	58	45	17	12	32	21	42	63	24
10	24	29	33	57	39	17	11	25	18	34	56	33
11	27	33	45	56	38	15	10	20	17	29	59	31
12	29	31	62	53	52	14	9.1	17	16	26	56	28
13	28	30	101	53	69	14	8.6	17	16	23	55	33
14	26	33	90	55	63	14	9.0	21	16	21	46	50
15	24	33	48	57	54	13	9.0	18	16	19	52	37
16	25	37	39	65	49	11	11	16	15	17	60	20
17	26	33	38	81	42	9.9	11	32	21	24	53	14
18	28	34	37	69	41	10	10	30	37	65	47	19
19	32	30	29	69	41	11	29	72	37	55	23	25
20	35	33	32	64	34	11	38	109	27	41	27	23
21	40	28	34	55	30	11	49	61	22	43	42	22
22	45	19	36	68	31	11	85	70	26	49	47	26
23	40	30	41	67	32	12	122	75	39	52	36	28
24	37	32	45	78	37	11	56	58	38	61	34	28
25	35	31	46	87	33	12	58	60	38	189	34	28
26	35	29	46	93	29	12	44	52	30	189	38	42
27	35	21	66	82	28	12	32	51	24	137	37	53
28	36	24	91	80	30	11	28	49	21	122	42	47
29	34	-----	90	73	28	9.2	21	46	58	114	43	55
30	35	-----	85	60	31	8.3	19	44	242	128	23	37
31	39	-----	90	-----	36	-----	55	39	-----	104	-----	31
TOTAL	913	869	1,481	2,031	1,331	458.4	902.0	1,424	993	2,217	1,621	1,033
MEAN	29.5	31.0	47.8	67.7	42.9	15.3	29.1	45.9	33.1	71.5	54.0	33.3
MAX	45	42	101	93	69	33	122	172	242	189	98	55
MIN	15	19	18	53	28	8.3	8.6	16	15	17	23	14
AC-FT	1,810	1,720	2,940	4,030	2,640	909	1,790	2,820	1,970	4,400	3,220	2,050

CAL YR 1971 TOTAL 15,273.4 MEAN 41.8 MAX 242 MIN 8.3 AC-FT 30,290
WTR YR 1971 TOTAL 13,307.4 MEAN 36.5 MAX 242 MIN 8.3 AC-FT 26,400

PEAK DISCHARGE (BASE, 1,000 CFS).--Aug. 5 (1630) 4,330 cfs (8.48 ft).

RIO GRANDE BASIN

08328500 Jemez Canyon Reservoir near Bernalillo, N. Mex.

LOCATION.--Lat 35°23'40", long 106°32'50", in SW¼SW¼ sec.32, T.14 N., R.4 E., Sandoval County, at corner of outlet works control tower of Jemez Canyon Dam on Jemez River, about 2.3 miles upstream from mouth, and 6 miles north of Bernalillo, N. Mex.

DRAINAGE AREA.--1,034 sq mi.

PERIOD OF RECORD.--October 1953 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 215 acre-ft Aug. 18 (elevation, 5,148.30 ft); no contents most of year.

Period of record: Maximum contents, 71,220 acre-ft June 8, 1958 (elevation, 5,213.36 ft); no storage most of time.

REMARKS.--Reservoir is formed by earthfill dam, completed October 19, 1953. Capacity, 181,800 acre-ft (from capacity table adopted July 20, 1969) between elevations 5,125.0 (sill of outlet gates) and 5,252.3 ft (operating deck of spillway). Maximum controlled capacity, 111,700 acre-ft at elevation 5,232.0 ft (floor of spillway which is located about 0.8 mile south of dam; flows directly to Rio Grande). Original plan for reservoir operation was to desilt all flow above 30 cfs by storage for one day before releasing to Rio Grande, and for possible detention during flood stage on Rio Grande.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity tables, water year 1970-71 (elevation, in feet, and contents, in acre-feet)

5,137.9	1	5,146	86
5,140	4	5,148	192
5,142	16	5,150	376
5,144	36	5,152	643

CONTENTS, IN ACRE-FEET, AT 800, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0						0	0	0
2				0						0	0	0
3				0						0	0	0
4				0						0	0	0
5				0						0	0	0
6				0						0	0	0
7				0						0	0	0
8				0						0	0	0
9				0						0	14	0
10				0						0	0	0
11				0						0	0	0
12				0						0	0	0
13				0						0	8	0
14				0						0	0	0
15				0						0	0	0
16				0						0	0	0
17				0						0	0	0
18				7						0	215	0
19				1						0	145	0
20				0						0	82	0
21				0						0	0	0
22				0						0	0	0
23				0						34	0	0
24				0						1	14	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	-----					0	0	178
31		-----		0	-----		-----		-----	0	0	-----
MAX	0	0	0	7	0	0	0	0	0	34	215	178
MIN	0	0	0	0	0	0	0	0	0	0	0	0
(†)	0	0	0	0	0	0	0	0	0	0	0	5,147.80
(‡)	0	0	0	0	0	0	0	0	0	0	0	+178

CAL YR † 0
WTR YR ‡ +178

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

08328500 Jemez Canyon Reservoir near Bernalillo, N. Mex.

LOCATION.--Lat 35°23'40", Long 106°32'50", in SW¼SW¼ sec.32, T.14 N., R.4 E., Sandoval County, at corner of outlet works control tower of Jemez Canyon Dam on Jemez River, about 2.3 miles upstream from mouth, and 6 miles north of Bernalillo, N. Mex.

DRAINAGE AREA.--1,034 sq mi.

PERIOD OF RECORD.--October 1953 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 463 acre-ft Oct. 1 (elevation, 5,150.73 ft); no contents most of year.
Period of record: Maximum contents, 71,220 acre-ft June 8, 1958 (elevation, 5,213.36 ft); no storage most of time.

REMARKS.--Reservoir is formed by earthfill dam, completed October 19, 1953. Capacity, 181,800 acre-ft (from capacity table adopted July 20, 1969) between elevations 5,125.0 (sill of outlet gates) and 5,252.3 ft (operating deck of spillway). Maximum controlled capacity, 111,700 acre-ft at elevation 5,232.0 ft (floor of spillway which is located about 0.8 mile south of dam; flows directly to Rio Grande). Original plan for reservoir operation was to desilt all flow above 30 cfs by storage for one day before releasing to Rio Grande, and for possible detention during flood stage on Rio Grande.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity tables, calendar year 1971 (elevation, in feet, and contents, in acre-feet)

5,137.9	1	5,146	86
5,140	4	5,148	192
5,142	16	5,150	376
5,144	36	5,152	643

CONTENTS, IN ACRE-FEET, AT 0800, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0						0	0	0	463		
2	0						0	0	0	0		
3	0						0	0	0	0		
4	0						0	0	0	0		
5	0						0	0	0	0		
6	0						0	0	0	0		
7	0						0	0	0	0		
8	0						0	0	0	0		
9	0						0	14	0	0		
10	0						0	0	0	0		
11	0						0	0	0	0		
12	0						0	0	0	0		
13	0						0	8	0	0		
14	0						0	0	0	0		
15	0						0	0	0	0		
16	0						0	0	0	0		
17	0						0	0	0	0		
18	7						0	215	0	0		
19	1						0	145	0	0		
20	0						0	82	0	0		
21	0						0	0	0	0		
22	0						0	0	0	0		
23	0						34	0	0	0		
24	0						1	14	0	0		
25	0						0	0	0	0		
26	0						0	0	0	0		
27	0						0	0	0	0		
28	0						0	0	0	0		
29	0	-----					0	0	0	0		
30	0	-----					0	0	178	0		
31	0	-----		-----		-----	0	0	-----	0	-----	
MAX	7	0	0	0	0	0	34	215	178	463	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
(+)	0	0	0	0	0	0	0	0	5,147.80	0	0	0
(+)	0	0	0	0	0	0	0	0	+178	0	0	0

CAL YR 1971. . . . † 0

† Elevation, in feet, at end of month.

† Change in contents, in acre-feet.

08329000 Jemez River below Jemez Canyon Dam, N. Mex.

LOCATION.--Lat 35°23'24", long 106°32'03", in NE¼ sec.5, T.13 N., R.4 E., Sandoval County, on right bank 0.8 mile downstream from Jemez Canyon Dam, 1.5 miles upstream from mouth, and 6 miles north of Bernalillo.

DRAINAGE AREA.--1,038 sq mi.

PERIOD OF RECORD.--March 1936 to January 1938, March 1943 to current year. Published as "Jemez Creek" prior to 1948, and as "near Bernalillo" prior to 1954.

GAGE.--Water-stage recorder. Datum of gage is 5,095.60 ft above mean sea level (Corps of Engineers bench mark). Prior to Apr. 24, 1951, at site 0.8 mile upstream at datum 24.51 ft higher. Apr. 24, 1951, to June 25, 1958, at site 37 ft upstream at datum 4.40 ft above present datum. Supplementary water-stage recorder at gates on Jemez Canyon Dam at datum 5,125.00 ft above mean sea level (Corps of Engineers bench mark) used at times since January 1953.

AVERAGE DISCHARGE.--29 years (1936-37, 1943-71), 50.6 cfs (36,660 acre-ft per year); 20 calendar years (1951-70), 49.4 cfs (35,790 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 670 cfs Aug. 20 (gage height, 8.18 ft); no flow for many days. Period of record: Maximum discharge, 16,300 cfs Aug. 29, 1943 (gage height, 5.62 ft, site and datum then in use), from rating curve extended above 3,000 cfs; no flow for many days most years.

A flood in 1900 was probably less than 16,000 cfs, but highest observed outside period of record.

REMARKS.--Records poor. Subsequent to October 1953, flow at this station can be completely regulated by Jemez Canyon Reservoir (see sta 08328500). However, reservoir is designed essentially for desilting and flood control rather than storage. Diversions for irrigation of about 3,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1178: 1949. WSP 1212: 1950. WSP 1512: 1936, 1943, 1945, 1947-48, 1949(M), 1950. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	13	34	15	26	6.5	49	60		0	5.0	5.0
2	1.4	13	24	12	27	12	56	54		2.0	5.5	0
3	1.8	12	24	7.0	26	9.0	50	52		0	4.2	0
4	8.1	11	17	5.0	15	10	42	48		0	3.9	0
5	6.8	15	15	2.0	10	10	40	47		0	6.7	0
6	7.4	13	13	0	5.0	8.0	38	35		0	88	0
7	9.1	15	13	0	5.0	13	39	22		0	22	0
8	6.1	11	13	0	5.0	16	32	20		0	82	0
9	5.6	13	14	0	8.0	16	30	18		0	118	0
10	8.5	13	16	0	15	13	23	16		0	40	0
11	8.8	14	15	0	13	14	25	15		0	51	0
12	7.0	17	12	0	11	17	20	14		0	20	0
13	8.4	16	12	0	18	28	12	19		0	70	0
14	7.7	21	11	0	15	67	18	30		0	30	0
15	7.8	20	21	1.0	18	47	28	20		0	58	0
16	12	19	12	2.0	18	32	41	18		0	9.0	0
17	11	18	16	3.0	19	27	30	12		0	4.8	0
18	12	17	15	4.0	14	26	47	9.0		0	145	0
19	14	23	15	3.0	12	24	66	9.2		0	204	0
20	16	18	16	4.0	9.5	23	68	10		6.4	210	0
21	17	15	19	5.0	20	25	51	7.9		8.9	72	0
22	17	16	17	10	7.0	22	52	4.8		9.0	260	0
23	22	9.9	11	15	11	19	64	0		44	137	0
24	23	16	15	20	20	21	65	0		15	41	0
25	24	18	12	25	15	19	51	0		5.0	28	0
26	28	27	27	23	10	26	77	0		8.0	24	0
27	22	25	56	22	13	31	87	1.0		7.5	20	0
28	19	38	30	23	10	40	80	0		7.0	15	0
29	17	36	19	25	-----	54	75	0		6.5	16	0
30	14	36	20	24	-----	48	70	0		6.0	13	227
31	13	-----	19	26	-----	57	-----	0	-----	6.0	10	-----
TOTAL	377.2	548.9	573	276.0	395.5	780.5	1,426	541.9	0	131.3	1,813.1	232.0
MEAN	12.2	18.3	18.5	8.90	14.1	25.2	47.5	17.5	0	4.24	58.3	7.73
MAX	28	38	56	26	27	67	87	60	0	44	260	227
MIN	1.4	9.9	11	0	5.0	6.5	12	0	0	0	3.9	0
AC-FT	748	1,090	1,140	547	784	1,550	2,830	1,070	0	260	3,600	460
CAL YR 1970	TOTAL	15,592.65	MEAN	42.7	MAX	260	MIN	0	AC-FT	30,930		
WTR YR 1971	TOTAL	7,095.40	MEAN	19.4	MAX	260	MIN	0	AC-FT	14,070		

08329000 Jemez River below Jemez Canyon Dam, N. Mex.

LOCATION.--Lat 35°23'24", long 106°32'03", in NE¼ sec.5, T.13 N., R.4 E., Sandoval County, on right bank 0.8 mile downstream from Jemez Canyon Dam, 1.5 miles upstream from mouth, and 6 miles north of Bernalillo.

DRAINAGE AREA.--1,038 sq mi.

PERIOD OF RECORD.--March 1936 to January 1938, March 1943 to current year. Published as "Jemez Creek" prior to 1948, and as "near Bernalillo" prior to 1954.

GAGE.--Water-stage recorder. Datum of gage is 5,095.60 ft above mean sea level (Corps of Engineers bench mark). Prior to Apr. 24, 1951, at site 0.8 mile upstream at datum 24.51 ft higher. Apr. 24, 1951, to June 25, 1958, at site 37 ft upstream at datum 4.40 ft above present datum. Supplementary water-stage recorder at gates on Jemez Canyon Dam at datum 5,125.00 ft above mean sea level (Corps of Engineers bench mark) used at times since January 1953.

AVERAGE DISCHARGE.--29 calendar years (1936-37, 1943-71), 50.6 cfs (36,660 acre-ft per year); 20 calendar years (1952-71), 49.8 cfs (36,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,640 cfs Oct. 25 (gage height, 8.89 ft); no flow for many days.

Period of record: Maximum discharge, 16,300 cfs Aug. 29, 1943 (gage height, 5.62 ft, site and datum then in use), from rating curve extended above 3,000 cfs; no flow for many days most years.

A flood in 1900 was probably less than 16,000 cfs, but highest observed outside period of record.

REMARKS.--Records poor. Subsequent to October 1953, flow at this station can be completely regulated by Jemez Canyon Reservoir (see sta 08328500). However, reservoir is designed essentially for desilting and flood control rather than storage. Diversions for irrigation of about 3,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1178: 1949. WSP 1212: 1950. WSP 1512: 1936, 1943, 1945, 1947-48, 1949(M), 1950. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	15	26	6.5	49	60		0	5.0	5.0	340	93	18
2	12	27	12	56	54		2.0	5.5	0	111	77	23
3	7.0	26	9.0	50	52		0	4.2	0	79	58	26
4	5.0	15	10	42	48		0	3.9	0	76	42	14
5	2.0	10	10	40	47		0	6.7	0	46	36	8.0
6	0	5.0	8.0	38	35		0	88	0	46	29	4.0
7	0	5.0	13	39	22		0	22	0	34	22	5.0
8	0	5.0	16	32	20		0	82	0	30	18	9.0
9	0	8.0	16	30	18		0	118	0	31	18	6.0
10	0	15	13	23	16		0	40	0	29	20	7.0
11	0	13	14	25	15		0	51	0	24	23	10
12	0	11	17	20	14		0	20	0	19	32	9.0
13	0	18	28	12	19		0	70	0	21	30	15
14	0	15	67	18	30		0	30	0	17	36	7.0
15	1.0	18	47	28	20		0	58	0	16	48	3.0
16	2.0	18	32	41	18		0	9.0	0	13	53	2.5
17	3.0	19	27	30	12		0	4.8	0	17	45	2.5
18	4.0	14	26	47	9.0		0	145	0	37	27	2.5
19	3.0	12	24	66	9.2		0	204	0	28	20	2.5
20	4.0	9.5	23	68	10		6.4	210	0	17	22	2.5
21	5.0	20	25	51	7.9		8.9	72	0	12	29	2.5
22	10	7.0	22	52	4.8		9.0	260	0	8.7	30	2.5
23	15	11	19	64	0		44	137	0	6.2	33	2.5
24	20	20	21	65	0		15	41	0	5.2	33	3.5
25	25	15	19	51	0		5.0	28	0	565	29	10
26	23	10	26	77	0		8.0	24	0	369	24	24
27	22	13	31	87	1.0		7.5	20	0	138	35	72
28	23	10	40	80	0		7.0	15	0	71	35	65
29	25	-----	54	75	0		6.5	16	0	68	28	79
30	24	-----	48	70	0		6.0	13	227	84	22	67
31	26	-----	57	-----	0	-----	6.0	10	-----	120	-----	37
TOTAL	276.0	395.5	780.5	1,426	541.9	0	131.3	1,813.1	232.0	2,478.1	1,047	541.5
MEAN	8.90	14.1	25.2	47.5	17.5	0	4.24	58.5	7.73	79.9	34.9	17.5
MAX	26	27	67	87	60	0	44	260	227	565	93	79
MIN	0	5.0	6.5	12	0	0	0	3.9	0	5.2	18	2.5
AC-FT	547	784	1,550	2,830	1,070	0	260	3,600	460	4,920	2,080	1,070

CAL YR 1971 TOTAL 9,662.9 MEAN 26.5 MAX 565 MIN 0 AC-FT 19,170

08329100 Bernalillo floodwater retarding reservoir No. 1 (Piedra Lisa Arroyo), near Bernalillo, N. Mex.

LOCATION.--Lat 35°18'50", long 106°31'44", Sandoval County in Bernalillo Grant, in reservoir 0.3 mile east of intersection of State Highways 44 and 422, and 1.5 miles northeast of Bernalillo.

DRAINAGE AREA.--4.1 sq mi, of which 2.0 sq mi has contouring, pitting and small dams to reduce runoff.

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

GAGE.--Water-stage recorder adjacent to outlet tower with fixed ports. Datum of gage is 5,169.98 above mean sea level (levels by Soil Conservation Service). Since July 21, 1958, supplementary outflow gage 390 ft below toe of dam, water-stage recorder and Parshall flume.

AVERAGE OUTFLOW.--16 years, 0.011 cfs (7.97 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1.4 cfs July 23 (gage height, 0.19 ft); no flow most of time.

Period of record: Maximum outflow, 55 cfs July 19, 1956 (gage height, 11.23 ft). Maximum inflow, 2,330 cfs, July 19, 1956 (average for 5-minute interval), computed from outflow and change in reservoir contents. No inflow or outflow for most of time.

REMARKS.--Records poor. Records represent outflow from Piedra Lisa Reservoir, completed in 1955. Water quality records for the current year are published in Part 2 of this report.

Reservoir is formed by earthfill dam, completed in 1955. Capacity, 300 acre-ft (original survey, no dead storage). Gage height of spillway crest is 27 ft, crest of dam is 35 ft. Outlet tower has an inside opening 3 ft square and outlet pipe through dam is 2 ft in diameter. A total of 9 port openings are spaced at 5-ft vertical intervals on upstream and sides of tower. They are 2 ft wide by 1 ft high; sill of lowest upstream port is at gage-height 4.8 ft (modified in 1963) and lowest side ports at gage-heights 6.3 ft.

Outflow during water year October 1970 to September 1971

Flow event	Date	Outflow (hours)	Maximum (cfs)	cfs-days	Runoff (acre-ft)
27	July 23	0.75	1.4	0.02	0.04

08329100 Bernalillo floodwater retarding reservoir No. 1 (Piedra Lisa Arroyo), near Bernalillo, N. Mex.

LOCATION.--Lat 35°18'50", long 106°31'44", Sandoval County in Bernalillo Grant, in reservoir 0.3 mile east of intersection of State Highways 44 and 422, and 1.5 miles northeast of Bernalillo.

DRAINAGE AREA.--4.1 sq mi, of which 2.0 sq mi has contouring, pitting and small dams to reduce runoff.

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

GAGE.--Water-stage recorder adjacent to outlet tower with fixed ports. Datum of gage is 5,169.98 above mean sea level (levels by Soil Conservation Service). Since July 21, 1958, supplementary outflow gage 390 ft below toe of dam, water-stage recorder and Parshall flume.

AVERAGE OUTFLOW.--15 calendar years, 0.011 cfs (7.97 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1.4 cfs July 23 (gage height, 0.19 ft); no flow most of time.

Period of record: Maximum outflow, 55 cfs July 19, 1956 (gage height, 11.23 ft). Maximum inflow, 2,330 cfs, July 19, 1956 (average for 5-minute interval), computed from outflow and change in reservoir contents. No inflow or outflow for most of time.

REMARKS.--Records poor. Records represent outflow from Piedra Lisa Reservoir, completed in 1955. Water quality records for the current year are published in Part 2 of this report.

Reservoir is formed by earthfill dam, completed in 1955. Capacity, 300 acre-ft (original survey, no dead storage). Gage height of spillway crest is 27 ft, crest of dam is 35 ft. Outlet tower has an inside opening 3 ft square and outlet pipe through dam is 2 ft in diameter. A total of 9 port openings are spaced at 5-ft vertical intervals on upstream and sides of tower. They are 2 ft wide by 1 ft high; sill of lowest upstream port is at gage-height 4.8 ft (modified in 1963) and lowest side ports at gage-heights 6.3 ft.

Outflow during calendar year 1971

Flow event	Date	Outflow (hours)	Maximum (cfs)	cfs-days	Runoff (acre-ft)
27	July 23	0.75	1.4	0.02	0.04

LOCATION.--Lat 35°11'58", long 106°35'53", Bernalillo County, in Elena Gallegos Grant, on left bank 0.5 mile upstream from Edith Blvd., 1.1 miles upstream from mouth, and 1.2 miles northeast of Alameda.

GAGE.--Water-stage recorder and concrete lined channel. Altitude of gage is 5,015 ft (from Corps of Engineers plan and profile map).

EXTREMES.--Current year: Maximum discharge, 5,000 cfs July 26 (gage height, 6.30 ft), from rating curve extended above 2,900 cfs; no flow most of time.
Period of record: Maximum discharge, 5,000 cfs July 26, 1971 (gage height, 6.30 ft) from rating curve extended above 2,900 cfs; minimum, no flow most of time.

REMARKS.--Records good. Floodway channel intercepts flow of numerous arroyos in northeast Albuquerque and discharges into the Rio Grande at a point 1.6 miles north of Alameda.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0				0	0	0	13	1.2	0
2	0	0	0				0	0	0	19	0	4.3
3	7.0	0	0				0	0	0	2.2	.68	3.9
4	25	0	0				0	0	0	0	6.2	0
5	1.6	0	0				0	0	0	0	3.0	0
6	0	0	0				0	8.3	0	0	59	0
7	0	0	0				0	4.6	0	0	.45	0
8	0	0	0				0	0	0	6.9	.88	0
9	0	0	0				0	0	0	11	0	0
10	0	0	0				0	0	0	5.9	0	0
11	0	0	0				0	0	0	4.0	50	0
12	0	0	0				9.9	3.5	6.2	2.2	169	2.5
13	0	10	0				2.2	8.1	.34	1.1	34	16
14	0	7.8	.17				0	5.8	0	0	2.8	2.7
15	0	1.1	40				97	.26	0	0	0	0
16	0	4.8	2.3				11	0	0	0	15	0
17	0	5.4	.64				5.4	0	0	0	75	43
18	0	2.7	0				62	0	0	0	3.2	12
19	0	.26	0				23	0	0	1.1	0	4.5
20	0	0	0				1.6	7.9	0	87	0	3.2
21	0	0	0				0	.38	0	8.8	0	6.3
22	0	0	0				49	0	.64	28	0	23
23	0	0	0				8.1	0	1.2	43	0	78
24	0	0	0				4.5	0	0	13	5.0	29
25	0	0	0				0	0	0	2.2	25	24
26	0	0	0				0	0	0	252	3.6	0
27	0	0	0				0	0	0	34	0	0
28	0	0	0				0	0	0	.45	0	0
29	0	0	0		-----		0	0	0	0	0	1.2
30	0	0	0		-----		0	0	0	11	0	84
31	0	-----	0		-----		-----	0	-----	49	0	-----
TOTAL	33.6	32.06	43.11	0	0	0	273.7	38.84	8.38	594.85	454.01	337.6
MEAN	1.08	1.07	1.39	0	0	0	9.12	1.25	.28	19.2	14.6	11.3
MAX	25	10	40	0	0	0	97	8.3	6.2	252	169	84
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	67	64	86	0	0	0	543	77	17	1,180	901	670
CAL YR 1970	TOTAL	1,423.57	MEAN	3.90	MAX	189	MIN	0	AC-FT	2,820		
WTR YR 1971	TOTAL	1,816.15	MEAN	4.98	MAX	252	MIN	0	AC-FT	3,600		

08329900 North Floodway Channel near Alameda, N. Mex.

LOCATION.--Lat 35°11'58", long 106°35'53", Bernalillo County, in Elena Gallegos Grant, on left bank 0.5 mile upstream from Edith Blvd., 1.1 miles upstream from mouth, and 1.2 miles northeast of Alameda.

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

GAGE.--Water-stage recorder and concrete lined channel. Altitude of gage is 5,015 ft (from Corps of Engineers plan and profile map).

EXTREMES.--Current year: Maximum discharge, 5,000 cfs July 26 (gage height, 6.30 ft), from rating curve extended above 2,900 cfs; no flow most of time.

Period of record: Maximum discharge, 5,000 cfs July 26, 1971 (gage height, 6.30 ft) from rating curve extended above 2,900 cfs; minimum, no flow most of time.

REMARKS.--Records good. Floodway channel intercepts flow of numerous arroyos in northeast Albuquerque and discharges into the Rio Grande at a point 1.6 miles north of Alameda.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				0	0	0	13	1.2	0	5.4	0	0
2				0	0	0	19	0	4.3	0	0	0
3				0	0	0	2.2	.68	3.9	0	0	0
4				0	0	0	0	6.2	0	0	0	0
5				0	0	0	0	3.0	0	0	0	0
6				0	8.3	0	0	59	0	0	0	0
7				0	4.6	0	0	.45	0	0	0	0
8				0	0	0	6.9	.88	0	0	0	.52
9				0	0	0	11	0	0	0	0	2.7
10				0	0	0	5.9	0	0	0	0	0
11				0	0	0	4.0	50	0	0	0	0
12				9.9	3.5	6.2	2.2	169	2.5	1.7	0	0
13				2.2	8.1	.34	1.1	34	16	0	0	0
14				0	5.8	0	0	2.8	2.7	0	0	0
15				97	.26	0	0	0	0	0	8.6	0
16				11	0	0	0	15	0	0	39	0
17				5.4	0	0	0	75	43	25	46	0
18				62	0	0	0	3.2	12	6.3	34	0
19				23	0	0	1.1	0	4.5	1.1	4.5	0
20				1.6	7.9	0	87	0	3.2	0	0	0
21				0	.38	0	8.8	0	6.3	1.7	0	0
22				49	0	.64	28	0	23	0	0	0
23				8.1	0	1.2	43	0	78	0	0	0
24				4.5	0	0	13	5.0	29	2.0	0	0
25				0	0	0	2.2	25	24	208	0	0
26				0	0	0	252	3.6	0	9.0	0	0
27				0	0	0	34	0	0	0	0	0
28				0	0	0	.45	0	0	0	0	0
29		-----		0	0	0	0	0	1.2	0	5.2	0
30		-----		0	0	0	11	0	84	0	0	0
31		-----		-----	0	-----	49	0	-----	0	-----	0
TOTAL	0	0	0	273.7	38.84	8.38	594.85	454.01	337.6	260.2	137.3	3.22
MEAN	0	0	0	9.12	1.25	.28	19.2	14.6	11.3	8.39	4.58	.10
MAX	0	0	0	97	8.3	6.2	252	169	84	208	46	2.7
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	543	77	17	1,180	901	670	516	272	6.4

CAL YR 1971 TOTAL 2,108.10 MEAN 5.78 MAX 252 MIN 0 AC-FT 4,180

08330000 Rio Grande at Albuquerque, N. Mex.

LOCATION.--Lat 35°05'21", long 106°40'48", Bernalillo County, in Atrisco Grant, at downstream side of Old Town bridge on U.S. Highway 66 at Albuquerque.

DRAINAGE AREA.--17,440 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gages is 4,946.16 ft above mean sea level. Prior to Sept. 18, 1947, at various sites at datum about 2.00 ft higher; Sept. 18, 1947, to Apr. 12, 1959, at site 550 ft to the left of present site; Apr. 13, 1959, to June 29, 1960, at site 150 ft to the right of present site. Supplemental water-stage recorders at sites 75 and 150 ft to right of present site used at various times since 1964.

AVERAGE DISCHARGE.--30 years, 1,056 cfs (765,100 acre-ft per year); 20 calendar years (1951-70) 939 cfs, (680,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,650 cfs July 27 (gage height, 7.11 ft); no flow at times.

Period of record: Maximum discharge, 25,000 cfs Apr. 24, 1942, from rating curve extended above 13,900 cfs; maximum gage height, 7.82 ft Aug. 10, 1967; no flow at times.

REMARKS.--Records good except those for summer months, which are fair and January which are poor. Possible regulation by operation of reservoirs on Rio Chama and by flood-and-silt-detention reservoir on Jemez River (see sta 08285000, 08286900, 08328500). Diversions above station for irrigation of about 718,000 acres, several hundred of which are below station. Water quality records for the current year are published in Part 2 of this report.

COOPERATION.--Records for Albuquerque Riverside drain and Arenal, Armijo, and Atrisco canals furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1312: 1946(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	694	1,800	920	949	1,140	2,650	962	200	7.2	514	86
2	380	759	1,250	900	1,120	994	2,150	800	171	7.0	263	58
3	355	946	1,040	880	1,070	872	1,840	552	210	214	54	71
4	432	1,060	1,110	700	1,070	746	1,550	655	334	334	36	44
5	432	1,140	1,010	500	1,120	707	1,450	1,070	220	389	29	35
6	372	1,510	901	250	1,040	733	1,380	1,120	125	320	141	11
7	306	1,570	946	130	1,060	843	1,410	1,110	147	135	474	11
8	372	1,390	930	130	1,030	814	1,450	800	167	58	296	5.0
9	355	1,450	916	190	901	746	1,030	720	97	39	303	0
10	327	1,650	843	300	916	746	843	800	67	27	137	0
11	341	2,150	843	450	901	843	901	872	51	21	502	0
12	355	2,010	886	814	962	946	828	707	44	17	351	0
13	389	2,060	886	828	930	1,010	540	632	60	15	938	0
14	480	2,150	814	785	916	1,030	406	720	58	13	465	0
15	364	1,840	843	746	886	1,030	432	720	35	11	297	0
16	389	1,590	785	694	858	1,010	574	668	20	9.0	203	0
17	460	1,530	720	632	800	901	655	668	112	7.0	129	0
18	598	1,800	772	632	1,040	785	620	563	326	5.0	130	0
19	540	1,800	720	858	1,180	655	785	563	335	4.2	192	1.0
20	598	1,730	843	962	1,340	644	694	772	350	492	878	7.3
21	620	1,860	916	946	1,250	962	978	681	330	385	381	16
22	746	1,820	901	843	1,180	1,120	1,110	552	122	295	249	7.8
23	772	1,800	872	840	1,010	901	901	490	50	818	694	29
24	707	1,530	901	800	872	800	901	510	35	960	440	94
25	644	1,470	720	772	946	1,090	1,140	450	31	614	306	86
26	668	1,820	707	694	1,070	1,390	930	285	7.8	346	185	102
27	681	1,630	872	632	1,230	1,410	872	299	7.8	2,780	75	122
28	681	1,690	901	694	1,360	1,690	1,030	175	7.8	1,020	35	91
29	772	1,780	886	720	-----	1,990	1,410	171	7.6	677	24	66
30	644	1,840	886	800	-----	2,430	1,200	163	7.4	494	54	187
31	540	-----	930	828	-----	2,550	-----	190	-----	278	88	-----
TOTAL	15,726	48,069	28,350	20,870	29,007	33,528	32,660	19,440	3,735.4	10,791.4	8,863	1,130.1
MEAN	507	1,602	915	673	1,036	1,082	1,089	627	125	348	286	37.7
MAX	772	2,150	1,800	962	1,360	2,550	2,650	1,120	350	2,780	938	187
MIN	306	694	707	130	800	644	406	163	7.4	4.2	24	0
AC-FT	31,190	95,340	56,230	41,400	57,540	66,500	64,780	38,560	7,410	21,400	17,580	2,240
(†)	10,860	1,300	1,070	1,040	908	9,260	11,340	11,640	12,060	16,020	11,020	13,450

CAL YR 1970 TOTAL 370,604.3 MEAN 1,015 MAX 3,710 MIN 7.2 AC-FT 735,100 † 110,000
WTR YR 1971 TOTAL 252,169.9 MEAN 691 MAX 2,780 MIN 0 AC-FT 500,200 † 99,970

PEAK DISCHARGE (BASE, 4,000 CFS).--July 27 (0800) 6,650 cfs (7.11 ft).

† Combined flow, in acre-ft, of Albuquerque Riverside drain and Arenal, Armijo, and Atrisco canals. This flow, which bypasses river gage, can be added to river records to get entire surface flow in valley cross-section.

08330000 Rio Grande at Albuquerque, N. Mex.

LOCATION.--Lat 35°05'21", long 106°40'48", Bernalillo County, in Atrisco Grant, at downstream side of Old Town bridge on U.S. Highway 66 at Albuquerque.

DRAINAGE AREA.--17,440 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gages is 4,946.16 ft above mean sea level. Prior to Sept. 18, 1947, at various sites at datum about 2.00 ft higher; Sept. 18, 1947, to Apr. 12, 1959, at site 550 ft to the left of present site; Apr. 13, 1959, to June 29, 1960, at site 150 ft to the right of present site. Supplemental water-stage recorders at sites 75 and 150 ft to right of present site used at various times since 1964.

AVERAGE DISCHARGE.--30 calendar years, 1,045 cfs (757,100 acre-ft per year); 20 calendar years (1952-71), 957 cfs (693,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,650 cfs July 27 (gage height, 7.11 ft); no flow at times.

Period of record: Maximum discharge, 25,000 cfs Apr. 24, 1942, from rating curve extended above 13,900 cfs; maximum gage height, 7.82 ft Aug. 10, 1967; no flow at times.

REMARKS.--Records good except those for summer months, which are fair and January which are poor. Possible regulation by operation of reservoirs on Rio Chama and by flood-and-silt-detention reservoir on Jemez River (see sta 08285000, 08286900, 08328500). Diversions above station for irrigation of about 718,000 acres, several hundred of which are below station. Water quality records for the current year are published in Part 2 of this report.

COOPERATION.--Records for Albuquerque Riverside drain and Arenal, Armijo, and Atrisco canals furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1312: 1946(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	920	949	1,140	2,650	962	200	7.2	514	86	1,270	960	850
2	900	1,120	994	2,150	800	171	7.0	263	58	1,600	919	841
3	880	1,070	872	1,840	552	210	214	54	71	1,330	907	808
4	700	1,070	746	1,550	655	334	334	36	44	650	860	795
5	500	1,120	707	1,450	1,070	220	389	29	35	579	1,430	755
6	250	1,040	733	1,380	1,120	125	320	141	11	792	1,600	775
7	130	1,060	843	1,410	1,110	147	135	474	11	1,030	1,850	780
8	130	1,030	814	1,450	800	167	58	296	5.0	872	1,760	804
9	190	901	746	1,030	720	97	39	303	0	751	1,710	859
10	300	916	746	843	800	67	27	137	0	678	1,690	887
11	450	901	843	901	872	51	21	502	0	622	1,630	761
12	814	962	946	828	707	44	17	351	0	561	1,610	841
13	828	930	1,010	540	632	60	15	938	0	512	1,650	850
14	785	916	1,030	406	720	58	13	465	0	449	1,690	910
15	746	886	1,030	432	720	35	11	297	0	406	1,720	900
16	694	858	1,010	574	668	20	9.0	203	0	430	1,860	827
17	632	800	901	655	668	112	7.0	129	0	590	1,800	779
18	632	1,040	785	620	563	326	5.0	130	0	620	1,400	633
19	858	1,180	655	785	563	335	4.2	192	1.0	586	1,150	596
20	962	1,340	644	694	772	350	492	878	7.3	495	935	675
21	946	1,250	962	978	681	330	385	381	16	414	915	714
22	843	1,180	1,120	1,110	552	122	295	249	7.8	405	987	619
23	840	1,010	901	901	490	50	818	694	29	364	538	700
24	800	872	800	901	510	35	960	440	94	347	1,070	815
25	772	946	1,090	1,140	450	31	614	306	86	867	1,050	947
26	694	1,070	1,390	930	285	7.8	346	185	102	1,200	1,020	923
27	632	1,230	1,410	872	299	7.8	2,780	75	122	980	1,000	999
28	694	1,360	1,690	1,030	175	7.8	1,020	35	91	920	1,040	1,090
29	720	-----	1,990	1,410	171	7.6	677	24	66	950	578	1,100
30	800	-----	2,430	1,200	163	7.4	494	54	187	895	877	954
31	828	-----	2,550	-----	190	-----	278	88	-----	952	-----	893
TOTAL	20,870	29,007	33,528	32,660	19,440	3,735.4	10,791.4	8,863	1,130.1	23,117	39,006	25,680
MEAN	673	1,036	1,082	1,089	627	125	348	286	37.7	746	1,300	828
MAX	962	1,360	2,550	2,650	1,120	350	2,780	938	187	1,600	1,860	1,100
MIN	130	800	644	406	163	7.4	4.2	24	0	347	860	596
AC-FT	41,400	57,540	66,500	64,780	38,560	7,410	21,400	17,580	2,240	45,850	77,370	50,940
(+)	1,040	908	9,260	11,340	11,640	12,060	16,020	11,020	13,450	12,300	1,330	1,200

CAL YR 1971 TOTAL 247,827.9 MEAN 679 MAX 2,780 MIN 0 AC-FT 491,600 + 101,600
WTR YR 1971 TOTAL 252,169.9 MEAN 691 MAX 2,780 MIN 0 AC-FT 500,200 + 99,970

PEAK DISCHARGE (BASE, 4,000 CFS).--July 27 (0800) 6,650 cfs (7.11 ft).

† Combined flow, in acre-ft, of Albuquerque Riverside drain and Arenal, Armijo, and Atrisco canals. This flow, which bypasses river gage, can be added to river records to get entire surface flow in valley cross-section.

08331990 Rio Grande conveyance channel near Bernardo, N. Mex.

LOCATION.--Lat 34°24'52", long 106°48'11", Socorro County, in Sevilleta or Belen Grant, 0.2 mile south of U.S. Highway 60, 1.8 miles east of Bernardo, about 3 miles upstream from floodway, and 4 miles upstream from Rio Puerco.

PERIOD OF RECORD.--June 1936 to September 1937, October 1964 to current year. July 1943 to September 1964, included in composite flow of "Rio Grande near Bernardo." October 1960 to September 1964, monthly acre-feet published in WSP 1923 (daily records available in district files). Beginning October 1952 flow in conveyance channel represents controlled diversion from Rio Grande. Prior to October 1952, records called "San Francisco Riverside drain near Bernardo," not equivalent.

GAGE.--Water-stage recorder with concrete control. Datum of gage is 4,720.00 ft above mean sea level. Prior to October 1964, 0.2 mile upstream at various datums.

AVERAGE DISCHARGE.--19 years (1952-71), 478 cfs (346,300 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 2,220 cfs Apr. 22, 1958; no flow many days most years.

REMARKS.--Records fair. Conveyance channel is 1 of 4 channels (see sta 08332010, 08332030, and 08332050) carrying flow in valley cross section. Original design and plan was for conveyance channel to carry flows up to about 2,000 cfs. For combined monthly flow in acre-ft of this channel, floodway, Bernardo interior drain and Lower San Juan Riverside drain see tabulation below daily table for sta 08332010. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	273	740	1,640	829	873	853	964	857	27	0	121	1.5
2	258	830	1,410	857	930	750	854	424	26	0	53	0
3	271	985	1,180	871	987	644	808	458	7.7	0	39	0
4	250	1,230	1,060	520	983	642	768	143	1.3	0	11	0
5	246	1,170	1,050	330	981	502	773	116	.78	0	1.9	0
6	305	1,140	871	175	1,050	621	766	170	.67	0	.48	0
7	266	1,360	843	125	975	416	878	376	.64	0	.18	0
8	181	1,420	878	130	878	570	871	412	.30	0	102	0
9	168	1,380	878	155	888	570	780	412	0	0	90	0
10	178	1,380	892	230	883	483	404	332	0	0	30	0
11	161	1,410	864	388	856	476	620	159	0	0	36	0
12	183	1,470	927	549	823	694	654	283	0	0	59	0
13	174	1,430	976	1,050	888	583	370	457	0	0	138	0
14	153	1,480	976	1,010	900	600	194	187	0	0	289	0
15	167	1,390	962	972	844	777	90	144	0	0	103	0
16	370	1,360	896	906	905	852	79	177	0	0	111	0
17	376	1,430	843	899	891	767	124	286	0	0	47	0
18	418	1,440	759	913	920	752	124	189	0	0	15	8.3
19	584	1,520	794	983	956	710	209	156	0	0	5.7	5.8
20	479	1,530	731	1,140	1,060	628	369	142	0	0	2.2	12
21	401	1,520	808	1,210	1,250	387	350	134	0	0	44	.90
22	417	1,510	815	1,230	1,150	412	607	130	0	.93	74	3.2
23	399	1,520	815	1,250	1,130	944	1,140	138	0	.75	23	23
24	553	1,590	871	1,170	910	532	1,040	139	0	.02	97	55
25	510	1,550	885	1,010	753	310	615	91	0	110	140	88
26	484	1,530	794	977	861	265	886	107	0	23	109	67
27	431	1,650	787	934	925	640	778	87	0	145	43	67
28	521	1,650	766	956	956	500	295	72	0	888	16	64
29	680	1,630	773	946	-----	1,090	250	36	0	125	91	23
30	898	1,610	808	921	-----	1,320	724	32	0	52	86	2.5
31	760	-----	780	909	-----	984	-----	23	-----	96	6.1	-----
TOTAL	11,515	41,855	28,332	24,545	26,406	20,274	17,384	6,869	64.39	1,440.70	1,983.56	421.20
MEAN	371	1,395	914	792	943	654	579	222	2.15	46.5	64.0	14.0
MAX	898	1,650	1,640	1,250	1,250	1,320	1,140	857	27	888	289	88
MIN	153	740	731	125	753	265	79	23	0	0	.18	0
AC-FT	22,840	83,020	56,200	48,690	52,380	40,210	34,480	13,620	128	2,860	3,930	835
CAL YR 1970	TOTAL	224,393.05	MEAN	615	MAX	1,650	MIN	0	AC-FT	445,100		
WTR YR 1971	TOTAL	181,089.85	MEAN	496	MAX	1,650	MIN	0	AC-FT	359,200		

08331990 Rio Grande conveyance channel near Bernardo, N. Mex.

LOCATION.--Lat 34°24'52", long 106°48'11", Socorro County, in Sevilleta or Balen Grant, 0.2 mile south of U.S. Highway 60, 1.8 miles east of Bernardo, about 3 miles upstream from floodway, and 4 miles upstream from Rio Puerco.

PERIOD OF RECORD.--June 1936 to September 1937, October 1964 to current year. July 1943 to September 1964, included in composite flow of "Rio Grande near Bernardo." October 1960 to September 1964, monthly acre-feet published in WSP 1923 (daily records available in district files). Beginning October 1952 flow in conveyance channel represents controlled diversion from Rio Grande. Prior to October 1952, records called "San Francisco Riverside drain near Bernardo," not equivalent.

GAGE.--Water-stage recorder with concrete control. Datum of gage is 4,720.00 ft above mean sea level. Prior to October 1964, 0.2 mile upstream at various datums.

AVERAGE DISCHARGE.--19 calendar years (1952-71), 492 cfs (356,500 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 2,220 cfs Apr. 22, 1958; no flow many days most years.

REMARKS.--Records fair. Conveyance channel is 1 of 4 channels (see sta 08332010, 08332030, and 08332050) carrying flow in valley cross section. Original design and plan was for conveyance channel to carry flows up to about 2,000 cfs. For combined monthly flow in acre-ft of this channel, floodway, Bernardo interior drain and Lower San Juan Riverside drain see tabulation below daily table for sta 08332010. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	829	873	853	964	857	27	0	121	1.5	4.8	830	1,020
2	857	930	750	854	424	26	0	53	0	755	828	967
3	871	987	644	808	458	7.7	0	39	0	1,020	663	928
4	520	983	642	768	143	1.3	0	11	0	673	682	946
5	330	981	502	773	116	.78	0	1.9	0	167	673	896
6	175	1,050	621	766	170	.67	0	.48	0	128	1,280	804
7	125	975	416	878	376	.64	0	.18	0	229	1,310	767
8	130	878	570	871	412	.30	0	102	0	237	1,350	773
9	155	888	570	780	412	0	0	90	0	214	1,420	746
10	230	883	483	404	332	0	0	30	0	167	1,440	759
11	388	856	476	620	159	0	0	36	0	181	1,420	780
12	549	823	694	654	283	0	0	59	0	141	1,380	640
13	1,050	888	583	370	457	0	0	138	0	86	1,220	640
14	1,010	900	600	194	187	0	0	289	0	90	1,080	787
15	972	844	777	90	144	0	0	103	0	98	1,100	766
16	906	905	852	79	177	0	0	111	0	69	1,300	750
17	899	891	767	124	286	0	0	47	0	47	1,350	730
18	913	920	752	124	189	0	0	15	8.3	114	1,230	730
19	983	956	710	209	156	0	0	5.7	5.8	172	1,190	730
20	1,140	1,060	628	369	142	0	0	2.2	12	231	1,120	690
21	1,210	1,250	387	350	134	0	0	44	.90	191	1,010	647
22	1,230	1,150	412	607	130	0	.93	74	3.2	147	913	745
23	1,250	1,130	944	1,140	138	0	.75	23	23	124	945	717
24	1,170	910	532	1,040	139	0	.02	97	55	136	880	766
25	1,010	753	310	615	91	0	110	140	88	205	908	857
26	977	861	265	886	107	0	23	109	67	756	893	864
27	934	925	640	778	87	0	145	43	67	1,040	921	990
28	956	956	500	295	72	0	888	16	64	705	923	1,030
29	946	-----	1,090	250	36	0	125	91	23	502	931	1,040
30	921	-----	1,320	724	32	0	52	86	2.5	584	950	971
31	909	-----	984	-----	23	-----	96	6.1	-----	552	-----	918
TOTAL	24,545	26,406	20,274	17,384	6,869	64.39	1,440.70	1,983.56	421.20	9,765.8	32,140	25,394
MEAN	792	943	654	579	222	2.15	46.5	64.0	14.0	315	1,071	819
MAX	1,250	1,250	1,320	1,140	857	27	888	289	88	1,040	1,440	1,040
MIN	125	753	265	79	23	0	0	.18	0	4.8	663	640
AC-FT	48,690	52,380	40,210	34,480	13,620	128	2,860	3,930	835	19,370	63,750	50,370
CAL YR 1971	TOTAL	166,687.65	MEAN	457	MAX	1,440	MIN	0	AC-FT	330,600		
WTR YR 1971	TOTAL	181,089.85	MEAN	496	MAX	1,650	MIN	0	AC-FT	359,200		

08332010 Rio Grande floodway near Bernardo, N. Mex.

LOCATION.--Lat 34°25'01", long 106°48'00", Socorro County, in Belen or Sevilleta Grant on downstream side of bridge on U.S. Highway 60, 5 miles downstream from heading of conveyance channel, and 2 miles east of Bernardo.

DRAINAGE AREA.--19,230 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--June 1936 to January 1939, October 1941 to current year. Monthly discharge only October 1942 to June 1943 published in WSP 1312, and October 1960 to September 1964, published in WSP 1923 (daily records available in district files). Published as "Rio Grande near Bernardo" prior to October 1964. Prior to October 1952, flow of Bernardo interior drain was included only when it carried river overflow, the entire flow has been included from October 1952 to September 1964. Flow in the conveyance channel, formerly San Francisco Riverside drain, has been included in record prior to October 1964.

GAGE.--Water-stage recorder. Datum of gage is 4,722.55 ft above mean sea level.

AVERAGE DISCHARGE.--19 years (1936-38, 1941-58), 1,142 cfs (826,800 acre-ft per year). Includes flow of floodway, conveyance channel, and Bernardo interior drain.

13 years (1958-71) 227 cfs (164,500 acre-ft per year). Floodway only.

13 years (1958-71) 842 cfs (610,000 acre-ft per year). Includes flow of floodway, conveyance channel, Bernardo interior drain, and lower San Juan Riverside drain.

EXTREMES.--Current year: Maximum discharge, 2,020 cfs Apr. 1 (gage height, 5.23 ft); no flow most of time.

1936-39, 1941 to current year: Maximum discharge, 21,000 cfs Apr. 25, 1942 (gage height, 6.90 ft); no flow for many days most years.

REMARKS.--Records poor. Floodway is 1 of 4 channels (see sta 08331990, 08332030, and 08332050) carrying flow in valley cross section. For combined monthly flow in acre-ft of floodway, conveyance channel, Bernardo interior drain and Lower San Juan Riverside drain see tabulation below. Normal plan is for floodway to carry flow when capacity of conveyance channel (about 2,000 cfs) is exceeded. Diversions for irrigation of about 740,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	65	0	0	0	1,550	2.0		0	0	
2		0	58	0	0	0	1,450			0	0	
3		0	18	0	0	0	930	0		0	0	
4		0	.50	0	0	0	658	0		0	0	
5		0	0	0	0	0	480	0		0	0	
6		0	0	0	0	0	205	0		0	0	
7		28	0	0	0	0	30	0		0	0	
8		90	0	0	0	0	111	0		0	0	
9		76	0	0	0	0	182	0		0	0	
10		100	0	0	0	0	17	0		0	0	
11		226	0	0	0	0	15	0		0	0	
12		440	0	0	0	0	7.4	0		0	0	
13		336	0	46	0	0	0	0		0	0	
14		352	0	5.4	0	0	0	0		0	0	
15		448	0	0	2.2	0	0	0		0	0	
16		249	0	0	6.7	0	0	0		0	0	
17		113	0	0	2.4	0	0	0		0	0	
18		76	0	0	0	0	0	0		0	0	
19		148	0	0	0	0	0	0		0	0	
20		87	0	1.6	0	0	0	0		0	0	
21		79	0	9.2	5.0	0	0	0		0	0	
22		148	0	13	4.0	0	6.8	0		0	0	
23		156	0	34	3.0	0	40	0		0	0	
24		56	0	57	2.1	0	25	0		0	0	
25		44	0	0	0	0	0	0		0	0	
26		32	0	0	0	0	5.7	0		0	0	
27		54	0	0	0	0	1.0	0		6.0	0	
28		74	0	0	0	0	1.0	0		146	0	
29		120	0	0	-----	4.5	0	0		0	.91	
30		87	0	0	-----	674	.62	0		0	0	
31		-----	0	0	-----	1,210	-----	0	-----	0	0	-----
TOTAL	0	3,619	141.50	166.2	25.4	1,888.5	5,715.52	2.0	0	152.0	.91	0
MEAN	0	121	4.56	5.36	.91	60.9	191	.065	0	4.90	.029	0
MAX	0	448	65	57	6.7	1,210	1,550	2.0	0	146	.91	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	7,180	281	330	50	3,750	11,340	4.0	0	301	1.8	0
(†)	33,870	95,590	61,620	53,800	56,900	53,040	58,740	25,630	5,260	6,880	13,320	5,740

CAL YR 1970 TOTAL 78,309.65 MEAN 215 MAX 2,540 MIN 0 AC-FT 155,300 † MEAN 980 AC-FT 709,700
WTR YR 1971 TOTAL 11,711.03 MEAN 32.1 MAX 1,550 MIN 0 AC-FT 23,230 † MEAN 650 AC-FT 470,400

† Combined flow, in acre-ft and mean, in cfs, of Floodway, Conveyance Channel, Bernardo Interior Drain, and Lower San Juan Riverside Drain.

08332010 Rio Grande floodway near Bernardo, N. Mex.

LOCATION.--Lat 34°25'01", long 106°48'00", Socorro County, in Belen or Seville Grant on downstream side of bridge on U.S. Highway 60, 5 miles downstream from heading of conveyance channel, and 2 miles east of Bernardo.

DRAINAGE AREA.--19,230 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--June 1936 to January 1939, October 1941 to current year. Monthly discharge only October 1942 to June 1943 published in WSP 1312, and October 1960 to September 1964, published in WSP 1923 (daily records available in district files). Published as "Rio Grande near Bernardo" prior to October 1964. Prior to October 1952, flow of Bernardo interior drain was included only when it carried river overflow, the entire flow has been included from October 1952 to September 1964. Flow in the conveyance channel, formerly San Francisco Riverside drain, has been included in record prior to October 1964.

GAGE.--Water-stage recorder. Datum of gage is 4,722.55 ft above mean sea level.

AVERAGE DISCHARGE.--19 calendar years (1936-38, 1941-58), 1,125 cfs (815,100 acre-ft per year). Includes flow of floodway, conveyance channel, and Bernardo interior drain.

13 calendar years (1958-71) 235 cfs (170,300 acre-ft per year). Floodway only.

13 calendar years (1958-71) 840 cfs (608,600 acre-ft per year). Includes flow of floodway, conveyance channel, Bernardo interior drain, and lower San Juan Riverside drain.

EXTREMES.--Current year: Maximum discharge, 2,020 cfs Apr. 1 (gage height, 5.23 ft); no flow most of time.

1936-39, 1941 to current year: Maximum discharge, 21,000 cfs Apr. 25, 1942 (gage height, 6.90 ft); no flow for many days most years.

REMARKS.--Records poor. Floodway is 1 of 4 channels (see sta 08331990, 08332030, and 08332050) carrying flow in valley cross section. For combined monthly flow in acre-ft of floodway, conveyance channel, Bernardo interior drain and Lower San Juan Riverside drain see tabulation below. Normal plan is for floodway to carry flow when capacity of conveyance channel (about 2,000 cfs) is exceeded. Diversions for irrigation of about 740,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	1,550	2.0		0	0		0	0	25
2	0	0	0	1,450	0		0	0		.47	0	26
3	0	0	0	930	0		0	0		.88	0	17
4	0	0	0	658	0		0	0		0	0	11
5	0	0	0	480	0		0	0		0	0	2.8
6	0	0	0	205	0		0	0		0	219	0
7	0	0	0	30	0		0	0		0	260	0
8	0	0	0	111	0		0	0		0	192	0
9	0	0	0	182	0		0	0		0	314	0
10	0	0	0	17	0		0	0		0	240	0
11	0	0	0	15	0		0	0		0	190	0
12	0	0	0	7.4	0		0	0		0	200	0
13	46	0	0	0	0		0	0		0	250	0
14	5.4	0	0	0	0		0	0		0	300	0
15	0	2.2	0	0	0		0	0		0	570	0
16	0	6.7	0	0	0		0	0		0	456	0
17	0	2.4	0	0	0		0	0		0	498	0
18	0	0	0	0	0		0	0		0	498	0
19	0	0	0	0	0		0	0		0	128	0
20	1.6	0	0	0	0		0	0		0	31	0
21	9.2	5.0	0	0	0		0	0		0	2.2	0
22	13	4.0	0	6.8	0		0	0		0	0	0
23	34	3.0	0	40	0		0	0		0	0	0
24	57	2.1	0	25	0		0	0		0	0	0
25	0	0	0	0	0		0	0		0	0	0
26	0	0	0	5.7	0		0	0		0	0	0
27	0	0	0	1.0	0		6.0	0		0	.44	7.6
28	0	0	0	1.0	0		146	0		0	4.2	107
29	0	-----	4.5	0	0		0	.91		0	5.3	308
30	0	-----	674	.62	0		0	0		0	7.3	448
31	0	-----	1,210	-----	0	-----	0	0	-----	0	-----	416
TOTAL	166.2	25.4	1,888.5	5,715.52	2.0	0	152.0	.91	0	1.35	4,365.44	1,368.4
MEAN	5.36	.91	60.9	191	.065	0	4.90	.029	0	.044	146	44.1
MAX	57	6.7	1,210	1,550	2.0	0	146	.91	0	.88	570	448
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	330	50	3,750	11,340	4.0	0	301	1.8	0	2.7	8,660	2,710
(†)	53,800	56,900	53,040	58,740	25,630	5,260	6,880	13,320	5,740	33,440	77,590	57,780

CAL YR 1971 TOTAL 13,685.72 MEAN 37.5 MAX 1,550 MIN 0 AC-FT 27,150 + MEAN 619 AC-FT 448,100

† Combined flow, in acre-ft and mean, in cfs, of Floodway, Conveyance Channel, Bernardo Interior Drain, and Lower San Juan Riverside Drain.

08332030 Lower San Juan Riverside drain near Bernardo, N. Mex.

LOCATION.--Lat 34°24'51", long 106°47'34", in SE 1/4 sec. 12, T.2 N., R.1 E., Socorro County, on right bank, 1,400 feet downstream from bridge on U.S. Highway 60, and 2.5 miles east of Bernardo.

PERIOD OF RECORD.--June 1936 to September 1937, August 1954 to current year. Monthly discharge only August 1955 to September 1960, published in WSP 1732, and October 1960 to September 1964, published in WSP 1923 (daily records available in district files). Records collected under name of "La Joya Eastside drain" are equivalent.

GAGE.--Water-stage recorder. Datum of gage is 4,722.35 ft above mean sea level.

EXTREMES.--Period of record: Maximum daily discharge, 204 cfs May 24, 1970; no flow for several days during 1963.

REMARKS.--This drain is one of four channels (see sta 08331990, 08332010 and 08332050) carrying flow in valley cross section. For combined flow in acre-ft of this drain, conveyance channel, floodway, and Bernardo interior drain see tabulation below daily table for station 08332010.

COOPERATION.--Since July 1958 records for this station or La Joya Eastside drain (records equivalent) furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	47	48	62	112	118	117	31	74	39	89	62	55
2	48	49	82	113	158	94	39	58	36	97	46	55
3	47	49	76	107	125	93	33	72	33	95	46	55
4	47	49	83	117	118	67	40	66	32	110	46	55
5	47	49	107	134	119	66	41	62	32	115	46	53
6	47	50	114	166	117	72	51	50	32	121	46	53
7	47	50	109	145	110	65	58	55	35	122	47	53
8	47	50	90	122	124	72	59	75	32	119	47	52
9	47	50	81	119	167	62	78	93	28	97	48	52
10	46	50	93	139	167	58	73	84	30	111	49	52
11	46	51	117	148	114	56	59	87	27	122	49	51
12	46	50	91	127	123	49	49	94	30	136	50	50
13	45	51	99	121	142	50	43	119	29	136	51	50
14	45	51	116	110	123	47	32	122	24	110	52	51
15	45	51	104	116	102	49	29	113	21	97	54	50
16	46	51	104	134	109	46	26	112	20	110	55	50
17	46	52	113	146	143	47	24	84	22	107	55	51
18	46	51	102	150	147	41	22	77	27	122	55	51
19	46	51	69	155	141	38	20	57	31	122	56	50
20	46	51	69	151	130	35	21	58	29	93	56	49
21	46	51	65	120	148	37	22	64	28	104	55	49
22	46	50	79	159	153	37	26	105	29	125	56	49
23	47	49	109	164	168	36	31	87	46	111	56	48
24	48	48	106	159	153	34	30	74	47	133	56	49
25	48	47	112	163	102	31	30	81	31	148	56	49
26	48	46	107	145	150	29	34	96	34	137	55	49
27	48	45	112	140	157	28	40	82	33	134	56	49
28	49	45	119	106	142	27	40	60	40	133	56	49
29	49	-----	110	137	125	32	43	60	68	128	55	50
30	49	-----	105	154	99	33	51	62	78	123	55	50
31	49	-----	101	-----	118	-----	52	47	-----	135	-----	51
TOTAL	1,454	1,385	3,006	4,079	4,112	1,548	1,227	2,430	1,023	3,642	1,572	1,580
MEAN	46.9	49.5	97.0	136	133	51.6	39.6	78.4	34.1	117	52.4	51.0
MAX	49	52	119	166	168	117	78	122	78	148	62	55
MIN	45	45	62	106	99	27	20	47	20	89	46	48
AC-FT	2,880	2,750	5,960	8,090	8,160	3,070	2,430	4,820	2,030	7,220	3,120	3,130

CAL YR 1971 TOTAL 27,058 MEAN 74.1 MAX 168 MIN 20 AC-FT 53,670

LOCATION.--Lat 34°24'56", long 106°49'15", Socorro County, on downstream side of bridge on U.S. Highway 60, and 1.0 mile east of Bernardo.

PERIOD OF RECORD.--June 1936 to May 1937, October 1943 to current year. Monthly discharge only June 1936 to May 1937, published in WSP 828. October 1943 to September 1960 included in composite records for station 08332000 "Rio Grande near Bernardo." October 1960 to September 1964 monthly acre-feet published in WSP 1923. Daily records available in district files beginning October 1943.

GAGE.--Water-stage recorder. Datum of gage is 4,713.99 ft above mean sea level. June 4, 1936 to May 17, 1937, staff gage 150 ft downstream at datum 2.77 ft higher.

EXTREMES.--Period of record: Maximum daily discharge, 187 cfs Aug. 7, 1970; no flow at times. Prior to 1952, drain was subject to overflow from floodway.

REMARKS.--Records good. This drain is 1 of 4 channels (see sta 08331990, 08332010, and 08332030) carrying flow in valley cross section. For combined monthly flow in acre-ft of this drain, conveyance channel, floodway, and Lower San Juan Riverside drain see tabulation below daily table for sta 08332010.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	44	33	29	31	31	54	57	38	24	67	43
2	64	38	33	29	32	30	60	79	37	27	84	38
3	67	34	32	30	32	30	72	65	37	27	64	42
4	50	34	32	31	32	36	59	51	57	26	42	34
5	43	34	32	31	32	46	57	51	69	26	46	31
6	61	33	32	30	32	33	51	57	65	22	54	28
7	66	33	32	29	32	30	55	61	49	20	59	30
8	70	33	33	29	31	38	68	57	40	19	79	30
9	54	34	33	28	30	45	70	70	38	18	75	25
10	52	34	33	28	31	47	70	67	37	20	84	20
11	62	33	32	29	31	47	76	54	37	22	83	23
12	62	34	32	30	30	50	51	69	39	17	90	22
13	62	34	32	31	30	57	61	82	39	15	117	15
14	68	33	33	31	30	46	67	85	33	13	79	15
15	66	34	32	32	30	52	74	84	29	12	104	14
16	62	35	32	32	30	62	108	84	25	12	106	14
17	59	34	32	32	30	58	121	72	27	15	84	18
18	66	35	31	32	30	59	136	65	25	17	77	26
19	57	35	31	32	30	61	147	65	27	11	59	46
20	66	34	31	32	32	66	134	63	32	12	51	38
21	64	34	31	33	32	62	145	61	29	11	60	30
22	65	34	31	33	31	63	138	66	26	10	78	42
23	67	34	30	33	31	54	117	72	27	12	84	110
24	62	34	30	33	31	54	78	60	24	22	98	128
25	62	34	30	32	31	50	74	56	24	18	95	111
26	59	34	30	32	30	57	63	57	29	28	99	113
27	56	34	30	31	31	64	58	53	28	25	61	96
28	58	34	29	31	31	64	55	49	25	26	54	93
29	61	34	30	31	-----	65	59	50	24	21	58	77
30	63	34	29	31	-----	56	59	40	23	35	63	96
31	63	-----	29	31	-----	59	-----	40	-----	67	48	-----
TOTAL	1,905	1,032	972	958	866	1,572	2,437	1,942	1,039	650	2,302	1,448
MEAN	61.5	34.4	31.4	30.9	30.9	50.7	81.2	62.6	34.6	21.0	74.3	48.3
MAX	70	44	33	33	32	66	147	85	69	67	117	128
MIN	43	33	29	28	30	30	51	40	23	10	42	14
AC-FT	3,780	2,050	1,930	1,900	1,720	3,120	4,830	3,850	2,060	1,290	4,570	2,870
CAL YR 1970	TOTAL 19,326		MEAN 52.9	MAX 187	MIN 22	AC-FT 38,330						
WTR YR 1971	TOTAL 17,123		MEAN 46.9	MAX 147	MIN 10	AC-FT 33,960						

LOCATION.--Lat 34°24'56", long 106°49'15", Socorro County, on downstream side of bridge on U.S. Highway 60, and 1.0 mile east of Bernardo.

PERIOD OF RECORD.--June 1936 to May 1937, October 1943 to current year. Monthly discharge only June 1936 to May 1937, published in WSP 828. October 1943 to September 1960 included in composite records for station 08332000 "Rio Grande near Bernardo." October 1960 to September 1964 monthly acre-feet published in WSP 1923. Daily records available in district files beginning October 1943.

EXTREMES.--Period of record: Maximum daily discharge, 187 cfs Aug. 7, 1970; no flow at times. Prior to 1952, drain was subject to overflow from floodway.

REMARKS.---Records good. This drain is 1 of 4 channels (see sta 08331990, 08332010, and 08332030) carrying flow in valley cross section. For combined monthly flow in acre-ft of this drain, conveyance channel, floodway, and Lower San Juan Riverside drain see tabulation below daily table for sta 08332010.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	29	31	31	54	57	38	24	67	43	122	56	15
2	29	32	30	60	79	37	27	84	38	133	56	14
3	30	32	30	72	65	37	27	64	42	114	62	16
4	31	32	36	59	51	57	26	42	34	106	51	17
5	31	32	46	57	51	69	26	46	31	105	38	17
6	30	32	33	51	57	65	22	54	28	97	36	19
7	29	32	30	55	61	49	20	59	30	121	35	20
8	29	31	38	68	57	40	19	79	30	119	36	22
9	28	30	45	70	70	38	18	75	25	118	35	23
10	28	31	47	70	67	37	20	84	20	113	35	24
11	29	31	47	76	54	37	22	83	23	114	35	26
12	30	30	50	51	69	39	17	90	22	98	35	27
13	31	30	57	61	82	39	15	117	15	104	34	29
14	31	30	46	67	85	33	13	79	15	116	35	30
15	32	30	52	74	84	29	12	104	14	110	35	32
16	32	30	62	108	84	25	12	106	14	115	34	31
17	32	30	58	121	72	27	15	84	18	106	34	31
18	32	30	59	136	65	25	17	77	26	143	34	31
19	32	30	61	147	65	27	11	59	46	137	33	30
20	32	32	66	134	63	32	12	51	38	144	33	29
21	33	32	62	145	61	29	11	60	30	140	32	29
22	33	31	63	138	66	26	10	78	42	111	31	29
23	33	31	54	117	72	27	12	84	110	108	31	28
24	33	31	54	78	60	24	22	98	128	116	30	28
25	32	31	50	74	56	24	18	95	111	121	28	28
26	32	30	57	63	57	29	28	99	113	110	25	28
27	31	31	64	58	53	28	25	61	96	89	23	28
28	31	31	64	55	49	25	26	54	93	101	21	28
29	31	-----	65	59	50	24	21	58	77	88	19	27
30	31	-----	56	59	40	23	35	63	96	69	17	28
31	31	-----	59	-----	40	-----	67	48	-----	65	-----	27
TOTAL	958	866	1,572	2,437	1,942	1,039	650	2,302	1,448	3,453	1,039	791
MEAN	30.9	30.9	50.7	81.2	62.6	34.6	21.0	74.3	48.3	111	34.6	25.5
MAX	33	32	66	147	85	69	67	117	128	144	62	32
MIN	28	30	30	51	40	23	10	42	14	65	17	14
AC-FT	1,900	1,720	3,120	4,830	3,850	2,060	1,290	4,570	2,870	6,850	2,060	1,570
CAL YR 1971	TOTAL	18,497	MEAN	50.7	MAX	147	MIN	10	AC-FT	36,690		
WTR YR 1971	TOTAL	17,123	MEAN	46.9	MAX	147	MIN	10	AC-FT	33,960		

08334000 Rio Puerco above Arroyo Chico, near Guadalupe, N. Mex.

LOCATION.--Lat 35°38'08", long 107°09'56", in SW¼ sec.21, T.16 N., R.3 W., Sandoval County, on right bank 1.6 miles upstream from Arroyo Chico and 5.5 miles northeast of village of Guadalupe.

DRAINAGE AREA.--420 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 5,950 ft above mean sea level. Prior to July 14, 1966 at datum 1.01 ft higher.

AVERAGE DISCHARGE.--20 years, 12.6 cfs (9,130 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,860 cfs July 21 (gage height, 9.20 ft); no flow for many days.

Period of record: Maximum discharge, 6,940 cfs July 29, 1967 (gage height, 13.53 ft), from rating curve extended above 1,300 cfs on basis of slope-area measurements at gage heights 7.75 and 10.60 ft; no flow for many days most years.

Flood of June 29, 1943, probably exceeded 5,000 cfs (based on records for stations above and below).

REMARKS.--Records poor. Diversions for irrigation of about 3,700 acres above station in past years, but present diversion negligible.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02		0	0	.03	0	2.2		0	.19	.30	
2	.03		.01	0	.02	0	4.8		0	.40	.15	
3	.50		.01	0	.02	0	2.0		0	2.8	.07	
4	10		.01	0	.03	.10	1.0		0	5.2	0	
5	1.0		.01	0	.03	.50	.40		0	2.7	0	
6	.02		.01	0	.03	1.0	.20		0	71	0	
7	.03		.01	0	.04	2.0	0		0	42	5.8	
8	0		.01	0	.05	2.0	10		0	23	4.0	
9	0		0	0	.02	1.0	5.0		0	3.9	0	
10	0		0	0	.02	.20	2.0		0	4.5	0	
11	0		0	0	0	.10	1.0		0	4.7	0	
12	0		0	0	0	.15	0		0	1.6	0	
13	0		0	0	0	5.6	0		0	41	0	
14	0		0	0	0	7.3	0		0	15	0	
15	0		0	0	0	.72	0		0	29	0	
16	0		0	0	0	.10	0		0	35	0	
17	0		0	0	0	0	0		0	8.2	49	
18	0		0	.10	0	0	0		0	22	97	
19	0		0	.20	0	0	0		0	158	3.0	
20	0		0	.34	0	0	0		0	341	.47	
21	0		0	.15	0	0	0		475	100	.12	
22	0		0	.07	0	0	0		69	20	34	
23	0		0	2.3	0	0	0		31	241	28	
24	0		0	2.0	0	0	0		205	133	2.7	
25	0		0	1.6	0	0	0		11	180	.62	
26	0		0	1.2	0	0	0		2.0	7.8	.15	
27	0		0	.80	0	0	0		21	2.2	.12	
28	0		0	.60	0	0	0		7.0	1.6	.10	
29	0		0	.40	-----	0	0		1.1	.54	86	
30	0		0	.20	-----	0	0		.19	.47	924	
31	0	-----	0	0	-----	.70	-----		.12	.47	-----	
TOTAL	11.60	0	.07	9.96	.29	21.47	28.60	0	0	822.41	1,498.27	1,235.60
MEAN	.37	0	.002	.32	.010	.69	.95	0	0	26.5	48.3	41.2
MAX	10	0	.01	2.3	.05	7.3	10	0	0	475	341	924
MIN	0	0	0	0	0	0	0	0	0	0	.19	0
AC-FT	23	0	.1	20	.6	43	57	0	0	1,630	2,970	2,450

CAL YR 1970 TOTAL 2,898.68 MEAN 7.94 MAX 437 MIN 0 AC-FT 5,750
WTR YR 1971 TOTAL 3,628.27 MEAN 9.94 MAX 924 MIN 0 AC-FT 7,200

PEAK DISCHARGE (BASE, 1,000 CFS, REVISED)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-21	0300	9.20	2,860	8-23	0100	5.75	1,020
7-24	0000	6.35	1,260	8-24	2130	6.05	1,160
8-19	2300	7.50	1,910	9-30	0800	8.40	2,340

08334000 Rio Puerco above Arroyo Chico, near Guadalupe, N. Mex.

LOCATION.--Lat 35°38'08", long 107°09'56", in SW¼ sec.21, T.16 N., R.3 W., Sandoval County, on right bank 1.6 miles upstream from Arroyo Chico and 5.5 miles northeast of village of Guadalupe.

DRAINAGE AREA.--420 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 5,950 ft above mean sea level. Prior to July 14, 1966 at datum 1.01 ft higher.

AVERAGE DISCHARGE.--20 calendar years, 12.8 cfs (9,270 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,860 cfs July 21 (gage height, 9.20 ft); no flow for many days.

Period of record: Maximum discharge, 6,940 cfs July 29, 1967 (gage height, 13.53 ft), from rating curve extended above 1,300 cfs on basis of slope-area measurements at gage heights 7.75 and 10.60 ft; no flow for many days most years.

Flood of June 29, 1943, probably exceeded 5,000 cfs (based on records for stations above and below).

REMARKS.--Records poor. Diversions for irrigation of about 3,700 acres above station in past years, but present diversion negligible.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	.03	0	2.2			0	.19	.30	300	1.6	4.0
2	0	.02	0	4.8			0	.40	.15	100	1.4	4.0
3	0	.02	0	2.0			0	2.8	.07	40	1.4	4.0
4	0	.03	.10	1.0			0	5.2	0	18	1.4	4.0
5	0	.03	.50	.40			0	2.7	0	10	1.4	4.0
6	0	.03	1.0	.20			0	71	0	9.0	1.6	4.0
7	0	.04	2.0	0			0	42	5.8	8.0	1.8	4.0
8	0	.05	2.0	10			0	23	4.0	7.0	2.0	4.0
9	0	.02	1.0	5.0			0	3.9	0	6.0	2.2	3.0
10	0	.02	.20	2.0			0	4.5	0	5.0	2.4	2.0
11	0	0	.10	1.0			0	4.7	0	4.5	2.4	1.5
12	0	0	.15	0			0	1.6	0	1.0	2.4	1.0
13	0	0	5.6	0			0	41	0	3.5	2.2	.60
14	0	0	7.3	0			0	15	0	3.0	2.6	.20
15	0	0	.72	0			0	29	0	4.0	3.0	0
16	0	0	.10	0			0	35	0	5.0	4.0	0
17	0	0	0	0			0	8.2	49	8.0	3.0	0
18	.10	0	0	0			0	22	97	9.0	2.5	0
19	.20	0	0	0			0	158	3.0	7.8	2.0	0
20	.34	0	0	0			0	341	.47	3.6	2.0	.05
21	.15	0	0	0		475	100		.12	3.0	2.0	.02
22	.07	0	0	0		69	20	34		2.4	2.0	0
23	2.3	0	0	0		31	241	28		2.2	2.0	0
24	2.0	0	0	0		205	133	2.7		2.1	2.0	0
25	1.6	0	0	0		11	180	.62		40	2.5	0
26	1.2	0	0	0			2.0	7.8	.15	20	3.0	.46
27	.80	0	0	0			21	2.2	.12	10	3.5	55
28	.60	0	0	0			7.0	1.6	.10	6.0	4.0	38
29	.40	-----	0	0			1.1	.54	86	4.0	4.0	21
30	.20	-----	0	0			.19	.47	924	3.0	4.0	8.2
31	0	-----	.70	-----		-----	.12	.47	-----	2.0	-----	.28
TOTAL	9.96	.29	21.47	28.60	0	0	822.41	1,498.27	1,235.60	647.1	72.3	163.31
MEAN	.32	.010	.69	.95	0	0	26.5	48.3	41.2	20.9	2.41	5.27
MAX	2.3	.05	7.3	10	0	0	475	341	924	300	4.0	55
MIN	0	0	0	0	0	0	0	.19	0	1.0	1.4	0
AC-FT	20	.6	43	57	0	0	1,630	2,970	2,450	1,280	143	324

CAL YR 1971 TOTAL 4,499.31 MEAN 12.3 MAX 924 MIN 0 AC-FT 8,920

PEAK DISCHARGE (BASE, 1,000 CFS, REVISED)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-21	0300	9.20	2,860	8-23	0100	5.75	1,020
7-24	0000	6.35	1,260	8-24	2130	6.05	1,160
8-19	2300	7.50	1,910	9-30	0800	8.40	2,340

08340500 Arroyo Chico near Guadalupe, N. Mex.

LOCATION.--Lat 35°35'33", long 107°11'19", in NE¼ sec.30, T.16 N., R.3 W., Sandoval County, on left bank 0.2 mile upstream from mouth, 4.1 miles northwest of Guadalupe, and 5.5 miles southwest of Cabezón.

DRAINAGE AREA.--1,390 sq mi, approximately.

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,921 ft above mean sea level. Prior to June 21, 1968 at site 500 ft upstream at datum 2.00 ft higher.

AVERAGE DISCHARGE.--28 years, 23.3 cfs (16,880 acre-ft per year); 20 calendar years (1951-70), 25.0 cfs (18,110 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,950 cfs Sept. 30 (gage height, 6.70 ft), from rating curve extended above 170 cfs; no flow for many days.

Period of record: Maximum discharge, 12,200 cfs July 17, 1953 (gage height, 17.1 ft, present datum), from rating curve extended above 2,900 cfs on basis of slope-area measurements at gage heights 11.6 and 14.8 ft, present datum; no flow for many days each year.

REMARKS.--Records poor. Diversions for irrigation of about 100 acres above station.

REVISIONS (WATER YEARS).--WSP 1282: 1944-50.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.01	.10	.40	.40	0			0	0	.31
2	0	0	.08	.16	.40	.31	0			0	0	.10
3	.66	0	.06	.10	.40	.19	0			0	9.8	0
4	15	.01	.08	0	.46	.31	0			0	.04	0
5	20	.02	.08	0	.35	.73	0			0	0	0
6	.52	.01	.06	0	.23	2.4	0			0	8.1	0
7	.27	.03	.08	0	.23	4.9	0			0	10	1.4
8	.13	0	.08	0	.31	5.2	0			0	0	387
9	.01	0	.08	0	.16	4.2	0			0	0	20
10	.01	0	.04	0	.13	1.8	0			0	19	1.0
11	0	0	.06	0	.04	9.1	0			0	0	0
12	0	0	.08	0	.02	1.9	0			0	.18	0
13	0	.03	.08	0	.01	1.4	0			0	22	0
14	0	.08	.10	.05	.01	.98	0			0	3.7	0
15	0	.13	.13	.13	.01	.50	.02			0	39	0
16	.04	.13	.16	.10	.06	.20	0			0	10	0
17	.04	.08	.13	.23	.10	0	0			0	74	4.8
18	.03	.03	.10	.31	.16	0	.02			0	10	25
19	.03	.01	.13	3.6	.06	0	.01			0	155	.46
20	.04	.03	.10	3.7	.04	0	0			0	65	0
21	.03	.06	.10	4.9	.08	0	0			26	47	0
22	.03	.04	.08	2.8	.23	0	0			45	84	7.5
23	.02	.04	.13	.98	.31	0	0			37	312	0
24	0	.06	.19	.40	.19	0	0			38	21	0
25	0	.06	.16	.40	.27	0	0			2.4	178	0
26	.01	.08	.10	.59	.66	0	0			.66	55	0
27	0	.10	.10	.66	.66	0	0			17	6.0	0
28	0	.08	.10	.66	.35	0	0			0	0	0
29	0	.06	.13	.52	-----	0	0			0	0	306
30	0	.02	.16	.52	-----	0	0			0	79	1,590
31	0	-----	.16	.40	-----	0	-----			0	4.2	-----
TOTAL	36.87	1.19	3.13	21.31	6.33	34.52	.05	0	0	166.06	1,212.02	2,343.57
MEAN	1.19	.040	.10	.69	.23	1.11	.002	0	0	5.36	39.1	78.1
MAX	20	.13	.19	4.9	.66	9.1	.02	0	0	45	312	1,590
MIN	0	0	.01	0	.01	0	0	0	0	0	0	0
AC-FT	73	2.4	6.2	42	13	68	.1	0	0	329	2,400	4,650

CAL YR 1970 TOTAL 2,951.40 MEAN 8.09 MAX 415 MIN 0 AC-FT 5,850
WTR YR 1971 TOTAL 3,825.05 MEAN 10.5 MAX 1,590 MIN 0 AC-FT 7,590

PEAK DISCHARGE (BASE, 2,500 CFS).--Sept. 30 (0300) 2,950 cfs (6.70 ft).

08340500 Arroyo Chico near Guadalupe, N. Mex.

LOCATION.--Lat 35°35'33", long 107°11'19", in NE¼ sec.30, T.16 N., R.3 W., Sandoval County, on left bank 0.2 mile upstream from mouth, 4.1 miles northwest of Guadalupe, and 5.5 miles southwest of Cabezón.

DRAINAGE AREA.--1,390 sq mi, approximately.

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,921 ft above mean sea level. Prior to June 21, 1968 at site 500 ft upstream at datum 2.00 ft higher.

AVERAGE DISCHARGE.--28 calendar years, 23.3 cfs (16,880 acre-ft per year); 20 calendar years (1952-71), 24.8 cfs (18,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,950 cfs Sept. 30 (gage height, 6.70 ft), from rating curve extended above 170 cfs; no flow for many days.

Period of record: Maximum discharge, 12,200 cfs July 17, 1953 (gage height, 17.1 ft, present datum), from rating curve extended above 2,900 cfs on basis of slope-area measurements at gage heights 11.6 and 14.8 ft, present datum; no flow for many days each year.

REMARKS.--Records poor. Diversions for irrigation of about 100 acres above station.

REVISIONS (WATER YEARS).--WSP 1282: 1944-50.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.10	.40	.40	0			0	0	.31	267	.30	.73
2	.16	.40	.31	0			0	0	.10	70	.20	.35
3	.10	.40	.19	0			0	9.8	0	20	.10	.89
4	0	.46	.31	0			0	.04	0	9.1	0	.73
5	0	.35	.73	0			0	0	0	1.4	0	.81
6	0	.23	2.4	0			0	8.1	0	.30	0	.46
7	0	.23	4.9	0			0	10	1.4	0	0	.59
8	0	.31	5.2	0			0	0	387	0	0	.59
9	0	.16	4.2	0			0	0	20	0	0	.52
10	0	.13	1.8	0			0	19	1.0	0	0	.40
11	0	.04	9.1	0			0	0	0	0	0	.20
12	0	.02	1.9	0			0	.18	0	0	0	.04
13	0	.01	1.4	0			0	22	0	0	0	.01
14	.05	.01	.98	0			0	3.7	0	0	0	0
15	.13	.01	.50	.02			0	39	0	0	0	0
16	.10	.06	.20	0			0	10	0	0	.40	0
17	.23	.10	0	0			0	74	4.8	0	.73	0
18	.31	.16	0	.02			0	10	25	0	.52	0
19	3.6	.06	0	.01			0	155	.46	0	.23	0
20	3.7	.04	0	0			0	65	0	0	.27	0
21	4.9	.08	0	0			28	47	0	0	.40	0
22	2.8	.23	0	0			45	84	7.5	0	.31	0
23	.98	.31	0	0			37	312	0	0	.19	.01
24	.40	.19	0	0			38	21	0	0	.19	.32
25	.40	.27	0	0			2.4	178	0	30	.31	3.5
26	.59	.66	0	0			.66	55	0	19	.40	44
27	.66	.66	0	0			17	6.0	0	4.9	.59	21
28	.66	.35	0	0			0	0	0	4.0	.73	113
29	.52	-----	0	0			0	0	306	2.0	.73	4.0
30	.52	-----	0	0			0	79	1,590	1.0	.81	2.0
31	.40	-----	0	-----		-----	0	4.2	-----	.60	-----	1.0
TOTAL	21.31	6.33	34.52	.05	0	0	166.06	1,212.02	2,343.57	429.30	7.41	195.15
MEAN	.69	.23	1.11	.002	0	0	5.36	39.1	78.1	13.8	.25	6.30
MAX	4.9	.66	9.1	.02	0	0	45	312	1,590	267	.81	113
MIN	0	.01	0	0	0	0	0	0	0	0	0	0
AC-FT	42	13	68	.1	0	0	329	2,400	4,650	852	15	387

CAL YR 1971 TOTAL 4,415.72 MEAN 12.1 MAX 1,590 MIN 0 AC-FT 8,760

PEAK DISCHARGE (BASE, 2,500 CFS).--Sept. 30 (0300) 2,950 cfs (6.70 ft).

08341400 Bluewater Lake near Bluewater, N. Mex.

LOCATION.--Lat 35°17'31", long 108°06'40", in SE¼ sec.9, T.12 N., R.12 W., Valencia County, at left end of Bluewater Dam on Bluewater Creek, and 9.5 miles west of Bluewater.

DRAINAGE AREA.--201 sq mi.

PERIOD OF RECORD.--June 1927 to December 1950 (monthend contents only, published in WSP 1732), April 1958 to current year (monthend contents only).

GAGE.--Water-stage recorder. Datum of gage is 7,345.57 ft above mean sea level. July 1958 to January 1961, nonrecording gage at nearby site, same datum. Gage heights have been converted to sea-level elevations.

EXTREMES.--Current year: Maximum contents, 5,210 acre-ft Oct. 6 (elevation, 7,370.5 ft); minimum, 3,270 acre-ft Sept. 28 (elevation, 7,365.1 ft).

Period of record: Maximum contents determined, 47,100 acre-ft, Apr. 30, 1941. Contents may have been greater on Apr. 28, 1941 when peak discharge of 800 cfs occurred at station 8 miles downstream; no storage at times prior to 1947.

REMARKS.--Reservoir is formed by concrete arch dam. Storage began in 1927. Capacity, 38,500 acre-ft at elevation 7,402.6 ft (crest of uncontrolled siphon spillway which is vented to avoid drawdown below crest), and 44,200 acre-ft at elevation 7,405.6 ft (crest of ungated spillway over dam). Dead storage, 3.4 acre-ft at elevation 7,345.4 ft (sill of lower outlet tube). Lake not usually drawn below conservation pool level (elevation, 7,365.36 ft), below which ownership is by State Game and Fish Department. Above this level, water is owned and used by Bluewater-Toltec Irrigation Co. Figures given herein represent total contents at 2400 hours.

Month-end elevations and contents, water year October 1970 to September 1971

Date	Elevation- (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,370.4	5,170	-
Oct. 31	7,370.0	5,000	-170
Nov. 30	7,369.7	4,880	-120
Dec. 31	7,369.5	4,800	-80
Calendar year 1970			-1,800
Jan. 31	7,369.2	4,680	-120
Feb. 28	7,368.1	4,270	-410
Mar. 31	7,367.6	4,090	-180
Apr. 30	7,368.0	4,230	+140
May 31	7,367.2	3,950	-280
June 30	7,366.3	3,650	-300
July 31	7,365.7	3,460	-190
Aug. 31	7,365.9	3,520	+60
Sept. 30	7,366.0	3,550	+30
Water year 1970-71	-	-	-1,250

08341400 Bluewater Lake near Bluewater, N. Mex.

LOCATION.--Lat 35°17'31", long 108°06'40", in SE¼ sec.9, T.12 N., R.12 W., Valencia County, at left end of Bluewater Dam on Bluewater Creek, and 9.5 miles west of Bluewater.

DRAINAGE AREA.--201 sq mi.

PERIOD OF RECORD.--June 1927 to December 1950 (monthend contents only, published in WSP 1732), April 1958 to current year (monthend contents only).

GAGE.--Water-stage recorder. Datum of gage is 7,345.57 ft above mean sea level. July 1958 to January 1961, nonrecording gage at nearby site, same datum. Gage heights have been converted to sea-level elevations.

EXTREMES.--Current year: Maximum contents, 4,800 acre-ft Jan. 1 (elevation, 7,369.5 ft); minimum, 3,270 acre-ft Sept. 28 (elevation, 7,365.1 ft).

Period of record: Maximum contents determined, 47,100 acre-ft, Apr. 30, 1941. Contents may have been greater on Apr. 28, 1941 when peak discharge of 800 cfs occurred at station 8 miles downstream; no storage at times prior to 1947.

REMARKS.--Reservoir is formed by concrete arch dam. Storage began in 1927. Capacity, 38,500 acre-ft at elevation 7,402.6 ft (crest of uncontrolled siphon spillway which is vented to avoid drawdown below crest), and 44,200 acre-ft at elevation 7,405.6 ft (crest of ungated spillway over dam). Dead storage, 3.4 acre-ft at elevation 7,345.4 ft (sill of lower outlet tube). Lake not usually drawn below conservation pool level (elevation, 7,365.36 ft), below which ownership is by State Game and Fish Department. Above this level, water is owned and used by Bluewater-Toltec Irrigation Co. Figures given herein represent total contents at 2400 hours.

Month-end elevations and contents, calendar year 1971

Date	Elevation- (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Dec. 31	7,369.5	4,800	-
Jan. 31	7,369.2	4,680	-120
Feb. 28	7,368.1	4,270	-410
Mar. 31	7,367.6	4,090	-180
Apr. 30	7,368.0	4,230	+140
May 31	7,367.2	3,950	-280
June 30	7,366.3	3,650	-300
July 31	7,365.7	3,460	-190
Aug. 31	7,365.9	3,520	+60
Sept. 30	7,366.0	3,550	+30
Oct. 31	7,366.0	3,550	0
Nov. 30	7,365.7	3,460	-90
Dec. 31	7,368.5	4,420	+960
Calendar year 1971	-	-	-380

LOCATION.--Lat 35°17'40", long 108°01'40", in W¹/₄SW¹/₄ sec.5, T.12 N., R.11 W., Valencia County, on left bank 3.5 miles northwest of Bluewater Village, and 8 miles downstream from Bluewater Dam.

PERIOD OF RECORD.--July 1912 to August 1915, April 1916 to June 1919, water years 1919-22, 1924, 1926 (annual maximum), January 1927 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for July 20-23, 1912, published in WSP 358, have been found to be unreliable and should not be used.

AVERAGE DISCHARGE.--49 years (1912-15, 1916-18, 1927-71), 9.08 cfs (6,580 acre-ft per year); 20 calendar years (1951-70), 3.97 cfs (2,880 acre-ft per year).

Period of record: Maximum discharge, about 4,000 cfs, during period July 12-19, 1919 (gage height, 13.5 ft, from floodmarks, site and datum in use Mar. 4, 1918 to June 28, 1919); no flow at times.

The flood of Sept. 6, 1909, when Bluewater Dam washed out exceeded all other observed floods at this location (stage and discharge not determined). For other major floods during period 1919-26, see WSP 1732, p. 429, and WSP 1682, p. 410.

REMARKS.--Records good except those for winter period and August, which are poor. Flow regulated by Bluewater Lake (see sta 08341400).

REVISIONS (WATER YEARS).--WSP 1512: 1912-15, 1931, 1943(M), 1945(M). WSP 1312: 1915, 1917-18, 1929. WSP 1732: 1931(M).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	1.0	1.7	2.3	.90	1.3	1.0	2.5	.78	.82	.62	1.2
2	.97	1.0	1.4	2.1	1.0	1.4	1.0	1.2	.76	.98	.57	1.2
3	1.5	1.1	1.5	2.4	1.0	1.5	1.0	.93	1.0	.96	.56	1.1
4	2.1	1.1	1.5	2.4	.93	1.7	1.0	.83	.69	.80	.86	.97
5	1.3	1.3	1.5	2.0	1.3	1.7	1.0	.80	.76	.62	.74	.95
6	1.1	1.3	1.5	2.0	1.3	1.4	1.1	.86	.82	.63	.65	.94
7	1.2	1.4	1.6	2.0	1.1	1.4	1.1	.90	.77	.89	.62	1.0
8	1.4	1.6	1.6	2.0	1.3	1.4	1.1	.92	.69	.80	.62	1.1
9	1.3	1.6	1.7	2.0	1.3	1.2	.96	.84	.79	.76	.57	.88
10	1.1	1.6	1.8	2.0	1.3	1.1	.97	.86	.65	.75	.63	.86
11	.98	1.6	1.4	1.8	1.2	1.1	.97	.89	.42	.65	.70	.87
12	1.1	1.7	1.5	1.8	1.1	1.0	.97	.94	.47	.60	.68	.91
13	1.1	1.8	1.4	1.8	1.1	.93	.98	.93	.55	.57	.65	.88
14	1.0	1.9	1.5	1.8	.93	.93	.98	.86	.52	.53	.65	.86
15	1.1	1.8	1.8	1.8	.88	1.0	.99	.87	.57	.51	.69	.84
16	1.2	1.8	1.7	1.6	.85	.81	1.0	.81	.57	.46	.61	.77
17	1.1	2.0	1.9	1.6	.77	.87	1.0	.72	.57	.51	.73	.86
18	1.1	2.2	2.0	1.6	.99	.81	1.0	.71	.56	.51	.82	1.1
19	1.0	1.7	1.7	1.6	.94	.87	1.0	.73	.51	.50	.85	.99
20	.92	2.0	1.8	1.6	1.1	.93	1.0	.74	.54	.64	3.0	.91
21	.97	2.1	1.9	1.4	2.0	.81	2.0	.69	.60	.84	1.5	.90
22	1.0	1.8	1.9	1.4	1.2	.93	2.0	.69	.56	.84	1.2	1.1
23	1.5	1.0	1.7	1.4	.94	.87	2.0	.84	.57	1.1	1.5	1.1
24	1.2	1.2	1.9	1.4	1.1	.93	2.0	.80	.70	1.1	1.3	1.1
25	1.1	1.2	2.1	1.4	1.1	.93	2.0	.79	.66	.87	2.0	1.0
26	1.4	1.3	2.1	1.2	1.1	.93	3.0	.73	.54	.81	1.5	.96
27	1.2	1.3	2.1	.80	1.0	.93	3.0	.74	.59	.75	1.5	.88
28	1.1	1.5	1.9	.80	1.1	.93	2.9	.69	.66	.69	1.2	.85
29	1.4	1.4	1.7	.80	-----	.93	3.1	.68	.53	.69	1.2	2.0
30	1.0	1.6	2.0	.80	-----	.87	3.1	.83	.61	.62	1.2	5.9
31	1.0	-----	2.3	.80	-----	.81	-----	.80	-----	.62	1.2	-----
TOTAL	36.39	45.9	54.1	50.40	30.83	33.22	45.22	27.12	19.01	22.42	31.12	34.98
MEAN	1.17	1.53	1.75	1.63	1.10	1.07	1.51	.87	.63	.72	1.00	1.17
MAX	2.1	2.2	2.3	2.4	2.0	1.7	3.1	2.5	1.0	1.1	3.0	5.9
MIN	.92	1.0	1.4	.80	.77	.81	.96	.68	.42	.46	.56	.77
AC-FT	72	91	107	100	61	66	90	54	38	44	62	69
CAL YR 1970	TOTAL	551.14	MEAN 1.51	MAX 3.5	MIN .54	AC-FT 1,090						
WTR YR 1971	TOTAL	430.71	MEAN 1.18	MAX 5.9	MIN .42	AC-FT 854						

08342000 Bluewater Creek near Bluewater, N. Mex.

LOCATION.--Lat 35°17'40", long 108°01'40", in W $\frac{1}{2}$ SW $\frac{1}{4}$ sec.5, T.12 N., R.11 W., Valencia County, on left bank 3.5 miles northwest of Bluewater Village, and 8 miles downstream from Bluewater Dam.

DRAINAGE AREA.--209 sq mi.

PERIOD OF RECORD.--July 1912 to August 1915, April 1916 to June 1919, water years 1919-22, 1924, 1926 (annual maximum), January 1927 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for July 20-23, 1912, published in WSP 358, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Altitude of gage is 6,720 ft (by barometer). See WSP 1732 or 1923 for history of changes prior to Mar. 18, 1939.

AVERAGE DISCHARGE.--49 calendar years (1912-15, 1916-18, 1927-71), 8.95 cfs (6,480 acre-ft per year); 20 calendar years (1952-71), 3.99 cfs (2,890 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 32 cfs Nov. 28 (gage height, 3.50 ft); minimum, 0.31 cfs June 29.

Period of record: Maximum discharge, about 4,000 cfs, during period July 12-19, 1919 (gage height, 13.5 ft, from floodmarks, site and datum in use Mar. 4, 1918 to June 28, 1919); no flow at times.

The flood of Sept. 6, 1909, when Bluewater Dam washed out exceeded all other observed floods at this location (stage and discharge not determined). For other major floods during period 1919-26, see WSP 1732, p. 429, and WSP 1682, p. 410.

REMARKS.--Records good except those for winter period and August, which are poor. Flow regulated by Bluewater Lake (see sta 08341400).

REVISIONS (WATER YEARS).--WSP 1512: 1912-15, 1931, 1943(M), 1945(M). WSP 1312: 1915, 1917-18, 1929. WSP 1732: 1931(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.3	.90	1.3	1.0	2.5	.78	.82	.62	1.2	1.7	1.1	1.5
2	2.1	1.0	1.4	1.0	1.2	.76	.98	.57	1.2	1.2	1.0	1.4
3	2.4	1.0	1.5	1.0	.93	1.0	.96	.56	1.1	1.1	1.0	1.3
4	2.4	.93	1.7	1.0	.83	.69	.80	.86	.97	1.0	1.0	1.2
5	2.0	1.3	1.7	1.0	.80	.76	.62	.74	.95	1.0	1.0	1.2
6	2.0	1.3	1.4	1.1	.86	.82	.63	.65	.94	1.0	1.0	1.2
7	2.0	1.1	1.4	1.1	.90	.77	.89	.62	1.0	1.0	1.1	1.2
8	2.0	1.3	1.4	1.1	.92	.69	.80	.62	1.1	1.0	1.1	1.2
9	2.0	1.3	1.2	.96	.84	.79	.76	.57	.88	1.0	1.1	1.2
10	2.0	1.3	1.1	.97	.86	.65	.75	.63	.86	1.0	1.1	1.2
11	1.8	1.2	1.1	.97	.89	.42	.65	.70	.87	.99	1.1	1.2
12	1.8	1.1	1.0	.97	.94	.47	.60	.68	.91	.98	1.1	1.2
13	1.8	1.1	.93	.98	.93	.55	.57	.65	.88	.90	1.1	1.2
14	1.8	.93	.93	.98	.86	.52	.53	.65	.86	.92	1.2	1.2
15	1.8	.88	1.0	.99	.87	.57	.51	.69	.84	.91	1.4	1.2
16	1.6	.85	.81	1.0	.81	.57	.46	.61	.77	.96	1.5	1.2
17	1.6	.77	.87	1.0	.72	.57	.51	.73	.86	1.1	1.6	1.2
18	1.6	.99	.81	1.0	.71	.56	.51	.82	1.1	1.2	1.5	1.2
19	1.6	.94	.87	1.0	.73	.51	.50	.85	.99	1.1	1.3	1.2
20	1.6	1.1	.93	1.0	.74	.54	.64	3.0	.91	1.0	1.4	1.2
21	1.4	2.0	.81	2.0	.69	.60	.84	1.5	.90	1.0	1.6	1.2
22	1.4	1.2	.93	2.0	.69	.56	.84	1.2	1.1	1.0	1.5	1.2
23	1.4	.94	.87	2.0	.84	.57	1.1	1.5	1.1	1.1	1.4	1.2
24	1.4	1.1	.93	2.0	.80	.70	1.1	1.3	1.1	1.0	1.4	1.2
25	1.4	1.1	.93	2.0	.79	.66	.87	2.0	1.0	1.3	1.4	1.2
26	1.2	1.1	.93	3.0	.73	.54	.81	1.5	.96	1.5	1.5	1.2
27	.80	1.0	.93	3.0	.74	.59	.75	1.5	.88	1.1	1.5	1.2
28	.80	1.1	.93	2.9	.69	.66	.69	1.2	.85	1.0	4.0	1.2
29	.80	-----	.93	3.1	.68	.53	.69	1.2	2.0	1.0	1.6	1.2
30	.80	-----	.87	3.1	.83	.61	.62	1.2	5.9	1.0	1.5	1.2
31	.80	-----	.81	-----	.80	-----	.62	1.2	-----	1.1	-----	1.2
TOTAL	50.40	30.83	33.22	45.22	27.12	19.01	22.42	31.12	34.98	33.16	41.1	37.8
MEAN	1.63	1.10	1.07	1.51	.87	.63	.72	1.00	1.17	1.07	1.37	1.22
MAX	2.4	2.0	1.7	3.1	2.5	1.0	1.1	3.0	5.9	1.7	4.0	1.5
MIN	.80	.77	.81	.96	.68	.42	.46	.56	.77	.90	1.0	1.2
AC-FT	100	61	66	90	54	38	44	62	69	66	82	75
CAL YR 1971	TOTAL 406.38		MEAN 1.11	MAX 5.9	MIN .42	AC-FT 806						
WTR YR 1971	TOTAL 430.71		MEAN 1.18	MAX 5.9	MIN .42	AC-FT 854						

08343000 Rio San Jose at Grants, N. Mex.

LOCATION.--Lat 35°09'16", long 107°52'11", in SW 1/4 sec. 26, T.11 N., R.10 W., Valencia County, on right bank at bridge on State Highway 53 at Grants, and 0.2 mile south of U.S. Highway 66.

DRAINAGE AREA.--1,020 sq mi, approximately.

PERIOD OF RECORD.--October 1912 to February 1914, June 1914, October 1914 to February 1915, May 1915 to June 1921, September 1921 to June 1923, October 1923 to May 1926, September to December 1926, May 1949 to September 1966, June 1968 to current year. Monthly discharge only for some periods published in WSP 1312. Prior to October 1967, published as Bluewater Creek at Grants.

GAGE.--Water-stage recorder. Datum of gage is 6,468.34 ft above mean sea level (levels by Corps of Engineers). See WSP 1732 or 1923 for history of changes prior to Jan. 1, 1926.

AVERAGE DISCHARGE.--30 years (1912-13, 1914-20, 1921-22, 1923-25, 1949-66, 1968-71), 3.98 cfs (2,880 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 143 cfs Aug. 7 (gage height, 2.92 ft); no flow most of year.

1949-66, 1968-71: Maximum discharge recorded, 1,760 cfs Aug. 28, 1952 (gage height, 5.35 ft), from rating curve extended above 300 cfs on basis of velocity-area studies; no flow for long periods.

Maximum flood observed occurred Sept. 6 or 7, 1909, when Bluewater Dam washed out. A flood in July 1919 probably exceeded the one in 1952.

REMARKS.--Records fair. Flow partly regulated by Bluewater Lake 32 miles upstream (see sta 08341400). Diversions and ground-water withdrawals for irrigation of about 4,500 acres above station.

REVISIONS (WATER YEARS).--WSP 1512: 1913-14. WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	0	0
2	0									0	0	0
3	0									0	0	0
4	1.2									0	0	0
5	.36									0	0	0
6	0									0	0	0
7	0									0	8.9	0
8	0									0	8.7	0
9	0									0	.60	0
10	0									.55	.04	0
11	0									0	0	0
12	0									0	0	0
13	0									0	0	0
14	0									0	0	0
15	0									0	0	0
16	0									0	0	0
17	0									0	0	0
18	0									0	0	0
19	0									0	0	0
20	0									0	0	0
21	0									0	0	0
22	0									0	0	0
23	0									.78	0	0
24	0									.06	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									0	0	.06
31	0									0	0	
TOTAL	1.56	0	0	0	0	0	0	0	0	1.39	18.24	.06
MEAN	.050	0	0	0	0	0	0	0	0	.045	.59	.002
MAX	1.2	0	0	0	0	0	0	0	0	.78	8.9	.06
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	3.1	0	0	0	0	0	0	0	0	2.8	36	.1

CAL YR 1970 TOTAL 1.56 MEAN .0040 MAX 1.2 MIN 0 AC-FT 3.1
WTR YR 1971 TOTAL 21.25 MEAN .058 MAX 8.9 MIN 0 AC-FT 42

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

08343000 Rio San Jose at Grants, N. Mex.

LOCATION.--Lat 35°09'16", long 107°52'11", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.26, T.11 N., R.10 W., Valencia County, on right bank at bridge on State Highway 53 at Grants, and 0.2 mile south of U.S. Highway 66.

DRAINAGE AREA.--1,020 sq mi, approximately.

PERIOD OF RECORD.--October 1912 to February 1914, June 1914, October 1914 to February 1915, May 1915 to June 1921, September 1921 to June 1923, October 1923 to May 1926, September to December 1926, May 1949 to September 1966, June 1968 to current year. Monthly discharge only for some periods published in WSP 1312. Prior to October 1967, published as Bluewater Creek at Grants.

GAGE.--Water-stage recorder. Datum of gage is 6,468.34 ft above mean sea level (levels by Corps of Engineers). See WSP 1732 or 1923 for history of changes prior to Jan. 1, 1926.

AVERAGE DISCHARGE.--30 calendar years (1912-13, 1914-20, 1921-22, 1923-25, 1949-66, 1968-71), 3.94 cfs (2,850 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 143 cfs Aug. 7 (gage height, 2.92 ft); no flow most of year.

1949-66, 1968-71: Maximum discharge recorded, 1,760 cfs Aug. 28, 1952 (gage height, 5.35 ft), from rating curve extended above 300 cfs on basis of velocity-area studies; no flow for long periods.

Maximum flood observed occurred Sept. 6 or 7, 1909, when Bluewater Dam washed out. A flood in July 1919 probably exceeded the one in 1952.

REMARKS.--Records fair. Flow partly regulated by Bluewater Lake 32 miles upstream (see sta 08341400). Diversions and ground-water withdrawals for irrigation of about 4,500 acres above station.

REVISIONS (WATER YEARS).--WSP 1512: 1913-14. WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	0	0			
2							0	0	0			
3							0	0	0			
4							0	0	0			
5							0	0	0			
6							0	0	0			
7							0	8.9	0			
8							0	8.7	0			
9							0	.60	0			
10							.55	.04	0			
11							0	0	0			
12							0	0	0			
13							0	0	0			
14							0	0	0			
15							0	0	0			
16							0	0	0			
17							0	0	0			
18							0	0	0			
19							0	0	0			
20							0	0	0			
21							0	0	0			
22							0	0	0			
23							.78	0	0			
24							.06	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	.06			
31		-----		-----		-----	0	0	-----		-----	
TOTAL	0	0	0	0	0	0	1.39	18.24	.06	0	0	0
MEAN	0	0	0	0	0	0	.045	.59	.002	0	0	0
MAX	0	0	0	0	0	0	.78	8.9	.06	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	2.8	36	.1	0	0	0

CAL YR 1971 TOTAL 19.69 MEAN .054 MAX 8.9 MIN 0 AC-FT 39

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

08343100 Grants Canyon at Grants, N. Mex.

LOCATION.--Lat 35°09'39", long 107°50'15", in NE¼NE¼ sec.25, T.11 N., R.10 W., Valencia County, at Roosevelt Avenue, in the town of Grants, 0.2 mile east of intersection of Roosevelt and First Avenue, and 1.1 mile upstream from confluence with Rio San Jose (formerly Bluewater Creek).

DRAINAGE AREA.--13.0 sq mi.

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

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

AVERAGE DISCHARGE.--10 years, 0.203 cfs (147 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 195 cfs July 23 (gage height, 1.70 ft); no flow most of time.

Period of record: Maximum discharge, 1,550 cfs Aug. 26, 1963, (gage height, 5.10 ft), from rating curve extended above 220 cfs on basis of slope-area measurements at gage heights 3.17, 5.10 and 5.38 ft; maximum gage height, 5.38 ft Sept. 8, 1967; no flow for most of time.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	0	0
2	0									0	0	0
3	7.1									0	0	0
4	0									0	0	0
5	0									0	0	0
6	0									0	0	0
7	0									0	0	0
8	0									0	0	0
9	0									0	0	0
10	0									0	0	0
11	0									0	0	0
12	0									0	0	0
13	0									0	0	0
14	0									0	0	0
15	0									0	0	0
16	0									0	0	0
17	0									0	1.5	0
18	0									0	0	0
19	0									0	0	0
20	0									0	0	0
21	0									0	0	0
22	0									0	0	0
23	0									5.7	0	0
24	0									0	.30	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	7.0
30	0									0	0	.98
31	0	-----			-----		-----		-----	0	0	-----
TOTAL	7.1	0	0	0	0	0	0	0	0	5.7	1.80	7.98
MEAN	.23	0	0	0	0	0	0	0	0	.18	.058	.27
MAX	7.1	0	0	0	0	0	0	0	0	5.7	1.5	7.0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	14	0	0	0	0	0	0	0	0	11	3.6	16

CAL YR 1970 TOTAL 67.16 MEAN .18 MAX 31 MIN 0 AC-FT 133
WTR YR 1971 TOTAL 22.58 MEAN .062 MAX 7.1 MIN 0 AC-FT 45

PEAK DISCHARGE (BASE, 175 CFS).--July 23 (1530) 195 cfs (1.70 ft).

08343100 Grants Canyon at Grants, N. Mex.

LOCATION.--Lat 35°09'39", long 107°50'15", in NE¼NE¼ sec.25, T.11 N., R.10 W., Valencia County, at Roosevelt Avenue, in the town of Grants, 0.2 mile east of intersection of Roosevelt and First Avenue, and 1.1 mile upstream from confluence with Rio San Jose (formerly Bluewater Creek).

DRAINAGE AREA.--13.0 sq mi.

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

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

AVERAGE DISCHARGE.--10 calendar years, 0.203 cfs (147 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 195 cfs July 23 (gage height, 1.70 ft); no flow most of time.
 Period of record: Maximum discharge, 1,550 cfs Aug. 26, 1963, (gage height, 5.10 ft), from rating curve extended above 220 cfs on basis of slope-area measurements at gage heights 3.17, 5.10 and 5.38 ft; maximum gage height, 5.38 ft Sept. 8, 1967; no flow for most of time.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	0	0	0		
2							0	0	0	0		
3							0	0	0	0		
4							0	0	0	0		
5							0	0	0	0		
6							0	0	0	0		
7							0	0	0	0		
8							0	0	0	0		
9							0	0	0	0		
10							0	0	0	0		
11							0	0	0	0		
12							0	0	0	0		
13							0	0	0	0		
14							0	0	0	0		
15							0	0	0	0		
16							0	0	0	0		
17							0	1.5	0	0		
18							0	0	0	0		
19							0	0	0	0		
20							0	0	0	0		
21							0	0	0	0		
22							0	0	0	0		
23							5.7	0	0	0		
24							0	.30	0	0		
25							0	0	0	0		
26							0	0	0	.04		
27							0	0	0	0		
28							0	0	0	0		
29		-----					0	0	7.0	0		
30		-----					0	0	.98	0		
31		-----		-----		-----	0	0	-----	0	-----	
TOTAL	0	0	0	0	0	0	5.7	1.80	7.98	.04	0	0
MEAN	0	0	0	0	0	0	.18	.058	.27	.001	0	0
MAX	0	0	0	0	0	0	5.7	1.5	7.0	.04	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	11	3.6	16	.08	0	0

CAL YR 1971 TOTAL 15.52 MEAN .043 MAX 7.0 MIN 0 AC-FT 31

PEAK DISCHARGE (BASE, 175 CFS).--July 23 (1530) 195 cfs (1.70 ft).

08343500 Rio San Jose near Grants, N. Mex.

LOCATION.--Lat 35°04'27", long 107°45'01", in SE¼SE¼ sec.23, T.10 N., R.9 W., Valencia County, on right bank at west boundary of Acoma Pueblo Grant, and 8.5 miles southeast of Grants.

DRAINAGE AREA.--2,300 sq mi, approximately, of which about 1,130 sq mi does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1936 to current year. Prior to October 1955, published as San Jose River near Grants.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,269.47 ft above mean sea level.

AVERAGE DISCHARGE.--35 years, 6.48 cfs (4,690 acre-ft per year); 20 calendar years (1951-70), 6.08 cfs (4,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 116 cfs July 22 (gage height, 2.35 ft); minimum, 2.7 cfs June 8, 9.

Period of record: Maximum discharge, 1,400 cfs Sept. 20, 1963 (gage height, 4.87 ft), from rating curve extended above 450 cfs on basis of slope-area measurements at gage heights 3.19 and 4.87 ft; minimum, 2.7 cfs June 8, 9, 1971.

Maximum flood probably occurred Sept. 6 or 7, 1909, following destruction of Bluewater Dam. The peak of Sept. 20, 1963 may have been exceeded by those of July 1919, August and September 1929, and August 1935.

REMARKS.--Records fair except those for March which are poor. Flow partly regulated by Bluewater Lake, 62 miles upstream (see sta 08341400). Diversions and ground-water withdrawal for irrigation of about 5,100 acres above station.

REVISIONS (WATER YEARS).--WSP 898: 1936-39(M). WSP 1512: 1943. WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	4.5	7.5	5.3	5.5	5.8	5.6	5.3	6.1	7.1	4.8	6.3
2	4.6	4.5	6.1	5.4	5.5	5.7	5.8	5.3	6.1	6.2	4.6	5.8
3	5.6	4.5	6.1	5.2	5.6	5.8	5.9	4.9	6.1	6.3	4.6	5.8
4	7.5	4.6	6.1	5.2	5.2	5.9	5.3	4.9	7.0	5.8	4.7	5.8
5	6.5	4.6	6.1	4.7	5.7	5.8	5.3	5.3	7.0	6.3	4.9	5.8
6	4.7	4.9	6.1	4.7	5.0	5.5	5.3	5.3	7.0	5.9	4.8	6.0
7	4.5	4.8	5.7	4.8	5.1	5.5	5.2	5.7	8.0	6.1	4.3	6.3
8	4.6	5.3	6.1	5.1	5.3	5.4	5.0	5.7	6.5	5.8	4.3	6.3
9	4.7	5.3	6.1	5.4	4.9	5.4	4.9	5.7	2.7	6.0	5.1	5.8
10	4.6	5.7	6.1	5.1	4.7	5.5	4.9	5.3	3.2	6.3	5.4	5.6
11	4.5	5.7	6.1	5.0	4.6	5.5	5.0	5.3	2.9	6.2	4.8	6.2
12	4.5	6.1	5.7	5.4	5.4	5.5	4.9	5.7	2.9	6.1	4.4	6.3
13	4.6	6.1	5.7	5.3	6.2	5.5	5.1	5.7	3.4	5.3	4.5	6.3
14	4.6	7.0	5.7	5.0	4.9	5.5	4.8	5.3	3.4	5.4	4.4	6.4
15	4.6	7.0	6.1	4.9	5.0	5.5	5.1	5.7	3.4	5.4	4.6	6.6
16	4.6	7.0	5.7	5.1	5.3	5.6	5.0	5.7	3.7	5.0	4.6	6.7
17	4.7	6.5	6.1	5.8	5.2	5.6	5.0	5.7	3.7	5.1	4.7	6.8
18	4.5	7.0	5.7	6.3	5.1	5.6	5.2	6.1	3.7	4.9	4.8	6.8
19	4.6	7.0	5.3	6.4	5.1	5.6	5.2	5.7	4.0	11	6.5	6.7
20	4.6	7.5	5.7	6.2	5.1	5.6	5.1	5.7	4.0	37	9.0	6.7
21	4.7	7.5	5.7	6.1	5.0	5.7	5.1	6.1	4.0	35	4.9	6.9
22	4.6	8.0	5.7	5.6	5.0	5.7	5.2	6.1	4.3	43	5.0	11
23	4.6	7.5	5.3	5.4	5.0	5.7	4.8	5.7	4.6	15	17	6.8
24	4.6	8.0	4.9	5.3	5.1	5.7	4.9	5.7	4.6	12	10	6.7
25	4.6	8.0	5.1	5.3	5.3	5.7	4.9	6.1	4.9	5.9	10	6.7
26	4.5	8.0	5.1	5.4	5.2	5.8	4.9	6.1	4.9	5.2	7.9	6.7
27	4.5	8.0	5.6	5.4	5.5	5.8	5.0	6.1	5.3	4.7	6.3	6.8
28	4.5	8.0	5.5	5.4	5.9	5.8	4.9	5.7	5.3	4.8	6.2	6.7
29	4.5	8.5	5.2	5.4	-----	5.8	4.9	5.7	5.7	4.8	6.3	7.5
30	4.5	8.5	5.2	5.6	-----	5.8	4.9	5.7	6.1	4.8	6.7	21
31	4.6	-----	5.3	5.6	-----	5.8	-----	5.7	-----	5.3	6.9	-----
TOTAL	148.6	195.6	178.4	166.8	146.4	175.1	153.1	174.7	144.5	293.7	187.0	211.8
MEAN	4.79	6.52	5.75	5.38	5.23	5.65	5.10	5.64	4.82	9.47	6.03	7.06
MAX	7.5	8.5	7.5	6.4	6.2	5.9	5.9	6.1	8.0	43	17	21
MIN	4.5	4.5	4.9	4.7	4.6	5.4	4.8	4.9	2.7	4.7	4.3	5.6
AC-FT	295	388	354	331	290	347	304	347	287	583	371	420

CAL YR 1970 TOTAL 2,009.0 MEAN 5.50 MAX 14 MIN 3.7 AC-FT 3,980
WTR YR 1971 TOTAL 2,175.7 MEAN 5.96 MAX 43 MIN 2.7 AC-FT 4,320

PEAK DISCHARGE (BASE, 100 CFS).--July 22 (2130) 116 cfs (2.35 ft).

08343500 Rio San Jose near Grants, N. Mex.

LOCATION.--Lat 35°04'27", long 107°45'01", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.23, T.10 N., R.9 W., Valencia County, on right bank at west boundary of Accma Pueblo Grant, and 8.5 miles southeast of Grants.

DRAINAGE AREA.--2,300 sq mi, approximately, of which about 1,130 sq mi does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1936 to current year. Prior to October 1955, published as San Jose River near Grants.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,269.47 ft above mean sea level.

AVERAGE DISCHARGE.--35 calendar years, 6.49 cfs (4,700 acre-ft per year); 20 calendar years (1952-71), 6.09 cfs (4,410 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 116 cfs July 22 (gage height, 2.35 ft); minimum, 2.7 cfs June 8, 9.

Period of record: Maximum discharge, 1,400 cfs Sept. 20, 1963 (gage height, 4.87 ft), from rating curve extended above 450 cfs on basis of slope-area measurements at gage heights 3.19 and 4.87 ft; minimum, 2.7 cfs June 8, 9, 1971.

Maximum flood probably occurred Sept. 6 or 7, 1909, following destruction of Bluewater Dam. The peak of Sept. 20, 1963 may have been exceeded by those of July 1919, August and September 1929, and August 1935.

REMARKS.--Records fair except those for March which are poor. Flow partly regulated by Bluewater Lake, 62 miles upstream (see sta 08341400). Diversions and ground-water withdrawal for irrigation of about 5,100 acres above station.

REVISIONS (WATER YEARS).--WSP 898: 1936-39 (M). WSP 1512: 1943. WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG.	SEP	OCT	NOV	DEC
1	5.3	5.5	5.8	5.6	5.3	6.1	7.1	4.8	6.3	13	6.7	5.8
2	5.4	5.5	5.7	5.8	5.3	6.1	6.2	4.6	5.8	8.0	6.6	5.6
3	5.2	5.6	5.8	5.9	4.9	6.1	6.3	4.6	5.8	6.6	6.6	6.0
4	5.2	5.2	5.9	5.3	4.9	7.0	5.8	4.7	5.8	6.1	6.8	6.2
5	4.7	5.7	5.8	5.3	5.3	7.0	6.3	4.9	5.8	6.1	6.9	5.7
6	4.7	5.0	5.5	5.3	5.3	7.0	5.9	4.8	6.0	5.7	6.9	5.8
7	4.8	5.1	5.5	5.2	5.7	8.0	6.1	4.3	6.3	5.7	6.9	6.2
8	5.1	5.3	5.4	5.0	5.7	6.5	5.8	4.3	6.3	5.7	7.0	6.0
9	5.4	4.9	5.4	4.9	5.7	2.7	6.0	5.1	5.8	5.8	6.8	5.9
10	5.1	4.7	5.5	4.9	5.3	3.2	6.3	5.4	5.6	5.4	6.8	5.8
11	5.0	4.6	5.5	5.0	5.3	2.9	6.2	4.8	6.2	5.4	6.8	5.8
12	5.4	5.4	5.5	4.9	5.7	2.9	6.1	4.4	6.3	5.6	6.8	5.7
13	5.3	6.2	5.5	5.1	5.7	3.4	5.3	4.5	6.3	4.9	6.8	5.6
14	5.0	4.9	5.5	4.8	5.3	3.4	5.4	4.4	6.4	5.1	6.6	5.6
15	4.9	5.0	5.5	5.1	5.7	3.4	5.4	4.6	6.6	5.3	6.7	5.2
16	5.1	5.3	5.6	5.0	5.7	3.7	5.0	4.6	6.7	5.6	6.8	4.9
17	5.8	5.2	5.6	5.0	5.7	3.7	5.1	4.7	6.8	5.6	7.3	4.9
18	6.3	5.1	5.6	5.2	6.1	3.7	4.9	4.8	6.8	5.7	6.7	4.9
19	6.4	5.1	5.6	5.2	5.7	4.0	11	6.5	6.7	5.5	6.2	5.6
20	6.2	5.1	5.6	5.1	5.7	4.0	37	9.0	6.7	5.9	6.0	5.8
21	6.1	5.0	5.7	5.1	6.1	4.0	35	4.9	6.9	5.8	6.4	6.2
22	5.6	5.0	5.7	5.2	6.1	4.3	43	5.0	11	5.5	6.5	6.7
23	5.4	5.0	5.7	4.8	5.7	4.6	15	17	6.8	5.5	6.1	8.0
24	5.3	5.1	5.7	4.9	5.7	4.6	12	10	6.7	5.9	6.0	8.0
25	5.3	5.3	5.7	4.9	6.1	4.9	5.9	10	6.7	8.2	5.8	7.9
26	5.4	5.2	5.8	4.9	6.1	4.9	5.2	7.9	6.7	16	5.7	8.2
27	5.4	5.5	5.8	5.0	6.1	5.3	4.7	6.3	6.8	7.5	5.6	7.4
28	5.4	5.9	5.8	4.9	5.7	5.3	4.8	6.2	6.7	6.4	5.6	6.9
29	5.4	-----	5.8	4.9	5.7	5.7	4.8	6.3	7.5	6.1	5.8	7.1
30	5.6	-----	5.8	4.9	5.7	6.1	4.8	6.7	21	6.0	5.7	6.2
31	5.6	-----	5.8	-----	5.7	-----	5.3	6.9	-----	6.2	-----	6.2
TOTAL	166.8	146.4	175.1	153.1	174.7	144.5	293.7	187.0	211.8	201.8	193.9	191.8
MEAN	5.38	5.23	5.65	5.10	5.64	4.82	9.47	6.03	7.06	6.51	6.46	6.19
MAX	6.4	6.2	5.9	5.9	6.1	8.0	43	17	21	16	7.3	8.2
MIN	4.7	4.6	5.4	4.8	4.9	2.7	4.7	4.3	5.6	4.9	5.6	4.9
AC-FT	331	290	347	304	347	287	583	371	420	400	385	380

CAL YR 1971 TOTAL 2,240.6 MEAN 6.14 MAX 43 MIN 2.7 AC-FT 4,440
WTR YR 1971 TOTAL 2,175.7 MEAN 5.96 MAX 43 MIN 2.7 AC-FT 4,320

PEAK DISCHARGE (BASE, 100 CFS).--July 22 (2130) 116 cfs (2.35 ft).

08351500 Rio San Jose at Correo, N. Mex.

LOCATION.--Lat 34°58'05", long 107°11'11", in NE¼ sec.31, T.9 N., R.3 W., Valencia County, on right bank 0.7 mile upstream from State Highway 6, 0.8 mile northwest of Correo, and 14 miles upstream from mouth.

DRAINAGE AREA.--3,660 sq mi, approximately, of which about 1,130 sq mi does not contribute directly to surface runoff.

PERIOD OF RECORD.--April 1943 to current year. Prior to October 1955, published as San Jose River at Correo.

GAGE.--Water-stage recorder. Datum of gage is 5,492.43 ft above mean sea level. Prior to Oct. 1, 1958, water-stage recorder and concrete control at site 1 mile downstream at datum 17.55 ft lower.

AVERAGE DISCHARGE.--28 years, 11.4 cfs (8,260 acre-ft per year); 20 calendar years (1951-70), 13.0 cfs (9,420 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,380 cfs Aug. 6 (gage height, 3.85 ft), from rating curve extended above 700 cfs on basis of slope-area measurement at a gage height of 4.28 ft; no flow for many days.

Period of record: Maximum discharge, 7,150 cfs Aug. 11, 1955; maximum gage height, 20.7 ft Aug. 22, 1958, backwater from dam (site and datum then in use); no flow for many days.

A flood which probably occurred Aug. 21, 1935, reached a stage of 15.4 ft, from floodmarks, former site and datum (discharge, about 11,000 cfs), but was probably exceeded by the flood of Sept. 23, 1929 (discharge not determined), based on study of records for Rio Puerco at Rio Puerco.

REMARKS.--Records poor. Flow regulated to some extent since 1927 by Bluewater Lake 120 miles upstream (see sta 08341400).

REVISIONS (WATER YEARS).--WSP 1442: 1944, 1945(M), 1946-48, 1949(M), 1950, 1951(P), 1952. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	5.0	4.5	.90	3.0	2.2			0	0	56
2	0	0	8.5	4.0	.80	3.5	2.3			0	0	29
3	.18	0	6.3	3.0	.70	4.0	2.5			0	0	15
4	11	0	7.0	2.0	.60	4.5	1.7			0	0	5.0
5	74	0	8.0	0	.50	5.0	1.8			0	0	3.0
6	5.0	0	8.0	0	.40	5.0	1.2			0	226	2.0
7	1.0	0	8.0	0	.40	4.5	1.0			0	15	1.0
8	0	0	8.0	0	1.0	5.0	.85			0	70	0
9	0	0	8.0	0	1.5	5.8	.46			0	15	0
10	0	0	6.2	0	2.0	2.5	0			0	5.0	0
11	0	0	5.0	0	2.5	3.4	0			0	3.0	0
12	0	0	5.0	0	2.5	3.5	0			0	3.0	0
13	0	0	5.0	0	2.5	3.5	0			0	5.0	0
14	0	0	5.0	0	2.5	3.1	0			0	5.0	0
15	0	0	5.0	0	2.5	2.6	0			0	5.0	0
16	0	0	5.0	0	3.0	2.9	0			0	5.0	0
17	0	0	5.0	0	3.0	2.9	0			0	25	0
18	0	.58	5.0	0	3.0	2.8	0			0	20	0
19	0	2.8	5.0	0	3.0	2.2	0			0	15	0
20	0	4.3	5.0	5.0	3.0	3.1	0			0	30	0
21	0	3.8	4.5	10	3.0	1.7	0			0	20	0
22	0	2.9	4.0	9.0	3.5	1.9	0			0	10	0
23	0	3.0	4.0	7.0	4.0	2.1	0			24	10	0
24	0	3.8	4.0	6.0	4.0	1.9	0			34	35	.87
25	0	4.2	4.0	5.0	4.0	1.5	0			9.8	40	.17
26	0	3.3	4.5	3.6	3.5	1.6	0			1.7	5.0	.02
27	0	3.7	5.0	3.0	3.0	1.7	0			.35	3.0	0
28	0	3.6	5.0	2.5	3.0	1.9	0			.02	2.0	0
29	0	4.2	5.0	2.0	-----	1.9	0			0	1.0	0
30	0	4.0	5.0	1.5	-----	2.2	0			0	10	.87
31	0	-----	5.0	1.0	-----	2.8	-----			0	8.0	-----
TOTAL	91.18	44.18	173.0	69.1	64.30	94.0	14.01	0	0	69.87	591.0	199.06
MEAN	2.94	1.47	5.58	2.23	2.30	3.03	.47	0	0	2.25	19.1	6.64
MAX	74	4.3	8.5	10	4.0	5.8	2.5	0	0	34	226	87
MIN	0	0	4.0	0	.40	1.5	0	0	0	0	0	0
AC-FT	181	88	343	137	128	186	28	0	0	139	1,170	395

CAL YR 1970 TOTAL 2,628.52 MEAN 7.20 MAX 300 MIN 0 AC-FT 5,210
WTR YR 1971 TOTAL 1,409.70 MEAN 3.86 MAX 226 MIN 0 AC-FT 2,800

PEAK DISCHARGE (BASE, 800 CFS).--Oct. 4 (2400) 816 cfs (3.29 ft); Aug. 6 (0030) 1,380 cfs (3.85 ft).

08351500 Rio San Jose at Correo, N. Mex.

LOCATION.--Lat 34°58'05", long 107°11'11", in NE¼ sec.31, T.9 N., R.3 W., Valencia County, on right bank 0.7 mile upstream from State Highway 6, 0.8 mile northwest of Correo, and 14 miles upstream from mouth.

DRAINAGE AREA.--3,660 sq mi, approximately, of which about 1,130 sq mi does not contribute directly to surface runoff.

PERIOD OF RECORD.--April 1943 to current year. Prior to October 1955, published as San Jose River at Correo.

GAGE.--Water-stage recorder. Datum of gage is 5,492.43 ft above mean sea level. Prior to Oct. 1, 1958, water-stage recorder and concrete control at site 1 mile downstream at datum 17.55 ft lower.

AVERAGE DISCHARGE.--28 calendar years, 11.5 cfs (8,330 acre-ft per year); 20 calendar years (1952-71), 12.9 cfs (9,350 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,380 cfs Aug. 6 (gage height, 3.85 ft), from rating curve extended above 700 cfs on basis of slope-area measurement at a gage height of 4.28 ft; no flow for many days.

Period of record: Maximum discharge, 7,150 cfs Aug. 11, 1955; maximum gage height, 20.7 ft Aug. 22, 1958, backwater from dam (site and datum then in use); no flow for many days.

A flood which probably occurred Aug. 21, 1935, reached a stage of 15.4 ft, from floodmarks, former site and datum (discharge, about 11,000 cfs), but was probably exceeded by the flood of Sept. 23, 1929 (discharge not determined), based on study of records for Rio Puerco at Rio Puerco.

REMARKS.--Records poor. Flow regulated to some extent since 1927 by Bluewater Lake 120 miles upstream (see sta 08341400).

REVISIONS (WATER YEARS).--WSP 1442: 1944, 1945(M), 1946-48, 1949(M), 1950, 1951(P), 1952. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	4.5	.90	3.0	2.2			0	0	56	60	1.6	12
2	4.0	.80	3.5	2.3			0	0	29	24	1.6	12
3	3.0	.70	4.0	2.5			0	0	15	10	1.5	12
4	2.0	.60	4.5	1.7			0	0	5.0	6.0	2.8	12
5	0	.50	5.0	1.8			0	0	3.0	3.7	3.4	12
6	0	.40	5.0	1.2			0	226	2.0	2.8	3.8	12
7	0	.40	4.5	1.0			0	15	1.0	2.3	3.7	12
8	0	1.0	5.0	.85			0	70	0	2.0	4.1	12
9	0	1.5	5.8	.46			0	15	0	1.7	4.3	10
10	0	2.0	2.5	0			0	5.0	0	1.3	4.1	8.7
11	0	2.5	3.4	0			0	3.0	0	1.2	4.1	8.0
12	0	2.5	3.5	0			0	3.0	0	1.2	5.0	8.0
13	0	2.5	3.5	0			0	5.0	0	.96	5.8	7.0
14	0	2.5	3.1	0			0	5.0	0	.91	4.6	6.0
15	0	2.5	2.6	0			0	5.0	0	.92	3.9	5.0
16	0	3.0	2.9	0			0	5.0	0	.89	3.9	4.0
17	0	3.0	2.9	0			0	25	0	1.3	3.5	3.0
18	0	3.0	2.8	0			0	20	0	1.2	3.4	3.0
19	0	3.0	2.2	0			0	15	0	.99	3.5	3.0
20	5.0	3.0	3.1	0			0	30	0	1.0	3.7	3.0
21	10	3.0	1.7	0			0	20	0	1.6	4.0	3.0
22	9.0	3.5	1.9	0			0	10	0	2.0	3.7	3.0
23	7.0	4.0	2.1	0			24	10	0	1.8	3.4	3.5
24	6.0	4.0	1.9	0			34	35	.87	1.2	3.4	4.0
25	5.0	4.0	1.5	0			9.8	40	.17	13	5.5	4.5
26	3.6	3.5	1.6	0			1.7	5.0	.02	9.6	8.7	5.0
27	3.0	3.0	1.7	0			.35	3.0	0	3.0	9.6	5.5
28	2.5	3.0	1.9	0			.02	2.0	0	2.0	10	6.0
29	2.0	-----	1.9	0			0	1.0	0	1.9	11	5.5
30	1.5	-----	2.2	0			0	10	87	1.8	11	5.0
31	1.0	-----	2.8	-----			0	8.0	-----	1.7	-----	4.0
TOTAL	69.1	64.30	94.0	14.01	0	0	69.87	591.0	199.06	163.97	142.6	213.7
MEAN	2.23	2.30	3.03	.47	0	0	2.25	19.1	6.64	5.29	4.75	6.89
MAX	10	4.0	5.8	2.5	0	0	34	226	87	60	11	12
MIN	0	.40	1.5	0	0	0	0	0	0	.89	1.5	3.0
AC-FT	137	128	186	28	0	0	139	1,170	395	325	283	424

CAL YR 1971 TOTAL 1,621.61 MEAN 4.44 MAX 226 MIN 0 AC-FT 3,220

PEAK DISCHARGE (BASE, 800 CFS).--Aug. 6 (0030) 1,380 cfs (3.85 ft).

08352500 Rio Puerco at Rio Puerco, N. Mex.

LOCATION.--Lat 34°47'38", long 106°59'20", in NW¼ sec.31, T.7 N., R.1 W., Valencia County, in San Clemente Grant, on downstream end of pier nearest left abutment of the Atchison, Topeka and Santa Fe, Railway Co. bridge, and 7 miles downstream from Rio San Jose.

DRAINAGE AREA.--6,590 sq mi, approximately, of which at least 1,130 sq mi does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1909 to December 1912 (records fragmentary, gage heights only), March 1934 to current year. Records for January 1913 to December 1914 published in WSP 358, 388, and 408 have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,008.59 above mean sea level.

AVERAGE DISCHARGE.--37 years (1934-71), 57.9 cfs (41,950 acre-ft per year); 20 calendar years (1951-70), 51.1 cfs (37,020 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,000 cfs Sept. 30 (gage height, 3.22 ft); no flow for many days.

Period of record: Maximum discharge, 28,000 cfs Aug. 21, 1935 (gage height, 7.24 ft), by computation of peak flow over dam; no flow many days.

The damaging flood of Sept. 23, 1929, is the greatest since about 1880; it reached a stage of 18 ft (conditions prior to destruction of railroad bridge. Discharge, 37,700 cfs, by weir formula, from reports of State Engineer). The flood of Aug. 12, 1929, reached a stage of about 16 ft (discharge, 31,300 cfs, by weir formula, from reports of State Engineer). A flood on Oct. 4, 1913, reached a stage of 9.5 ft (discharge not determined) prior to construction of the concrete control.

REMARKS.--Records poor. Diversions for irrigation of about 11,500 acres above station (includes 3,700 acres irrigated partly or entirely from wells).

REVISIONS (WATER YEARS).--WSP 1512: 1937 (calendar year figures only), 1941, 1944. WSP 1712: 1958. WSP 1732: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	0	4.0	3.0	4.0	1.7	.02	0		0	2.4	55
2	.02	0	2.8	2.5	3.8	3.5	.05	0		0	2.2	30
3	.01	0	3.9	2.0	3.3	.68	.07	0		0	2.0	20
4	3.0	0	3.6	1.5	3.1	4.8	.21	0		0	.35	7.5
5	5.0	0	3.5	1.0	2.4	5.4	.07	0		0	.21	3.0
6	0	0	3.9	0	2.6	4.5	0	0		0	246	2.3
7	0	0	4.0	0	.35	4.3	0	0		0	124	1.9
8	0	0	4.6	0	1.0	4.5	0	0		0	366	1.7
9	0	0	4.6	0	4.0	4.3	0	0		0	80	256
10	0	0	4.9	0	5.0	3.8	0	0		0	10	97
11	0	0	4.3	0	3.5	2.4	0	0		0	6.0	10
12	0	0	2.0	0	4.0	2.0	0	0		0	10	1.0
13	0	0	1.5	0	3.5	2.2	0	.66		0	50	0
14	0	0	1.9	0	3.8	2.0	0	0		0	20	0
15	0	.20	4.0	0	4.0	1.2	0	0		0	20	0
16	0	.40	4.0	2.0	4.0	1.2	0	0		0	30	0
17	0	.50	3.5	1.4	3.5	1.2	0	0		0	20	0
18	0	.50	3.0	8.0	3.3	.82	0	0		0	252	5.0
19	0	.50	2.0	12	3.1	.55	0	0		0	50	100
20	0	.35	3.8	15	3.3	1.2	0	0		0	166	20
21	0	.26	3.0	18	4.0	1.2	0	0		0	300	10
22	0	2.1	3.0	16	3.5	1.4	0	0		43	300	8.4
23	0	3.1	1.2	14	4.0	.82	0	0		160	320	22
24	0	3.1	3.1	12	5.7	.41	0	0		120	440	101
25	0	3.2	3.0	9.3	5.1	.50	0	0		240	280	29
26	0	3.7	3.0	9.6	4.0	.47	0	0		46	290	15
27	0	3.9	4.0	7.6	3.3	.24	0	0		15	100	7.8
28	0	3.9	4.0	5.7	2.6	.14	0	0		8.0	80	6.5
29	0	4.1	2.0	4.8	-----	.07	0	0		4.0	50	6.1
30	0	4.2	3.0	4.5	-----	.04	0	0		3.0	30	1,030
31	0	-----	2.5	4.3	-----	.03	-----	0	-----	2.6	49	-----
TOTAL	8.07	34.01	101.6	154.2	97.75	57.57	.42	.66	0	641.6	3,716.16	1,846.2
MEAN	.26	1.13	3.28	4.97	3.49	1.86	.014	.021	0	20.7	120	61.5
MAX	5.0	4.2	4.9	18	5.7	5.4	.21	.66	0	240	440	1,030
MIN	0	0	1.2	0	.35	.03	0	0	0	0	.21	0
AC-FT	16	67	202	306	194	114	.8	1.3	0	1,270	7,370	3,660

CAL YR 1970 TOTAL 5,848.34 MEAN 16.0 MAX 670 MIN 0 AC-FT 11,600
WTR YR 1971 TOTAL 6,658.24 MEAN 18.2 MAX 1,030 MIN 0 AC-FT 13,210

PEAK DISCHARGE (BASE, 2,500 CFS, REVISED).--Sept. 30 (2400) 4,000 cfs (3.22 ft).

08352500 Rio Puerco at Rio Puerco, N. Mex.

LOCATION.--Lat 34°47'38", long 106°59'20", in NW¼ sec.31, T.7 N., R.1 W., Valencia County, in San Clemente Grant, on downstream end of pier nearest left abutment of the Atchison, Topeka and Santa Fe, Railway Co. bridge, and 7 miles downstream from Rio San Jose.

DRAINAGE AREA.--6,590 sq mi, approximately, of which at least 1,130 sq mi does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1909 to December 1912 (records fragmentary, gage heights only), March 1934 to current year. Records for January 1913 to December 1914 published in WSP 358, 388, and 408 have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,008.59 above mean sea level.

AVERAGE DISCHARGE.--37 calendar years (1934-71), 58.2 cfs (42,170 acre-ft per year); 20 calendar years (1952-71), 51.0 cfs (36,950 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,200 cfs Oct. 1 (gage height, 3.52 ft); no flow for many days.

Period of record: Maximum discharge, 28,000 cfs Aug. 21, 1935 (gage height, 7.24 ft), by computation of peak flow over dam; no flow many days.

The damaging flood of Sept. 23, 1929, is the greatest since about 1880; it reached a stage of 18 ft (conditions prior to destruction of railroad bridge. Discharge, 37,700 cfs, by weir formula, from reports of State Engineer). The flood of Aug. 12, 1929, reached a stage of about 16 ft (discharge, 31,300 cfs, by weir formula, from reports of State Engineer). A flood on Oct. 4, 1913, reached a stage of 9.5 ft (discharge not determined) prior to construction of the concrete control.

REMARKS.--Records poor. Diversions for irrigation of about 11,500 acres above station (includes 3,700 acres irrigated partly or entirely from wells).

REVISIONS (WATER YEARS).--WSP 1512: 1937 (calendar year figures only), 1941, 1944. WSP 1712: 1958. WSP 1732: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.0	4.0	1.7	.02	0		0	2.4	55	2,170	2.4	12
2	2.5	3.8	3.5	.05	0		0	2.2	30	504	2.1	12
3	2.0	3.3	.68	.07	0		0	2.0	20	195	1.9	13
4	1.5	3.1	4.8	.21	0		0	.35	7.5	100	1.7	13
5	1.0	2.4	5.4	.07	0		0	.21	3.0	60	1.7	13
6	0	2.6	4.5	0	0		0	246	2.3	30	2.1	13
7	0	.35	4.3	0	0		0	124	1.9	20	2.7	12
8	0	1.0	4.5	0	0		0	366	1.7	15	2.9	13
9	0	4.0	4.3	0	0		0	80	256	8.3	3.1	13
10	0	5.0	3.8	0	0		0	10	97	5.2	3.3	14
11	0	3.5	2.4	0	0		0	6.0	10	3.6	3.4	13
12	0	4.0	2.0	0	0		0	10	1.0	3.1	3.5	11
13	0	3.5	2.2	0	.66		0	50	0	2.6	3.8	9.3
14	0	3.8	2.0	0	0		0	20	0	2.1	4.5	17
15	0	4.0	1.2	0	0		0	20	0	1.7	4.4	12
16	2.0	4.0	1.2	0	0		0	30	0	.86	7.2	8.1
17	1.4	3.5	1.2	0	0		0	20	0	1.1	5.9	7.3
18	8.0	3.3	.82	0	0		0	252	5.0	1.6	3.9	6.8
19	12	3.1	.55	0	0		0	50	100	1.7	3.8	6.8
20	15	3.3	1.2	0	0		0	186	20	1.5	3.6	7.2
21	18	4.0	1.2	0	0		0	300	10	1.2	4.1	7.2
22	16	3.5	1.4	0	0		43	300	8.4	.96	4.1	7.2
23	14	4.0	.82	0	0		160	320	22	1.3	4.3	6.8
24	12	5.7	.41	0	0		120	440	101	1.6	4.0	6.1
25	9.3	5.1	.50	0	0		240	280	29	7.4	4.0	5.9
26	9.6	4.0	.47	0	0		46	290	15	90	4.8	5.1
27	7.6	3.3	.24	0	0		15	100	7.8	123	7.6	3.7
28	5.7	2.6	.14	0	0		8.0	80	6.5	30	5.3	5.2
29	4.8	-----	.07	0	0		4.0	50	6.1	10	10	49
30	4.5	-----	.04	0	0		3.0	30	1,030	5.0	10	61
31	4.3	-----	.03	-----	0	-----	2.6	49	-----	3.0	-----	56
TOTAL	154.2	97.75	57.57	.42	.66	0	641.6	3,716.16	1,846.2	3,400.82	130.1	439.7
MEAN	4.97	3.49	1.86	.014	.021	0	20.7	120	61.5	110	4.34	14.2
MAX	18	5.7	5.4	.21	.66	0	240	440	1,030	2,170	10	61
MIN	0	.35	.03	0	0	0	0	.21	0	.86	1.7	3.7
AC-FT	306	194	114	.8	1.3	0	1,270	7,370	3,660	6,750	258	872

CAL YR 1971 TOTAL 10,485.18 MEAN 28.7 MAX 2,170 MIN 0 AC-FT 20,800

WTR YR 1971 TOTAL 6,658.24 MEAN 18.2 MAX 1,030 MIN 0 AC-FT 13,210

PEAK DISCHARGE (BASE, 2,500 CFS, REVISED).--Sept. 30 (2400) 4,000 cfs (3.22 ft); Oct. 1 (0530) 5,200 cfs (3.52 ft).

08353000 Rio Puerco near Bernardo, N. Mex.

LOCATION.--Lat 34°24'33", long 106°51'09", in SE¼ sec.8, T.2 N., R.1 E., Socorro County, on bridge on former U.S. Highway 85 and 0.2 mile upstream from Interstate Highway 25, 1.2 miles southwest of Bernardo, 3 miles upstream from mouth, and 18 miles south of Belen.

DRAINAGE AREA.--7,350 sq mi, approximately, of which at least 1,130 sq mi does not contribute directly to surface runoff.

PERIOD OF RECORD.--November 1939 to current year. Fragmentary gage-height record and footnotes concerning no flow for the period September 1910 to August 1914, published in WSP 358 and 388, have been found to be in error and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 4,722.34 ft above mean sea level. Prior to Jan. 24, 1969, at datum 3.10 ft higher.

AVERAGE DISCHARGE.--31 years (1940-71), 49.2 cfs (35,650 acre-ft per year); 20 calendar years (1951-70), 47.9 cfs (34,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,300 cfs Aug. 24 (gage height, 7.55 ft); no flow for extended periods.

Period of record: Maximum discharge, 18,800 cfs Sept. 23, 1941, from rating curve extended above 7,800 cfs; maximum gage height, 16.9 ft present datum, Aug. 12, 1955; no flow for extended periods.

The greatest flood since about 1880 occurred Sept. 23, 1929, from information by local residents (discharge, about 35,000 cfs, estimated on basis of peak at Rio Puerco). Another flood occurred Aug. 12, 1929 (discharge 30,600 cfs, by slope-area method, from reports of State Engineer).

REMARKS.--Records poor. Diversions for irrigation of about 11,500 acres above station (includes 3,700 acres irrigated wholly or partly from wells). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEAR).--WSP 1512: 1941-42, 1944-45, 1946(P), 1947-49. WSP 1632: 1957. WSP 1732: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0			0						17	0	58
2	0			0						14	0	37
3	0			0						0	0	14
4	0			0						0	0	7.6
5	0			0						0	0	2.2
6	40			0						0	0	1.1
7	13			0						0	293	.70
8	5.0			0						0	159	.34
9	0			0						0	298	53
10	0			0						0	72	80
11	0			0						0	23	20
12	0			0						0	22	10
13	0			0						0	100	0
14	0			0						0	25	0
15	0			0						0	68	0
16	0			0						0	50	0
17	0			0						0	18	7.1
18	0			0						0	50	1.0
19	0			0						0	277	0
20	0			0						0	28	25
21	0			0						0	386	7.2
22	0			5.0						0	153	16
23	0			5.0						42	234	22
24	0			2.0						169	496	26
25	0			1.0						121	239	20
26	0			0						133	225	13
27	0			0						40	148	10
28	0			0						10	80	7.6
29	0			0	-----					3.0	20	7.2
30	0			0	-----					2.0	10	14
31	0	-----		0	-----		-----		-----	0	47	-----
TOTAL	58.0	0	0	13.0	0	0	0	0	0	551.0	3,521	460.04
MEAN	1.87	0	0	.42	0	0	0	0	0	17.8	114	15.3
MAX	40	0	0	5.0	0	0	0	0	0	169	496	80
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	115	0	0	26	0	0	0	0	0	1,090	6,980	912

CAL YR 1970 TOTAL 4,541.50 MEAN 12.4 MAX 580 MIN 0 AC-FT 9,010
WTR YR 1971 TOTAL 4,603.04 MEAN 12.6 MAX 496 MIN 0 AC-FT 9,130

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

08353000 Rio Puerco near Bernardo, N. Mex.

LOCATION.--Lat 34°24'33", long 106°51'09", in SE¼ sec.8, T.2 N., R.1 E., Socorro County, on bridge on former U.S. Highway 85 and 0.2 mile upstream from Interstate Highway 25, 1.2 miles southwest of Bernardo, 3 miles upstream from mouth, and 18 miles south of Belen.

DRAINAGE AREA.--7,350 sq mi, approximately, of which at least 1,130 sq mi does not contribute directly to surface runoff.

PERIOD OF RECORD.--November 1939 to current year. Fragmentary gage-height record and footnotes concerning no flow for the period September 1910 to August 1914, published in WSP 358 and 388, have been found to be in error and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 4,722.34 ft above mean sea level. Prior to Jan. 24, 1969, at datum 3.10 ft higher.

AVERAGE DISCHARGE.--32 calendar years (1940-71), 49.7 cfs (36,010 acre-ft per year); 20 calendar years (1952-71), 47.7 cfs (34,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,150 cfs Oct. 1 (gage height, 10.26 ft); no flow for extended periods.

Period of record: Maximum discharge, 18,800 cfs Sept. 23, 1941, from rating curve extended above 7,800 cfs; maximum gage height, 16.9 ft present datum, Aug. 12, 1955; no flow for extended periods.

The greatest flood since about 1880 occurred Sept. 23, 1929, from information by local residents (discharge, about 35,000 cfs, estimated on basis of peak at Rio Puerco). Another flood occurred Aug. 12, 1929 (discharge 30,600 cfs, by slope-area method, from reports of State Engineer).

REMARKS.--Records poor. Diversions for irrigation of about 11,500 acres above station (includes 3,700 acres irrigated wholly or partly from wells). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEAR).--WSP 1512: 1941-42, 1944-45, 1946(P), 1947-49. WSP 1632: 1957. WSP 1732: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0						17	0	58	2,720	0	6.0
2	0						14	0	37	878	0	7.0
3	0						0	0	14	331	0	8.0
4	0						0	0	7.6	128	0	9.0
5	0						0	0	2.2	50	0	10
6	0						0	0	1.1	23	0	10
7	0						0	293	.70	15	0	10
8	0						0	159	.34	5.0	0	10
9	0						0	298	53	1.0	1.0	10
10	0						0	72	80	0	2.0	10
11	0						0	23	20	0	2.5	9.0
12	0						0	22	10	0	3.0	8.0
13	0						0	100	0	0	3.0	7.0
14	0						0	25	0	0	3.0	6.0
15	0						0	68	0	0	3.0	5.0
16	0						0	50	0	0	3.0	4.0
17	0						0	18	7.1	1.0	3.0	3.0
18	0						0	50	1.0	0	3.0	2.0
19	0						0	277	0	0	3.0	1.0
20	0						0	28	25	0	3.0	1.0
21	0						0	386	7.2	0	3.0	1.0
22	5.0						0	153	16	0	3.0	1.0
23	5.0						42	234	22	0	3.0	1.0
24	2.0						169	496	26	0	3.0	1.0
25	1.0						121	239	20	0	3.0	1.0
26	0						133	225	13	0	3.0	1.0
27	0						40	148	10	170	3.5	3.0
28	0						10	80	7.6	128	3.5	5.0
29	0	-----					3.0	20	7.2	40	4.0	6.0
30	0	-----					2.0	10	14	5.0	4.7	76
31	0	-----		-----		-----	0	47	-----	1.0	-----	45
TOTAL	13.0	0	0	0	0	0	551.0	3,521	460.04	4,496.0	66.2	277.0
MEAN	.42	0	0	0	0	0	17.8	114	15.3	145	2.21	8.94
MAX	5.0	0	0	0	0	0	169	496	80	2,720	4.7	76
MIN	0	0	0	0	0	0	0	0	0	0	0	1.0
AC-FT	26	0	0	0	0	0	1,090	6,980	912	8,920	131	549

CAL YR 1971 TOTAL 9,384.24 MEAN 25.7 MAX 2,720 MIN 0 AC-FT 18,610

PEAK DISCHARGE (BASE, 2,000 CFS).--Oct. 1 (1900) 4,150 cfs (10.26 ft).

08354000 Rio Salado near San Acacia, N. Mex.

LOCATION.--Lat 34°17'50", long 106°53'59", in NW¼ sec.24, T.1 N., R.1 W., Socorro County, at former bridge site 0.3 mile upstream from bridge on Interstate Highway 25, 3.1 miles upstream from mouth, 2.9 miles north of San Acacia, and 15 miles north of Socorro.

DRAINAGE AREA.--1,380 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,765 ft (from topographic map). Prior to Sept. 14, 1966 at site 1.7 miles downstream at different datum.

AVERAGE DISCHARGE.--24 years, 13.5 cfs (9,780 acre-ft per year); 20 calendar years (1951-70), 15.0 cfs (10,870 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,850 cfs Aug. 29 (gage height, 2.92 ft), from rating curve extended as explained below; maximum gage height, 3.00 ft Aug. 7; no flow most of time.

Period of record: Maximum discharge, 36,200 cfs July 31, 1965 (gage height, 5.54 ft, from floodmarks, present site and datum), from rating curve extended above 900 cfs on basis of slope-area measurement of peak flow; no flow most of time.

Another flood occurred Aug. 12, 1929 (discharge, 27,400 cfs, by slope-area method), from reports of State Engineer.

REMARKS.--Records poor. Diversions for irrigation of about 100 acres above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1948-49, 1955. WSP 1632: 1953.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	5.0	0
2	0									0	0	63
3	35									0	0	0
4	300									0	0	0
5	280									0	25	0
6	15									0	35	0
7	0									0	73	0
8	0									0	18	0
9	0									10	70	84
10	0									0	20	10
11	0									0	10	0
12	0									0	5.0	0
13	0									0	124	0
14	0									0	15	0
15	0									0	0	0
16	0									0	0	0
17	0									0	0	0
18	0									0	0	31
19	0									0	0	0
20	0									0	0	0
21	0									0	0	0
22	0									28	0	0
23	0									1.0	0	152
24	0									0	0	5.0
25	0									0	100	0
26	0									0	10	0
27	0									0	0	0
28	0									5.0	0	0
29	0									0	150	0
30	0									0	42	256
31	0	-----			-----		-----		-----	37	58	-----
TOTAL	630	0	0	0	0	0	0	0	0	81.0	760.0	601.0
MEAN	20.3	0	0	0	0	0	0	0	0	2.61	24.5	20.0
MAX	300	0	0	0	0	0	0	0	0	37	150	256
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1,250	0	0	0	0	0	0	0	0	161	1,510	1,190

CAL YR 1970 TOTAL 5,442.00 MEAN 14.9 MAX 1,030 MIN 0 AC-FT 10,790
WTR YR 1971 TOTAL 2,072.00 MEAN 5.68 MAX 300 MIN 0 AC-FT 4,110

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

08354000 Rio Salado near San Acacia, N. Mex.

LOCATION.--Lat 34°17'50", long 106°53'59", in NW¼ sec.24, T.1 N., R.1 W., Socorro County, at former bridge site 0.3 mile upstream from bridge on Interstate Highway 25, 3.1 miles upstream from mouth, 2.9 miles north of San Acacia, and 15 miles north of Socorro.

DRAINAGE AREA.--1,380 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,765 ft (from topographic map). Prior to Sept. 14, 1966 at site 1.7 miles downstream at different datum.

AVERAGE DISCHARGE.--24 calendar years, 13.5 cfs (9,780 acre-ft per year); 20 calendar years (1952-71), 14.4 cfs (10,430 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,850 cfs Aug. 29 (gage height, 2.92 ft), from rating curve extended as explained below; maximum gage height, 3.00 ft Aug. 7; no flow most of time.

Period of record: Maximum discharge, 36,200 cfs July 31, 1965 (gage height, 5.54 ft, from floodmarks, present site and datum), from rating curve extended above 900 cfs on basis of slope-area measurement of peak flow; no flow most of time.
Another flood occurred Aug. 12, 1929 (discharge, 27,400 cfs, by slope-area method), from reports of State Engineer.

REMARKS.--Records poor. Diversions for irrigation of about 100 acres above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1948-49, 1955. WSP 1632: 1953.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	5.0	0	0		
2							0	0	63	0		
3							0	0	0	0		
4							0	0	0	0		
5							0	25	0	0		
6							0	35	0	0		
7							0	73	0	0		
8							0	18	0	0		
9							10	70	84	0		
10							0	20	10	0		
11							0	10	0	0		
12							0	5.0	0	0		
13							0	124	0	0		
14							0	15	0	0		
15							0	0	0	0		
16							0	0	0	0		
17							0	0	0	0		
18							0	0	31	0		
19							0	0	0	0		
20							0	0	0	0		
21							0	0	0	0		
22							28	0	0	0		
23							1.0	0	152	0		
24							0	0	5.0	0		
25							0	100	0	3.0		
26							0	10	0	1.0		
27							0	0	0	0		
28							5.0	0	0	0		
29		-----					0	150	0	0		
30		-----					0	42	256	0		
31		-----		-----		-----	37	58	-----	0	-----	
TOTAL	0	0	0	0	0	0	81.0	760.0	601.0	4.0	0	0
MEAN	0	0	0	0	0	0	2.61	24.5	20.0	.13	0	0
MAX	0	0	0	0	0	0	37	150	256	3.0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	161	1,510	1,190	7.9	0	0

CAL YR 1971 TOTAL 1,446.0 MEAN 3.96 MAX 256 MIN 0 AC-FT 2,870

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

08354500 Socorro main canal north at San Acacia, N. Mex.

LOCATION.--Lat 34°15'17", long 106°53'43", in SE 1/4 sec. 1, T.1 S., R.1 W., Socorro County, on right bank at San Acacia, and 0.5 mile downstream from point of diversion.

PERIOD OF RECORD.--April 1936 to September 1964 (monthly discharge only), October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,660.16 ft above mean sea level. Prior to Mar. 8, 1958, at site 300 ft upstream (in old channel) at datum 0.42 ft lower.

EXTREMES.--Period of record: Maximum daily discharge, 251 cfs July 30, 1965; no flow at times.

REMARKS.--Records fair. This canal is 1 of 3 channels (see sta 08354800, 08354900) carrying flow in valley cross section. For combined monthly flow in acre-ft of this canal, conveyance channel, and floodway see tabulation below daily table for sta 08354900. Canal diverts water from right bank of Rio Grande for irrigation of about 8,000 acres. Alamillo Acequia and 3 other smaller ditches divert water from canal above station for irrigation of about 400 acres. Discharge records collected at the canal heading October 1964 to September 1965, indicate 7,770 acre-ft or 9% of the initial canal flow was diverted before reaching the regular gaging station.

REVISIONS (WATER YEARS).--WSP 1242, 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152					117	231	207	147	45	145	131
2	152					114	232	221	126	50	166	151
3	148					140	230	228	114	54	168	127
4	154					143	220	219	86	54	129	82
5	158					144	220	223	98	58	115	79
6	162					157	213	232	111	62	95	69
7	160					165	212	230	115	68	96	55
8	155					168	217	231	107	70	103	44
9	161					161	221	223	96	68	127	79
10	166					162	210	227	91	74	137	133
11	161					154	215	221	87	67	138	87
12	157					163	218	227	87	59	139	52
13	162					169	219	230	89	52	131	37
14	161					171	212	233	88	45	136	23
15	160					178	218	231	85	39	139	23
16	107					176	220	235	76	23	142	23
17	43					185	225	235	74	7.0	143	35
18	62					177	219	230	68	7.0	155	136
19	124					200	220	231	62	7.0	151	117
20	146					199	216	232	62	9.1	147	167
21	147					189	210	230	61	13	143	126
22	150					191	201	228	56	103	146	110
23	152					197	201	227	39	94	154	103
24	159					191	194	227	39	136	155	54
25	156					213	196	220	37	156	163	81
26	157					222	203	231	35	158	156	84
27	159					205	203	226	35	159	150	84
28	160					208	208	223	37	165	146	97
29	159				-----	210	209	204	41	166	121	113
30	160				-----	210	207	166	48	147	152	102
31	121	-----			-----	230	-----	138	-----	146	131	-----
TOTAL	4,531	0	0	0	0	5,509	6,420	6,866	2,297	2,361.1	4,319	2,604
MEAN	146	0	0	0	0	178	214	221	76.6	76.2	139	86.8
MAX	166	0	0	0	0	230	232	235	147	166	168	167
MIN	43	0	0	0	0	114	194	138	35	7.0	95	23
AC-FT	8,990	0	0	0	0	10,930	12,730	13,620	4,560	4,680	8,570	5,170

CAL YR 1970 TOTAL 40,590.00 MEAN 111 MAX 235 MIN 0 AC-FT 80,510
WTR YR 1971 TOTAL 34,907.10 MEAN 95.6 MAX 235 MIN 0 AC-FT 69,240

08354500 Socorro main canal north at San Acacia, N. Mex.

LOCATION.--Lat 34°15'17", long 106°53'43", in SE 1/4 sec. 1, T.1 S., R.1 W., Socorro County, on right bank at San Acacia, and 0.5 mile downstream from point of diversion.

PERIOD OF RECORD.--April 1936 to September 1964 (monthly discharge only), October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,660.16 ft above mean sea level. Prior to Mar. 8, 1958, at site 300 ft upstream (in old channel) at datum 0.42 ft lower.

EXTREMES.--Period of record: Maximum daily discharge, 251 cfs July 30, 1965; no flow at times.

REMARKS.--Records fair. This canal is 1 of 3 channels (see sta 08354800, 08354900) carrying flow in valley cross section. For combined monthly flow in acre-ft of this canal, conveyance channel, and floodway see tabulation below daily table for sta 08354900. Canal diverts water from right bank of Rio Grande for irrigation of about 8,000 acres. Alamillo Acequia and 3 other smaller ditches divert water from canal above station for irrigation of about 400 acres. Discharge records collected at the canal heading October 1964 to September 1965, indicate 7,770 acre-ft or 9% of the initial canal flow was diverted before reaching the regular gaging station.

REVISIONS (WATER YEARS).--WSP 1242, 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			117	231	207	147	45	145	131	74		
2			114	232	221	126	50	166	151	62		
3			140	230	228	114	54	168	127	64		
4			143	220	219	86	54	129	82	116		
5			144	220	223	98	58	115	79	125		
6			157	213	232	111	62	95	69	128		
7			165	212	230	115	68	96	55	134		
8			168	217	231	107	70	103	44	138		
9			161	221	223	96	68	127	79	137		
10			162	210	227	91	74	137	133	139		
11			154	215	221	87	67	138	87	141		
12			163	218	227	87	59	139	52	140		
13			169	219	230	89	52	131	37	141		
14			171	212	233	88	45	136	23	135		
15			178	218	231	85	39	139	23	128		
16			176	220	235	76	23	142	23	124		
17			185	225	235	74	7.0	143	35	121		
18			177	219	230	68	7.0	155	136	116		
19			200	220	231	62	7.0	151	117	129		
20			199	216	232	62	9.1	147	167	131		
21			189	210	230	61	13	143	126	129		
22			191	201	228	56	103	146	110	128		
23			197	201	227	39	94	154	103	131		
24			191	194	227	39	136	155	54	141		
25			213	196	220	37	156	163	81	107		
26			222	203	231	35	158	156	84	101		
27			205	203	226	35	159	150	84	139		
28			208	208	223	37	165	146	97	140		
29		-----	210	209	204	41	166	121	113	143		
30		-----	210	207	166	48	147	152	102	144		
31		-----	230	-----	138	-----	146	131	-----	103	-----	
TOTAL	0	0	5,509	6,420	6,866	2,297	2,361.1	4,319	2,604	3,829	0	0
MEAN	0	0	178	214	221	76.6	76.2	139	86.8	124	0	0
MAX	0	0	230	232	235	147	166	168	167	144	0	0
MIN	0	0	114	194	138	35	7.0	95	23	62	0	0
AC-FT	0	0	10,930	12,730	13,620	4,560	4,680	8,570	5,170	7,590	0	0
CAL YR 1971	TOTAL	34,205.10	MEAN	93.7	MAX	235	MIN	0	AC-FT	67,850		
WTR YR 1971	TOTAL	34,907.10	MEAN	95.6	MAX	235	MIN	0	AC-FT	69,240		

08354800 Rio Grande conveyance channel at San Acacia, N. Mex.

LOCATION.--Lat 34°14'54", long 106°54'04", in SW¼ sec.1, T.1 S., R.1 W., Socorro County, on right bank 75 ft upstream from railway crossing, 0.5 mile south of San Acacia, and 1.2 miles downstream from San Acacia diversion dam.

PERIOD OF RECORD.--October 1958 to September 1964 included in composite flow of station "08355000 Rio Grande at San Acacia," October 1960 to September 1964 (monthly discharge published in WSP 1923 with records for station 08355000), October 1964 to current year. Daily records 1958-64 are available in files at district office.

GAGE.--Water-stage recorder. Datum of gage is 4,652.5 ft above mean sea level (Bureau of Reclamation datum).

AVERAGE DISCHARGE.--13 years, 503 cfs (364,400 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,950 cfs May 12, 13, 1966; no flow at times.

REMARKS.--Records good. Conveyance channel, constructed in 1958, is 1 of 3 channels (see sta 08354500, 08354900) carrying flow in valley cross section. Original design and plan was for conveyance channel to carry all flows up to about 2,000 cfs. For combined monthly flow in acre-ft of this channel, floodway, and Socorro main canal north see tabulation below daily table for station 08354900. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	299	860	1,750	870	882	876	1,700	474	2.6	.70	109	15
2	280	979	1,660	926	926	740	1,720	303	2.1	.42	12	212
3	288	1,020	1,250	916	1,010	608	1,600	286	1.9	.10	2.5	1.6
4	324	1,130	1,140	600	1,010	610	1,470	138	1.8	0	8.6	2.4
5	366	1,110	1,100	411	1,030	474	1,270	67	1.7	0	8.0	0
6	357	1,080	991	340	1,050	514	1,020	44	1.6	0	3.3	0
7	319	1,270	923	290	1,020	445	883	156	1.6	0	141	0
8	261	1,410	927	219	939	556	802	180	1.6	0	210	0
9	212	1,420	933	218	884	544	887	226	1.5	0	618	79
10	180	1,450	958	295	931	522	522	244	1.4	0	116	83
11	161	1,510	927	475	875	514	362	139	1.1	0	106	2.4
12	175	1,780	984	579	830	532	514	98	1.1	0	54	1.9
13	188	1,730	1,020	674	871	509	284	239	1.0	0	303	0
14	141	1,720	1,060	878	895	525	160	160	1.0	0	334	0
15	166	1,720	1,030	962	884	615	98	86	.88	0	132	0
16	421	1,590	929	901	880	674	62	60	1.0	0	188	0
17	555	1,510	865	894	891	576	132	140	1.0	0	92	0
18	477	1,480	789	908	907	521	174	136	.97	0	34	62
19	455	1,610	791	955	973	455	276	127	.84	.45	228	8.7
20	408	1,610	794	1,080	980	489	345	64	.84	.50	32	2.4
21	373	1,600	807	1,170	1,100	360	399	64	.89	.50	294	1.1
22	353	1,630	856	1,170	1,150	348	406	73	.70	.80	397	17
23	350	1,680	839	1,210	1,170	537	678	74	1.0	.60	474	259
24	397	1,690	874	1,240	1,010	472	744	113	1.5	2.0	522	115
25	414	1,650	940	1,030	772	323	433	43	1.6	37	733	123
26	408	1,590	869	974	865	262	467	32	1.5	73	559	108
27	414	1,690	818	943	978	402	480	47	1.5	220	283	113
28	423	1,730	777	949	1,010	610	280	15	1.6	846	50	77
29	455	1,750	772	998	-----	801	218	4.0	1.5	144	100	55
30	519	1,740	846	956	-----	1,180	292	3.1	1.1	9.0	192	290
31	692	-----	839	937	-----	1,550	-----	2.9	-----	130	22	-----
TOTAL	10,831	44,739	30,058	24,968	26,723	18,144	18,678	3,838.0	40.42	1,465.07	6,357.4	1,628.5
MEAN	349	1,491	970	805	954	585	623	124	1.35	47.3	205	54.3
MAX	692	1,780	1,750	1,240	1,170	1,550	1,720	474	2.6	846	733	290
MIN	141	860	772	218	772	262	62	2.9	.70	0	2.5	0
AC-FT	21,480	88,740	59,620	49,520	53,010	35,990	37,050	7,610	80	2,910	12,610	3,230
CAL YR 1970	TOTAL 261,755.70		MEAN 717		MAX 1,780		MIN 0		AC-FT 519,200			
WTR YR 1971	TOTAL 187,470.39		MEAN 514		MAX 1,780		MIN 0		AC-FT 371,800			

08354800 Rio Grande conveyance channel at San Acacia, N. Mex.

LOCATION.--Lat 34°14'54", long 106°54'04", in SW 1/4 sec. 1, T.1 S., R.1 W., Socorro County, on right bank 75 ft upstream from railway crossing, 0.5 mile south of San Acacia, and 1.2 miles downstream from San Acacia diversion dam.

PERIOD OF RECORD.--October 1958 to September 1964 included in composite flow of station "08355000 Rio Grande at San Acacia," October 1960 to September 1964 (monthly discharge published in WSP 1923 with records for station 08355000), October 1964 to current year. Daily records 1958-64 are available in files at district office.

GAGE.--Water-stage recorder. Datum of gage is 4,652.5 ft above mean sea level (Bureau of Reclamation datum).

AVERAGE DISCHARGE.--13 calendar years, 519 cfs (376,000 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,950 cfs May 12, 13, 1966; no flow at times.

REMARKS.--Records good. Conveyance channel, constructed in 1958, is 1 of 3 channels (see sta 08354500, 08354900) carrying flow in valley cross section. Original design and plan was for conveyance channel to carry all flows up to about 2,000 cfs. For combined monthly flow in acre-ft of this channel, floodway, and Socorro main canal north see tabulation below daily table for station 08354900. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	870	882	876	1,700	474	2.6	.70	109	15	990	867	1,070
2	926	926	740	1,720	303	2.1	.42	12	212	1,690	934	1,080
3	916	1,010	608	1,600	286	1.9	.10	2.5	1.6	1,690	765	1,070
4	600	1,010	610	1,470	138	1.8	0	8.6	2.4	1,170	762	1,060
5	411	1,030	474	1,270	67	1.7	0	8.0	0	321	732	1,040
6	340	1,050	514	1,020	44	1.6	0	3.3	0	176	1,130	960
7	290	1,020	445	883	156	1.6	0	141	0	298	1,220	898
8	219	939	556	802	180	1.6	0	210	0	278	1,660	814
9	218	884	544	887	226	1.5	0	618	79	280	1,630	814
10	295	931	522	522	244	1.4	0	116	83	195	1,670	796
11	475	875	514	362	139	1.1	0	106	2.4	204	1,580	867
12	579	830	532	514	98	1.1	0	54	1.9	205	1,540	745
13	674	871	509	284	239	1.0	0	303	0	152	1,520	684
14	878	895	525	160	160	1.0	0	334	0	123	1,530	827
15	962	884	615	98	86	.88	0	132	0	110	1,600	821
16	901	880	674	62	60	1.0	0	188	0	111	1,660	815
17	894	891	576	132	140	1.0	0	92	0	85	1,720	798
18	908	907	521	174	136	.97	0	34	62	123	1,680	784
19	955	973	455	276	127	.84	.45	228	8.7	232	1,380	805
20	1,080	980	489	345	64	.84	.50	32	2.4	272	1,180	802
21	1,170	1,100	360	399	64	.89	.50	294	1.1	272	1,100	775
22	1,170	1,150	348	406	73	.70	.80	397	17	235	578	821
23	1,210	1,170	537	678	74	1.0	.60	474	259	198	1,010	770
24	1,240	1,010	472	744	113	1.5	2.0	522	115	156	957	770
25	1,030	772	323	433	43	1.6	37	733	123	495	960	870
26	974	865	262	467	32	1.5	73	559	108	765	952	890
27	943	978	402	480	47	1.5	220	283	113	1,040	993	991
28	949	1,010	610	280	15	1.6	846	50	77	912	975	1,130
29	998	-----	801	218	4.0	1.5	144	100	55	588	990	1,200
30	956	-----	1,180	292	3.1	1.1	9.0	192	290	678	999	1,300
31	937	-----	1,550	-----	2.9	-----	130	22	-----	690	-----	1,220
TOTAL	24,968	26,723	18,144	18,678	3,838.0	40.42	1,465.07	6,357.4	1,628.5	14,734	36,674	28,287
MEAN	805	954	585	623	124	1.35	47.3	205	54.3	475	1,222	912
MAX	1,240	1,170	1,550	1,720	474	2.6	846	733	290	1,690	1,720	1,300
MIN	218	772	262	62	2.9	.70	0	2.5	0	85	732	684
AC-FT	49,520	53,010	35,990	37,050	7,610	80	2,910	12,610	3,230	29,220	72,740	56,110
CAL YR 1971	TOTAL	181,537.39	MEAN	497	MAX	1,720	MIN	0	AC-FT	360,100		
WTR YR 1971	TOTAL	187,470.39	MEAN	514	MAX	1,780	MIN	0	AC-FT	371,800		

08354900 Rio Grande floodway at San Acacia, N. Mex.

LOCATION.--Lat 34°15'23", long 106°53'18", Socorro County, in Sevilleta Grant, 0.2 mile below San Acacia diversion dam, 0.3 mile east of San Acacia, and 2 miles downstream from Rio Salado.

DRAINAGE AREA.--26,770 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--April 1936 to September 1958 (prior to construction of conveyance channel), October 1958 to September 1964 (flow in conveyance channel included), October 1964 to current year. Prior to October 1964 published as "08355000 Rio Grande at San Acacia" and records are not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 4,654.50 ft above mean sea level. Aug. 19, 1965 to Aug. 15, 1967 at same site at datum 1.89 ft higher. Prior to Mar. 19, 1953, at several sites 0.1 mile upstream at different datums. Mar. 19, 1953 to Aug. 19, 1965, at site 0.4 mile downstream at datum 3.60 ft higher. Floodway is bypassed by Socorro main canal north and, since Oct. 1958, by conveyance channel.

AVERAGE DISCHARGE.--22 years (1936-58), 1,192 cfs (863,000 acre-ft per year), prior to construction of conveyance channel; does not include Socorro main canal north.

13 years (1958-71), 257 cfs (186,200 acre-ft per year), flow of floodway only.

13 years (1958-71), 848 cfs (614,400 acre-ft per year), combined flow of floodway, conveyance channel and Socorro main canal north.

EXTREMES.--Current year: Maximum discharge, 2,530 cfs July 27 (gage height, 5.95 ft); no flow at times.

Period of record: Maximum discharge, 27,400 cfs Aug. 5, 1936 (gage height, 10.75 ft, site and datum then in use); no flow at times.

REMARKS.--Records poor. Floodway is 1 of 3 channels (see sta 08354500, 08354800) carrying flow in valley cross section. For combined monthly flow in acre-ft of floodway, conveyance channel, and Socorro main canal north see tabulation below. Normal plan is for floodway to carry flow when combined capacities of conveyance channel (about 2,000 cfs) and Socorro main canal north (about 200 cfs) is exceeded, during periods of silt sluicing, and when river silt load is excessive. Diversions above station for irrigation of about 760,000 acres; this includes Socorro main canal north which bypasses station and irrigates about 8,000 acres. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1242: 1951. WSP 1732: 1958(M). WRD 1969: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	5.2	3.7	1.8	.62	1.2	9.4	650	4.1	2.1	.66	.02	.12			
2	4.1	7.9	1.5	.62	1.2	10	336	3.7	1.8	.66	.02	65			
3	10	4.4	1.2	.58	1.5	10	28	3.7	2.1	.62	.02	.11			
4	2.5	3.3	2.5	2.3	1.5	10	10	4.5	1.8	.62	.02	.02			
5	12	1.8	2.3	1.8	1.0	9.4	11	2.5	1.8	.58	.02	.02			
6	5.2	1.8	1.5	1.5	1.2	10	14	2.3	2.1	.58	.02	.02			
7	3.7	2.5	1.2	.90	1.0	6.0	14	2.9	2.1	.62	4.1	.02			
8	12	6.4	1.0	.90	1.2	7.9	15	2.9	2.3	.62	2.1	.02			
9	12	1.2	1.0	.73	1.2	13	4.5	16	2.3	.62	110	22			
10	8.7	1.2	1.5	.80	1.5	12	1.8	9.4	2.3	.66	1.5	2.3			
11	5.2	3.3	1.0	1.2	2.3	10	27	6.4	2.1	.66	1.8	.80			
12	12	35	1.2	6.4	1.8	7.9	5.2	7.2	2.1	.66	4.5	.62			
13	9.4	6.0	1.5	70	1.8	8.7	4.5	7.9	2.1	.73	7.2	.73			
14	7.2	4.8	1.5	178	1.8	35	3.7	7.9	2.1	.80	4.9	.66			
15	5.2	3.7	1.5	2.3	1.8	9.4	4.1	9.4	2.1	.80	4.1	.62			
16	12	3.3	1.2	1.2	2.3	16	2.9	12	2.1	.90	2.5	.62			
17	14	2.5	1.2	1.0	2.3	14	5.2	12	1.5	.90	2.5	13			
18	10	2.5	1.2	1.2	2.9	7.9	13	8.7	1.0	1.3	3.7	6.0			
19	24	3.7	3.7	1.8	2.3	6.4	6.0	8.7	.80	1.0	54	.73			
20	18	2.3	4.1	2.5	2.3	4.8	4.8	10	.80	1.3	.62	.90			
21	35	2.0	2.9	2.3	8.7	4.8	4.1	9.4	.73	1.0	20	.73			
22	18	3.3	9.4	2.3	7.2	5.2	4.1	8.7	.73	.90	8.7	6.0			
23	8.7	1.8	6.4	2.3	4.4	12	3.7	8.7	.90	.66	6.4	3.3			
24	15	1.5	6.0	2.3	3.3	7.2	3.7	5.2	1.0	.58	7.9	11			
25	10	1.5	4.0	1.8	44	6.4	13	4.1	.80	.73	1.3	7.2			
26	6.0	1.5	2.5	1.8	8.7	5.6	11	4.1	.80	1.3	.02	2.9			
27	4.4	1.5	1.8	1.5	5.2	18	5.2	4.8	.90	185	.02	1.8			
28	3.3	1.2	1.0	1.5	12	5.6	4.8	3.7	1.0	86	.02	1.8			
29	2.5	1.5	.80	1.5	-----	7.9	5.2	2.9	.90	0	91	1.3			
30	5.6	2.5	.80	1.2	-----	12	6.0	3.7	.80	0	12	35			
31	12	-----	.66	1.2	-----	220	-----	2.1	-----	0	.32	-----			
TOTAL	312.9	119.6	69.86	296.05	127.6	522.5	1,221.5	199.6	45.96	291.46	395.42	185.34			
MEAN	10.1	3.99	2.25	9.55	4.56	16.9	40.7	6.44	1.53	9.40	12.8	6.18			
MAX	35	35	9.4	178	44	220	650	16	2.3	185	110	65			
MIN	2.5	1.2	.66	.58	1.0	4.8	1.8	2.1	.73	0	.02	.02			
AC-FT	621	237	139	587	253	1,040	2,420	396	91	578	784	368			
(+)	31,050	88,980	59,760	50,110	53,250	47,960	52,200	21,630	4,730	8,170	21,960	8,770			
CAL YR 1970	TOTAL	29,259.66	MEAN	80.2	MAX	929	MIN	0	AC-FT	58,040	+	MEAN	909	AC-FT	657,700
WTR YR 1971	TOTAL	3,787.79	MEAN	10.4	MAX	650	MIN	0	AC-FT	7,510	+	MEAN	620	AC-FT	448,600

+ Combined flow, in acre-ft and mean, in cfs, of floodway, conveyance channel, and Socorro main canal north.

08354900 Rio Grande floodway at San Acacia, N. Mex.

LOCATION.--Lat 34°15'23", long 106°53'18", Socorro County, in Seville Grant, 0.2 mile below San Acacia diversion dam, 0.3 mile east of San Acacia, and 2 miles downstream from Rio Salado.

DRAINAGE AREA.--26,770 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--April 1936 to September 1958 (prior to construction of conveyance channel), October 1958 to September 1964 (flow in conveyance channel included), October 1964 to current year. Prior to October 1964 published as "08355000 Rio Grande at San Acacia" and records are not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 4,654.50 ft above mean sea level. Aug. 19, 1965 to Aug. 15, 1967 at same site at datum 1.89 ft higher. Prior to Mar. 19, 1953, at several sites 0.1 mile upstream at different datums. Mar. 19, 1953 to Aug. 19, 1965, at site 0.4 mile downstream at datum 3.60 ft higher. Floodway is bypassed by Socorro main canal north and, since Oct. 1958, by conveyance channel.

AVERAGE DISCHARGE.--22 years (1936-58), 1,192 cfs (863,000 acre-ft per year), prior to construction of conveyance channel; does not include Socorro main canal north.

13 calendar years (1958-71), 242 cfs (175,300 acre-ft per year), flow of floodway only.

13 calendar years (1958-71), 847 cfs (613,700 acre-ft per year), combined flow of floodway, conveyance channel and Socorro main canal north.

EXTREMES.--Current year: Maximum discharge, 2,660 cfs Oct. 1 (gage height, 5.75 ft); no flow at times.

Period of record: Maximum discharge, 27,400 cfs Aug. 5, 1936 (gage height, 10.75 ft, site and datum then in use); no flow at times.

REMARKS.--Records poor. Floodway is 1 of 3 channels (see sta 08354500, 08354800) carrying flow in valley cross section. For combined monthly flow in acre-ft of floodway, conveyance channel, and Socorro main canal north see tabulation below. Normal plan is for floodway to carry flow when combined capacities of conveyance channel (about 2,000 cfs) and Socorro main canal north (about 200 cfs) is exceeded, during periods of silt sluicing, and when river silt load is excessive. Diversions above station for irrigation of about 760,000 acres; this includes Socorro main canal north which bypasses station and irrigates about 8,000 acres. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1242: 1951. WSP 1732: 1958(M). WRD 1969: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.62	1.2	9.4	650	4.1	2.1	.66	.02	.12	1,510	2.6	2.1
2	.62	1.2	10	336	3.7	1.8	.66	.02	65	285	2.3	2.2
3	.58	1.5	10	28	3.7	2.1	.62	.02	.11	34	5.0	2.1
4	2.3	1.5	10	10	4.5	1.8	.62	.02	.02	6.6	3.0	2.0
5	1.8	1.0	9.4	11	2.5	1.8	.58	.02	.02	3.4	2.4	2.0
6	1.5	1.2	10	14	2.3	2.1	.58	.02	.02	3.1	15	1.9
7	.90	1.0	6.0	14	2.9	2.1	.62	4.1	.02	14	14	1.9
8	.90	1.2	7.9	15	2.9	2.3	.62	2.1	.02	9.3	47	2.0
9	.73	1.2	13	4.5	16	2.3	.62	110	22	3.6	3.7	1.9
10	.80	1.5	12	1.8	9.4	2.3	.66	1.5	2.3	3.3	7.2	1.9
11	1.2	2.3	10	27	6.4	2.1	.66	1.8	.80	2.7	3.4	1.8
12	6.4	1.8	7.9	5.2	7.2	2.1	.66	4.5	.62	3.1	3.1	1.7
13	70	1.8	8.7	4.5	7.9	2.1	.73	7.2	.73	2.4	2.9	1.6
14	178	1.8	35	3.7	7.9	2.1	.80	49	.66	2.6	2.8	1.8
15	2.3	1.8	9.4	4.1	9.4	2.1	.80	4.1	.62	2.8	6.1	1.6
16	1.2	2.3	16	2.9	12	2.1	.90	2.5	.62	3.5	4.7	1.5
17	1.0	2.3	14	5.2	12	1.5	.90	2.5	13	6.5	4.0	1.5
18	1.2	2.9	7.9	13	8.7	1.0	1.3	3.7	6.0	6.2	3.5	1.5
19	1.8	2.3	6.4	6.0	8.7	.80	1.0	54	.73	4.9	2.8	1.5
20	2.5	2.3	4.8	4.8	10	.80	1.3	.62	.90	4.1	2.6	1.3
21	2.3	8.7	4.8	4.1	9.4	.73	1.0	20	.73	3.4	2.4	1.3
22	2.3	7.2	5.2	4.1	8.7	.73	.90	8.7	6.0	4.9	2.3	1.4
23	2.3	4.4	12	3.7	8.7	.90	.66	6.4	3.3	5.5	2.1	1.4
24	2.3	3.3	7.2	3.7	5.2	1.0	.58	7.9	11	8.3	2.0	1.3
25	1.8	44	6.4	13	4.1	.80	.73	1.3	7.2	24	2.0	1.4
26	1.8	8.7	5.6	11	4.1	.80	1.3	.02	2.9	13	1.9	1.5
27	1.5	5.2	18	5.2	4.8	.90	185	.02	1.8	12	2.0	1.4
28	1.5	12	5.6	4.8	3.7	1.0	86	.02	1.8	4.3	2.0	1.5
29	1.5	-----	7.9	5.2	2.9	.90	0	91	1.3	8.0	2.1	1.6
30	1.2	-----	12	6.0	3.7	.80	0	12	35	4.6	2.0	1.7
31	1.2	-----	220	-----	2.1	-----	0	.32	-----	4.8	-----	1.7
TOTAL	296.05	127.6	522.5	1,221.5	199.6	45.56	291.46	395.42	185.34	1,999.9	158.9	52.0
MEAN	9.55	4.56	16.7	40.7	6.44	1.53	9.40	12.8	6.18	64.5	5.30	1.68
MAX	178	44	220	650	16	2.3	185	110	65	1,510	47	2.2
MIN	.58	1.0	4.8	1.8	2.1	.73	0	.02	.02	2.4	1.9	1.3
AC-FT	587	253	1,040	2,420	396	91	578	784	368	3,970	315	103
(†)	50,110	53,250	47,960	52,200	21,630	4,730	8,170	21,960	8,770	40,780	73,060	56,210

CAL YR 1971 TOTAL 5,496.23 MEAN 15.1 MAX 1,510 MIN 0 AC-FT 10,900 † MEAN 606 AC-FT 438,800
WTR YR 1971 TOTAL 3,787.79 MEAN 10.4 MAX 650 MIN 0 AC-FT 7,510 † MEAN 620 AC-FT 448,600

† Combined flow, in acre-ft and mean, in cfs, of floodway, conveyance channel, and Socorro main canal north.

08355300 Arroyo de la Matanza near Socorro, N. Mex.

LOCATION.--Lat 34°01'51", long 106°54'04", in Town of Socorro Grant, on left abutment of former highway bridge, and 1.9 miles south of Socorro.

DRAINAGE AREA.--46.0 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,760 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 924 cfs July 31 (gage height, 5.14 ft); no flow most of time.
 Period of record: Maximum discharge, 1,580 cfs July 28, 1970 (gage height, 6.20 ft), from rating curve extended above 60 cfs on basis of slope-area measurement of peak flow; no flow most of time.

REMARKS.--Record poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	0	0
2										0	0	0
3										0	0	.45
4										0	0	.03
5										0	0	0
6										0	0	0
7										0	0	0
8										0	0	0
9										0	5.7	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	2.9
19										0	0	.08
20										0	0	0
21										0	0	0
22										7.1	0	0
23										0	6.8	18
24										0	0	0
25										0	0	0
26										0	0	0
27										1.5	0	0
28										0	0	0
29										0	31	0
30										2.0	0	.05
31										29	0	-----
TOTAL	0	0	0	0	0	0	0	0	0	39.6	43.5	21.51
MEAN	0	0	0	0	0	0	0	0	0	1.28	1.40	.72
MAX	0	0	0	0	0	0	0	0	0	29	31	18
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	79	86	43

CAL YR 1970 TOTAL 112.09 MEAN .31 MAX 79 MIN 0 AC-FT 222
 WTR YR 1971 TOTAL 104.61 MEAN .29 MAX 31 MIN 0 AC-FT 207

PEAK DISCHARGE (BASE, 175 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-22	1745	3.75	345	8-23	1630	3.59	297
7-31	1730	5.14	924	8-29	1830	4.66	684
8-9	2000	3.33	219	9-23	1400	3.30	193

08355300 Arroyo de la Matanza near Socorro, N. Mex.

LOCATION.--Lat 34°01'51", long 106°54'04", in Town of Socorro Grant, on left abutment of former highway bridge, and 1.9 miles south of Socorro.

DRAINAGE AREA.--46.0 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,760 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 924 cfs July 31 (gage height, 5.14 ft); no flow most of time.

Period of record: Maximum discharge, 1,580 cfs July 28, 1970 (gage height, 6.20 ft), from rating curve extended above 60 cfs on basis of slope-area measurement of peak flow; no flow most of time.

REMARKS.--Record poor.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	0	0	.02	0	
2							0	0	0	0	0	
3							0	0	.45	0	0	
4							0	0	.03	0	0	
5							0	0	0	0	0	
6							0	0	0	0	0	
7							0	0	0	0	0	
8							0	0	0	0	0	
9							0	5.7	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	0	0	
15							0	0	0	0	3.9	
16							0	0	0	0	.42	
17							0	0	0	0	0	
18							0	0	2.9	0	0	
19							0	0	.08	0	0	
20							0	0	0	0	0	
21							0	0	0	0	0	
22							7.1	0	0	0	0	
23							0	6.8	18	0	0	
24							0	0	0	0	0	
25							0	0	0	46	0	
26							0	0	0	0	0	
27							1.5	0	0	0	0	
28							0	0	0	0	0	
29		-----					0	31	0	0	0	
30		-----					2.0	0	.05	0	0	
31		-----		-----		-----	29	0	-----	0	-----	
TOTAL	0	0	0	0	0	0	39.6	43.5	21.51	46.02	4.32	0
MEAN	0	0	0	0	0	0	1.28	1.40	.72	1.48	.14	0
MAX	0	0	0	0	0	0	29	31	18	46	3.9	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	79	86	43	91	8.6	0

CAL YR 1971 TOTAL 154.95 MEAN .42 MAX 46 MIN 0 AC-FT 307

PEAK DISCHARGE (BASE, 175 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-22	1745	3.75	345	8-23	1630	3.59	297
7-31	1730	5.14	924	8-29	1830	4.66	684
8-9	2000	3.33	219	9-23	1400	3.30	193

08356000 Socorro main canal south near San Antonio, N. Mex.

LOCATION.--Lat 33°53'28", long 106°51'54", in NW¼ sec.8, T.5 S., R. 1 E., Socorro County, on right bank 1.5 miles upstream from Bosque del Apache Grant, and 1.8 miles south of San Antonio.

PERIOD OF RECORD.--April 1937 to July 1938, March 1948 to September 1971 (discontinued). Published as "at end near San Antonio" 1937-38.

GAGE.--Water-stage recorder and V-notch weir control since Mar. 27, 1954. Datum of gage is 4,526.41 ft above mean sea level. April 1937 to July 1938 at two different sites about 1.5 miles downstream at different datums. March 1948 to November 1951 at site 30 ft upstream at datum 7.29 ft higher.

EXTREMES.--Period of record: Maximum daily discharge, 66 cfs Sept. 2, 1971; no flow for many days each year.

REMARKS.--Records fair. Diversions made at San Acacia into Socorro main canal north are the main source of water but may be supplemented by diversions from the conveyance channel at 3 points and from San Antonio Riverside drain, 2 miles above gage. Some diversions occur between gage and north boundary of U.S. Fish and Wildlife Refuge (Bosque del Apache Grant). This is 1 of 3 stations gaging flow into refuge.

Monthly discharge, in cubic feet per second, water year October 1970 to September 1971

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October	56	4.4	30.4	1,840
November	20	0	0.67	40
December	0	0	0	0
Calendar year 1970	59	0	19.7	14,260
January	0	0	0	0
February	0	0	0	0
March	53	0	27.0	1,660
April	45	11.0	30.8	1,830
May	52	12.0	31.8	1,950
June	17	0	2.26	134
July	26	0	5.08	313
August	48	6.4	22.6	1,390
September	66	0	23.7	1,410
Water year 1970-71	66	0	14.6	10,600

RIO GRANDE BASIN

08356500 San Antonio Riverside drain near San Antonio, N. Mex.

LOCATION.--Lat 33°53'24", long 106°51'04", in SW¼ sec.9, T.5 S., R.1 E., Socorro County, on left bank 1 mile east of old U.S. Highway 85, and 1.2 miles upstream from boundary of Bosque del Apache Grant (wildlife refuge), and 2 miles southeast of San Antonio.

PERIOD OF RECORD.--March 1948 to September 1971 (discontinued). May 1936 to February 1938, at site 50 ft downstream from Elmendorf interior drain; records not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 4,524.33 ft above mean sea level (levels by Bureau of Reclamation). Mar. 15, 1948 to Mar. 31, 1949, at site 1.2 miles downstream at datum 1.14 ft lower.

EXTREMES.--Period of record: Maximum daily discharge, 161 cfs May 31, 1957; no flow at times since 1959.

REMARKS.--Records fair. Diversions from drain above station, canal wasteways and interior drains entering channel above station. Flow represents 1 of 3 channels entering north boundary of Bosque del Apache Grant. Reduction in flow occurred after conveyance channel was completed in about 1957. Average pickup per mile between station and Grant boundary is about 5 percent (as determined from comparative discharge measurements).

Monthly discharge, in cubic feet per second, water year October 1970 to September 1971

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October	28	9.7	16.4	1,010
November	25	17.0	22.0	1,310
December	25	1.7	19.0	1,170
Calendar year 1970	69	.42	21.9	15,880
January	20	13.0	16.7	1,030
February	21	12.0	17.4	964
March	44	13.0	27.6	1,700
April	69	24.0	36.4	2,160
May	30	14.0	23.3	1,430
June	12	0	0.99	59
July	6.4	0	0.21	13
August	28	4.5	13.4	825
September	14	2.7	5.70	339
Water year 1970-71	69	0	16.6	12,010

08357000 Elmdorf interior drain near San Antonio, N. Mex.

LOCATION.--Lat 33°52'12", long 106°51'39", Socorro County, in Bosque del Apache Grant (wildlife refuge), on right bank 2,000 ft downstream from north boundary of refuge, 1.0 mile east of railroad, and 3.7 miles south of junction of U.S. Highways 85 and 380.

PERIOD OF RECORD.--July 1936 to January 1938 (Published as "at end near San Antonio"), March 1948 to September 1971 (discontinued).

GAGE.--Water-stage recorder and culvert control. Datum of gage is 4,518.9 ft above mean sea level (levels by Bureau of Reclamation). July 1936 to January 1938, staff gage at site 0.5 mile upstream in former channel at datum about 0.34 ft higher. Mar. 11, 1948, to Nov. 10, 1949, at site about 2,500 ft upstream in former channel at different datum. Nov. 11, 1949, to Feb. 7, 1956, at site 2,000 ft upstream in present channel at datum about 0.26 ft lower.

EXTREMES.--Period of Record: Maximum daily discharge, 59 cfs Aug. 21, 1956; no flow at times.

REMARKS.--Records fair. Flow past station represents 1 of 3 channels entering north boundary of Bosque del Apache Grant.

Monthly discharge, in cubic feet per second, water year October 1970 to September 1971

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October.	38.0	8.8	21.7	1,340
November.	15.0	1.4	2.70	160
December.	5.0	1.2	2.94	180
Calendar year 1970	48.0	0.52	16.1	11,670
January.	3.7	.94	1.94	119
February.	1.4	.54	.86	48
March.	38.0	1.0	21.1	1,290
April.	42.0	12.0	28.2	1,680
May.	40.0	6.2	25.8	1,590
June.	5.0	.43	1.38	82
July.	31.0	.46	4.84	298
August.	37.0	6.9	23.8	1,460
September.	38.0	0	7.43	442
Water year 1970-71	42.0	0	12.0	8,690

RIO GRANDE BASIN

08357500 San Antonio Riverside drain near San Marcial, N. Mex.

LOCATION.--Lat 33°44'31", long 106°55'28", Socorro County, in Bosque del Apache Grant (wildlife refuge), on left bank 1.0 mile upstream from outlet to Rio Grande conveyance channel, 5 miles northeast of San Marcial, and 12 miles south of San Antonio.

PERIOD OF RECORD.--March 1948 to September 1971 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 4,487.12 ft above mean sea level. Mar. 19, 1948 to July 28, 1960, at datum 2.00 ft higher. July 28, 1960, to May 14, 1962, at site 0.4 mile downstream at datum 1.42 ft lower. May 14, 1962 to Dec. 1, 1966 at present site at datum 2.00 ft higher.

EXTREMES.--Period of record: Maximum daily discharge, 226 cfs May 22, 1957; no flow at times.

REMARKS.--Records fair. Flow represents surface outflow from wildlife refuge. Diversion for irrigation of a few hundred acres above station.

Monthly discharge, in cubic feet per second, water year October 1970 to September 1971

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October.	93	15	53.4	3,280
November.	76	14	22.6	1,340
December.	28	16	22.6	1,390
Calendar year 1970	158	2.9	56.8	41,140
January.	31	12	24.5	1,510
February.	44	22	27.1	1,510
March.	119	20	77.0	4,730
April.	113	32	88.8	5,290
May.	120	37	82.3	5,060
June.	28	0	6.78	403
July.	73	0	9.78	601
August.	97	24	70.0	4,300
September.	86	0	26.5	1,580
Water year 1970-71	120	0	42.8	31,000

08358300 Rio Grande conveyance channel at San Marcial, N. Mex.

LOCATION.--Lat 33°41'07", long 106°59'40", Socorro County, in Pedro Armendaris Grant No. 34, on right bank 0.4 mile northwest of Atchison, Topeka and Santa Fe Railway Co. bridge over floodway channel, 1.0 mile southwest of former site of San Marcial, 3.5 miles downstream from railroad bridge near Tiffany siding, and 51 miles downstream from heading at San Acacia.

PERIOD OF RECORD.--October 1958 to September 1959, October 1960 to current year. Prior to October 1964 monthly discharge only published with record for station 08358500 Rio Grande at San Marcial. Records of daily discharge since March 1954 available in files of district office.

GAGE.--Water-stage recorder. Datum of gage is 4,454.00 ft above mean sea level (levels by Bureau of Reclamation). Prior to Apr. 29, 1958, at datum 4.19 ft higher.

AVERAGE DISCHARGE.--17 years, 512 cfs (370,900 acre-ft per year).

EXTREMES.--1954-71: Maximum daily discharge, 2,200 cfs May 14, 1966; no flow at times.

REMARKS.--Records fair. Original design and plan was for conveyance channel to carry all flows up to about 2,000 cfs. Conveyance channel is 1 of 2 channels (see sta 08358400) carrying flow in valley cross section. For combined monthly flow in acre-ft of this channel and floodway see tabulation below daily table for sta 08358400. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	320	795	1,680	895	915	555	1,920	570	92	0	246	66
2	299	870	1,860	965	915	855	1,980	490	60	0	84	183
3	282	930	1,300	945	1,020	750	1,980	396	54	0	48	185
4	388	1,010	1,210	700	1,060	760	1,760	348	52	0	5.8	136
5	415	1,060	1,160	460	1,080	720	1,370	228	49	0	4.2	76
6	332	1,010	1,100	300	1,120	660	1,200	195	48	0	21	34
7	420	1,160	990	200	1,120	690	1,000	183	45	0	22	21
8	376	1,340	1,000	210	970	635	900	348	40	0	88	2.0
9	292	1,420	1,010	230	935	720	1,060	324	39	0	390	1.0
10	273	1,460	1,000	300	995	650	805	392	36	0	368	108
11	306	1,570	975	500	970	620	480	324	33	0	192	92
12	285	1,790	980	600	910	625	670	231	31	0	178	71
13	246	1,840	1,030	800	900	640	360	246	30	0	218	36
14	261	1,820	1,080	850	930	620	258	455	27	0	405	4.2
15	213	1,820	1,030	955	920	685	212	360	21	0	475	2.8
16	360	1,700	980	935	890	745	202	264	8.4	0	252	1.4
17	475	1,540	885	915	935	670	212	289	1.4	0	303	1.4
18	372	1,470	835	910	895	680	285	380	1.5	0	132	7.0
19	380	1,570	820	970	985	600	410	352	1.5	0	122	71
20	445	1,620	870	1,060	1,070	595	480	384	2.0	0	243	48
21	410	1,570	805	1,270	1,250	555	460	303	2.5	0	144	1.4
22	400	1,530	905	1,270	1,350	550	384	273	1.5	0	530	2.8
23	410	1,610	885	1,290	1,230	610	580	306	1.5	0	415	98
24	420	1,640	915	1,380	1,110	695	855	317	1.0	0	364	203
25	455	1,570	975	1,150	800	500	685	384	5.50	0	800	68
26	420	1,530	970	1,010	800	455	600	249	25	0	715	85
27	376	1,580	865	1,000	990	485	690	190	2.0	115	420	132
28	368	1,740	840	975	995	775	565	185	0	396	306	90
29	392	1,730	875	1,040	-----	765	388	138	0	605	258	37
30	450	1,680	890	1,030	-----	1,220	435	146	0	43	310	108
31	585	-----	915	955	-----	1,560	-----	126	-----	25	112	-----
TOTAL	11,426	43,975	31,635	26,070	28,060	22,085	23,186	9,376	705.80	1,184	8,175.0	1,972.0
MEAN	369	1,466	1,020	841	1,002	712	773	302	23.5	38.2	264	65.7
MAX	585	1,840	1,860	1,380	1,350	1,560	1,980	570	92	605	800	203
MIN	213	795	805	200	800	455	202	126	0	0	4.2	1.0
AC-FT	22,660	87,220	62,750	51,710	55,660	43,810	45,990	18,600	1,400	2,350	16,220	3,910
CAL YR 1970	TOTAL	295,356.00	MEAN	809	MAX	1,970	MIN	20	AC-FT	585,800		
WTR YR 1971	TOTAL	207,849.80	MEAN	569	MAX	1,980	MIN	0	AC-FT	412,300		

08358300 Rio Grande conveyance channel at San Marcial, N. Mex.

LOCATION.--Lat 33°41'07", long 106°59'40", Socorro County, in Pedro Armendaris Grant No. 34, on right bank 0.4 mile northwest of Atchison, Topeka and Santa Fe Railway Co. bridge over floodway channel, 1.0 mile southwest of former site of San Marcial, 3.5 miles downstream from railroad bridge near Tiffany siding, and 51 miles downstream from heading at San Acacia.

PERIOD OF RECORD.--October 1958 to September 1959, October 1960 to current year. Prior to October 1964 monthly discharge only published with record for station 08358500 Rio Grande at San Marcial. Records of daily discharge since March 1954 available in files of district office.

GAGE.--Water-stage recorder. Datum of gage is 4,454.00 ft above mean sea level (levels by Bureau of Reclamation). Prior to Apr. 29, 1958, at datum 4.19 ft higher.

AVERAGE DISCHARGE.--17 calendar years, 522 cfs (378,200 acre-ft per year).

EXTREMES.--1954-71: Maximum daily discharge, 2,200 cfs May 14, 1966; no flow at times.

REMARKS.--Records fair. Original design and plan was for conveyance channel to carry all flows up to about 2,000 cfs. Conveyance channel is 1 of 2 channels (see sta 08358400) carrying flow in valley cross section. For combined monthly flow in acre-ft of this channel and floodway see tabulation below daily table for sta 08358400. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	895	915	955	1,920	570	92	0	246	66	435	876	1,040
2	965	915	855	1,980	490	60	0	84	183	1,760	1,010	1,050
3	945	1,020	750	1,980	396	54	0	48	185	1,560	737	1,030
4	700	1,060	760	1,760	348	52	0	9.8	136	1,280	760	998
5	460	1,080	720	1,370	228	49	0	4.2	76	574	717	990
6	300	1,120	660	1,200	195	48	0	21	34	181	991	899
7	200	1,120	690	1,000	183	45	0	22	21	199	1,140	856
8	210	970	635	900	348	40	0	88	2.0	222	1,740	780
9	230	935	720	1,060	324	39	0	390	1.0	281	1,600	907
10	300	995	690	805	392	36	0	368	108	246	1,720	801
11	500	970	620	480	324	33	0	192	92	263	1,540	872
12	600	910	625	670	231	31	0	178	71	260	1,490	815
13	800	900	640	360	246	30	0	218	36	199	1,450	699
14	850	930	620	258	455	27	0	405	4.2	141	1,440	824
15	955	920	685	212	360	21	0	475	2.8	93	1,480	901
16	935	890	745	202	264	8.4	0	252	1.4	78	1,600	856
17	915	935	670	212	289	1.4	0	303	1.4	63	1,640	822
18	910	895	680	285	380	1.5	0	132	7.0	71	1,720	829
19	970	985	600	410	352	1.5	0	122	71	104	1,420	828
20	1,060	1,070	595	480	384	2.0	0	243	48	189	1,170	789
21	1,270	1,250	555	460	303	2.5	0	144	1.4	209	1,070	768
22	1,270	1,350	550	384	273	1.5	0	530	2.8	202	578	818
23	1,290	1,230	610	580	306	1.5	0	415	98	168	1,020	772
24	1,380	1,110	695	855	317	1.0	0	364	203	149	960	752
25	1,150	800	500	685	384	.50	0	800	68	285	544	829
26	1,010	800	455	600	249	25	0	715	85	849	960	857
27	1,000	990	485	690	190	2.0	115	420	132	936	939	901
28	975	995	775	565	185	0	396	306	90	1,230	927	1,130
29	1,040	-----	765	388	138	0	605	258	37	692	933	1,190
30	1,030	-----	1,220	435	146	0	43	310	108	773	975	1,330
31	955	-----	1,560	-----	126	-----	25	112	-----	742	-----	1,410
TOTAL	26,070	28,060	22,085	23,186	9,376	705.80	1,184	8,175.0	1,972.0	14,434	35,947	28,343
MEAN	841	1,002	712	773	302	23.5	38.2	264	65.7	466	1,198	914
MAX	1,380	1,350	1,560	1,980	570	92	605	800	203	1,760	1,740	1,410
MIN	200	800	455	202	126	0	0	4.2	1.0	63	717	699
AC-FT	51,710	55,660	43,810	45,990	18,600	1,400	2,350	16,220	3,910	28,630	71,300	56,220
CAL YR 1971	TOTAL	199,537.80	MEAN	547	MAX	1,980	MIN	0	AC-FT	395,800		
WTR YR 1971	TOTAL	207,849.80	MEAN	569	MAX	1,980	MIN	0	AC-FT	412,300		

08358400 Rio Grande floodway at San Marcial, N. Mex.

LOCATION.--Lat 33°40'50", long 106°59'30", Socorro County, in Pedro Armendaris Grant No. 33 on pier of the Atchison, Topeka, and Santa Fe Railway Co. bridge, 1.1 miles downstream from former site of San Marcial, and 18.5 miles southwest of San Antonio.

DRAINAGE AREA.--27,700 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--October 1964 to current year. Records collected at this site January 1895 to September 1964 represented total flow of the river and were published as 08358500 Rio Grande at San Marcial. Records of daily discharge for floodway only April 1950 to September 1964 are available in files of district office.

GAGE.--Water-stage recorder. Datum of gage is 4,455.19 ft above mean sea level.

AVERAGE DISCHARGE.--7 years (1964-71), 157 cfs (113,700 acre-ft per year).

Total flow of river.--76 years (1895-71), 1,260 cfs (912,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 500 cfs July 27 (gage height, 8.34 ft); no flow for most of time.

Period of record: Maximum discharge since January 1895 about 50,000 cfs Oct. 11, 1904.

REMARKS.--Records fair. Floodway is 1 of 2 channels (see also sta 08358300) carrying flow in valley cross section. Prior to 1950 all flow was in floodway channel. Normal plan is for floodway to carry flow when capacity of conveyance channel (about 2,000 cfs) is exceeded. Combined monthly discharge in acre-ft is given at end of each year table. Diversions for irrigation of about 775,000 acres above station (includes about 13,800 acre-ft diverted from conveyance channel, as based on weekly measurements, data furnished by Bureau of Reclamation). Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1							0			0	24	4.8			
2							67			0	10	0			
3							62			0	0	3.4			
4							11			0	0	5.2			
5							0			0	0	0			
6							0			0	0	0			
7							0			0	0	0			
8							0			0	0	0			
9							0			0	0	0			
10							0			0	0	0			
11							0			0	0	0			
12							0			0	0	0			
13							0			0	0	0			
14							0			0	0	0			
15							0			0	0	0			
16							0			0	0	0			
17							0			0	0	0			
18							0			0	0	1.6			
19							0			0	0	0			
20							0			0	0	0			
21							0			0	0	0			
22							0			0	0	0			
23							0			0	0	0			
24							0			0	0	0			
25							0			0	0	0			
26							0			0	0	0			
27							0			110	0	0			
28							0			36	0	0			
29							0			56	0	0			
30							0			2.4	6.4	0			
31							0			1.8	30	0			
TOTAL	0	0	0	0	0	0	140	0	0	206.2	70.4	15.0			
MEAN	0	0	0	0	0	0	4.67	0	0	6.65	2.27	.50			
MAX	0	0	0	0	0	0	67	0	0	110	30	5.2			
MIN	0	0	0	0	0	0	0	0	0	0	0	0			
AC-FT	0	0	0	0	0	0	278	0	0	409	140	30			
(+)	22,660	87,220	62,750	51,710	55,660	43,810	46,270	18,600	1,400	2,760	16,360	3,940			
CAL YR 1970	TOTAL	15,445.30	MEAN	42.3	MAX	680	MIN	0	AC-FT	30,640	(+)	MEAN	852	AC-FT	616,500
WTR YR 1971	TOTAL	431.60	MEAN	1.18	MAX	110	MIN	0	AC-FT	856	(+)	MEAN	571	AC-FT	413,100

(+) Combined flow, in acre-ft and mean, in cfs, of Floodway and Conveyance Channel.

08358400 Rio Grande floodway at San Marcial, N. Mex.

LOCATION.--Lat 33°40'50", long 106°59'30", Socorro County, in Pedro Armendaris Grant No. 33 on pier of the Atchison, Topeka, and Santa Fe Railway Co. bridge, 1.1 miles downstream from former site of San Marcial, and 18.5 miles southwest of San Antonio.

DRAINAGE AREA.--27,700 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--October 1964 to current year. Records collected at this site January 1895 to September 1964 represented total flow of the river and were published as 08358500 Rio Grande at San Marcial. Records of daily discharge for floodway only April 1950 to September 1964 are available in files of district office.

GAGE.--Water-stage recorder. Datum of gage is 4,455.19 ft above mean sea level.

AVERAGE DISCHARGE.--7 calendar years (1964-71), 158 cfs (114,500 acre-ft per year).
Total flow of river.--76 years (1895-71), 1,260 cfs (912,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 500 cfs July 27 (gage height, 8.34 ft); no flow for most of time.
Period of record: Maximum discharge since January 1895 about 50,000 cfs Oct. 11, 1904.

REMARKS.--Records fair. Floodway is 1 of 2 channels (see also sta 08358300) carrying flow in valley cross section. Prior to 1950 all flow was in floodway channel. Normal plan is for floodway to carry flow when capacity of conveyance channel (about 2,000 cfs) is exceeded. Combined monthly discharge in acre-ft is given at end of each year table. Diversions for irrigation of about 775,000 acres above station (includes about 13,800 acre-ft diverted from conveyance channel, as based on weekly measurements, data furnished by Bureau of Reclamation). Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				0			0	24	4.8	0		
2				67			0	10	0	381		
3				62			0	0	3.4	137		
4				11			0	0	5.2	16		
5				0			0	0	0	9.5		
6				0			0	0	0	3.2		
7				0			0	0	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	0	0		
15				0			0	0	0	0		
16				0			0	0	0	0		
17				0			0	0	0	0		
18				0			0	0	1.6	0		
19				0			0	0	0	0		
20				0			0	0	0	0		
21				0			0	0	0	0		
22				0			0	0	0	0		
23				0			0	0	0	0		
24				0			0	0	0	0		
25				0			0	0	0	0		
26				0			0	0	0	78		
27				0			110	0	0	11		
28				0			36	0	0	0		
29		-----		0			56	0	0	0		
30		-----		0			2.4	6.4	0	0		
31		-----		-----		-----	1.8	30	-----	0	-----	
TOTAL	0	0	0	140	0	0	206.2	70.4	15.0	635.7	0	0
MEAN	0	0	0	4.67	0	0	6.65	2.27	.50	20.5	0	0
MAX	0	0	0	67	0	0	110	30	5.2	381	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	278	0	0	409	140	30	1,260	0	0
(†)	51,710	55,660	43,810	46,270	18,600	1,400	2,760	16,360	3,940	29,890	71,300	56,220

CAL YR 1971 TOTAL 1,067.3 MEAN 2.92 MAX 381 MIN 0 AC-FT 2,120 † MEAN 550 AC-FT 397,900

† Combined flow, in acre-ft and mean, in cfs, of Floodway and Conveyance Channel.

08358550 Milligan Gulch near San Marcial, N. Mex.

LOCATION.--Lat 33°39'37", Long 107°05'25", in SE¼NE¼ sec.36, T.7 S., R.3 W., on left upstream side of bridge on Highway 85, and 7.2 miles southwest of San Marcial. Prior to July 1, 1971 gage located on downstream side of bridge.

DRAINAGE AREA.--413 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,720 ft (from topographic map). Prior to July 1, 1971 gage located on downstream side of bridge.

EXTREMES.--Current year: Maximum discharge, 1,630 cfs Aug. 7 (gage height, 4.05 ft); no flow most of time.

Period of record: Maximum discharge, 3,710 cfs July 26, 1970 (gage height, 4.77 ft) from rating curve extended above 3 cfs on basis of slope-area measurement of peak flow; no flow most of time.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	43	
8										0	2.0	
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	2.9	
29										0	4.6	
30										59	0	
31										2.3	0	
TOTAL	0	0	0	0	0	0	0	0	0	61.3	52.5	0
MEAN	0	0	0	0	0	0	0	0	0	1.98	1.69	0
MAX	0	0	0	0	0	0	0	0	0	59	43	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	122	104	0

CAL YR 1970 TOTAL 308.00 MEAN .84 MAX 224 MIN 0 AC-FT 611
 WTR YR 1971 TOTAL 113.80 MEAN .31 MAX 59 MIN 0 AC-FT 226

PEAK DISCHARGE (BASE, 50 CFS).--July 30 (1815) 1,020 cfs (3.71 ft); Aug. 7 (2230) 1,630 cfs (4.05 ft).

08358550 Milligan Gulch near San Marcial, N. Mex.

LOCATION.--Lat 33°39'37", long 107°05'25", in SE 1/4 sec. 36, T.7 S., R.3 W., on left upstream side of bridge on Highway 85, and 7.2 miles southwest of San Marcial. Prior to July 1, 1971 gage located on downstream side of bridge.

DRAINAGE AREA.--413 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,720 ft (from topographic map). Prior to July 1, 1971 gage located on downstream side of bridge.

EXTREMES.--Current year: Maximum discharge, 1,630 cfs Aug. 7 (gage height, 4.05 ft); no flow most of time.

Period of record: Maximum discharge, 3,710 cfs July 26, 1970 (gage height, 4.77 ft) from rating curve extended above 3 cfs on basis of slope-area measurement of peak flow; no flow most of time.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	0				
2							0	0				
3							0	0				
4							0	0				
5							0	0				
6							0	0				
7							0	43				
8							0	2.0				
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	2.9				
29		-----					0	4.6				
30		-----					59	0				
31		-----		-----		-----	2.3	0	-----		-----	
TOTAL	0	0	0	0	0	0	61.3	52.5	0	0	0	0
MEAN	0	0	0	0	0	0	1.98	1.69	0	0	0	0
MAX	0	0	0	0	0	0	59	43	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	122	104	0	0	0	0

CAL YR 1971 TOTAL 113.8 MEAN .31 MAX 59 MIN 0 AC-FT 226

PEAK DISCHARGE (BASE, 50 CFS).--July 30 (1815) 1,020 cfs (3.71 ft); Aug. 7 (2230) 1,630 cfs (4.05 ft).

08360000 Alamosa Creek near Monticello, N. Mex.

LOCATION.--Lat 33°34'09", long 107°35'33", in SE¼ sec.31, T.8 S., R.7 W., Socorro County, on left bank at Alamosa damsite and below Old Fort Ojo Caliente, just downstream from Wildhorse Creek, and 15 miles northwest of Monticello.

DRAINAGE AREA.--403 sq mi,

PERIOD OF RECORD.--October to December 1929, May 1931 to April 1942, July 1956 to June 1958 (annual maximum only), July 1958 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1312. Prior to 1966 published as Alamosa River.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 6,142.04 ft above mean sea level. Prior to August 17, 1930, at different datum. May 2, 1931, to December 14, 1939, at datum 0.20 ft lower. July 16, 1956, to July 27, 1958, crest-stage only.

AVERAGE DISCHARGE.--23 years (1931-41, 1958-71), 8.27 cfs (5,990 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,320 cfs July 28 (gage height, 9.35 ft); minimum, 5.2 cfs Apr. 24, 25, 27.

Period of record: Maximum discharge, 10,800 cfs Aug. 13, 1964 (gage height, 14.04 ft), from rating curve extended above 390 cfs on basis of slope-area measurements at gage heights 6.66 and 12.0 ft; minimum, 5.0 cfs on several days in June, July and August 1969.

A flood in 1895 exceeded all other floods at this location from information by local residents. A flood in August 1943 was the highest since 1917.

REMARKS.--Records good except those for August and September which are poor. No diversion above station. Entire normal flow diverted below station for irrigation.

REVISIONS (WATER YEARS).--WSP 1562: 1931, 1932-34(M), 1935-36, 1937-38(M), 1940-41(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	7.0	8.3	7.5	7.3	7.5	6.4	6.4	5.6	6.2	7.0	8.3
2	6.8	7.0	8.3	7.5	7.3	7.5	6.6	6.2	5.8	6.4	6.8	6.0
3	7.3	7.0	8.3	7.5	7.3	7.5	6.6	6.2	6.0	6.4	6.8	6.2
4	6.6	7.0	8.3	7.5	7.3	7.5	6.8	6.0	6.0	6.4	6.6	6.0
5	6.4	7.3	8.3	7.5	7.3	7.5	6.8	6.2	6.0	6.4	6.6	6.0
6	6.4	7.3	8.3	7.5	7.0	7.3	6.8	6.2	6.0	6.6	6.6	6.0
7	6.4	7.3	8.3	7.5	7.0	7.3	6.6	6.0	6.0	6.6	6.6	6.0
8	6.4	7.3	8.3	7.5	7.0	7.0	6.6	6.0	6.0	6.6	6.6	21
9	6.4	7.3	8.3	7.5	7.0	7.0	6.6	6.0	5.8	6.6	6.6	7.0
10	6.4	7.5	8.3	7.5	7.0	7.0	6.4	6.0	5.8	6.4	6.6	7.0
11	6.2	7.3	8.3	7.5	7.0	6.8	6.4	6.0	6.0	6.4	6.2	7.0
12	6.2	7.3	8.3	7.5	7.0	6.8	6.4	6.0	5.8	6.4	6.2	7.0
13	6.2	7.3	8.3	7.5	7.0	7.0	6.4	6.0	5.6	6.4	6.2	7.0
14	6.4	7.5	8.3	7.5	7.0	6.8	6.2	6.2	5.6	6.4	11	6.8
15	6.2	7.5	8.0	7.5	7.0	6.8	6.4	6.2	5.8	6.4	7.0	6.8
16	6.4	7.3	7.8	7.3	7.0	7.0	6.2	6.2	5.6	6.4	6.8	6.8
17	6.4	7.3	7.8	7.3	7.0	7.0	6.2	6.2	5.4	6.6	6.6	6.8
18	6.4	7.5	7.8	7.3	7.3	6.8	6.2	6.0	5.4	6.6	6.6	6.8
19	6.4	7.5	7.8	7.3	7.3	6.6	6.2	6.2	5.6	6.4	6.6	6.8
20	6.4	7.5	7.8	7.3	7.3	6.4	5.6	6.2	5.6	6.4	6.4	6.8
21	6.4	7.5	7.8	7.0	7.3	6.4	5.4	6.0	5.6	6.4	6.4	6.8
22	6.6	7.5	7.8	7.0	7.3	6.4	5.4	5.8	5.6	6.4	6.4	6.8
23	6.6	7.8	7.8	7.0	7.3	6.4	5.4	6.0	5.8	6.8	6.4	6.8
24	6.6	7.8	7.8	7.3	7.3	6.4	5.2	6.0	6.0	6.8	6.4	6.8
25	7.0	7.8	7.8	7.3	7.3	6.2	5.2	6.0	6.0	6.6	8.0	6.8
26	7.0	7.8	7.8	7.0	7.3	5.8	5.4	6.0	6.0	8.2	6.8	6.8
27	7.0	8.0	7.8	7.0	7.3	6.0	5.4	6.0	6.0	13	6.4	6.8
28	7.0	8.0	7.8	7.3	7.3	6.2	5.6	5.8	6.2	124	6.2	6.8
29	7.0	8.0	7.8	7.3	-----	6.4	5.6	5.8	6.2	7.0	6.2	6.8
30	7.0	8.0	7.8	7.3	-----	6.6	6.2	6.0	6.2	7.0	30	6.8
31	7.0	-----	7.8	7.3	-----	6.6	-----	5.8	-----	7.0	6.4	-----
TOTAL	204.1	224.2	249.0	227.8	200.8	210.5	183.2	187.6	175.0	328.2	232.0	216.1
MEAN	6.58	7.47	8.03	7.35	7.17	6.79	6.11	6.05	5.83	10.6	7.48	7.20
MAX	7.3	8.0	8.3	7.5	7.3	7.5	6.8	6.4	6.2	124	30	21
MIN	6.2	7.0	7.8	7.0	7.0	5.8	5.2	5.8	5.4	6.2	6.2	6.0
AC-FT	405	445	494	452	398	418	363	372	347	651	460	429

CAL YR 1970 TOTAL 2,872.1 MEAN 7.87 MAX 268 MIN 6.2 AC-FT 5,700
WTR YR 1971 TOTAL 2,638.5 MEAN 7.23 MAX 124 MIN 5.2 AC-FT 5,230

PEAK DISCHARGE (BASE, 1,000 CFS).--July 28 (1945) 5,320 cfs (9.35 ft); Aug. 30 (1960) 1,470 cfs (5.58 ft).

08360500 Elephant Butte Reservoir at Elephant Butte, N. Mex.

LOCATION.--Lat 33°09'15", long 107°11'28", in NW¼ sec.30, T.13 S., R.3 W., Sierra County, at dam on Rio Grande, 1 mile west of Elephant Butte and 4 miles northeast of Truth or Consequences (Hot Springs), N. Mex.

DRAINAGE AREA.--29,445 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.)

PERIOD OF RECORD.--March 1915 to December 1939 (monthend contents only published in WSP 1312), January 1940 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 43.3 ft above mean sea level. October 16, 1939, to May 2, 1940, and prior to September 1930, nonrecording gages.

EXTREMES.--Current year: Maximum daily contents, 380,000 acre-ft Feb. 8 (gage height, 4,326.41 ft); minimum daily, 30,600 acre-ft Sept. 7 (gage height, 4,271.19 ft).

Period of record: Maximum daily contents, 2,302,800 acre-ft June 16-18, 1942 (gage height, 4,409.19 ft); minimum daily after initial filling, 9,900 acre-ft Aug. 6, 1954 (gage height, 4,258.03 ft).

REMARKS.--Reservoir is formed by concrete dam. Storage began Jan. 6, 1915. Dam completed May 13, 1916. Capacity, 2,137,000 acre-ft (survey of 1969) between gage heights 4,231.5 (sill of outlet gate) and 4,407.0 ft (crest of spillway). Capacity by original survey was 2,638,900 acre-ft. No adjustment made for decrease in capacity due to sedimentation between effective dates of capacity tables. No dead storage, surveys of 1957, 1961 and 1969. No storage allocated to flood control. Figures given herein represent usable contents and are computed from mean daily gage heights. Water is used for power development and irrigation on Rio Grande Project of Bureau of Reclamation. Lake is major recreational area.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1442: 1954(m). WSP 1632: Drainage area.

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

4,270	27.93	4,290	92.81	4,310	220.1	4,330	422.2
4,275	39.98	4,295	118.2	4,315	263.5	4,335	485.1
4,280	54.16	4,300	147.6	4,320	311.4	4,340	552.0
4,285	71.45	4,305	181.4	4,325	364.1	4,345	624.0

CONTENTS, IN ACRE-Feet, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179,700	200,700	273,800	325,900	369,700	360,200	315,900	287,200	218,300	151,900	95,500	44,700
2	180,400	201,900	276,800	327,400	371,000	359,100	315,700	285,500	215,900	150,100	92,200	41,700
3	181,000	203,300	279,800	329,000	372,600	357,900	316,300	283,700	213,300	148,300	88,900	38,800
4	181,700	205,100	282,200	330,200	374,200	356,600	317,100	281,200	210,800	146,400	85,600	36,000
5	182,100	206,800	284,200	331,100	375,900	355,300	317,400	279,100	208,100	144,500	82,000	33,200
6	182,900	208,100	286,300	331,700	377,800	353,900	317,400	277,000	205,600	142,300	78,300	30,800
7	183,600	210,800	288,100	331,900	379,500	352,200	317,400	274,600	203,000	140,500	74,800	30,600
8	184,200	212,800	288,700	332,300	380,000	351,200	317,800	272,500	200,200	138,800	71,000	30,800
9	184,700	214,900	291,200	332,600	378,900	349,900	318,300	270,200	197,700	136,900	67,600	30,700
10	185,200	216,900	292,800	333,000	378,000	348,700	318,400	267,900	195,100	135,200	66,000	31,000
11	185,600	219,200	294,300	333,600	377,300	347,100	318,400	265,500	192,500	133,400	64,400	31,700
12	185,800	221,800	295,900	333,800	376,400	345,700	318,400	263,600	190,000	131,600	62,300	31,900
13	186,200	224,100	297,000	334,800	375,300	344,100	318,200	261,400	187,300	129,600	60,300	32,200
14	186,700	226,500	299,300	336,100	374,400	342,700	317,200	259,400	184,700	127,800	59,300	32,400
15	187,200	228,900	301,400	337,700	373,300	341,200	315,500	257,400	182,400	125,900	58,500	32,600
16	187,700	231,600	303,100	339,400	371,800	339,900	313,600	255,400	180,500	123,900	57,700	32,700
17	188,200	234,500	304,700	341,200	370,700	338,700	311,500	252,900	178,700	122,100	56,800	32,700
18	189,300	237,000	306,200	343,100	369,500	337,200	309,300	250,500	176,800	120,200	55,900	32,800
19	189,900	239,700	307,700	344,500	368,100	335,700	307,100	248,200	174,900	118,200	54,900	32,800
20	190,700	241,600	309,100	346,200	367,100	334,100	305,300	245,700	173,000	116,300	53,900	32,900
21	191,500	245,500	310,400	347,800	366,400	332,700	303,400	243,600	170,900	114,400	53,000	33,000
22	192,300	248,300	311,400	350,100	366,000	330,900	301,900	241,400	168,600	112,500	52,000	33,200
23	193,100	251,000	312,900	352,200	365,300	328,900	300,300	239,300	166,800	110,700	51,200	33,300
24	193,900	253,800	314,300	354,200	364,900	327,600	298,600	237,400	164,900	108,800	50,600	33,400
25	194,700	256,600	315,700	356,100	364,000	326,000	297,200	235,200	162,800	107,000	50,200	34,000
26	195,400	259,400	316,300	358,200	363,200	325,400	295,700	233,100	161,000	105,300	49,900	34,500
27	196,200	262,400	318,900	360,400	362,300	322,400	294,300	230,900	159,000	103,400	50,000	34,700
28	196,800	265,300	320,500	362,100	361,100	320,800	292,700	228,600	157,500	101,800	49,900	35,000
29	197,700	268,100	321,500	364,100	-----	318,800	290,800	226,200	155,900	101,300	49,200	35,200
30	198,500	271,000	323,100	366,000	-----	317,300	289,000	223,700	154,000	101,400	48,200	35,400
31	199,400	-----	324,500	367,800	-----	316,500	-----	221,200	-----	98,400	47,300	-----
MAX	199,400	271,000	324,500	367,800	380,000	360,200	318,400	287,200	218,300	151,900	95,500	44,700
MIN	179,700	200,700	273,800	325,900	361,100	316,500	289,000	221,200	154,000	98,400	47,300	30,600
(†)	4,307.41	4,315.81	4,321.29	4,325.33	4,324.73	4,320.51	4,317.72	4,310.13	4,301.01	4,391.17	4,277.67	4,273.19
(‡)	+20,300	+71,600	+53,500	+43,300	-6,700	-44,600	-27,500	-67,800	-67,200	-55,600	-51,100	-11,900

CAL YR 1970 † -203,700

WTR YR 1971 † -143,700

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

‡ Change in contents, in acre-feet.

08360500 Elephant Butte Reservoir at Elephant Butte, N. Mex.

LOCATION.--Lat 33°09'15", long 107°11'28", in NW¼ sec.30, T.13 S., R.3 W., Sierra County, at dam on Rio Grande, 1 mile west of Elephant Butte and 4 miles northeast of Truth or Consequences (Hot Springs), N. Mex.

DRAINAGE AREA.--29,445 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.)

PERIOD OF RECORD.--March 1915 to December 1939 (monthend contents only published in WSP 1312), January 1940 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 43.3 ft above mean sea level. October 16, 1939, to May 2, 1940, and prior to September 1930, nonrecording gages.

EXTREMES.--Current year: Maximum daily contents, 380,000 acre-ft Feb. 8 (gage height, 4,326.41 ft); minimum daily, 30,600 acre-ft Sept. 7 (gage height, 4,271.19 ft).
Period of record: Maximum daily contents, 2,302,800 acre-ft June 16-18, 1942 (gage height, 4,409.19 ft); minimum daily after initial filling, 9,900 acre-ft Aug. 6, 1954 (gage height, 4,258.03 ft).

REMARKS.--Reservoir is formed by concrete dam. Storage began Jan. 6, 1915. Dam completed May 13, 1916. Capacity, 2,137,000 acre-ft (survey of 1969) between gage heights 4,231.5 (sill of outlet gate) and 4,407.0 ft (crest of spillway). Capacity by original survey was 2,638,900 acre-ft. No adjustment made for decrease in capacity due to sedimentation between effective dates of capacity tables. No dead storage, surveys of 1957, 1961 and 1969. No storage allocated to flood control. Figures given herein represent usable contents and are computed from mean daily gage heights. Water is used for power development and irrigation on Rio Grande Project of Bureau of Reclamation. Lake is major recreational area.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1442: 1954(m). WSP 1632: Drainage area.

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

4,270	27.93	4,290	92.81	4,310	220.1	4,330	422.2
4,275	39.98	4,295	118.2	4,315	263.5	4,335	485.1
4,280	54.16	4,300	147.6	4,320	311.4	4,340	552.0
4,285	71.45	4,305	181.4	4,325	364.1	4,345	624.0

CONTENTS, IN ACRE-FEET, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	325,900	369,700	360,200	315,900	287,200	218,300	151,900	95,500	44,700	35,500	66,200	129,600
2	327,400	371,000	359,100	315,700	285,500	215,900	150,100	92,200	41,700	36,100	67,500	131,300
3	329,000	372,600	357,900	316,300	283,700	213,300	148,300	88,900	38,800	37,800	69,000	133,100
4	330,200	374,200	356,600	317,100	281,200	210,800	146,400	85,600	36,000	40,200	70,500	135,000
5	331,100	375,900	355,300	317,400	279,100	208,100	144,500	82,000	33,200	41,700	71,900	136,800
6	331,700	377,800	353,900	317,400	277,000	205,600	142,300	78,300	30,800	45,000	73,800	138,300
7	331,900	379,500	352,200	317,400	274,600	203,000	140,500	74,800	30,600	46,000	76,000	139,800
8	332,300	380,000	351,200	317,800	272,500	200,200	138,800	71,000	30,800	46,700	78,200	141,400
9	332,600	378,900	349,900	318,300	270,200	197,700	136,900	67,600	30,700	47,500	80,500	142,800
10	333,000	378,000	348,700	318,400	267,900	195,100	135,200	66,000	31,000	48,100	83,200	144,600
11	333,600	377,300	347,100	318,400	265,500	192,500	133,400	64,400	31,700	48,700	86,000	146,100
12	333,800	376,400	345,700	318,400	263,600	190,000	131,600	62,300	31,900	49,300	88,500	147,500
13	334,800	375,300	344,100	318,200	261,400	187,300	129,600	60,300	32,200	50,000	91,000	148,900
14	336,100	374,400	342,700	317,200	259,400	184,700	127,800	59,300	32,400	50,500	93,500	150,000
15	337,700	373,300	341,200	315,500	257,400	182,400	125,900	58,500	32,600	50,900	95,600	151,400
16	339,400	371,800	339,900	313,600	255,400	180,500	123,900	57,700	32,700	51,200	98,200	153,000
17	341,200	370,700	338,700	311,500	252,900	178,700	122,100	56,800	32,700	51,500	101,000	154,400
18	343,100	369,500	337,200	309,300	250,500	176,800	120,200	55,900	32,800	51,600	103,100	155,700
19	344,500	368,100	335,700	307,100	248,200	174,900	118,200	54,900	32,800	51,900	105,700	157,100
20	346,200	367,100	334,100	305,300	245,700	173,000	116,300	53,900	32,900	52,400	108,100	158,600
21	347,800	366,400	332,700	303,400	243,600	170,900	114,400	53,000	33,000	52,900	110,000	160,100
22	350,100	366,000	330,900	301,900	241,400	168,600	112,500	52,000	33,200	53,300	112,400	161,700
23	352,200	365,300	328,900	300,300	239,300	166,800	110,700	51,200	33,300	53,900	114,200	163,000
24	354,200	364,900	327,600	298,600	237,400	164,900	108,800	50,600	33,400	54,200	115,700	164,300
25	356,100	364,000	326,000	297,200	235,200	162,800	107,000	50,200	34,000	55,600	117,100	165,600
26	358,200	363,200	325,400	295,700	233,100	161,000	105,300	49,900	34,500	57,300	118,500	167,400
27	360,400	362,300	322,400	294,300	230,900	159,000	103,400	50,000	34,700	58,600	120,600	169,000
28	362,100	361,100	320,800	292,700	228,600	157,500	101,800	49,900	35,000	60,200	123,500	170,600
29	364,100	-----	318,800	290,800	226,200	155,900	101,300	49,200	35,200	62,000	126,200	172,600
30	366,000	-----	317,300	289,000	223,700	154,000	101,400	48,200	35,400	63,400	128,000	174,300
31	367,800	-----	316,500	-----	221,200	-----	98,400	47,300	-----	64,500	-----	177,000
MAX	367,800	380,000	360,200	318,400	287,200	218,300	151,900	95,500	44,700	64,500	128,000	177,000
MIN	325,900	361,100	316,500	289,000	221,200	154,000	98,400	47,300	30,600	35,500	66,200	129,600
(†)	4,325.33	4,324.73	4,320.51	4,317.72	4,310.13	4,301.01	4,291.17	4,277.67	4,273.19	4,283.13	4,296.75	4,204.39
(‡)	+43,300	-6,700	-44,600	-27,500	-67,800	-67,200	-55,600	-51,100	-11,900	+29,100	+63,500	+49,000

CAL YR 1971 ‡ -147,500

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

‡ Change in contents, in acre-feet.

LOCATION.---Lat 33°08'54", long 107°12'22", Sierra County, in Pedro Armendaris Grant, on left bank 1.0 mile downstream from dam, and 1.5 miles upstream from Cuchillo Negro River.

PERIOD OF RECORD.--January 1915 to current year. Monthly or annual discharge only for some periods, published in WSP 1732. Figures of daily discharge, published in WSP 458 for October to December 1916, are unreliable.

AVERAGE DISCHARGE.--56 years, 1,004 cfs (727,400 acre-ft per year); 20 calendar years (1951-70), 710 cfs (514,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,000 cfs June 21 (gage height, 6.28 ft); minimum, 2.6 cfs Sept. 24, 25.
Period of record: Maximum daily discharge, 8,220 cfs May 22, 1942; no flow at times prior to 1929.

REMARKS.--Records good except these for April to July, which are fair. Flow regulated by Elephant Butte Reservoir (see sta 08360500).
Diversion for irrigation of about 800,000 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	7.5	10	15	11	1,380	1,450	1,490	1,390	970	1,930	1,570
2	9.0	7.0	11	20	13	1,390	1,450	1,480	1,380	961	1,910	1,560
3	9.0	7.0	13	22	13	1,390	1,460	1,480	1,380	942	1,980	1,530
4	8.6	8.5	13	22	12	1,400	1,470	1,470	1,370	933	1,980	1,510
5	8.0	10	13	20	13	1,400	1,480	1,460	1,360	920	1,980	1,480
6	7.5	9.0	13	20	14	1,390	1,450	1,440	1,350	907	1,980	553
7	7.5	9.5	13	20	13	1,380	1,140	1,420	1,340	886	1,980	11
8	7.0	8.0	13	20	1,300	1,380	925	1,400	1,340	876	1,980	9.1
9	6.5	7.5	14	20	1,360	1,370	1,010	1,380	1,340	858	1,690	7.9
10	6.5	8.0	14	19	1,360	1,380	908	1,360	1,320	843	1,120	7.0
11	6.0	8.0	13	20	1,360	1,370	676	1,360	1,330	835	1,310	6.5
12	5.5	8.0	13	20	1,370	1,370	714	1,360	1,330	826	1,310	6.5
13	5.1	7.0	13	19	1,370	1,370	506	1,340	1,320	825	997	6.5
14	7.0	7.0	13	19	1,370	1,360	1,370	1,330	1,320	825	650	6.0
15	12	7.5	12	18	1,370	1,350	1,420	1,320	952	826	650	5.5
16	10	7.5	14	18	1,370	1,360	1,420	1,320	951	862	554	5.5
17	10	7.0	16	17	1,370	1,370	1,430	1,300	972	845	650	5.6
18	10	7.0	17	17	1,380	1,360	1,440	1,300	979	855	649	6.1
19	10	7.5	15	16	1,370	1,360	1,450	1,300	982	872	747	4.8
20	10	7.5	15	20	1,370	1,370	1,460	1,320	990	882	660	4.6
21	9.5	10	16	17	1,370	1,370	1,460	1,330	1,120	892	680	4.2
22	9.5	11	17	15	1,370	1,380	1,460	1,340	836	891	680	4.0
23	9.5	10	15	14	1,370	1,380	1,470	1,340	984	900	680	3.4
24	9.5	8.5	14	14	1,370	1,390	1,480	1,340	984	906	676	2.9
25	9.0	11	14	12	1,380	1,390	1,480	1,350	985	922	676	3.2
26	9.0	12	14	11	1,380	1,400	1,470	1,350	988	932	676	3.7
27	8.0	12	14	11	1,370	1,410	1,470	1,340	988	935	672	4.2
28	8.0	12	13	11	1,370	1,410	1,480	1,340	980	874	672	4.0
29	7.5	12	13	10	-----	1,410	1,480	1,350	975	44	676	4.6
30	7.5	13	13	9.0	-----	1,430	1,490	1,360	968	1,410	672	5.1
31	7.5	-----	13	8.5	-----	1,440	-----	1,360	-----	1,910	950	-----
TOTAL	259.2	267.5	424	514.5	28,789	42,910	39,369	42,430	34,504	28,165	34,417	8,334.9
MEAN	8.36	8.92	13.7	16.6	1,028	1,384	1,312	1,369	1,150	909	1,110	278
MAX	12	13	17	22	1,380	1,440	1,490	1,490	1,390	1,910	1,980	1,570
MIN	5.1	7.0	10	8.5	11	1,350	506	1,300	836	44	554	2.9
AC-FT	514	531	841	1,020	57,100	85,110	78,090	84,160	68,440	55,870	68,270	16,530
CAL YR 1970	TOTAL	345,790.6	MEAN	947	MAX	2,100	MIN	5.1	AC-FT	685,900		
WTR YR 1971	TOTAL	260,384.1	MEAN	713	MAX	1,980	MIN	2.9	AC-FT	516,500		

LOCATION.--Lat 33°08'54", long 107°12'22", Sierra County, in Pedro Armendaris Grant, on left bank 1.0 mile downstream from dam, and 1.5 miles upstream from Cuchillo Negro River.

PERIOD OF RECORD.--January 1915 to current year. Monthly or annual discharge only for some periods, published in WSP 1732. Figures of daily discharge, published in WSP 458 for October to December 1916, are unreliable.

AVERAGE DISCHARGE.--57 calendar years, 1,009 cfs (731,000 acre-ft per year); 20 calendar years (1952-71), 716 cfs (518,700 acre-ft per year).

REMARKS.--Records good except those for April to July, which are fair and October and November, which are poor. Flow regulated by Elephant Butte Reservoir (see sta 08360500). Diversion for irrigation of about 800,000 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	15	11	1,380	1,450	1,490	1,390	970	1,930	1,570	4.2	1.1	1.9
2	20	13	1,390	1,450	1,480	1,380	961	1,910	1,560	4.2	1.1	1.7
3	22	13	1,390	1,460	1,480	1,380	942	1,980	1,530	3.8	1.1	1.7
4	22	12	1,400	1,470	1,470	1,370	933	1,980	1,510	1.8	1.1	1.6
5	20	13	1,400	1,480	1,460	1,360	920	1,980	1,480	1.8	1.2	1.6
6	20	14	1,390	1,450	1,440	1,350	907	1,980	553	1.1	1.2	1.5
7	20	13	1,380	1,140	1,420	1,340	886	1,980	11	1.4	1.2	1.5
8	20	1,300	1,380	925	1,400	1,340	876	1,980	9.1	1.1	1.2	3.4
9	20	1,360	1,370	1,010	1,380	1,340	858	1,690	7.9	1.2	1.3	3.4
10	19	1,360	1,380	908	1,360	1,320	843	1,120	7.0	1.4	1.3	3.4
11	20	1,360	1,370	676	1,360	1,330	835	1,310	6.5	1.8	1.3	3.8
12	20	1,370	1,370	714	1,360	1,330	826	1,310	6.5	1.8	1.3	3.0
13	19	1,370	1,370	506	1,340	1,320	825	997	6.5	1.5	1.2	3.4
14	19	1,370	1,360	1,370	1,330	1,320	825	650	6.0	1.1	1.2	7.5
15	18	1,370	1,350	1,420	1,320	952	826	650	5.5	1.2	1.2	15
16	18	1,370	1,360	1,420	1,320	951	862	554	5.5	1.8	1.2	12
17	17	1,370	1,370	1,430	1,300	972	845	650	5.6	24	1.1	11
18	17	1,380	1,360	1,440	1,300	979	855	649	6.1	44	1.1	7.0
19	16	1,370	1,360	1,450	1,300	982	872	747	4.8	33	1.1	6.0
20	20	1,370	1,370	1,460	1,320	990	882	660	4.6	10	1.1	5.1
21	17	1,370	1,370	1,460	1,330	1,120	892	680	4.2	7.0	1.1	5.1
22	15	1,370	1,380	1,460	1,340	836	891	680	4.0	5.5	1.1	4.2
23	14	1,370	1,380	1,470	1,340	984	900	680	3.4	5.1	1.1	2.6
24	14	1,370	1,390	1,480	1,340	984	906	676	2.9	4.6	1.2	2.6
25	12	1,380	1,390	1,480	1,350	985	922	676	3.2	39	1.3	2.6
26	11	1,380	1,400	1,470	1,350	988	932	676	3.7	1.7	1.4	4.2
27	11	1,370	1,410	1,470	1,340	988	935	672	4.2	1.6	1.5	4.6
28	11	1,370	1,410	1,480	1,340	980	874	672	4.0	1.1	1.6	5.1
29	10	-----	1,410	1,480	1,350	975	44	676	4.6	1.2	1.7	4.2
30	9.0	-----	1,430	1,490	1,360	968	1,410	672	5.1	1.1	1.8	4.2
31	8.5	-----	1,440	-----	1,360	-----	1,910	950	-----	1.1	-----	4.2
TOTAL	514.5	28,789	42,910	39,369	42,430	34,504	28,165	34,417	8,334.9	211.2	37.4	139.1
MEAN	16.6	1,028	1,384	1,312	1,369	1,150	909	1,110	278	6.81	1.25	4.49
MAX	22	1,380	1,440	1,490	1,490	1,390	1,910	1,980	1,570	44	1.8	15
MIN	8.5	11	1,350	506	1,300	836	44	554	2.9	1.1	1.1	1.5
AC-FT	1,020	57,100	85,110	78,090	84,160	68,440	55,870	68,270	16,530	419	74	276
CAL YR 1971 TOTAL 259,821.1 MEAN 712 MAX 1,980 MIN 1.1 AC-FT 515,400												

08362000 Caballo Reservoir near Arrey, N. Mex.

LOCATION.--Lat 32°53'47", long 107°17'30", in SE¼SW¼ sec.19, T.16 S., R.4 W., Sierra County, in control tower of Caballo Dam on Rio Grande, 0.5 mile downstream from mouth of Apache Canyon, 0.9 mile upstream from Bojarquez Bridge, 2 miles upstream from Percha diversion dam, 3.5 miles northeast of Arrey, and 5.2 miles south of Caballo.

DRAINAGE AREA.--30,700 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--February 1938 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 43.3 ft above mean sea level.

EXTREMES.--Current year: Maximum daily contents, 75,980 acre-ft June 10, 11, 12 (gage height, 4,149.01 ft); minimum daily, 3,630 acre-ft Sept. 9 (gage height, 4,122.23 ft).
Period of record: Maximum daily contents, 347,000 acre-ft Mar. 4, 1942 (gage height, 4,182.06 ft); minimum daily 118 acre-ft Oct. 14, 1938 (gage height, 4,108.1 ft).

REMARKS.--Reservoir is formed by earthfill dam, completed Sept. 19, 1938. Storage began Feb. 8, 1938. Capacity (1958 survey), 344,000 acre-ft between gage heights 4,104 (bottom of tunnel entrance of gates) and 4,182 ft (gage height above which spillway gates operate automatically). No dead storage. Storage held for flood control, 100,000 acre-ft. Figures given herein represent usable contents and are computed from mean daily heights. Water released from Elephant Butte Reservoir for power development is stored in Caballo Reservoir and released for irrigation on Rio Grande project of Bureau of Reclamation.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 978: 1942. WSP 1632: Drainage area.

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

4,122	3.41	4,130	14.70	4,138	34.19	4,146	62.50
4,124	5.47	4,132	18.88	4,140	40.31	4,148	71.28
4,126	8.00	4,134	23.52	4,142	47.03	4,150	80.76
4,128	11.06	4,136	28.61	4,144	54.42	4,152	91.03

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21,550	24,540	26,110	27,880	30,190	74,680	44,140	58,820	73,050	52,980	18,280	6,290
2	21,810	24,620	26,190	27,930	30,220	75,190	43,660	59,480	73,380	51,090	19,290	6,220
3	22,050	24,640	26,240	28,060	30,240	75,380	43,760	59,980	73,750	50,490	20,380	6,160
4	22,380	24,690	26,320	28,190	30,330	75,280	44,280	60,310	74,260	50,240	22,050	6,090
5	22,690	24,740	26,370	28,270	30,350	75,140	44,800	60,560	74,680	50,100	23,700	5,990
6	22,790	24,820	26,400	28,400	30,410	74,860	45,450	60,770	75,050	49,700	25,340	5,630
7	22,880	24,840	26,420	28,480	30,490	74,260	45,930	60,970	75,380	48,650	27,100	4,600
8	22,980	24,960	26,480	28,580	30,820	73,610	45,930	61,260	75,750	47,360	28,990	3,730
9	22,980	25,010	26,530	28,690	33,110	73,000	45,790	61,920	75,890	45,970	30,790	3,630
10	23,050	25,040	26,610	28,800	35,690	72,120	45,830	62,590	75,980	45,040	31,420	3,780
11	23,100	25,090	26,710	28,830	38,310	71,190	46,000	63,400	75,980	44,180	31,340	3,940
12	23,170	25,140	26,760	28,880	40,740	69,980	45,970	64,180	75,980	43,200	31,250	4,080
13	23,240	25,260	26,790	28,940	43,130	68,730	45,660	64,870	75,930	42,410	31,230	4,230
14	23,400	25,290	26,790	29,050	45,590	67,570	44,620	65,900	75,840	40,970	30,870	4,330
15	23,550	25,290	26,920	29,150	47,930	66,380	44,560	66,760	75,610	39,370	29,700	4,460
16	23,570	25,290	27,050	29,180	50,200	65,130	44,830	67,660	74,630	37,620	28,450	4,540
17	23,570	25,340	27,050	29,240	52,640	63,360	45,660	68,420	73,380	36,140	27,100	4,690
18	23,570	25,410	27,080	29,370	55,050	61,590	46,580	69,140	72,170	34,580	26,500	4,860
19	23,700	25,490	27,150	29,430	57,420	59,860	47,790	69,630	71,240	33,110	25,640	5,050
20	23,820	25,540	27,200	29,480	59,530	58,130	48,940	69,980	70,300	31,170	24,620	5,200
21	23,950	25,590	27,230	29,540	62,170	56,470	49,950	70,390	69,090	29,050	23,670	5,310
22	23,970	25,640	27,260	29,620	64,520	54,810	51,090	70,790	68,420	27,050	22,690	5,410
23	24,050	25,710	27,330	29,670	66,720	53,360	52,110	71,380	66,850	25,010	21,480	5,510
24	24,100	25,740	27,360	29,750	69,090	51,620	53,130	71,930	65,560	23,430	20,700	5,760
25	24,170	25,780	27,440	29,810	71,330	49,990	54,080	72,260	64,100	22,240	19,060	5,710
26	24,170	25,860	27,520	29,920	73,610	48,550	55,050	72,630	62,380	20,970	17,110	5,800
27	24,290	25,880	27,570	29,970	74,490	47,460	56,000	72,820	60,640	20,130	15,020	5,900
28	24,290	25,960	27,620	30,050	74,540	46,760	56,670	72,960	58,910	19,760	12,990	5,990
29	24,320	26,010	27,700	30,080	-----	46,000	57,460	73,000	57,180	18,990	10,910	6,070
30	24,370	26,030	27,780	30,110	-----	45,170	58,170	73,050	55,130	17,030	9,060	6,120
31	24,470	-----	27,830	30,160	-----	44,660	-----	72,960	-----	17,220	7,280	-----
MAX	24,470	26,030	27,830	30,160	74,540	75,380	58,170	73,050	75,980	52,980	31,420	6,290
MIN	21,550	24,540	26,110	27,880	30,190	44,660	43,660	58,820	55,130	17,030	7,280	3,630
(†)	4,134.38	4,135.01	4,135.70	4,136.57	4,148.70	4,141.31	4,144.95	4,148.36	4,144.18	4,131.23	4,125.46	4,124.54
(†)	+3,080	+1,560	+1,800	+2,330	+44,380	-29,880	+13,510	+14,790	-17,830	-37,910	-9,940	-1,160

CAL YR 1970 † -15,270

WTR YR 1971 † -15,270

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

† Change in contents, in acre-feet.

08362000 Caballo Reservoir near Arrey, N. Mex.

LOCATION.--Lat 32°53'47", long 107°17'30", in SE¼SW¼ sec.19, T.16 S., R.4 W., Sierra County, in control tower of Caballo Dam on Rio Grande, 0.5 mile downstream from mouth of Apache Canyon, 0.9 mile upstream from Bojarquez Bridge, 2 miles upstream from Percha diversion dam, 3.5 miles northeast of Arrey, and 5.2 miles south of Caballo.

DRAINAGE AREA.--30,700 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--February 1938 to September 1965 (monthend contents only), October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 43.3 ft above mean sea level.

EXTREMES.--Current year: Maximum daily contents, 75,980 acre-ft June 10, 11, 12 (gage height, 4,149.01 ft); minimum daily, 3,630 acre-ft Sept. 9 (gage height, 4,122.23 ft).
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REMARKS.--Reservoir is formed by earthfill dam, completed Sept. 19, 1938. Storage began Feb. 8, 1938. Capacity (1958 survey), 344,000 acre-ft between gage heights 4,104 (bottom of tunnel entrance of gates) and 4,182 ft (gage height above which spillway gates operate automatically). No dead storage. Storage held for flood control, 100,000 acre-ft. Figures given herein represent usable contents and are computed from mean daily heights. Water released from Elephant Butte Reservoir for power development is stored in Caballo Reservoir and released for irrigation on Rio Grande project of Bureau of Reclamation.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 978: 1942. WSP 1632: Drainage area.

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

4,122	3.41	4,130	14.70	4,138	34.19	4,146	62.50
4,124	5.47	4,132	18.88	4,140	40.31	4,148	71.28
4,126	8.00	4,134	23.52	4,142	47.03	4,150	80.76
4,128	11.06	4,136	28.61	4,144	54.42	4,152	91.03

CONTENTS, IN ACRE-FEET, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	27,880	30,190	74,680	44,140	58,820	73,050	52,980	18,280	6,290	6,180	11,060	12,990
2	27,930	30,220	75,190	43,660	59,480	73,380	51,090	19,290	6,220	6,310	11,070	13,090
3	28,060	30,240	75,380	43,760	59,980	73,750	50,490	20,380	6,160	6,430	11,160	13,180
4	28,190	30,330	75,280	44,280	60,310	74,260	50,240	22,050	6,090	6,580	11,180	13,240
5	28,270	30,350	75,140	44,800	60,560	74,680	50,100	23,700	5,990	6,680	11,230	13,340
6	28,400	30,410	74,860	45,450	60,770	75,050	49,700	25,340	5,630	6,730	11,370	13,350
7	28,480	30,490	74,260	45,930	60,970	75,380	48,650	27,100	4,600	6,810	11,390	13,350
8	28,580	30,820	73,610	45,930	61,260	75,750	47,360	28,990	3,730	6,890	11,420	13,430
9	28,690	33,110	73,000	45,790	61,920	75,890	45,970	30,790	3,630	6,980	11,480	13,560
10	28,800	35,690	72,120	45,830	62,590	75,980	45,040	31,420	3,780	7,080	11,530	13,580
11	28,830	38,310	71,190	46,000	63,400	75,980	44,180	31,340	3,940	7,160	11,560	13,600
12	28,880	40,740	69,980	45,970	64,180	75,980	43,200	31,250	4,080	7,230	11,620	13,700
13	28,940	43,130	68,730	45,660	64,870	75,930	42,410	31,230	4,230	7,310	11,670	13,750
14	29,050	45,590	67,570	44,620	65,900	75,840	40,970	30,870	4,330	7,360	11,720	13,810
15	29,150	47,930	66,380	44,560	66,760	75,610	39,370	29,700	4,460	7,420	11,790	13,900
16	29,180	50,200	65,130	44,830	67,660	74,630	37,620	28,450	4,540	7,460	11,930	13,980
17	29,240	52,640	63,360	45,660	68,420	73,380	36,140	27,100	4,690	7,470	12,020	14,070
18	29,370	55,050	61,590	46,580	69,140	72,170	34,580	26,500	4,860	7,480	12,110	14,090
19	29,430	57,420	59,860	47,790	69,630	71,240	33,110	25,640	5,050	7,600	12,180	14,110
20	29,480	59,530	58,130	48,940	69,980	70,300	31,170	24,620	5,200	7,650	12,250	14,150
21	29,540	62,170	56,470	49,950	70,390	69,090	29,050	23,670	5,310	7,720	12,320	14,240
22	29,620	64,520	54,810	51,090	70,790	68,420	27,050	22,690	5,410	7,800	12,420	14,300
23	29,670	66,720	53,360	52,110	71,380	66,850	25,010	21,480	5,510	7,840	12,460	14,380
24	29,750	69,090	51,620	53,130	71,930	65,560	23,430	20,700	5,760	7,880	12,470	14,450
25	29,810	71,330	49,990	54,080	72,260	64,100	22,240	19,060	5,710	8,510	12,520	14,510
26	29,920	73,610	48,550	55,050	72,630	62,380	20,970	17,110	5,800	10,190	12,610	14,570
27	29,970	74,490	47,460	56,000	72,820	60,640	20,130	15,020	5,900	10,660	12,660	14,600
28	30,050	74,540	46,760	56,670	72,960	58,910	19,760	12,990	5,990	10,800	12,770	14,680
29	30,080	-----	46,000	57,460	73,000	57,180	18,990	10,910	6,070	10,900	12,800	14,800
30	30,110	-----	45,170	58,170	73,050	55,130	17,030	9,060	6,120	11,010	12,860	14,970
31	30,160	-----	44,660	-----	72,960	-----	17,220	7,280	-----	11,040	-----	15,100
MAX	30,160	74,540	75,380	58,170	73,050	75,980	52,980	31,420	6,290	11,040	12,860	15,100
MIN	27,880	30,190	44,660	43,660	58,820	55,130	17,030	7,280	3,630	6,180	11,060	12,990
(†)	4,136.57	4,148.70	4,141.31	4,144.95	4,148.36	4,144.18	4,131.23	4,125.46	4,124.54	4,127.99	4,129.03	4,130.20
(*)	+2,330	+44,380	-29,880	+13,510	+14,790	-17,830	+37,910	-9,940	-1,160	+4,920	+1,820	+2,240

CAL YR 1971 † -12,730

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

* Change in contents, in acre-feet.

08362500 Rio Grande below Caballo Dam, N. Mex.

LOCATION.--Lat 32°53'05", long 107°17'31", in NE¼SW¼ sec.30, T.16 S., R.4 W., Sierra County, on left bank 2,000 ft upstream from Interstate Highway 25, 4,200 ft downstream from Caballo Dam, 1.2 miles downstream from Apache Canyon, 1.3 miles upstream from Percha diversion dam, 3 miles northeast of Arrey, and 5 miles south of Caballo.

DRAINAGE AREA.--30,700 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

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

GAGE.--Water-stage recorder. Datum of gage is 4,140.9 ft above mean sea level. Prior to Oct. 7, 1938, at datum 7.0 ft higher, Oct. 7-12, 1938, at datum 6.0 ft higher, and Oct. 13, 1938, to Dec. 31, 1945, at datum 5.0 ft higher than present datum.

AVERAGE DISCHARGE.--33 years, 879 cfs (636,800 acre-ft per year); 20 calendar years (1951-70), 699 cfs (506,400 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 2,210 cfs Mar. 17, minimum daily, 1.0 cfs many days.

Period of record: Maximum daily discharge, 7,650 cfs May 20, 1942; minimum daily, 0.1 cfs Oct. 31 to Nov. 14, 1954, Nov. 7 to Dec. 31, 1955.

REMARKS.--Records good. Flow regulated by Caballo Reservoir (capacity, 344,000 acre-ft, 1958 survey) and Elephant Butte Reservoir (capacity, 2,137,000 acre-ft, 1969 survey). Diversions for irrigation of about 800,000 acres above station. Figures of daily discharge do not include Bonita ditch which diverts from Caballo Dam and bypasses station for irrigation below. See monthly table below for record of ditch.

COOPERATION.--Records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.2	1.2	1.0	1.0	1,030	1,570	936	1,120	1,960	1,400	1,520
2	2.5	2.0	1.2	1.0	1.0	990	1,300	956	1,030	1,500	1,320	1,500
3	2.2	1.8	1.1	1.0	1.0	1,150	1,090	997	1,010	1,100	1,180	1,510
4	1.8	1.6	1.1	1.0	1.0	1,270	1,010	1,070	1,010	1,060	1,060	1,490
5	1.5	1.4	1.1	1.0	1.0	1,280	952	1,110	1,050	1,070	1,090	1,470
6	1.6	1.4	1.0	1.0	1.0	1,380	943	1,120	1,050	1,320	1,060	1,320
7	1.7	1.4	1.0	1.0	1.0	1,510	941	1,090	1,060	1,620	1,020	893
8	1.8	1.4	1.0	1.0	1.0	1,510	941	984	1,110	1,560	1,050	292
9	1.9	1.4	1.0	1.0	1.0	1,590	843	904	1,200	1,430	1,070	10
10	2.0	1.4	1.0	1.0	1.0	1,680	730	889	1,250	1,300	1,180	5.0
11	2.1	1.4	1.0	1.0	1.0	1,760	713	864	1,270	1,290	1,300	4.2
12	2.2	1.4	1.0	1.0	1.0	1,920	696	838	1,280	1,280	1,300	3.5
13	2.1	1.3	1.0	1.0	1.0	1,920	925	773	1,260	1,500	1,240	2.7
14	1.9	1.2	1.0	1.0	1.0	1,840	1,150	732	1,250	1,740	1,190	2.7
15	1.8	1.1	1.0	1.1	1.0	1,840	1,150	722	1,330	1,730	1,190	2.8
16	1.7	1.1	1.0	1.1	1.0	2,030	946	721	1,480	1,720	1,180	2.8
17	1.6	1.1	1.0	1.1	1.0	2,210	757	743	1,520	1,710	1,280	2.9
18	1.4	1.1	1.0	1.1	1.0	2,190	727	834	1,430	1,700	1,280	2.9
19	1.3	1.1	1.0	1.1	1.0	2,140	730	910	1,310	1,700	1,260	2.9
20	1.4	1.2	1.0	1.1	1.0	2,040	736	937	1,310	1,870	1,200	3.0
21	1.5	1.2	1.0	1.1	1.0	2,030	750	940	1,310	2,020	1,160	2.8
22	1.6	1.2	1.0	1.0	1.0	2,020	740	958	1,470	1,990	1,160	2.6
23	1.7	1.2	1.0	1.0	1.0	2,100	729	994	1,620	1,850	1,150	2.5
24	1.8	1.2	1.0	1.0	1.0	2,140	719	1,040	1,610	1,640	1,400	2.3
25	1.9	1.2	1.0	1.0	1.0	2,090	725	1,080	1,710	1,520	1,640	2.1
26	2.0	1.2	1.0	1.0	315	1,950	753	1,130	1,800	1,450	1,600	2.0
27	2.1	1.2	1.0	1.0	1,020	1,740	830	1,190	1,790	1,290	1,570	1.8
28	2.2	1.2	1.0	1.0	1,040	1,660	874	1,210	1,780	1,170	1,580	1.8
29	2.3	1.2	1.0	1.0	-----	1,660	871	1,220	1,870	1,160	1,590	1.8
30	2.4	1.2	1.0	1.0	-----	1,610	899	1,200	1,960	1,260	1,470	1.8
31	2.4	-----	1.0	1.0	-----	1,560	-----	1,180	-----	1,420	1,500	-----
TOTAL	59.2	40.0	31.7	31.7	2,400.0	53,840	26,740	30,272	41,250	46,930	39,670	10,061.9
MEAN	1.91	1.33	1.02	1.02	85.7	1,737	891	977	1,375	1,514	1,280	335
MAX	2.8	2.2	1.2	1.1	1,040	2,210	1,570	1,220	1,960	2,020	1,640	1,520
MIN	1.3	1.1	1.0	1.0	1.0	990	696	721	1,010	1,060	1,020	1.8
AC-FT	117	79	63	63	4,760	106,800	53,040	60,040	81,820	93,090	78,690	19,960
(†)	0	0	0	0	0	180	51	56	107	73	129	72

CAL YR 1970 TOTAL 333,365.9 MEAN 913 MAX 2,690 MIN 1.0 AC-FT 661,200

WTR YR 1971 TOTAL 251,326.5 MEAN 689 MAX 2,210 MIN 1.0 AC-FT 498,500

† Diversion, in acre-feet, by Bonita ditch. Bonita ditch diverts directly from Caballo Dam and this diversion is not included in the river records.

08362500 Rio Grande below Caballo Dam, N. Mex.

LOCATION.--Lat 32°53'05", long 107°17'31", in NE¼SW¼ sec.30, T.16 S., R.4 W., Sierra County, on left bank 2,000 ft upstream from Interstate Highway 25, 4,200 ft downstream from Caballo Dam, 1.2 miles downstream from Apache Canyon, 1.3 miles upstream from Percha diversion dam, 3 miles northeast of Arrey, and 5 miles south of Caballo.

DRAINAGE AREA.--30,700 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

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

GAGE.--Water-stage recorder. Datum of gage is 4,140.9 ft above mean sea level. Prior to Oct. 7, 1938, at datum 7.0 ft higher, Oct. 7-12, 1938, at datum 6.0 ft higher, and Oct. 13, 1938, to Dec. 31, 1945, at datum 5.0 ft higher than present datum.

AVERAGE DISCHARGE.--34 calendar years, 883 cfs (639,700 acre-ft per year); 20 calendar years (1952-71), 701 cfs (507,900 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 2,210 cfs Mar. 17, minimum daily, 1.0 cfs many days.

Period of record: Maximum daily discharge, 7,650 cfs May 20, 1942; minimum daily, 0.1 cfs Oct. 31 to Nov. 14, 1954, Nov. 7 to Dec. 31, 1955.

REMARKS.--Records good. Flow regulated by Caballo Reservoir (capacity, 344,000 acre-ft, 1958 survey) and Elephant Butte Reservoir (capacity, 2,137,000 acre-ft, 1969 survey). Diversions for irrigation of about 800,000 acres above station. Figures of daily discharge do not include Bonita ditch which diverts from Caballo Dam and bypasses station for irrigation below. See monthly table below for record of ditch.

COOPERATION.--Records furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.0	1.0	1,030	1,570	936	1,120	1,960	1,400	1,520	1.8	1.1	1.0
2	1.0	1.0	990	1,300	956	1,030	1,500	1,320	1,500	1.8	1.1	1.0
3	1.0	1.0	1,150	1,090	997	1,010	1,100	1,180	1,510	1.8	1.0	1.0
4	1.0	1.0	1,270	1,010	1,070	1,010	1,060	1,060	1,490	1.8	1.0	1.0
5	1.0	1.0	1,280	952	1,110	1,050	1,070	1,090	1,470	1.8	1.0	1.0
6	1.0	1.0	1,380	943	1,120	1,050	1,320	1,060	1,320	1.8	1.0	1.0
7	1.0	1.0	1,510	941	1,090	1,060	1,620	1,020	893	1.8	1.0	1.0
8	1.0	1.0	1,510	941	984	1,110	1,560	1,050	292	1.8	1.0	1.0
9	1.0	1.0	1,590	843	904	1,200	1,430	1,070	10	1.8	1.0	1.0
10	1.0	1.0	1,680	730	889	1,250	1,300	1,180	5.0	1.9	1.0	1.0
11	1.0	1.0	1,760	713	864	1,270	1,290	1,300	4.2	1.9	1.0	1.0
12	1.0	1.0	1,920	696	838	1,280	1,280	1,300	3.5	1.9	1.0	1.0
13	1.0	1.0	1,920	925	773	1,260	1,500	1,240	2.7	1.8	1.0	1.0
14	1.0	1.0	1,840	1,150	732	1,250	1,740	1,190	2.7	1.7	1.0	1.0
15	1.1	1.0	1,840	1,150	722	1,330	1,730	1,190	2.8	1.6	1.0	1.0
16	1.1	1.0	2,030	946	721	1,480	1,720	1,180	2.8	1.5	1.0	1.0
17	1.1	1.0	2,210	757	743	1,520	1,710	1,280	2.9	1.4	1.0	1.0
18	1.1	1.0	2,190	727	834	1,430	1,700	1,280	2.9	1.3	1.0	1.0
19	1.1	1.0	2,140	730	910	1,310	1,700	1,260	2.9	1.2	1.0	1.0
20	1.1	1.0	2,040	736	937	1,310	1,870	1,200	3.0	1.2	1.0	1.0
21	1.1	1.0	2,030	750	940	1,310	2,020	1,160	2.8	1.2	1.0	1.0
22	1.0	1.0	2,020	740	958	1,470	1,990	1,160	2.6	1.2	1.0	1.0
23	1.0	1.0	2,100	729	994	1,620	1,850	1,150	2.5	1.2	1.0	1.0
24	1.0	1.0	2,140	719	1,040	1,610	1,640	1,400	2.3	1.2	1.0	1.0
25	1.0	1.0	2,090	725	1,080	1,710	1,520	1,640	2.1	1.1	1.0	1.0
26	1.0	315	1,950	753	1,130	1,800	1,450	1,600	2.0	1.1	1.0	1.0
27	1.0	1,020	1,740	830	1,190	1,790	1,290	1,570	1.8	1.1	1.0	1.0
28	1.0	1,040	1,660	874	1,210	1,780	1,170	1,580	1.8	1.1	1.0	1.0
29	1.0	-----	1,660	871	1,220	1,870	1,160	1,590	1.8	1.1	1.0	1.0
30	1.0	-----	1,610	899	1,200	1,960	1,260	1,470	1.8	1.1	1.0	1.0
31	1.0	-----	1,560	-----	1,180	-----	1,420	1,500	-----	1.1	-----	1.0
TOTAL	31.7	2,400.0	53,840	26,740	30,272	41,250	46,930	39,670	10,061.9	46.1	30.2	31.0
MEAN	1.02	85.7	1,737	891	977	1,375	1,514	1,280	335	1.49	1.01	1.00
MAX	1.1	1,040	2,210	1,570	1,220	1,960	2,020	1,640	1,520	1.9	1.1	1.0
MIN	1.0	1.0	990	696	721	1,010	1,060	1,020	1.8	1.1	1.0	1.0
AC-FT	63	4,760	106,800	53,040	60,040	81,820	93,090	78,690	19,960	91	60	61
(+)	0	0	180	51	56	107	73	129	72	0	0	0

CAL YR 1971 TOTAL 251,302.9 MEAN 689 MAX 2,210 MIN 1.0 AC-FT 498,500

† Diversion, in acre-feet, by Bonita ditch. Bonita ditch diverts directly from Caballo Dam and this diversion is not included in the river records.

08363700 Tortugas Arroyo near Las Cruces, N. Mex.

LOCATION.--Lat 32°17'15", long 106°43'43", Dona Ana County, in Dona Ana bend Colony Grant, 30 ft downstream from flood detention dam, 1.2 miles northeast of New Mexico State University, and 3.3 miles southeast of Las Cruces.

DRAINAGE AREA.--20.7 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and Parshall flume at downstream end of reservoir outlet pipe. Datum of gage is 4,071.62 ft above mean sea level (Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--9 years, 0.20 cfs (145 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 26 cfs Aug. 25 (gage height, 1.17 ft); no flow most of time.
Period of record: Maximum discharge 100 cfs Aug. 6, 1967 (gage height, 2.48 ft); no flow most of time.

REMARKS.--Records good. Records represent outflow from Tortugas Reservoir, completed in 1962. Water quality records for the current year are published in Part 2 of this report.

Reservoir is designed to retard floodflows and detain silt. Dam is earthfill, L-shaped, 3,400 ft long at crest and 44 ft high. Original capacity, 1,325 acre-ft at spillway crest. No dead storage, though deposition of silt is expected to reduce storage capacity. Outlet drop tower is 9' -2" x 4' -2" inside and 18' 6" high. The tower has 9 rectangular outlet ports, each 8"x17", but 6 are presently closed. Tower is connected to downstream channel by a 30-inch diameter pipe. Records will be published in tabular form, as flow events.

Outflow during water year October 1970 to September 1971

Flow event	Date	Outflow (hours)	Maximum (cfs)	Cfs-days	Runoff (acre-ft)
45	July 26	1.25	1.2	.03	0.1
46	Aug. 18	5.50	12.0	1.1	2.2
47	Aug. 25-26	25.0	26.0	6.6	13.0
Totals		31.75		7.73	15.3

08363700 Tortugas Arroyo near Las Cruces, N. Mex.

LOCATION.--Lat 32°17'15", long 106°43'43", Dona Ana County, in Dona Ana bend Colony Grant, 30 ft downstream from flood detention dam, 1.2 miles northeast of New Mexico State University, and 3.3 miles southeast of Las Cruces.

DRAINAGE AREA.--20.7 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and Parshall flume at downstream end of reservoir outlet pipe. Datum of gage is 4,071.62 ft above mean sea level (Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--9 calendar years, 0.18 cfs (138 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 26 cfs Aug. 25 (gage height, 1.17 ft); no flow most of time.
Period of record: Maximum discharge 100 cfs Aug. 6, 1967 (gage height, 2.48 ft); no flow most of time.

REMARKS.--Records good. Records represent outflow from Tortugas Reservoir, completed in 1962. Water quality records for the current year are published in Part 2 of this report.

Reservoir is designed to retard floodflows and detain silt. Dam is earthfill, L-shaped, 3,400 ft long at crest and 44 ft high. Original capacity, 1,325 acre-ft at spillway crest. No dead storage, though deposition of silt is expected to reduce storage capacity. Outlet drop tower is 9' -2" x 4' -2" inside and 18' 6" high. The tower has 9 rectangular outlet ports, each 8"x17", but 6 are presently closed. Tower is connected to downstream channel by a 30-inch diameter pipe. Records will be published in tabular form, as flow events.

Outflow during calendar year 1971

Flow event	Date	Outflow (hours)	Maximum (cfs)	Cfs-days	Runoff (acre-ft)
45	July 26	1.25	1.2	.03	0.1
46	Aug. 18	5.50	12.0	1.1	2.2
47	Aug. 25-26	25.0	26.0	6.6	13.0
Totals		31.75		7.73	15.3

08364000 Rio Grande at El Paso, Tex.

LOCATION.--Lat 31°48'10", long 106°32'25", El Paso County, on downstream side of first pier from left abutment of Courchesne Bridge at El Paso, 1.7 miles upstream from American Dam, 5.6 miles upstream from Santa Fe Street - Juarez Avenue Bridge between El Paso and Cd. Juarez, Chihuahua, and at mile 1,249.9.

DRAINAGE AREA.--32,207 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--January 1889 to current year. October 1960 to September 1965 in bulletins of International Boundary and Water Commission. Monthly discharges only for some periods published in WSP 1312 or 1732.

GAGE.--Water-stage recorder. Datum of gage is 3,722.30 ft above mean sea level (U.S.C. & G.S. datum). See WSP 1312 or 1732 for history of changes prior to Aug. 4, 1938.

AVERAGE DISCHARGE.--34 calendar years (1938-71), 529 cfs (383,300 acre-ft per year); 20 calendar years (1952-71), 348 cfs (252,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,240 cfs July 2 (gage height, 5.62 ft); minimum, 38.6 cfs Nov. 20.

REMARKS.--Daily discharges were computed by adding discharges of American Canal at El Paso and Rio Grande below American Dam at El Paso. Reservoirs, diversions, and drainage returns modify the river flow at this station.

COOPERATION.--Records furnished by International Boundary and Water Commission, United States and Mexico.

DISCHARGE, IN CFS, FOR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	93.2	70.7	336	633	458	667	590	457	567	73.4	76.3	42.9
2	92.3	68.6	470	599	526	641	1,030	549	523	65.5	61.4	49.2
3	88.3	66.0	470	623	631	639	1,000	519	485	63.9	52.6	45.9
4	84.5	62.9	408	707	615	537	964	483	483	69.8	50.2	46.6
5	81.5	58.8	462	579	639	504	709	402	457	60.0	50.6	46.2
6	74.2	59.8	609	512	645	513	638	314	413	60.4	50.2	43.6
7	72.7	61.8	761	387	715	555	567	355	338	61.1	47.1	41.1
8	80.8	62.5	1,010	391	671	548	518	407	315	58.7	48.8	41.3
9	101	60.1	987	434	603	541	620	402	321	58.8	50.8	46.8
10	108	57.4	699	439	635	533	587	443	330	56.2	48.6	45.3
11	93.2	55.6	751	529	582	540	640	400	248	57.4	47.9	43.2
12	89.1	54.7	724	556	532	594	540	423	178	59.2	47.9	42.7
13	86.8	53.6	865	528	505	628	551	383	177	54.7	49.2	42.9
14	85.3	53.5	1,060	477	532	691	503	362	177	54.1	45.2	46.0
15	81.5	53.4	914	447	482	691	524	452	180	51.4	51.5	43.9
16	80.8	51.4	810	644	453	662	578	467	160	47.9	50.6	43.6
17	81.5	51.1	744	672	426	586	531	434	140	46.8	43.4	46.1
18	83.0	51.6	978	689	409	605	552	479	107	48.1	41.2	45.4
19	81.5	48.5	812	591	427	632	622	422	106	51.0	39.4	44.6
20	80.9	51.0	780	534	442	741	615	526	105	49.7	39.9	44.4
21	81.8	54.3	676	476	470	655	649	399	100	47.1	43.0	43.8
22	76.9	55.7	626	452	483	695	661	438	89.2	46.9	45.9	41.3
23	75.0	56.8	698	454	481	648	725	503	85.4	40.8	47.0	42.7
24	74.4	59.3	646	420	535	562	833	449	82.9	42.1	44.6	45.2
25	74.6	58.0	688	430	581	641	802	426	80.5	56.4	44.8	48.1
26	71.5	58.0	597	460	572	633	777	404	77.3	85.9	43.5	49.5
27	69.9	56.3	568	461	562	669	763	585	73.9	39.4	42.3	50.4
28	71.1	55.6	604	467	538	734	556	518	71.4	24.7	44.2	52.3
29	69.0	-----	640	475	543	742	425	531	76.0	140	44.0	48.5
30	68.8	-----	696	475	580	676	443	574	79.9	99.1	44.5	45.1
31	72.0	-----	677	-----	622	-----	458	655	-----	81.1	-----	41.1
TOTAL	2,525.1	1,607.0	21,766	13,546	16,925	13,703	19,971	14,161	6,626.5	2,428.5	1,436.6	1,399.7
MEAN	81.5	57.4	702	518	546	623	644	457	221	783	47.9	45.2
MAX	108	70.7	1,060	707	715	742	1,030	655	567	394	76.3	52.3
MIN	68.8	48.5	336	387	409	504	425	314	71.4	40.8	39.4	41.1
AC-FT	5,008	3,187	43,173	30,835	33,571	37,097	39,612	28,088	13,143	4,817	2,849	2,776

CAL YR 1971 TOTAL 123,095.4 MEAN 337 MAX 1,060 MIN 39.4 AC-FT 244,156

08364000 Rio Grande at El Paso, Tex.

LOCATION.--Lat 31°48'10", long 106°32'25", El Paso County, on downstream side of first pier from left abutment of Courchesne Bridge at El Paso, 1.7 miles upstream from American Dam, 5.6 miles upstream from Santa Fe Street - Juarez Avenue Bridge between El Paso and Cd. Juarez, Chihuahua, and at mile 1,249.9.

DRAINAGE AREA.--32,207 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--January 1889 to current year. October 1960 to September 1965 in bulletins of International Boundary and Water Commission. Monthly discharges only for some periods published in WSP 1312 or 1732.

GAGE.--Water-stage recorder. Datum of gage is 3,722.30 ft above mean sea level (U.S.C. & G.S. datum). See WSP 1312 or 1732 for history of changes prior to Aug. 4, 1938.

AVERAGE DISCHARGE.--34 years (1937-71), 529 cfs (383,300 acre-ft per year); 20 calendar years (1951-70), 349 cfs (252,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,240 cfs July 2 (gage height, 5.62 ft); minimum, 45.2 cfs Feb. 19.

Period of record: Maximum discharge, 24,000 cfs June 12, 1905; no flow at times. Maximum discharge since construction of Elephant Butte Dam in 1915, 13,500 cfs Sept. 3, 1925.

REMARKS.--Daily discharges were computed by adding discharges of American Canal at El Paso and Rio Grande below American Dam at El Paso. Reservoirs, diversions, and drainage returns modify the river flow at this station.

COOPERATION.--Records furnished by International Boundary and Water Commission, United States and Mexico.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	124	914	932	707	336	633	408	667	590	457	567
2	234	120	981	923	686	470	549	526	641	1,030	549	523
3	230	122	969	883	660	470	628	631	639	1,000	519	485
4	230	116	957	845	629	408	707	615	537	964	483	483
5	372	116	946	815	588	462	579	639	504	709	402	457
6	536	121	923	742	598	609	512	645	513	638	314	413
7	306	119	936	727	518	761	387	715	555	567	355	338
8	234	117	938	808	625	1,010	391	671	548	518	407	315
9	202	117	928	101	601	987	434	603	541	620	402	321
10	192	116	897	108	574	699	439	635	533	587	443	330
11	184	118	868	932	556	751	529	582	540	640	400	248
12	174	116	861	891	547	724	556	552	594	540	423	178
13	172	117	864	868	536	865	528	505	628	551	383	177
14	168	109	868	853	535	1,060	477	532	691	503	362	177
15	156	111	913	815	534	914	447	482	691	524	452	180
16	148	112	897	808	514	810	644	453	662	578	467	160
17	154	116	911	815	511	744	672	426	586	531	434	140
18	158	127	967	830	516	978	689	409	605	552	479	107
19	164	118	953	815	485	812	591	427	632	622	422	106
20	162	112	822	809	510	780	534	442	741	615	526	105
21	158	112	846	818	543	676	476	470	655	649	399	100
22	156	107	908	769	557	626	452	483	695	661	458	89.2
23	156	102	895	750	565	698	454	481	648	725	503	85.4
24	142	99.6	866	744	593	646	420	535	562	833	449	82.9
25	140	108	864	745	580	688	430	581	641	802	426	80.5
26	140	107	880	715	580	597	450	572	633	777	404	77.3
27	134	107	887	699	563	558	461	562	669	763	585	73.9
28	136	105	946	711	556	604	467	538	734	556	518	71.4
29	132	104	928	690	-----	640	475	543	742	425	531	76.0
30	130	102	904	688	-----	696	475	580	676	443	574	79.9
31	132	-----	905	720	-----	677	-----	622	-----	458	655	-----
TOTAL	5,968	5,397.6	2,794.2	2,525.1	1,607.0	2,176.6	1,554.6	1,692.5	18,703	19,971	14,161	6,626.5
MEAN	193	113	90.1	81.5	57.4	702	518	546	623	644	457	221
MAX	536	127	98.1	108	70.7	1,060	707	715	742	1,030	655	567
MIN	130	99.6	82.2	68.8	48.5	336	387	409	504	425	314	71.4
AC-FT	11,838	6,739	5,542	5,008	3,187	43,173	30,835	33,571	37,097	39,612	28,088	13,143
CAL YR 1970	TOTAL 181,859.7		MEAN 498		MAX 1,810		MIN 53.3		AC-FT 360,719			
WTR YR 1971	TOTAL 129,900.4		MEAN 356		MAX 1,060		MIN 48.5		AC-FT 257,833			

RIO GRANDE BASIN

08377900 Rio Mora near Terrero, N. Mex.
(Hydrologic bench-mark station)

LOCATION.--Lat 35°46'38", long 105°39'27", in E1/4 sec.22, T.18 N., R.12 E., San Miguel County, in Santa Fe National Forest, on left bank 450 ft upstream from bridge on State Highway 63, 600 ft upstream from mouth, and 2.6 miles north of Terrero.

DRAINAGE AREA.--53.2 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,890 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 26.2 cfs (18,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 145 cfs Aug. 24 (gage height, 2.40 ft); maximum gage height, 2.43 ft Dec. 8 (ice jam); minimum discharge recorded, 1.5 cfs Mar. 19, but may have been less during period of ice effect.

Period of record: Maximum discharge, 451 cfs July 29, 1965 (gage height, 3.56 ft), from rating curve extended above 190 cfs; minimum determined, 0.90 cfs Jan. 12-14, 1964, but may have been less during periods of ice effect.

Greatest flood since 1886 probably occurred Sept. 29, 1904 (based on statement for Pecos River near Pecos and history of that flood period).

REMARKS.--Records good except those for winter period, which are poor. About 90 percent of the drainage is in the Pecos Wilderness Area and not subject to development, watershed management, or the building of highways; there is limited cattle grazing by permit. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	11	4.5	4.8	4.0	3.5	11	13	18	7.8	14	57
2	12	10	5.5	4.5	4.3	3.3	9.0	15	17	12	15	51
3	11	8.5	5.0	4.3	4.0	3.0	8.9	16	16	7.9	15	47
4	11	8.2	4.5	4.0	3.5	3.3	8.0	17	16	6.3	15	43
5	11	10	5.0	3.0	4.0	3.5	7.5	16	15	5.7	23	39
6	11	9.7	4.5	2.0	3.5	3.5	7.1	16	14	5.1	27	35
7	11	9.3	5.0	1.8	3.0	3.8	7.9	16	13	4.9	37	32
8	12	9.1	5.5	2.0	3.3	4.0	7.6	16	13	5.0	37	30
9	11	7.7	5.0	2.5	3.5	3.5	8.4	16	13	5.3	32	28
10	12	9.4	4.5	3.0	3.8	3.5	8.4	15	12	4.9	29	26
11	12	8.4	4.0	4.0	3.8	3.5	9.4	17	12	4.6	30	24
12	12	8.7	4.3	4.5	4.0	3.5	11	16	11	4.3	32	23
13	11	8.7	4.5	5.0	4.0	4.0	11	18	10	4.2	34	21
14	10	4.8	5.0	5.5	4.0	3.7	11	21	9.8	3.7	33	20
15	11	6.3	5.5	6.0	4.2	3.5	12	24	10	4.0	34	19
16	11	7.0	6.0	6.0	4.0	3.5	11	26	9.8	5.9	31	17
17	10	6.5	6.5	5.5	3.5	3.5	13	26	9.0	5.1	48	20
18	10	6.5	6.0	5.0	3.3	3.5	13	24	8.6	5.5	53	22
19	9.7	6.0	5.5	5.0	3.5	3.6	12	23	8.2	7.6	47	18
20	11	5.5	5.5	5.0	3.5	3.6	8.1	22	7.7	22	51	18
21	11	6.5	5.5	5.5	3.3	3.5	12	21	8.2	17	43	19
22	11	6.0	5.0	5.0	3.2	4.4	12	21	9.2	15	46	18
23	11	5.5	5.0	4.5	3.5	5.7	11	20	7.9	23	65	17
24	11	6.0	5.0	5.0	3.6	7.3	12	20	7.5	21	80	18
25	12	6.0	5.5	4.5	3.5	7.8	16	19	7.2	18	99	18
26	11	6.0	6.0	4.4	3.7	9.8	19	18	6.9	16	83	17
27	10	5.8	5.5	4.3	3.7	16	16	18	6.7	21	76	15
28	9.5	5.5	5.0	4.2	3.6	18	15	20	6.0	17	76	14
29	11	5.8	5.5	4.1	-----	14	15	25	5.5	15	77	14
30	13	5.2	5.0	4.0	-----	13	14	22	6.0	16	67	36
31	12	-----	5.0	4.0	-----	14	-----	19	-----	15	62	-----
TOTAL	344.2	219.6	159.8	132.9	102.8	184.3	337.3	596	314.2	325.8	1,411	776
MEAN	11.1	7.32	5.15	4.29	3.67	5.95	11.2	19.2	10.5	10.5	45.5	25.9
MAX	13	11	6.5	6.0	4.3	18	19	26	18	23	99	57
MIN	9.5	4.8	4.0	1.8	3.0	3.0	7.1	13	5.5	3.7	14	14
AC-FT	683	436	317	264	204	366	669	1,180	623	646	2,800	1,540

CAL YR 1970 TOTAL 8,239.5 MEAN 22.6 MAX 145 MIN 2.8 AC-FT 16,340
WTR YR 1971 TOTAL 4,903.9 MEAN 13.4 MAX 99 MIN 1.8 AC-FT 9,730

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE
8-24	2045	2.40	145

08377900 Rio Mora near Terrero, N. Mex.
(Hydrologic bench-mark station)

LOCATION.--Lat 35°46'38", long 105°39'27", in E1/4 sec. 22, T.18 N., R.12 E., San Miguel County, in Santa Fe National Forest, on left bank 450 ft upstream from bridge on State Highway 63, 600 ft upstream from mouth, and 2.6 miles north of Terrero.

DRAINAGE AREA.--53.2 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,890 ft (from topographic map).

AVERAGE DISCHARGE.--8 calendar years, 26.4 cfs (19,130 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 145 cfs Aug. 24 (gage height, 2.40 ft); minimum recorded, 1.5 cfs Mar. 19, but may have been less during period of ice effect.

Period of record: Maximum discharge, 451 cfs July 29, 1965 (gage height, 3.56 ft), from rating curve extended above 190 cfs; minimum determined, 0.90 cfs Jan. 12-14, 1964, but may have been less during periods of ice effect.

Greatest flood since 1886 probably occurred Sept. 29, 1904 (based on statement for Pecos River near Pecos and history of that flood period).

REMARKS.--Records good except those for winter periods, which are poor. About 90 percent of the drainage is in the Pecos Wilderness Area and not subject to development, watershed management, or the building of highways; there is limited cattle grazing by permit. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	4.8	4.0	3.5	11	13	18	7.8	14	57	29	25	10
2	4.5	4.3	3.3	9.0	15	17	12	15	51	26	21	9.0
3	4.3	4.0	3.0	8.9	16	16	7.9	15	47	24	20	9.0
4	4.0	3.5	3.3	8.0	17	16	6.3	15	43	22	19	9.0
5	3.0	4.0	3.5	7.5	16	15	5.7	23	39	21	18	10
6	2.0	3.5	3.5	7.1	16	14	5.1	27	35	21	17	10
7	1.8	3.0	3.8	7.9	16	13	4.9	37	32	20	16	10
8	2.0	3.3	4.0	7.6	16	13	5.0	37	30	20	16	9.0
9	2.5	3.5	3.5	8.4	16	13	5.3	32	28	20	14	9.0
10	3.0	3.8	3.5	8.4	15	12	4.9	29	26	19	14	9.0
11	4.0	3.8	3.5	9.4	17	12	4.6	30	24	18	14	8.0
12	4.5	4.0	3.5	11	16	11	4.3	32	23	18	14	8.0
13	5.0	4.0	4.0	11	18	10	4.2	34	21	17	14	8.0
14	5.5	4.0	3.7	11	21	9.8	3.7	33	20	17	12	9.0
15	6.0	4.2	3.5	12	24	10	4.0	34	19	16	14	9.0
16	6.0	4.0	3.5	11	26	9.8	5.9	31	17	16	13	9.0
17	5.5	3.5	3.5	13	26	9.0	5.1	48	20	18	13	9.0
18	5.0	3.3	3.5	13	24	8.6	5.5	53	22	18	11	9.0
19	5.0	3.5	3.6	12	23	8.2	7.6	47	18	15	8.6	9.0
20	5.0	3.5	3.6	8.1	22	7.7	22	51	18	15	9.0	8.0
21	5.5	3.3	3.5	12	21	8.2	17	43	19	16	10	8.0
22	5.0	3.2	4.4	12	21	9.2	15	46	18	15	11	8.0
23	4.5	3.5	5.7	11	20	7.9	23	65	17	14	12	8.2
24	5.0	3.6	7.3	12	20	7.5	21	80	18	15	13	8.3
25	4.5	3.5	7.8	16	19	7.2	18	99	18	32	13	7.8
26	4.4	3.7	9.8	19	18	6.9	16	83	17	37	13	8.5
27	4.3	3.7	16	16	18	6.7	21	76	15	28	13	8.4
28	4.2	3.6	18	15	20	6.0	17	76	14	27	12	8.0
29	4.1	-----	14	15	25	5.5	15	77	14	31	11	8.6
30	4.0	-----	13	14	22	6.0	16	67	36	30	11	7.6
31	4.0	-----	14	-----	19	-----	15	62	-----	27	-----	8.0
TOTAL	132.9	102.8	184.3	337.3	596	314.2	325.8	1,411	776	662	421.6	269.4
MEAN	4.29	3.67	5.95	11.2	19.2	10.5	10.5	45.5	25.9	21.4	14.1	8.69
MAX	6.0	4.3	18	19	26	18	23	99	57	37	25	10
MIN	1.8	3.0	3.0	7.1	13	5.5	3.7	14	14	14	8.6	7.6
AC-FT	264	204	366	669	1,180	623	646	2,800	1,540	1,310	836	534

CAL YR 1971 TOTAL 5,533.3 MEAN 15.2 MAX 99 MIN 1.8 AC-FT 10,980

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE
8-24	2045	2.40	145

08378500 Pecos River near Pecos, N. Mex.

LOCATION.--Lat 35°42'30", long 105°40'55", in NE¼ sec.17, T.17 N., R.12 E., San Miguel County, in Santa Fe National Forest, on left bank at downstream side of bridge on private road, 300 ft upstream from Indian Creek, 2.4 miles downstream from Holy Ghost Creek, and 9.0 miles north of Pecos.

DRAINAGE AREA.--189 sq mi.

PERIOD OF RECORD.--August 1919 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "near Cowles" 1919-25, "at Irvins Ranch" 1926-29, and as "at Irvins Ranch near Pecos" 1930-39.

GAGE.--Water-stage recorder. Datum of gage is 7,502.94 ft above mean sea level.

AVERAGE DISCHARGE.--52 years, 97.1 cfs (70,350 acre-ft per year); 20 calendar years (1951-70), 84.9 cfs (61,510 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 278 cfs Sept. 30 (gage height, 2.98 ft); minimum, 2.0 cfs Mar. 19, result of freezeup. Period of record: Maximum discharge, about 4,500 cfs Sept. 21 or 22, 1929 (gage height, 6.2 ft, from floodmark), from rating curve extended above 1,600 cfs; minimum, 2.0 cfs Mar. 19, 1971, result of freezeup. Flood of Sept. 29, 1904, was greatest since 1886, from information by local residents.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 75 acres (1959 determination) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 898: Drainage area. WSP 1312: 1932(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	37	20	25	20	18	47	44	68	41	46	95
2	42	37	29	23	21	16	44	48	67	79	44	87
3	39	33	26	18	20	14	40	52	63	48	47	81
4	39	24	23	15	18	15	37	55	62	35	42	78
5	38	35	26	12	19	17	34	55	60	30	58	67
6	40	35	23	10	18	17	33	53	58	29	65	62
7	37	35	29	10	15	19	35	53	56	29	89	58
8	40	35	30	11	16	20	34	55	56	29	89	56
9	39	29	27	12	17	18	35	50	56	29	72	52
10	42	35	23	15	20	18	35	48	53	27	63	48
11	43	34	19	20	20	18	40	52	52	24	67	47
12	42	33	20	23	21	18	46	53	50	22	67	44
13	40	34	23	25	22	20	48	63	48	22	68	46
14	38	22	27	30	22	18	50	65	46	20	80	44
15	40	27	30	35	24	17	53	68	46	19	81	41
16	40	38	32	35	23	17	50	74	46	24	68	40
17	38	33	35	33	22	17	56	80	42	23	91	46
18	38	33	33	30	21	17	53	78	41	23	114	58
19	36	30	30	30	22	18	50	68	38	28	117	47
20	39	29	30	30	21	22	35	68	37	87	123	48
21	40	33	30	33	20	19	47	67	40	78	100	50
22	40	29	28	30	18	22	48	67	41	55	117	50
23	41	27	28	27	19	27	44	67	37	100	139	48
24	42	30	28	29	20	33	48	63	35	112	163	52
25	42	30	30	25	18	33	58	63	34	70	159	50
26	41	30	35	24	19	37	68	62	33	62	142	47
27	37	29	30	23	19	63	55	62	30	76	134	56
28	34	26	25	22	18	67	53	70	27	60	137	38
29	37	30	28	21	-----	55	52	100	26	52	130	38
30	38	26	25	20	-----	52	47	85	27	52	112	162
31	38	-----	25	20	-----	60	-----	76	-----	48	112	-----
TOTAL	1,222	938	847	716	553	822	1,375	1,964	1,375	1,433	2,936	1,736
MEAN	39.4	31.3	27.3	23.1	19.8	26.5	45.8	63.4	45.8	46.2	94.7	57.9
MAX	43	38	35	35	24	67	68	100	68	112	163	162
MIN	34	22	19	10	15	14	33	44	26	19	42	38
AC-FT	2,420	1,860	1,680	1,420	1,100	1,630	2,730	3,900	2,730	2,840	5,820	3,440

CAL YR 1970 TOTAL 24,627 MEAN 67.5 MAX 309 MIN 16 AC-FT 48,850
WTR YR 1971 TOTAL 15,917 MEAN 43.6 MAX 163 MIN 10 AC-FT 31,570

PEAK DISCHARGE (BASE, 310 CFS).--No peak above base.

08378500 Pecos River near Pecos, N. Mex.

LOCATION.--Lat 35°42'30", long 105°40'55", in NE¼ sec. 17, T. 17 N., R. 12 E., San Miguel County, in Santa Fe National Forest, on left bank at downstream side of bridge on private road, 300 ft upstream from Indian Creek, 2.4 miles downstream from Holy Ghost Creek, and 9.0 miles north of Pecos.

DRAINAGE AREA.--189 sq mi.

PERIOD OF RECORD.--August 1919 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "near Cowles" 1919-25, "at Irvins Ranch" 1926-29, and as "at Irvins Ranch near Pecos" 1930-39.

GAGE.--Water-stage recorder. Datum of gage is 7,502.94 ft above mean sea level.

AVERAGE DISCHARGE.--52 calendar years, 97.0 cfs (70,280 acre-ft per year); 20 calendar years (1952-71), 85.1 cfs (61,650 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 278 cfs Sept. 30 (gage height, 2.98 ft); maximum gage height, 3.46 ft Dec. 5 (backwater from ice); minimum discharge, 2.0 cfs Mar. 19, result of freezeup.

Period of record: Maximum discharge, about 4,500 cfs Sept. 21 or 22, 1929 (gage height, 6.2 ft, from floodmark), from rating curve extended above 1,600 cfs; minimum, 2.0 cfs Mar. 19, 1971, result of freezeup.

Flood of Sept. 29, 1904, was greatest since 1886, from information by local residents.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 75 acres (1959 determination) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 898: Drainage area. WSP 1312: 1932(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	25	20	18	47	44	68	41	46	95	104	83	45
2	23	21	16	44	48	67	79	44	87	85	74	43
3	18	20	14	40	52	63	48	47	81	72	67	45
4	15	18	15	37	55	62	35	42	78	67	65	45
5	12	19	17	34	55	60	30	58	67	63	62	45
6	10	18	17	33	53	58	29	65	62	60	60	43
7	10	15	19	35	53	56	29	89	58	58	55	43
8	11	16	20	34	55	56	29	89	56	58	58	45
9	12	17	18	35	50	56	29	72	52	55	50	44
10	15	20	18	35	48	53	27	63	48	52	50	45
11	20	20	18	40	52	52	24	67	47	50	50	43
12	23	21	18	46	53	50	22	67	44	48	50	40
13	25	22	20	48	63	48	22	68	46	46	50	40
14	30	22	18	50	65	46	20	80	44	44	44	45
15	35	24	17	53	68	46	19	81	41	44	52	47
16	35	23	17	50	74	46	24	68	40	42	52	47
17	33	22	17	56	80	42	23	91	46	48	50	46
18	30	21	17	53	78	41	23	114	58	53	46	45
19	30	22	18	50	68	38	28	117	47	41	47	45
20	30	21	22	35	68	37	87	123	48	44	53	43
21	33	20	19	47	67	40	78	100	50	47	55	41
22	30	18	22	48	67	41	55	117	50	46	53	40
23	27	19	27	44	67	37	100	139	48	41	50	38
24	29	20	33	48	63	35	112	163	52	44	55	37
25	25	18	33	58	63	34	70	159	50	101	48	35
26	24	19	37	68	62	33	62	142	47	134	47	35
27	23	19	63	55	62	30	76	134	56	97	48	35
28	22	18	67	53	70	27	60	137	38	91	48	37
29	21	-----	55	52	100	26	52	130	38	104	47	35
30	20	-----	52	47	85	27	52	112	162	102	40	35
31	20	-----	60	-----	76	-----	48	112	-----	95	-----	35
TOTAL	716	553	822	1,375	1,964	1,375	1,433	2,936	1,736	2,036	1,609	1,287
MEAN	23.1	19.8	26.5	45.8	63.4	45.8	46.2	94.7	57.9	65.7	53.6	41.5
MAX	35	24	67	68	100	68	112	163	162	134	83	47
MIN	10	15	14	33	44	26	19	42	38	41	40	35
AC-FT	1,420	1,100	1,630	2,730	3,900	2,730	2,840	5,820	3,440	4,040	3,190	2,550

CAL YR 1971 TOTAL 17,842 MEAN 48.9 MAX 163 MIN 10 AC-FT 35,390

PEAK DISCHARGE (BASE, 310 CFS).--No peak above base.

08379500 Pecos River near Anton Chico, N. Mex.

LOCATION.--Lat 35°10'44", long 105°06'30", Guadalupe County, in Anton Chico Grant, on right bank 2.1 miles upstream from Canon Blanco, 2.3 miles southeast of Anton Chico, and 9.7 miles downstream from Tecolote Creek.

DRAINAGE AREA.--1,050 sq mi, approximately (contributing area).

PERIOD OF RECORD.--April 1910 to May 1916, October 1916 to September 1924, August to December 1925, January 1927 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 5,130 ft (from river-profile map). See WSP 1312 for history of changes prior to June 21, 1951.

AVERAGE DISCHARGE.--58 years (1910-15, 1916-24, 1926-71), 133 cfs (96,360 acre-ft per year); 20 calendar years (1951-70), 103 cfs (74,620 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,050 cfs Aug. 24 (gage height, 13.85 ft); no flow at times in February, March.

Period of record: Maximum discharge, 40,300 cfs June 1, 1937 (gage height, 20.34 ft, from floodmarks, at site and datum then in use), by slope-area measurement; no flow at times.

The greatest flood since 1879 occurred Sept. 29, 1904 (discharge, about 73,000 cfs), from information by a local resident.

REMARKS.--Records fair. Diversions above station for irrigation of about 4,900 acres (1959 determination) above and below station.

Acequia del Bodo Juan Paiz (see table below) diverts water about 8 miles above gage and bypasses this station on left bank; ditch flow not included in record. Discharge measurements made at point opposite regular gage. A portion of this flow may be returned to the river about five miles downstream. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1342: 1951(M), 1952-53. WSP 1512: 1912-14, 1931, 1933 (M), 1935-36(M), 1938(P), 1939-40, 1941-42(P), 1945(M), 1946(P), 1949(P). WSP 1712: 1942(P).

Discharge measurements, in cubic feet per second, of Acequia del Bodo Juan Paiz, October 1970 to September 1971

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Oct. 9	0	Nov. 16	0	Jan. 19	0	June 9	13
28	0	Dec. 16	0	Mar. 15	0	Sept. 14	0

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	45	34	18	24	0	.65	5.0	4.6	9.9	304	110
2	49	49	32	1.0	23	0	2.5	5.9	4.8	1.6	100	90
3	52	45	25	20	24	.60	2.4	5.6	6.2	1.5	62	76
4	52	39	22	12	26	2.0	3.3	1.6	7.4	1.4	65	56
5	48	36	29	16	24	2.5	.97	.96	7.4	1.3	84	43
6	42	32	25	25	18	.44	.69	.96	6.6	1.3	89	36
7	38	37	22	22	10	.16	.53	1.4	5.4	1.2	294	22
8	42	46	22	16	11	.08	3.4	1.2	3.8	1.2	2,050	5.0
9	39	47	23	18	12	.07	5.2	.64	3.5	.96	450	2.0
10	41	42	30	20	17	.23	5.0	2.2	3.5	2.0	388	1.5
11	41	31	31	20	28	.11	6.0	1.8	5.2	.88	272	1.5
12	43	36	29	30	32	.07	2.2	3.3	4.4	2.0	197	1.0
13	45	36	18	40	28	.03	1.3	3.0	3.1	.88	138	1.0
14	43	34	14	40	24	.01	2.5	3.0	3.1	.80	195	.64
15	51	43	11	40	22	.20	6.4	2.5	2.6	.72	140	.96
16	55	32	16	50	21	.31	9.8	2.0	2.1	.72	97	.72
17	56	22	16	44	21	.18	10	2.0	3.1	.72	92	2.4
18	51	29	16	37	8.1	0	3.8	3.0	4.7	.56	169	6.7
19	49	37	14	34	.60	.16	3.9	3.5	2.3	.78	90	11
20	46	31	14	41	.46	.16	2.4	3.6	1.9	329	97	19
21	42	31	14	40	.60	.09	5.6	2.8	2.0	436	114	20
22	41	28	13	41	.90	.18	9.9	1.6	1.7	202	86	22
23	44	35	5.0	40	.70	.32	11	1.4	1.7	178	86	33
24	45	35	5.0	33	.07	.09	9.9	3.3	1.4	207	1,580	41
25	46	32	7.0	23	0	0	8.1	3.0	1.2	180	397	32
26	46	32	10	19	0	0	7.2	2.8	152	192	268	27
27	49	35	20	22	0	0	5.0	2.4	27	112	195	31
28	47	35	20	21	0	0	5.9	7.1	3.0	149	156	24
29	45	35	14	20	-----	.02	6.2	3.1	2.0	572	190	21
30	37	28	12	18	-----	.43	8.1	2.2	12	480	259	27
31	43	-----	14	13	-----	.57	-----	5.7	-----	163	146	-----
TOTAL	1,420	1,075	577.0	834.0	376.43	9.01	149.84	88.56	289.7	3,307.64	8,850	764.42
MEAN	45.8	35.8	18.6	26.9	13.4	.29	4.99	2.86	9.66	107	285	25.5
MAX	56	49	34	50	32	2.5	11	7.1	152	572	2,050	110
MIN	37	22	5.0	1.0	0	0	.53	.64	1.2	.56	62	.64
AC-FT	2,820	2,130	1,140	1,650	747	18	297	176	575	6,560	17,550	1,520

CAL YR 1970 TOTAL 27,006.70 MEAN 74.0 MAX 1,380 MIN 2.7 AC-FT 53,570
WTR YR 1971 TOTAL 17,741.60 MEAN 48.6 MAX 2,050 MIN 0 AC-FT 35,190

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-29	2230	7.95	3,440	8-24	1630	13.85	14,050
8-8	0300	9.44	6,110				

08379500 Pecos River near Anton Chico, N. Mex.

LOCATION.--Lat 35°10'44", long 105°06'30", Guadalupe County, in Anton Chico Grant, on right bank 2.1 miles upstream from Canon Blanco, 2.3 miles southeast of Anton Chico, and 9.7 miles downstream from Tecolote Creek.

DRAINAGE AREA.--1,050 sq mi, approximately (contributing area).

PERIOD OF RECORD.--April 1910 to May 1916, October 1916 to September 1924, August to December 1925, January 1927 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 5,130 ft (from river-profile map). See WSP 1312 for history of changes prior to June 21, 1951.

AVERAGE DISCHARGE.--58 calendar years (1911-15, 1917-24, 1927-71), 133 cfs (96,360 acre-ft per year); 20 calendar years (1952-71), 104 cfs (75,350 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,050 cfs Aug. 24 (gage height, 13.85 ft); no flow at times in February, March. Period of record: Maximum discharge, 40,300 cfs June 1, 1937 (gage height, 20.34 ft, from floodmarks, at site and datum then in use), by slope-area measurement; no flow at times. The greatest flood since 1879 occurred Sept. 29, 1904 (discharge, about 73,000 cfs), from information by a local resident.

REMARKS.--Records fair. Diversions above station for irrigation of about 4,900 acres (1959 determination) above and below station. Acequia del Bodo Juan Paiz (see table below) diverts water about 8 miles above gage and bypasses this station on left bank; ditch flow not included in record. Discharge measurements made at point opposite regular gage. A portion of this flow may be returned to the river about five miles downstream. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1342: 1951(M), 1952-53. WSP 1512: 1912-14, 1931, 1933(M), 1935-36(M), 1938(P), 1939-40, 1941-42(P), 1945(M), 1946(P), 1949(P). WSP 1712: 1942(P).

Discharge measurements, in cubic feet per second, of Acequia del Bodo Juan Paiz, January 1971 to December 1971

	<u>Date</u>	<u>Discharge</u>	<u>Date</u>	<u>Discharge</u>	<u>Date</u>	<u>Discharge</u>
	Jan. 19	0	June 9	13	Oct. 5	12
	Mar. 15	0	Sept. 14	0		

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971												
DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	18	24	0	.65	5.0	4.6	9.9	304	110	80	96	64
2	1.0	23	0	2.5	5.9	4.8	1.6	100	90	119	92	52
3	20	24	.60	2.4	5.6	6.2	1.5	62	76	100	78	48
4	12	26	2.0	3.3	1.6	7.4	1.4	65	56	74	61	50
5	16	24	2.5	.97	.96	7.4	1.3	84	43	86	55	42
6	25	18	.44	.69	.96	6.6	1.3	89	36	60	52	34
7	22	10	.16	.53	1.4	5.4	1.2	294	22	35	49	35
8	16	11	.08	3.4	1.2	3.8	1.2	2,050	5.0	27	48	37
9	18	12	.07	5.2	.64	3.5	.96	450	2.0	22	47	40
10	20	17	.23	5.0	2.2	3.5	2.0	388	1.5	23	46	32
11	20	28	.11	6.0	1.8	5.2	.88	272	1.5	20	42	27
12	30	32	.07	2.2	3.3	4.4	2.0	197	1.0	17	42	44
13	40	28	.03	1.3	3.0	3.1	.88	138	1.0	15	42	33
14	40	24	.01	2.5	3.0	3.1	.80	195	.64	17	43	60
15	40	22	.20	6.4	2.5	2.6	.72	140	.96	15	42	50
16	50	21	.31	9.8	2.0	2.1	.72	97	.72	15	43	24
17	44	21	.18	10	2.0	3.1	.72	92	2.4	16	66	22
18	37	8.1	0	3.8	3.0	4.7	.56	169	6.7	18	49	25
19	34	.60	.16	3.9	3.5	2.3	78	90	11	19	47	34
20	41	.46	.16	2.4	3.6	1.9	329	97	19	22	42	36
21	40	.60	.09	5.6	2.8	2.0	436	114	20	21	38	46
22	41	.90	.18	9.9	1.6	1.7	202	86	22	22	49	53
23	40	.70	.32	11	1.4	1.7	178	86	33	23	52	62
24	33	.07	.09	9.9	3.3	1.4	207	1,580	41	25	47	64
25	23	0	0	8.1	3.0	1.2	180	397	32	108	44	66
26	19	0	0	7.2	2.8	152	192	268	27	201	45	70
27	22	0	0	5.0	2.4	27	112	195	31	161	45	81
28	21	0	0	5.9	7.1	3.0	149	156	24	122	46	100
29	20	-----	.02	6.2	3.1	2.0	572	190	21	109	46	94
30	18	-----	.43	8.1	2.2	12	480	259	27	99	53	95
31	13	-----	.57	-----	5.7	-----	163	146	-----	107	-----	62
TOTAL	834.0	376.43	9.01	149.84	88.56	289.7	3,307.64	8,850	764.42	1,798	1,547	1,582
MEAN	26.9	13.4	.29	4.99	2.86	9.66	107	285	25.5	58.0	51.6	51.0
MAX	50	32	2.5	11	7.1	152	572	2,050	110	201	96	100
MIN	1.0	0	0	.53	.64	1.2	.56	62	.64	15	38	22
AC-FT	1,650	747	18	297	176	575	6,560	17,550	1,520	3,570	3,070	3,140

CAL YR 1971 TOTAL 19,596.60 MEAN 53.7 MAX 2,050 MIN 0 AC-FT 38,870

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-29	2230	7.95	3,440	8-24	1630	13.85	14,050
8- 8	0300	9.44	6,110				

08380500 Gallinas Creek near Montezuma, N. Mex.

LOCATION.--Lat 35°39'07", long 105°19'06", San Miguel County, in Las Vegas Grant, on left bank 2.4 miles west of Montezuma, and 6.9 miles northwest of Las Vegas.

DRAINAGE AREA.--84 sq mi, approximately.

PERIOD OF RECORD.--March to September 1915, June 1916 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1964, published as Gallinas River near Montezuma.

GAGE.--Water-stage recorder. Altitude of gage is 6,875 ft (from topographic map). Prior to Sept. 21, 1934, at different datum.

AVERAGE DISCHARGE.--55 years (1916-71), 19.4 cfs (14,060 acre-ft per year); 20 calendar years (1951-70), 15.8 cfs (11,450 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 863 cfs Aug. 7 (gage height, 4.00 ft); minimum, 0.81 cfs Feb. 10, result of freezeup.

Period of record: Maximum discharge, 7,120 cfs Aug. 2, 1966 (gage height, 9.7 ft, from floodmarks), from rating curve extended above 500 cfs on basis of slope-area measurements at gage heights 5.25, 8.25, and 9.7 ft; minimum, 0.20 cfs Oct. 6-9, 1922, Sept. 21, Oct. 9-14, 1956, Dec. 13, 1964.

The greatest flood since about 1900 occurred the night of Sept. 29, 1904 (discharge not determined), from information by local residents and G. B. Monk's report on floods.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 80 acres (1959 determination) above station.

REVISIONS (WATER YEARS).--WSP 898: Drainage area. WSP 1562: 1951(P), 1952(M), 1955(P), 1957. WSP 1632: 1931-32, 1933(M), 1934, 1935(M), 1938, 1939-40(M), 1941-42, 1945, 1949-50(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	7.3	5.2	5.0	3.2	3.3	4.5	4.1	3.5	2.9	38	24
2	6.7	7.5	4.8	4.8	3.0	3.0	4.3	3.5	3.7	3.6	27	21
3	6.5	7.3	5.2	4.0	3.2	2.8	4.3	3.5	3.5	2.7	23	18
4	6.4	6.1	5.0	3.0	3.2	3.0	4.2	3.4	3.3	1.9	21	15
5	6.3	7.2	4.8	2.0	2.9	3.3	4.3	3.8	3.1	1.9	24	13
6	6.2	7.3	5.2	1.5	2.9	3.6	4.3	4.1	3.1	1.6	21	11
7	5.9	7.6	6.0	1.5	2.5	3.8	4.3	4.3	3.0	1.4	104	9.9
8	7.0	8.2	5.2	2.0	2.7	4.0	4.2	4.5	2.9	1.8	58	9.6
9	7.1	7.0	5.5	2.5	2.8	4.2	4.1	4.0	2.9	1.7	54	8.8
10	7.0	7.1	5.3	3.0	3.0	4.1	4.2	3.4	2.8	1.6	50	7.9
11	6.9	7.2	4.8	4.0	3.3	4.3	4.1	4.6	2.3	1.5	42	7.2
12	7.1	6.8	4.8	5.0	3.1	4.4	4.0	6.0	2.3	1.4	40	6.7
13	6.7	7.1	5.0	6.0	3.2	4.7	4.1	6.0	2.2	1.3	31	6.2
14	6.5	6.1	5.5	5.5	3.1	4.7	4.3	5.9	2.2	1.2	26	6.0
15	7.4	5.7	5.2	6.0	3.0	4.0	5.0	5.9	2.2	1.1	26	6.1
16	8.3	6.2	6.0	5.5	3.1	4.1	5.3	5.4	2.5	1.2	22	5.9
17	8.0	6.7	6.0	5.0	3.2	4.3	5.0	5.2	2.6	1.0	27	6.3
18	7.9	6.3	5.5	4.5	3.2	4.1	4.7	5.1	2.5	1.0	20	7.9
19	7.9	5.9	5.5	4.0	3.1	3.9	4.3	5.1	2.2	2.0	15	7.6
20	7.8	5.8	5.5	3.8	3.2	4.0	4.7	4.7	2.2	5.2	16	7.2
21	7.7	6.3	5.2	4.0	3.0	4.2	4.7	4.3	2.1	13	13	7.1
22	7.6	5.9	5.0	3.8	2.9	4.2	5.1	4.1	2.0	10	14	7.2
23	7.8	5.4	5.0	3.5	3.0	4.3	4.8	3.3	2.0	16	22	7.5
24	7.8	5.6	5.2	3.4	3.2	4.7	4.9	3.4	1.9	23	95	9.6
25	7.5	6.1	5.5	3.4	3.6	4.8	4.4	3.9	1.8	21	107	9.4
26	7.4	5.6	6.0	3.4	3.7	4.9	4.4	3.1	1.7	22	63	7.7
27	7.4	5.7	5.5	3.2	3.6	5.6	4.5	3.3	1.7	45	43	6.2
28	6.8	5.7	5.0	3.4	3.5	6.3	4.5	3.8	1.5	26	33	5.9
29	7.0	5.5	5.5	3.2	-----	5.8	4.4	4.5	1.5	23	36	6.2
30	7.1	5.5	5.2	3.5	-----	5.2	4.3	4.3	1.5	28	33	18
31	7.1	-----	5.0	3.4	-----	4.6	-----	3.7	-----	28	30	-----
TOTAL	221.6	193.7	164.1	116.8	87.4	132.2	134.2	134.2	72.7	293.0	1,174	290.1
MEAN	7.15	6.46	5.29	3.77	3.12	4.26	4.47	4.33	2.42	9.45	37.9	9.67
MAX	8.3	8.2	6.0	6.0	3.7	6.3	5.3	6.0	3.7	45	107	24
MIN	5.9	5.4	4.8	1.5	2.5	2.8	4.0	3.1	1.5	1.0	13	5.9
AC-FT	440	384	325	232	173	262	266	266	144	581	2,330	575

CAL YR 1970 TOTAL 4,816.4 MEAN 13.2 MAX 72 MIN 3.9 AC-FT 9,550
WTR YR 1971 TOTAL 3,014.0 MEAN 8.26 MAX 107 MIN 1.0 AC-FT 5,980

PEAK DISCHARGE (BASE, 200 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8- 7	1700	4.00	863	8-24	1600	3.00	310

08380500 Gallinas Creek near Montezuma, N. Mex.

LOCATION.--Lat 35°39'07", long 105°19'06", San Miguel County, in Las Vegas Grant, on left bank 2.4 miles west of Montezuma, and 6.9 miles northwest of Las Vegas.

DRAINAGE AREA.--84 sq mi, approximately.

PERIOD OF RECORD.--March to September 1915, June 1916 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1964, published as Gallinas River near Montezuma.

GAGE.--Water-stage recorder. Altitude of gage is 6,875 ft (from topographic map). Prior to Sept. 21, 1934, at different datum.

AVERAGE DISCHARGE.--55 calendar years, 19.4 cfs (14,060 acre-ft per year); 20 calendar years (1952-71), 16.0 cfs (11,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 863 cfs Aug. 7 (gage height, 4.00 ft); minimum, 0.81 cfs Feb. 10, result of freezeup.

Period of record: Maximum discharge, 7,120 cfs Aug. 2, 1966 (gage height, 9.7 ft, from floodmarks), from rating curve extended above 500 cfs on basis of slope-area measurements at gage heights 5.25, 8.25, and 9.7 ft; minimum, 0.20 cfs Oct. 6-9, 1922, Sept. 21, Oct. 9-14, 1956, Dec. 13, 1964.

The greatest flood since about 1900 occurred the night of Sept. 29, 1904 (discharge not determined), from information by local residents and G. B. Monk's report on floods.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 80 acres (1959 determination) above station.

REVISIONS (WATER YEARS).--WSP 898: Drainage area. WSP 1562: 1951(P), 1952(M), 1955(P), 1957. WSP 1632: 1931-32, 1933(M), 1934, 1935(M), 1938, 1939-40(M), 1941-42, 1945, 1949-50(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	5.0	3.2	3.3	4.5	4.1	3.5	2.9	38	24	17	18	8.0
2	4.8	3.0	3.0	4.3	3.5	3.7	3.6	27	21	15	16	7.5
3	4.0	3.2	2.8	4.3	3.5	3.5	2.7	23	18	12	14	6.5
4	3.0	3.2	3.0	4.2	3.4	3.3	1.9	21	15	10	13	7.5
5	2.0	2.9	3.3	4.3	3.8	3.1	1.9	24	13	9.4	12	7.0
6	1.5	2.9	3.6	4.3	4.1	3.1	1.6	21	11	8.7	11	7.0
7	1.5	2.5	3.8	4.3	4.3	3.0	1.4	104	9.9	8.2	10	7.0
8	2.0	2.7	4.0	4.2	4.5	2.9	1.8	58	9.6	7.7	9.8	9.0
9	2.5	2.8	4.2	4.1	4.0	2.9	1.7	54	8.8	7.4	8.9	7.5
10	3.0	3.0	4.1	4.2	3.4	2.8	1.6	50	7.9	7.2	8.5	8.0
11	4.0	3.3	4.3	4.1	4.6	2.3	1.5	42	7.2	6.9	8.2	9.0
12	5.0	3.1	4.4	4.0	6.0	2.3	1.4	40	6.7	6.6	7.9	8.5
13	6.0	3.2	4.7	4.1	6.0	2.2	1.3	31	6.2	6.5	7.5	9.0
14	5.5	3.1	4.7	4.3	5.9	2.2	1.2	26	6.0	6.0	6.9	10
15	6.0	3.0	4.0	5.0	5.9	2.2	1.1	26	6.1	5.8	8.1	10
16	5.5	3.1	4.1	5.3	5.4	2.5	1.2	22	5.9	5.5	11	9.0
17	5.0	3.2	4.3	5.0	5.2	2.6	1.0	27	6.3	6.1	10	8.0
18	4.5	3.2	4.1	4.7	5.1	2.5	1.0	20	7.9	7.0	9.5	8.5
19	4.0	3.1	3.9	4.3	5.1	2.2	2.0	15	7.6	6.9	8.6	8.5
20	3.8	3.2	4.0	4.7	4.7	2.2	5.2	16	7.2	6.2	11	9.0
21	4.0	3.0	4.2	4.7	4.3	2.1	13	13	7.1	6.0	10	9.5
22	3.8	2.9	4.2	5.1	4.1	2.0	10	14	7.2	5.9	11	10
23	3.5	3.0	4.3	4.8	3.3	2.0	16	22	7.5	5.6	9.8	11
24	3.4	3.2	4.7	4.9	3.4	1.9	23	95	9.6	5.6	9.7	14
25	3.4	3.6	4.8	4.4	3.9	1.8	21	107	9.4	12	9.8	16
26	3.4	3.7	4.9	4.4	3.1	1.7	22	63	7.7	34	9.7	17
27	3.2	3.6	5.6	4.5	3.3	1.7	45	43	6.2	25	9.6	19
28	3.4	3.5	6.3	4.5	3.8	1.5	26	33	5.9	19	9.4	17
29	3.2	-----	5.8	4.4	4.5	1.5	23	36	6.2	22	9.3	17
30	3.5	-----	5.2	4.3	4.3	1.5	28	33	18	25	7.5	13
31	3.4	-----	4.6	-----	3.7	-----	28	30	-----	21	-----	15
TOTAL	116.8	87.4	132.2	134.2	134.2	72.7	293.0	1,174	290.1	347.2	305.7	323.0
MEAN	3.77	3.12	4.26	4.47	4.33	2.42	9.45	37.9	9.67	11.2	10.2	10.4
MAX	6.0	3.7	6.3	5.3	6.0	3.7	45	107	24	34	18	19
MIN	1.5	2.5	2.8	4.0	3.1	1.5	1.0	13	5.9	5.5	6.9	6.5
AC-FT	232	173	262	266	266	144	581	2,330	575	689	606	641

CAL YR 1971 TOTAL 3,410.5 MEAN 9.34 MAX 107 MIN 1.0 AC-FT 6,760

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8- 7	1700	4.00	863	8-24	1600	3.00	310

08382500 Gallinas River near Colonias, N. Mex.

LOCATION.--Lat 35°10'55", long 104°53'59", Guadalupe County, in Anton Chico and Preston Beck Grants, on right bank 2.4 miles upstream from mouth, 2.3 miles south of San Miguel-Guadalupe County line, 5.8 miles northwest of Colonias, and 9.0 miles east of Dilia.

DRAINAGE AREA.--610 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,944 ft (from topographic map).

AVERAGE DISCHARGE.--20 years, 16.0 cfs (11,590 acre-ft per year); 20 calendar years (1951-70), 15.6 cfs (11,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,240 cfs July 29 (gage height, 13.65 ft), from rating curve extended above 1,900 cfs, as explained below; no flow most of time.

Period of record: Maximum discharge, 9,360 cfs June 16, 1963 (gage height, 16.65 ft), from rating curve extended above 1,900 cfs on basis of slope-area measurements at gage heights 8.64, 12.74, 16.65, and 27.2 ft; no flow most of time.

Flood of about June 1, 1937, reached a stage of about 27.2 ft; discharge determined as 26,700 cfs by slope-area measurement made in 1951. A flood of about the same magnitude occurred Sept. 29-30, 1904.

REMARKS.--Records poor. Diversions for irrigation of about 7,000 acres (1959 determination) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.3	2.1	.23				0	0	26	311	8.5
2	0	1.3	2.2	.45				0	0	25	63	5.3
3	0	1.7	2.1	.20				0	0	27	91	1.8
4	0	2.2	2.2	.10				0	0	5.2	20	.28
5	0	2.4	2.2	0				0	0	.68	25	0
6	0	3.3	2.1	0				0	0	.04	82	0
7	0	3.0	2.1	0				0	0	0	23	0
8	0	2.7	2.2	0				0	0	0	13	0
9	0	2.7	2.5	0				0	0	0	12	0
10	0	2.5	2.4	0				0	0	0	23	0
11	0	2.4	2.7	0				0	0	0	41	0
12	0	2.5	2.9	0				0	0	0	21	0
13	0	2.7	2.5	0				0	0	0	9.8	0
14	0	2.5	2.2	0				0	0	0	130	0
15	0	2.5	2.4	0				0	0	0	115	0
16	0	2.7	2.4	0				0	0	0	14	0
17	3.8	2.9	1.9	0				0	0	0	6.9	0
18	3.9	2.9	2.1	0				0	0	0	5.6	0
19	3.9	3.2	2.1	0				0	0	0	7.2	0
20	3.2	3.2	1.9	0				0	0	1,000	3.8	0
21	2.1	2.7	1.7	0				0	0	90	2.2	0
22	1.2	2.9	1.4	0				0	0	44	9.3	0
23	.94	2.7	.63	0				0	0	62	.53	0
24	.94	2.7	.35	0				0	0	54	2.6	0
25	.56	2.7	0	0				0	0	73	194	0
26	.49	2.5	.15	0				0	0	24	35	0
27	.49	2.4	.50	0				0	9.6	15	14	0
28	.56	2.2	1.4	0				0	2.6	23	6.9	0
29	.56	1.9	1.0	0	-----			62	.01	658	45	3.2
30	.82	1.7	.30	0	-----			5.1	0	1,420	68	.10
31	1.2	-----	.10	0	-----			.70	-----	161	6.9	-----
TOTAL	24.66	75.0	52.73	.98	0	0	0	67.80	12.21	3,707.92	1,401.73	19.18
MEAN	.80	2.50	1.70	.032	0	0	0	2.19	.41	120	45.2	.64
MAX	3.9	3.3	2.9	.45	0	0	0	62	9.6	1,420	311	8.5
MIN	0	1.3	0	0	0	0	0	0	0	0	.53	0
AC-FT	49	149	105	1.9	0	0	0	134	24	7,350	2,780	38
CAL YR 1970	TOTAL 1,673.05	MEAN 4.58	MAX 328	MIN 0	AC-FT 3,320							
WTR YR 1971	TOTAL 5,362.21	MEAN 14.7	MAX 1,420	MIN 0	AC-FT 10,640							

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	0600	11.00	3,960	7-29	2230	13.65	6,240

08382500 Gallinas River near Colonias, N. Mex.

LOCATION.--Lat 35°10'55", long 104°53'59", Guadalupe County, in Anton Chico and Preston Beck Grants, on right bank 2.4 miles upstream from mouth, 2.3 miles south of San Miguel-Guadalupe County line, 5.8 miles northwest of Colonias, and 9.0 miles east of Dilia.

DRAINAGE AREA.--610 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,944 ft (from topographic map).

AVERAGE DISCHARGE.--21 calendar years, 15.6 cfs (11,300 acre-ft per year); 20 calendar years (1952-71), 16.0 cfs (11,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,240 cfs July 29 (gage height, 13.65 ft), from rating curve extended above 1,900 cfs, as explained below; no flow most of time.

Period of record: Maximum discharge, 9,360 cfs June 16, 1963 (gage height, 16.65 ft), from rating curve extended above 1,900 cfs on basis of slope-area measurements at gage heights 8.64, 12.74, 16.65, and 27.2 ft; no flow most of time.

Flood of about June 1, 1937, reached a stage of about 27.2 ft; discharge determined as 26,700 cfs by slope-area measurement made in 1951. A flood of about the same magnitude occurred Sept. 29-30, 1904.

REMARKS.--Records poor. Diversions for irrigation of about 7,000 acres (1959 determination) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.23				0	0	26	311	8.5	0	3.9	4.7
2	.45				0	0	25	63	5.3	.93	4.7	6.0
3	.20				0	0	27	91	1.8	5.9	3.3	6.2
4	.10				0	0	5.2	20	.28	2.4	2.2	6.0
5	0				0	0	.68	25	0	.38	1.7	5.0
6	0				0	0	.04	82	0	0	1.2	4.5
7	0				0	0	0	23	0	0	.94	3.9
8	0				0	0	0	13	0	0	.70	3.0
9	0				0	0	0	12	0	0	.70	3.0
10	0				0	0	0	23	0	0	.70	1.0
11	0				0	0	0	41	0	0	.70	3.0
12	0				0	0	0	21	0	0	.63	1.5
13	0				0	0	0	9.8	0	0	.63	2.5
14	0				0	0	0	130	0	0	.21	3.0
15	0				0	0	0	115	0	0	.21	1.5
16	0				0	0	0	14	0	0	1.9	2.0
17	0				0	0	0	6.9	0	0	5.3	1.5
18	0				0	0	0	5.6	0	0	15	1.5
19	0				0	0	0	7.2	0	0	16	1.5
20	0				0	0	1,000	3.8	0	0	10	2.0
21	0				0	0	90	2.2	0	0	8.4	3.5
22	0				0	0	44	9.3	0	0	6.8	3.2
23	0				0	0	62	.53	0	0	6.2	3.2
24	0				0	0	54	2.6	0	0	6.0	3.2
25	0				0	0	73	194	0	.44	5.5	4.3
26	0				0	0	24	35	0	78	4.9	9.4
27	0				0	9.6	15	14	0	23	4.3	6.5
28	0				0	2.6	23	6.9	0	16	3.7	4.9
29	0	-----			62	.01	658	45	3.2	8.7	3.5	4.9
30	0	-----			5.1	0	1,420	68	.10	5.1	3.5	4.9
31	0	-----		-----	.70	-----	161	6.9	-----	3.9	-----	4.7
TOTAL	.98	0	0	0	67.80	12.21	3,707.92	1,401.73	19.18	144.75	123.42	116.0
MEAN	.032	0	0	0	2.19	.41	120	45.2	.64	4.67	4.11	3.74
MAX	.45	0	0	0	62	9.6	1,420	311	8.5	78	16	9.4
MIN	0	0	0	0	0	0	0	.53	0	0	.21	1.0
AC-FT	1.9	0	0	0	134	24	7,350	2,780	38	287	245	230

CAL YR 1971 TOTAL 5,593.99 MEAN 15.3 MAX 1,420 MIN 0 AC-FT 11,100

PEAK DISCHARGE (BASE, 1,700 CFS).--July 20 (0600) 3,960 cfs (11.00 ft); July 29 (2230) 6,240 cfs (13.65).

08382700 Pecos River near Colonias, N. Mex.

LOCATION.--Lat 35°03'26", long 104°45'20", in SW¼SE¼SW¼ sec.30, T.10 N., R.21 E., Guadalupe County, at edge of left bank, on south boundary of Preston Beck Grant, 1.2 miles upstream from River Ranch, 6.5 miles southeast of Colonias, and 8.8 miles northwest of Santa Rosa.

DRAINAGE AREA.--2,340 sq mi, approximately.

PERIOD OF RECORD.--July 15, 1970, to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder. Altitude of gage is 4,758 (from topographic map).

EXTREMES.--July to September 1970: Maximum discharge not determined; minimum, 12 cfs July 17.

Water year 1971: Maximum discharge not determined; minimum, 5.6 cfs July 3, 16, 17.

REMARKS.--Records poor. Diversions and ground-water withdrawals above station for irrigation of about 12,000 acres (1959 determination). Most of base flow originates as springs in a three or four-mile reach upstream from gage.

DISCHARGE, IN CUBIC FEET PER SECOND, 1970

DAY	JUL	AUG	SEP	DAY	JUL	AUG	SEP	DAY	JUL	AUG	SEP	DAY	JUL	AUG	SEP
1	-	-	21	9	-	-	20	17	14	139	54	25	-	80	15
2	-	-	21	10	-	-	20	18	17	149	32	26	-	58	17
3	-	-	20	11	-	-	20	19	15	64	22	27	-	35	17
4	-	-	20	12	-	-	20	20	23	87	183	28	-	25	16
5	-	-	22	13	-	151	21	21	-	-	230	29	-	22	17
6	-	-	21	14	-	143	21	22	-	-	60	30	-	21	17
7	-	-	20	15	-	77	111	23	-	154	23	31	-	21	-
8	-	-	20	16	17	71	111	24	-	70	16				
Total.....															1,228
Mean.....															40.8
Max.....															230
Min.....															15
Runoff in acre-feet.....															2,440

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	18	15	16	15	15	12	9.7	9.2	6.8		70
2	21	18	16	17	15	15	11	9.7	9.2	7.2		36
3	18	18	16	17	14	17	11	9.2	9.2	7.2		23
4	20	18	17	15	14	17	11	8.8	8.8	6.5		16
5	19	18	17	13	14	17	11	8.8	9.2	7.2		14
6	19	19	17	13	14	17	11	9.2	9.2	7.6		14
7	19	19	17	13	14	17	11	9.2	9.7	8.4		14
8	23	20	17	16	13	17	11	9.2	9.7	8.8		13
9	21	20	17	18	14	17	12	8.4	10	9.2		13
10	19	19	17	16	14	17	12	8.4	11	9.2		12
11	18	19	17	15	14	17	12	8.8	10	8.4		12
12	16	19	17	16	14	17	12	10	10	7.6		12
13	18	20	17	16	15	17	12	9.7	9.7	6.8		12
14	16	19	17	15	15	17	12	8.8	9.7	6.5		12
15	23	19	17	15	15	15	13	8.8	10	6.5		12
16	22	18	17	15	15	14	13	8.8	9.7	6.5		11
17	20	18	17	15	15	14	13	8.8	9.7	6.2		12
18	18	17	16	16	14	14	12	9.7	9.7	6.5		12
19	16	17	16	16	15	14	12	9.7	9.2	7.2		12
20	16	16	16	16	15	14	12	10	9.2			12
21	16	15	16	16	17	14	11	11	8.8			12
22	17	15	15	16	15	13	11	11	8.4			12
23	18	15	15	15	17	13	11	11	8.0			14
24	18	16	15	15	17	13	10	10	8.4			12
25	18	15	15	14	17	12	10	10	8.4			12
26	18	15	16	14	16	12	10	10	8.4			11
27	17	15	16	15	17	12	10	9.7	53			11
28	17	15	16	15	17	12	10	8.8	9.2			11
29	18	15	16	15	-----	12	10	9.2	6.5			41
30	17	15	16	14	-----	12	10	12	6.5			20
31	18	-----	16	15	-----	12	-----	9.7	-----			-----
TOTAL	574	520	505	473	421	456	339	296.1	317.7			500
MEAN	18.5	17.3	16.3	15.3	15.0	14.7	11.3	9.55	10.6			16.7
MAX	23	20	17	18	17	17	13	12	53			70
MIN	16	15	15	13	13	12	10	8.4	6.5			11
AC-FT	1,140	1,030	1,000	938	835	904	672	587	630			992

08382700 Pecos River near Colonias, N. Mex.

LOCATION.--Lat 35°03'26", long 104°45'20", in SW¼SE¼SW¼ sec.30, T.10 N., R.21 E., Guadalupe County, at edge of left bank, on south boundary of Preston Beck Grant, 1.2 miles upstream from River Ranch, 6.5 miles southeast of Colonias, and 8.8 miles northwest of Santa Rosa.

DRAINAGE AREA.--2,340 sq mi, approximately.

PERIOD OF RECORD.--July 1970 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder. Altitude of gage is 4,758 (from topographic map).

EXTREMES.--Current year: Maximum discharge not determined; minimum, 5.6 cfs July 3, 16, 17.

Period of record: Maximum discharge not determined; minimum, 5.6 cfs July 3, 16, 17, 1971.

REMARKS.--Records poor. Diversions and ground-water withdrawals above station for irrigation of about 12,000 acres (1959 determination). Most of base flow originates as springs in a three or four-mile reach upstream from gage.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	16	15	15	12	9.7	9.2	6.8		70	14	44	11
2	17	15	15	11	9.7	9.2	7.2		36	22	38	12
3	17	14	17	11	9.2	9.2	7.2		23	36	31	12
4	15	14	17	11	8.8	8.8	6.5		16	31	25	12
5	13	14	17	11	8.8	9.2	7.2		14	20	20	13
6	13	14	17	11	9.2	9.2	7.6		14	16	15	13
7	13	14	17	11	9.2	9.7	8.4		14	14	14	12
8	16	13	17	11	9.2	9.7	8.8		13	12	15	12
9	18	14	17	12	8.4	10	9.2		13	11	14	12
10	16	14	17	12	8.4	11	9.2		12	11	12	12
11	15	14	17	12	8.8	10	8.4		12	11	12	12
12	16	14	17	12	10	10	7.6		12	11	12	12
13	16	15	17	12	9.7	9.7	6.8		12	11	11	12
14	15	15	17	12	8.8	9.7	6.5		12	11	11	12
15	15	15	15	13	8.8	10	6.5		12	11	11	12
16	15	15	14	13	8.8	9.7	6.5		11	10	12	12
17	15	15	14	13	8.8	9.7	6.2		12	11	12	12
18	16	14	14	12	9.7	9.7	6.5		12	11	12	12
19	16	15	14	12	9.7	9.2	7.2		12	10	14	12
20	16	15	14	12	10	9.2			12	10	16	12
21	16	17	14	11	11	8.8			12	10	13	12
22	16	15	13	11	11	8.4			12	9.7	11	12
23	15	17	13	11	11	8.0			14	9.7	11	12
24	15	17	13	10	10	8.4			12	9.7	10	12
25	14	17	12	10	10	8.4			12	11	9.7	12
26	14	16	12	10	10	8.4			11	113	9.7	12
27	15	17	12	10	9.7	53			11	151	9.7	12
28	15	17	12	10	8.8	9.2			11	111	10	14
29	15	-----	12	10	9.2	6.5			41	75	10	30
30	14	-----	12	10	12	6.5			20	56	10	28
31	15	-----	12	-----	9.7	-----			-----	42	-----	28
TOTAL	473	421	456	339	296.1	317.7			500	892.1	455.1	425
MEAN	15.3	15.0	14.7	11.3	9.55	10.6			16.7	28.8	15.2	13.7
MAX	18	17	17	13	12	53			70	151	44	30
MIN	13	13	12	10	8.4	6.5			11	9.7	9.7	11
AC-FT	938	835	904	672	587	630			992	1,770	903	843

08382800 Pecos River above Los Esteros damsite, near Santa Rosa, N. Mex.

LOCATION.--Lat 35°02'26", long 104°40'52", Guadalupe County, in Jose Perea Grant, on left bank, 1.3 miles downstream from Catfish Falls, 1.6 miles southwest from mouth of Esteros Creek, and 7.2 miles north of Santa Rosa.

DRAINAGE AREA.--2,430 sq mi, approximately.

PERIOD OF RECORD.--October 1965 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder. Altitude of gage is 4,630 ft (from topographic map).

EXTREMES.--Maximum not determined; minimum daily discharge 1.0 cfs Jan. 5, 6.

REMARKS.--Records poor. Diversions for irrigation of about 12,000 acres (1959 determination) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	17	13	18	13	12	11	10	9.4	9.0		84
2	20	18	13	16	15	12	12	10	9.0	9.0		37
3	19	18	14	10	15	10	12	10	9.4	8.3		26
4	22	18	14	4.0	15	15	12	9.4	8.3	7.0	83	14
5	20	18	15	1.0	15	16	12	9.4	7.9	6.5	37	12
6	20	17	15	1.0	16	16	12	9.8	7.5	6.2	93	12
7	20	18	15	2.0	14	16	12	10	7.9	6.1		12
8	24	18	14	5.0	10	16	12	10	8.3	6.1		12
9	22	18	14	12	12	16	12	9.0	8.3	6.8		12
10	20	18	14	20	13	15	12	9.4	7.9	6.1		12
11	20	18	15	25	14	15	12	9.0	7.5	5.8		12
12	20	18	15	25	15	15	11	9.8	7.9	5.8	170	12
13	19	19	17	25	15	15	12	9.8	7.9	5.8	85	12
14	19	19	17	20	15	15	13	9.8	6.8	6.1	45	12
15	24	19	18	14	15	15	14	9.4	7.2	5.8		12
16	24	18	18	14	14	16	14	9.0	6.4	5.5	150	10
17	20	18	18	14	15	16	13	8.3	6.4	5.2	70	10
18	19	17	17	14	15	15	13	9.0	6.1	5.0	40	14
19	18	17	17	15	14	16	13	9.4	6.1	5.0	70	13
20	17	17	17	15	15	15	13	9.0	6.1		55	10
21	17	16	17	15	10	15	13	8.6	6.1		40	10
22	17	15	17	15	9.0	14	13	8.6	6.4		60	10
23	17	16	18	15	13	14	13	9.0	5.8	176	70	14
24	16	16	19	15	15	14	12	10	5.8	141		17
25	17	14	18	15	15	13	11	10	5.2	201		12
26	16	14	19	15	14	12	10	10	6.1	146	335	10
27	16	14	18	15	13	12	11	10	37	150	161	10
28	18	14	17	15	12	12	11	10	25	83	82	10
29	18	14	16	14	-----	13	11	9.8	13		48	12
30	17	13	16	14	-----	13	10	11	9.8			117
31	17	-----	17	14	-----	11	-----	10	-----		200	-----
TOTAL	593	504	502	432.0	386.0	440	362	296.5	272.5			572
MEAN	19.1	16.8	16.2	13.9	13.8	14.2	12.1	9.56	9.08			19.1
MAX	24	19	19	25	16	16	14	11	37			117
MIN	16	13	13	1.0	9.0	10	10	8.3	5.2			10
AC-FT	1,180	1,000	996	857	766	873	718	588	541			1,130

08382800 Pecos River above Los Esteros damsite, near Santa Rosa, N. Mex.

LOCATION.--Lat 35°02'26", long 104°40'52", Guadalupe County, in Jose Perea Grant, on left bank, 1.3 miles downstream from Catfish Falls, 1.6 miles southwest from mouth of Esteros Creek, and 7.2 miles north of Santa Rosa.

DRAINAGE AREA.--2,430 sq mi, approximately.

PERIOD OF RECORD.--October 1965 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder. Altitude of gage is 4,630 ft (from topographic map).

EXTREMES.--Current year: Maximum not determined; minimum daily discharge 1.0 cfs Jan. 5, 6.
Period of record: Maximum not determined; minimum daily discharge, 1.0 cfs Jan. 5, 6, 1971.

REMARKS.--Records poor. Diversions for irrigation of about 12,000 acres (1959 determination) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	18	13	12	11	10	9.4	9.0		84	20	44	15
2	16	15	12	12	10	9.0	9.0		37	14	40	11
3	10	15	10	12	10	9.4	8.3		26	58	33	13
4	4.0	15	15	12	9.4	8.3	7.0	83	14	46	26	13
5	1.0	15	16	12	9.4	7.9	6.5	37	12	26	17	13
6	1.0	16	16	12	9.8	7.5	6.2	93	12	19	14	13
7	2.0	14	16	12	10	7.9	6.1		12	14	12	12
8	5.0	10	16	12	10	8.3	6.1		12	12	12	12
9	12	12	16	12	9.0	8.3	6.8		12	12	12	11
10	20	13	15	12	9.4	7.9	6.1		12	12	11	13
11	25	14	15	12	9.0	7.5	5.8		12	11	10	12
12	25	15	15	11	9.8	7.9	5.8	170	12	11	10	12
13	25	15	15	12	9.8	7.9	5.8	85	12	12	10	12
14	20	15	15	13	9.8	6.8	6.1	45	12	11	11	12
15	14	15	15	14	9.4	7.2	5.8		12	11	13	12
16	14	14	16	14	9.0	6.4	5.5	150	10	11	14	13
17	14	15	16	13	8.3	6.4	5.2	70	10	12	14	11
18	14	15	15	13	9.0	6.1	5.0	40	14	12	14	12
19	15	14	16	13	9.4	6.1	5.0	70	13	12	17	14
20	15	15	15	13	9.0	6.1		55	10	12	19	12
21	15	10	15	13	8.6	6.1		40	10	12	17	12
22	15	9.0	14	13	8.6	6.4		60	10	12	13	13
23	15	13	14	13	9.0	5.8	176	70	14	12	13	12
24	15	15	14	12	10	5.8	141		17	12	13	12
25	15	15	13	11	10	5.2	201		12	14	12	12
26	15	14	12	10	10	6.1	146	335	10	102	12	12
27	15	13	12	11	10	37	150	161	10	153	12	12
28	15	12	12	11	10	25	83	82	10	102	12	14
29	14	-----	13	11	9.8	13		48	12	72	12	25
30	14	-----	13	10	11	9.8			117	53	13	27
31	14	-----	11	-----	10	-----		200	-----	45	-----	28
TOTAL	432.0	386.0	440	362	296.5	272.5			572	937	482	427
MEAN	13.9	13.8	14.2	12.1	9.56	9.08			19.1	30.2	16.1	13.8
MAX	25	16	16	14	11	37			117	153	44	28
MIN	1.0	9.0	10	10	8.3	5.2			10	11	10	11
AC-FT	857	766	873	718	588	541			1,130	1,860	956	847

08383000 Pecos River at Santa Rosa, N. Mex.

LOCATION.--Lat 34°56'36", long 104°41'55", in NW¼SE¼ sec.3, T.8 N., R.21 E., Guadalupe County, on left bank 0.6 mile upstream from bridge on U.S. Highway 66 in Santa Rosa, and 1.9 miles upstream from El Rito Creek.

DRAINAGE AREA.--2,650 sq mi, approximately (contributing area).

PERIOD OF RECORD.--May 1903 to December 1905 (gage heights only), January to December 1906, February 1910 to July 1911, September 1912 to December 1924, March to May 1927, July 1927, January 1928 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for Apr. 5-20, May 4-7, 11, Aug. 13, 16-18, 24, Sept. 7-9, 11, 13, 19, 21, 23, 25, 27, Oct. 1-31, Nov. 3, 4, 9, 11, 20, 22, 1910, and Feb. 1 to Mar. 31, June 1 to July 31, 1911, published in WSP 358 have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 4,537.56 ft above mean sea level. For history of changes prior to July 1, 1958, see WSP 1732. July 1, 1958, to Sept. 30, 1963, water-stage recorder at site 800 ft downstream at datum 4.16 ft lower. Supplemental water-stage recorder at site 800 ft downstream Oct. 1, 1963, to Sept. 13, 1967, at datum 4.16 ft lower than primary gage.

AVERAGE DISCHARGE.--55 years (1912-24, 1928-71), 140 cfs (101,400 acre-ft per year); 20 calendar years (1951-70), 97.4 cfs (70,570 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,300 cfs July 30 (gage height, 9.14 ft); minimum, 0.28 cfs Jan. 7.

1930-71: Maximum discharge, 55,200 cfs June 2, 1937 (gage height, 25.7 ft, site and datum then in use), from rating curve extended above 32,000 cfs; minimum, 0.28 cfs, Jan. 7, 1971.

The flood of June 2, 1937, is the greatest since about 1886. Flood of Sept. 30, 1904, reached a stage of 24.7 ft (site and datum then in use), discharge, 45,500 cfs, by Kutter's formula. Flood of June 9, 1903, reached a stage of 21.1 ft (same site and datum as in 1904), discharge, 34,000 cfs, by comparison with 1904 flood.

REMARKS.--Records fair. Diversions for irrigation of about 12,000 acres (1959 determination) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1913-15. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	24	16	22	22	14	15	12	10	11	510	101
2	20	22	16	20	19	13	16	12	10	11	327	54
3	19	24	17	9.0	20	12	17	12	12	10	119	39
4	25	24	17	5.0	19	16	17	11	11	8.1	144	27
5	22	22	19	1.0	16	17	17	11	10	8.1	41	22
6	20	22	19	1.0	19	16	17	12	11	6.6	64	22
7	20	24	19	3.0	17	16	17	12	11	6.6	82	19
8	25	22	18	9.0	11	17	17	12	12	7.3	2,100	17
9	24	20	17	17	13	16	17	11	12	10	495	17
10	19	20	17	25	13	14	17	10	11	10	355	17
11	19	22	18	31	14	16	17	10	10	8.1	342	16
12	17	22	18	31	14	16	16	11	11	8.1	232	16
13	19	22	20	31	14	17	16	11	11	9.0	108	16
14	17	22	20	25	14	17	17	11	10	10	58	13
15	24	24	21	24	16	17	19	11	10	11	352	14
16	25	20	21	24	16	19	19	10	10	13	193	16
17	20	20	20	22	17	17	18	10	9.0	13	90	16
18	19	20	19	20	19	17	17	10	9.0	14	48	19
19	17	19	17	20	19	16	17	11	12	17	54	18
20	17	20	20	20	19	16	17	10	10	1,650	66	15
21	17	20	20	20	16	17	16	10	10	872	51	15
22	17	22	19	20	13	16	14	10	9.0	498	56	15
23	19	19	16	19	20	17	14	10	9.0	216	66	19
24	19	20	17	17	20	17	16	10	8.1	177	630	21
25	19	19	20	19	19	16	13	10	8.1	202	2,360	18
26	19	18	24	20	17	17	13	9.0	9.0	173	347	14
27	20	17	24	20	16	17	13	9.0	21	168	182	14
28	20	17	20	20	19	17	13	9.0	64	112	108	16
29	22	17	20	22	-----	18	13	9.0	17	244	66	17
30	22	16	22	22	-----	18	13	9.0	10	4,570	481	91
31	24	-----	22	22	-----	16	-----	12	-----	586	226	-----
TOTAL	626	620	593	581.0	471	505	478	327.0	377.2	9,659.9	10,353	734
MEAN	20.2	20.7	19.1	18.7	16.8	16.3	15.9	10.5	12.6	312	334	24.5
MAX	25	24	24	31	22	19	19	12	64	4,570	2,360	101
MIN	17	16	16	1.0	11	12	13	9.0	8.1	6.6	41	13
AC-FT	1,240	1,230	1,180	1,150	934	1,000	948	649	748	19,160	20,540	1,460

CAL YR 1970 TOTAL 20,850.9 MEAN 57.1 MAX 2,380 MIN 8.8 AC-FT 41,360
WTR YR 1971 TOTAL 25,325.1 MEAN 69.4 MAX 4,570 MIN 1.0 AC-FT 50,230

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	1800	5.04	4,510	8- 8	1200	5.52	5,280
7-30	0600	9.14	12,300	8-25	0130	8.25	10,300

08383000 Pecos River at Santa Rosa, N. Mex.

LOCATION.--Lat 34°56'36", long 104°41'55", in NW¼SE¼ sec.3, T.8 N., R.21 E., Guadalupe County, on left bank 0.6 mile upstream from bridge on U.S. Highway 66 in Santa Rosa, and 1.9 miles upstream from El Rito Creek.

DRAINAGE AREA.--2,650 sq mi, approximately (contributing area).

PERIOD OF RECORD.--May 1903 to December 1905 (gage heights only), January to December 1906, February 1910 to July 1911, September 1912 to December 1924, March to May 1927, July 1927, January 1928 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for Apr. 5-20, May 4-7, 11, Aug. 13, 16-18, 24, Sept. 7-9, 11, 13, 19, 21, 23, 25, 27, Oct. 1-31, Nov. 3, 4, 9, 11, 20, 22, 1910, and Feb. 1 to Mar. 31, June 1 to July 31, 1911, published in WSP 358 have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 4,537.56 ft above mean sea level. For history of changes prior to July 1, 1958, see WSP 1732. July 1, 1958, to Sept. 30, 1963, water-stage recorder at site 800 ft downstream at datum 4.16 ft lower. Supplemental water-stage recorder at site 800 ft downstream Oct. 1, 1963, to Sept. 13, 1967, at datum 4.16 ft lower than primary gage.

AVERAGE DISCHARGE.--57 calendar years (1906, 1913-24, 1928-71), 139 cfs (100,700 acre-ft per year); 20 calendar years (1952-71), 99.0 cfs (71,730 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,300 cfs July 30 (gage height, 9.14 ft); minimum, 0.28 cfs Jan. 7.

1930-71: Maximum discharge, 55,200 cfs June 2, 1937 (gage height, 25.7 ft, site and datum then in use), from rating curve extended above 32,000 cfs; minimum, 0.28 cfs, Jan. 7, 1971.

The flood of June 2, 1937, is the greatest since about 1886. Flood of Sept. 30, 1904, reached a stage of 24.7 ft (site and datum then in use), discharge, 45,500 cfs, by Kutter's formula. Flood of June 9, 1903, reached a stage of 21.1 ft (same site and datum as in 1904), discharge, 34,000 cfs, by comparison with 1904 flood.

REMARKS.--Records fair. Diversions for irrigation of about 12,000 acres (1959 determination) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1913-15. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	22	22	14	15	12	10	11	510	101	35	58	20
2	20	19	13	16	12	10	11	327	54	22	56	19
3	9.0	20	12	17	12	12	10	119	39	40	54	18
4	5.0	19	16	17	11	11	8.1	144	27	46	48	19
5	1.0	16	17	17	11	10	8.1	41	22	37	37	19
6	1.0	19	16	17	12	11	6.6	64	22	24	31	19
7	3.0	17	16	17	12	11	6.6	82	19	17	24	19
8	9.0	11	17	17	12	12	7.3	2,100	17	14	20	17
9	17	13	16	17	11	12	10	495	17	13	20	16
10	25	13	14	17	10	11	10	355	17	13	19	17
11	31	14	16	17	10	10	8.1	342	16	12	17	17
12	31	14	16	16	11	11	8.1	232	16	11	17	18
13	31	14	17	16	11	11	9.0	108	16	11	16	19
14	25	14	17	17	11	10	10	58	13	13	16	19
15	24	16	17	19	11	10	11	352	14	14	17	14
16	24	16	19	19	10	10	13	193	16	13	20	14
17	22	17	17	18	10	9.0	13	90	16	14	20	14
18	20	19	17	17	10	9.0	14	48	19	14	17	14
19	20	19	16	17	11	12	17	54	18	14	19	16
20	20	19	16	17	10	10	1,650	66	15	12	25	14
21	20	16	17	16	10	10	872	51	15	13	24	14
22	20	13	16	14	10	9.0	498	56	15	13	20	16
23	19	20	17	14	10	9.0	216	66	19	13	19	16
24	17	20	17	16	10	8.1	177	630	21	13	17	16
25	19	19	16	13	10	8.1	202	2,360	18	14	17	16
26	20	17	17	13	9.0	9.0	173	347	14	64	17	16
27	20	16	17	13	9.0	21	168	182	14	151	17	16
28	20	19	17	13	9.0	64	112	108	16	101	17	16
29	22	-----	18	13	9.0	17	244	66	17	85	17	24
30	22	-----	18	13	9.0	10	4,570	481	91	66	17	31
31	22	-----	16	-----	12	-----	586	226	-----	61	-----	29
TOTAL	581.0	471	505	478	327.0	377.2	9,659.9	10,353	734	983	733	552
MEAN	18.7	16.8	16.3	15.9	10.5	12.6	312	334	24.5	31.7	24.4	17.8
MAX	31	22	19	19	12	64	4,570	2,360	101	151	58	31
MIN	1.0	11	12	13	9.0	8.1	6.6	41	13	11	16	14
AC-FT	1,150	934	1,000	948	649	748	19,160	20,540	1,460	1,950	1,450	1,090

CAL YR 1971 TOTAL 25,754.1 MEAN 70.6 MAX 4,570 MIN 1.0 AC-FT 51,080

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-20	1800	5.04	4,510	8-8	1200	5.52	5,280
7-30	0600	9.14	12,300	8-25	0130	8.25	10,300

08383500 Pecos River near Puerto de Luna, N. Mex.

LOCATION.--Lat 34°43'48", long 104°31'28", in NE 1/4 sec. 20, T. 6 N., R. 23 E., Guadalupe County, on left bank 9 miles southeast of Puerto de Luna, and 15.8 miles upstream from Alamogordo Dam.

DRAINAGE AREA.--3,970 sq mi, approximately (contributing area).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage 4,311.34 ft above mean sea level. Prior to April 15, 1954, at datum 1 ft higher.

AVERAGE DISCHARGE.--33 years, 215 cfs (155,800 acre-ft per year); 20 calendar years (1951-70), 184 cfs (133,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,230 cfs July 30 (gage height 6.50 ft); minimum, 51 cfs July 7.

Period of record: Maximum discharge, 48,600 cfs Sept. 1, 1942 (gage height, 17.00 ft), from rating curve extended above 7,400 cfs on basis of flow at Santa Rosa; minimum, 11 cfs Jan. 31, 1951.

Maximum flood known since at least 1886 occurred June 2, 1937, when peak at Santa Rosa was 55,200 cfs. Flood of July 24, 1895, was reported as "highest in 10 years." Other major floods occurred on June 9, 1903, Sept. 30, 1904, and May 1, 1914.

REMARKS.--Records good. Diversions for irrigation of about 12,500 acres (1959 determination) above station. Discharge represents inflow to Alamogordo Reservoir (capacity, 110,700 acre-ft). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	90	96	99	91	83	74	73	67	91	543	223
2	81	90	94	99	91	90	76	74	65	64	574	155
3	81	94	94	95	93	93	78	76	65	61	309	121
4	87	95	94	82	90	92	79	74	65	58	276	104
5	86	93	94	70	89	93	76	69	61	57	191	89
6	78	94	96	70	92	88	76	72	61	58	136	85
7	73	91	96	75	88	89	77	75	61	53	164	84
8	84	88	96	80	88	92	79	76	63	55	1,550	80
9	86	90	96	100	94	90	79	76	63	57	1,540	81
10	82	94	94	110	93	85	78	75	62	58	555	81
11	80	94	94	120	89	84	75	77	60	57	447	78
12	77	94	94	120	89	87	77	76	62	55	416	76
13	83	93	96	115	87	86	73	78	62	54	233	75
14	84	93	96	105	89	86	72	74	60	54	249	73
15	92	95	99	101	90	85	77	74	63	55	379	69
16	99	95	101	99	88	87	78	73	64	57	330	70
17	96	93	101	97	88	85	78	68	64	55	179	70
18	91	95	104	96	87	85	76	67	61	54	155	75
19	89	94	101	90	83	82	74	67	62	55	109	81
20	88	94	104	90	81	82	73	68	65	933	122	80
21	87	94	104	88	78	82	75	67	65	929	111	75
22	86	93	99	94	80	83	76	68	64	485	106	76
23	86	92	99	93	86	81	73	65	63	453	114	117
24	86	94	99	91	86	78	75	65	62	276	335	186
25	88	96	99	91	86	78	77	64	62	219	2,600	103
26	85	94	99	91	79	78	75	65	63	346	566	88
27	80	94	104	91	77	80	74	68	64	299	320	82
28	84	96	101	91	78	79	74	69	77	262	244	79
29	86	101	99	92	-----	77	74	68	98	257	201	79
30	87	101	96	91	-----	80	73	70	136	3,940	362	223
31	89	-----	99	91	-----	78	-----	70	-----	774	340	-----
TOTAL	2,642	2,814	3,038	2,917	2,430	2,618	2,271	2,201	2,010	10,281	13,756	2,958
MEAN	85.2	93.8	98.0	94.1	86.8	84.5	75.7	71.0	67.0	332	444	98.6
MAX	99	101	104	120	94	93	79	78	136	3,940	2,600	223
MIN	73	88	94	70	77	77	72	64	60	53	106	69
AC-FT	5,240	5,580	6,030	5,790	4,820	5,190	4,500	4,370	3,990	20,390	27,290	5,870

CAL YR 1970 TOTAL 49,976 MEAN 137 MAX 2,410 MIN 58 AC-FT 99,130
WTR YR 1971 TOTAL 49,936 MEAN 137 MAX 3,940 MIN 53 AC-FT 99,050

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-30	1115	6.50	8,230	8-25	0615	6.15	7,240
8-9	0245	5.79	6,320				

08383500 Pecos River near Puerto de Luna, N. Mex.

LOCATION.--Lat 34°43'48", long 104°31'28", in NE¼SE¼NW¼ sec.20, T.6 N., R.23 E., Guadalupe County, on left bank 9 miles southeast of Puerto de Luna, and 15.8 miles upstream from Alamogordo Dam.

DRAINAGE AREA.--3,970 sq mi, approximately (contributing area).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage 4,311.34 ft above mean sea level. Prior to Apr. 15, 1954, at datum 1 ft higher.

AVERAGE DISCHARGE.--33 calendar years, 214 cfs (155,000 acre-ft per year); 20 calendar years (1952-71), 185 cfs (134,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,230 cfs July 30 (gage height 6.50 ft); minimum, 51 cfs July 7.

Period of record: Maximum discharge, 48,600 cfs Sept. 1, 1942 (gage height, 17.00 ft), from rating curve extended above 7,400 cfs on basis of flow at Santa Rosa; minimum, 11 cfs Jan. 31, 1951.

Maximum flood known since at least 1886 occurred June 2, 1937, when peak at Santa Rosa was 55,200 cfs. Flood of July 24, 1895, was reported as "highest in 10 years." Other major floods occurred on June 9, 1903, Sept. 30, 1904, and May 1, 1914.

REMARKS.--Records good. Diversions for irrigation of about 12,500 acres (1959 determination) above station. Discharge represents inflow to Alamogordo Reservoir (capacity, 110,700 acre-ft). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	99	91	83	74	73	67	91	543	223	165	132	99
2	99	91	90	76	74	65	64	574	155	99	127	111
3	95	93	93	78	76	65	61	309	121	88	130	104
4	82	90	92	79	74	65	58	276	104	113	121	99
5	70	89	93	76	69	61	57	191	89	108	116	96
6	70	92	88	76	72	61	58	136	85	97	103	92
7	75	88	89	77	75	61	53	164	84	93	96	94
8	80	88	92	79	76	63	55	1,550	80	88	94	96
9	100	94	90	79	76	63	57	1,540	81	84	93	96
10	110	93	85	78	75	62	58	555	81	79	92	96
11	120	89	84	75	77	60	57	447	78	80	91	94
12	120	89	87	77	76	62	55	416	76	80	90	94
13	115	87	86	73	78	62	54	233	75	76	88	94
14	105	89	86	72	74	60	54	249	73	76	87	96
15	101	90	85	77	74	63	55	379	69	74	99	96
16	99	88	87	78	73	64	57	330	70	73	117	94
17	97	88	85	78	68	64	55	179	70	76	144	94
18	96	87	85	76	67	61	54	155	75	78	101	92
19	90	83	82	74	67	62	55	109	81	80	91	94
20	90	81	82	73	68	65	933	122	80	80	90	92
21	88	78	82	75	67	65	929	111	75	80	98	94
22	94	80	83	76	68	64	485	106	76	80	100	92
23	93	86	81	73	65	63	453	114	117	80	94	92
24	91	86	78	75	65	62	276	335	186	81	90	94
25	91	86	78	77	64	62	219	2,600	103	89	90	94
26	91	79	78	75	65	63	346	566	88	161	88	96
27	91	77	80	74	68	64	299	320	82	183	88	94
28	91	78	79	74	69	77	262	244	79	214	88	92
29	92	-----	77	74	68	98	257	201	79	177	88	104
30	91	-----	80	73	70	136	3,940	362	223	155	90	116
31	91	-----	78	-----	70	-----	774	340	-----	140	-----	121
TOTAL	2,917	2,430	2,618	2,271	2,201	2,010	10,281	13,756	2,958	3,227	3,016	3,012
MEAN	94.1	86.8	84.5	75.7	71.0	67.0	332	444	98.6	104	101	97.2
MAX	120	94	93	79	78	136	3,940	2,600	223	214	144	121
MIN	70	77	77	72	64	60	53	106	69	73	87	92
AC-FT	5,790	4,820	5,190	4,500	4,370	3,990	20,390	27,290	5,870	6,400	5,980	5,970

CAL YR 1971 TOTAL 50,697 MEAN 139 MAX 3,940 MIN 53 AC-FT 100,600

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-30	1115	6.50	8,230	8-25	0615	6.15	7,240
8-9	0245	5.79	6,320				

REVISIONS (WATER YEARS).--WSP 1732: 1939-54. WSP 1923: 1939-53(M) (m).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40,120	40,010	45,090	50,690	56,180	59,770	58,470	31,610	5,210	5,310	25,080	31,230
2	40,220	40,120	45,210	50,960	56,320	59,770	58,470	29,840	5,210	5,350	26,240	31,510
3	40,330	40,220	45,450	51,090	56,470	59,770	58,320	28,320	5,210	5,350	27,260	31,610
4	40,330	40,330	45,690	51,230	56,610	59,620	58,320	27,000	5,210	5,310	27,610	31,610
5	40,330	40,440	45,940	51,500	56,750	59,620	58,320	25,160	5,210	5,280	28,140	31,510
6	40,220	40,660	46,070	51,630	56,900	59,620	58,180	23,950	5,180	5,250	26,410	31,420
7	40,120	40,990	46,190	51,770	57,040	59,620	58,180	22,410	5,180	5,210	24,430	31,420
8	40,120	41,220	46,450	51,900	57,180	59,480	58,040	20,930	5,150	5,150	22,560	31,320
9	40,120	41,450	46,570	52,040	57,470	59,480	58,040	19,520	5,110	5,110	25,910	31,230
10	40,010	41,560	46,700	52,180	57,610	59,480	56,470	18,050	5,110	5,080	25,570	31,230
11	40,010	41,670	46,950	52,310	57,750	59,330	54,650	16,480	5,080	5,050	24,270	31,130
12	39,900	41,900	47,080	52,580	57,900	59,330	52,720	14,760	5,080	5,010	23,640	31,040
13	39,790	42,020	47,200	52,850	58,040	59,330	50,820	13,320	5,080	4,950	22,260	30,940
14	39,680	42,130	47,330	53,120	58,180	59,180	48,860	11,930	5,050	4,880	20,370	30,850
15	39,680	42,360	47,580	53,260	58,320	59,180	47,450	10,040	5,050	4,820	18,720	30,760
16	39,790	42,700	47,830	53,530	58,470	59,180	46,190	8,440	5,050	4,720	18,320	30,570
17	39,900	42,930	48,080	53,670	58,610	59,040	44,840	6,830	5,050	4,660	18,720	30,480
18	40,010	43,040	48,210	53,950	58,750	59,040	43,390	5,050	5,010	4,660	19,120	30,390
19	40,010	43,160	48,470	54,090	58,750	58,900	42,020	5,050	5,010	4,630	19,390	30,390
20	40,010	43,270	48,600	54,230	58,750	58,900	40,880	5,080	5,150	4,630	19,460	30,390
21	40,010	43,510	48,730	54,510	58,610	58,900	39,460	5,150	5,150	8,690	19,600	30,300
22	40,120	43,760	48,990	54,650	58,610	58,900	37,540	5,180	5,150	10,510	19,660	30,210
23	40,120	43,880	49,120	54,790	58,900	58,750	36,200	5,210	5,150	11,580	19,660	30,210
24	40,120	44,000	49,250	54,930	59,180	58,750	34,990	5,210	5,110	12,330	19,660	30,660
25	40,120	44,120	49,380	55,070	59,330	58,750	33,140	5,210	5,080	12,640	23,720	30,850
26	40,120	44,240	49,650	55,210	59,480	58,610	33,140	5,210	5,050	12,900	28,320	30,850
27	40,120	44,360	49,780	55,350	59,620	58,610	33,140	5,180	5,010	13,540	29,200	30,850
28	40,010	44,480	49,910	55,490	59,770	58,610	33,140	5,180	4,950	13,870	29,660	30,850
29	40,010	44,600	50,170	55,770	-----	58,610	33,140	5,180	4,910	14,530	29,840	30,850
30	40,010	44,840	50,300	55,910	-----	58,610	33,140	5,180	5,010	15,690	30,020	30,850
31	40,010	-----	50,560	56,040	-----	58,610	-----	5,180	-----	23,790	30,850	-----
MAX	40,330	44,840	50,560	56,040	59,770	59,770	58,470	31,610	5,210	23,790	30,850	31,610
MIN	39,680	40,010	45,090	50,690	56,180	58,610	33,140	5,050	4,910	4,630	18,320	30,210
NTR YR 1971 MAX 59,770 MIN 4,630												

08384000 Alamogordo Reservoir near Fort Sumner, N. Mex.--Continued

ELEVATION, IN FEET, AT 0800, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,253.60	4,253.55	4,255.75	4,257.95	4,259.95	4,261.20	4,260.75	4,249.40	4,227.55	4,227.70	4,245.70	4,249.20
2	4,253.65	4,253.60	4,255.80	4,258.05	4,260.00	4,261.20	4,260.75	4,248.45	4,227.55	4,227.75	4,246.40	4,249.35
3	4,253.70	4,253.65	4,255.90	4,258.10	4,260.05	4,261.20	4,260.70	4,247.60	4,227.55	4,227.75	4,247.00	4,249.40
4	4,253.70	4,253.70	4,256.00	4,258.15	4,260.10	4,261.15	4,260.70	4,246.85	4,227.55	4,227.70	4,247.20	4,249.40
5	4,253.70	4,253.75	4,256.10	4,258.25	4,260.15	4,261.15	4,260.70	4,245.75	4,227.55	4,227.65	4,247.50	4,249.35
6	4,253.65	4,253.85	4,256.15	4,258.30	4,260.20	4,261.15	4,260.65	4,245.00	4,227.50	4,227.60	4,246.50	4,249.30
7	4,253.60	4,254.00	4,256.20	4,258.35	4,260.25	4,261.15	4,260.65	4,244.00	4,227.50	4,227.55	4,245.30	4,249.30
8	4,253.60	4,254.10	4,256.30	4,258.40	4,260.30	4,261.10	4,260.60	4,243.00	4,227.45	4,227.45	4,244.10	4,249.25
9	4,253.60	4,254.20	4,256.35	4,258.45	4,260.40	4,261.10	4,260.60	4,242.00	4,227.40	4,227.40	4,246.20	4,249.20
10	4,253.55	4,254.25	4,256.40	4,258.50	4,260.45	4,261.10	4,260.05	4,240.90	4,227.40	4,227.35	4,246.00	4,249.20
11	4,253.55	4,254.30	4,256.50	4,258.55	4,260.50	4,261.05	4,259.40	4,239.65	4,227.35	4,227.30	4,245.20	4,249.15
12	4,253.50	4,254.40	4,256.55	4,258.65	4,260.55	4,261.05	4,258.70	4,238.20	4,227.35	4,227.25	4,244.80	4,249.10
13	4,253.45	4,254.45	4,256.60	4,258.75	4,260.60	4,261.05	4,258.00	4,236.90	4,227.35	4,227.15	4,243.90	4,249.05
14	4,253.40	4,254.50	4,256.65	4,258.85	4,260.65	4,261.00	4,257.25	4,235.55	4,227.30	4,227.05	4,242.60	4,249.00
15	4,253.40	4,254.60	4,256.75	4,258.90	4,260.70	4,261.00	4,256.70	4,233.60	4,227.30	4,226.95	4,241.40	4,248.95
16	4,253.45	4,254.75	4,256.85	4,259.00	4,260.75	4,261.00	4,256.20	4,231.80	4,227.30	4,226.80	4,241.10	4,248.85
17	4,253.50	4,254.85	4,256.95	4,259.05	4,260.80	4,260.95	4,255.65	4,229.80	4,227.30	4,226.70	4,241.40	4,248.80
18	4,253.55	4,254.90	4,257.00	4,259.15	4,260.85	4,260.95	4,255.05	4,227.30	4,227.25	4,226.70	4,241.70	4,248.75
19	4,253.55	4,254.95	4,257.10	4,259.20	4,260.85	4,260.90	4,254.45	4,227.30	4,227.25	4,226.65	4,241.90	4,248.75
20	4,253.55	4,255.00	4,257.15	4,259.25	4,260.85	4,260.90	4,253.95	4,227.35	4,227.45	4,226.65	4,241.95	4,248.75
21	4,253.55	4,255.10	4,257.20	4,259.35	4,260.80	4,260.90	4,253.30	4,227.45	4,227.45	4,232.10	4,242.05	4,248.70
22	4,253.60	4,255.20	4,257.30	4,259.40	4,260.80	4,260.90	4,252.40	4,227.50	4,227.45	4,234.10	4,242.10	4,248.65
23	4,253.60	4,255.25	4,257.35	4,259.45	4,260.90	4,260.85	4,251.75	4,227.55	4,227.45	4,235.20	4,242.10	4,248.65
24	4,253.60	4,255.30	4,257.40	4,259.50	4,261.00	4,260.85	4,251.15	4,227.55	4,227.40	4,235.95	4,242.10	4,248.90
25	4,253.60	4,255.35	4,257.45	4,259.55	4,261.05	4,260.85	4,250.20	4,227.55	4,227.35	4,236.25	4,244.85	4,249.00
26	4,253.60	4,255.40	4,257.55	4,259.60	4,261.10	4,260.80	4,250.20	4,227.55	4,227.30	4,236.50	4,247.60	4,249.00
27	4,253.60	4,255.45	4,257.60	4,259.65	4,261.15	4,260.80	4,250.20	4,227.50	4,227.25	4,237.10	4,248.10	4,249.00
28	4,253.55	4,255.50	4,257.65	4,259.70	4,261.20	4,260.80	4,250.20	4,227.50	4,227.15	4,237.40	4,248.35	4,249.00
29	4,253.55	4,255.55	4,257.75	4,259.80	-----	4,260.80	4,250.20	4,227.50	4,227.10	4,238.00	4,248.45	4,249.00
30	4,253.55	4,255.65	4,257.80	4,259.85	-----	4,260.80	4,250.20	4,227.50	4,227.25	4,239.00	4,248.55	4,249.00
31	4,253.55	-----	4,257.90	4,259.90	-----	4,260.80	-----	4,227.50	-----	4,244.90	4,249.00	-----
MEAN	4,253.57	4,254.64	4,256.84	4,258.95	4,260.61	4,260.98	4,256.04	4,234.94	4,227.38	4,230.70	4,244.87	4,249.03
MAX	4,253.70	4,255.65	4,257.90	4,259.90	4,261.20	4,261.20	4,260.75	4,249.40	4,227.55	4,244.90	4,249.00	4,249.40
MIN	4,253.40	4,253.55	4,255.75	4,257.95	4,259.95	4,260.80	4,250.20	4,227.30	4,227.10	4,226.65	4,241.10	4,248.65

WTR YR 1971 MEAN 4,248.98 MAX 4,261.20 MIN 4,226.65

08384000 Alamogordo Reservoir near Fort Sumner, N. Mex.

LOCATION.--Lat 34°36'30", long 104°23'04", in SE¼SW¼ sec.34, T.5 N., R.24 E., DeBaca County, near center of dam (revised) on Pecos River, 5.0 miles northeast of Guadalupe, and 12.2 miles northwest of Fort Sumner.

DRAINAGE AREA.--4,390 sq mi, approximately (contributing area).

PERIOD OF RECORD.--December 1938 to September 1965 (monthend contents only), October 1965 to current year. Monthend elevations September 1937 to November 1938 published in reports of Pecos River Commission.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (Bureau of Reclamation datum). Apr. 1, 1946, to Sept. 30, 1957, water-stage recorder above elevation 4,234.25 ft, nonrecording gage below.

EXTREMES.--Current year: Maximum contents, 59,770 acre-ft Feb. 28 to Mar. 3 (elevation, 4,261.20 ft); minimum, 4,630 acre-ft July 19, 20 (elevation, 4,226.65 ft).

Period of record: Maximum contents, 138,300 acre-ft May 23-30, June 1-10, July 21, Sept. 22, 23, 30, Oct. 12, Nov. 4, 5, 30, Dec. 23, 24, 1941 (elevation, 4,275.00 ft); maximum elevation 4,276.10 ft June 3, Sept. 8, 1958; no storage July 28 to Aug. 2, 1951 (elevation, 4,200.70 ft).

REMARKS.--Reservoir is formed by earthfill dam, completed and storage began in August 1937. Capacity, 110,700 acre-ft at elevation 4,275.0 ft (top of spillway gates). No dead storage. No storage allocated for flood control. Reservoir is used to store water for irrigation. Figures given herein represent contents computed from elevations at 0800 hours.

COOPERATION.--Elevation record furnished by Bureau of Reclamation and Carlsbad Irrigation District. Capacity table furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1732: 1939-54. WSP 1923: 1939-53(M)(m).

CONTENTS, IN ACRE-FEET, AT 0800, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	50,690	56,180	59,770	58,470	31,610	5,210	5,310	25,080	31,230	31,320	32,460	38,800
2	50,960	56,320	59,770	58,470	29,840	5,210	5,350	26,240	31,510	31,320	32,650	39,020
3	51,090	56,470	59,770	58,320	28,320	5,210	5,350	27,260	31,610	31,320	33,040	39,350
4	51,230	56,610	59,620	58,320	27,000	5,210	5,310	27,610	31,610	31,420	33,520	39,680
5	51,500	56,750	59,620	58,320	25,160	5,210	5,280	28,140	31,510	31,510	33,720	39,790
6	51,630	56,900	59,620	58,180	23,950	5,180	5,250	26,410	31,420	31,510	33,910	40,010
7	51,770	57,040	59,620	58,180	22,410	5,180	5,210	24,430	31,420	31,510	34,200	40,220
8	51,900	57,180	59,480	58,040	20,930	5,150	5,150	22,560	31,320	31,510	34,400	40,330
9	52,040	57,470	59,480	58,040	19,520	5,110	5,110	25,910	31,230	31,510	34,590	40,550
10	52,180	57,610	59,480	56,470	18,050	5,110	5,080	25,570	31,230	31,510	34,690	40,770
11	52,310	57,750	59,330	54,650	16,480	5,080	5,050	24,270	31,130	31,420	34,890	40,990
12	52,580	57,900	59,330	52,720	14,760	5,080	5,010	23,640	31,040	31,420	35,090	41,100
13	52,850	58,040	59,330	50,820	13,320	5,080	4,950	22,260	30,940	31,320	35,190	41,220
14	53,120	58,180	59,180	48,860	11,930	5,050	4,880	20,370	30,850	31,320	35,390	41,330
15	53,260	58,320	59,180	47,450	10,040	5,050	4,820	18,720	30,760	31,320	35,600	41,560
16	53,530	58,470	59,180	46,190	8,440	5,050	4,720	18,320	30,570	31,230	35,900	41,790
17	53,670	58,610	59,040	44,840	6,830	5,050	4,660	18,720	30,480	31,130	36,200	41,900
18	53,950	58,750	59,040	43,390	5,050	5,010	4,660	19,120	30,390	31,130	36,500	42,130
19	54,090	58,750	58,900	42,020	5,050	5,010	4,630	19,390	30,390	31,040	36,700	42,240
20	54,230	58,750	58,900	40,880	5,080	5,150	4,630	19,460	30,390	31,040	36,910	42,360
21	54,510	58,610	58,900	39,460	5,150	5,150	8,690	19,600	30,300	31,040	37,120	42,590
22	54,650	58,610	58,900	37,540	5,180	5,150	10,510	19,660	30,210	30,940	37,330	42,820
23	54,790	58,900	58,750	36,200	5,210	5,150	11,580	19,660	30,210	30,940	37,440	43,040
24	54,930	59,180	58,750	34,990	5,210	5,110	12,330	19,660	30,660	30,940	37,650	43,270
25	55,070	59,330	58,750	33,140	5,210	5,080	12,640	23,720	30,850	30,850	37,860	43,390
26	55,210	59,480	58,610	33,140	5,210	5,050	12,900	28,320	30,850	30,940	37,960	43,510
27	55,350	59,620	58,610	33,140	5,180	5,010	13,540	29,200	30,850	30,940	38,170	43,760
28	55,490	59,770	58,610	33,140	5,180	4,950	13,870	29,660	30,850	31,610	38,280	43,880
29	55,770	-----	58,610	33,140	5,180	4,910	14,530	29,840	30,850	31,800	38,490	44,120
30	55,910	-----	58,610	33,140	5,180	5,010	15,690	30,020	30,850	31,990	38,590	44,360
31	56,040	-----	58,610	-----	5,180	-----	23,790	30,850	-----	32,370	-----	44,480
MAX	56,040	59,770	59,770	58,470	31,610	5,210	23,790	30,850	31,610	32,370	38,590	44,480
MIN	50,690	56,180	58,610	33,140	5,050	4,910	4,630	18,320	30,210	30,850	32,460	38,800

CAL YR 1971 MAX 59,770 MIN 4,630

08384000 Alamogordo Reservoir near Fort Sumner, N. Mex.--Continued

ELEVATION, IN FEET, AT 0800, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	4,257.95	4,259.95	4,261.20	4,260.75	4,249.40	4,227.55	4,227.70	4,245.70	4,249.20	4,249.25	4,249.85	4,253.00
2	4,258.05	4,260.00	4,261.20	4,260.75	4,248.45	4,227.55	4,227.75	4,246.40	4,249.35	4,249.25	4,249.95	4,253.10
3	4,258.10	4,260.05	4,261.20	4,260.70	4,247.60	4,227.55	4,227.75	4,247.00	4,249.40	4,249.25	4,250.15	4,253.25
4	4,258.15	4,260.10	4,261.15	4,260.70	4,246.85	4,227.55	4,227.70	4,247.20	4,249.40	4,249.30	4,250.40	4,253.40
5	4,258.25	4,260.15	4,261.15	4,260.70	4,245.75	4,227.55	4,227.65	4,247.50	4,249.35	4,249.35	4,250.50	4,253.45
6	4,258.30	4,260.20	4,261.15	4,260.65	4,245.00	4,227.50	4,227.60	4,246.50	4,249.30	4,249.35	4,250.60	4,253.55
7	4,258.35	4,260.25	4,261.15	4,260.65	4,244.00	4,227.50	4,227.55	4,245.30	4,249.30	4,249.35	4,250.75	4,253.65
8	4,258.40	4,260.30	4,261.10	4,260.60	4,243.00	4,227.45	4,227.45	4,244.10	4,249.25	4,249.35	4,250.85	4,253.70
9	4,258.45	4,260.40	4,261.10	4,260.60	4,242.00	4,227.40	4,227.40	4,243.20	4,249.20	4,249.35	4,250.95	4,253.80
10	4,258.50	4,260.45	4,261.10	4,260.05	4,240.90	4,227.40	4,227.35	4,246.00	4,249.20	4,249.35	4,251.00	4,253.90
11	4,258.55	4,260.50	4,261.05	4,259.40	4,239.65	4,227.35	4,227.30	4,245.20	4,249.15	4,249.30	4,251.10	4,254.00
12	4,258.65	4,260.55	4,261.05	4,258.70	4,238.20	4,227.35	4,227.25	4,244.80	4,249.10	4,249.30	4,251.20	4,254.05
13	4,258.75	4,260.60	4,261.05	4,258.00	4,236.90	4,227.35	4,227.15	4,243.90	4,249.05	4,249.25	4,251.25	4,254.10
14	4,258.85	4,260.65	4,261.00	4,257.25	4,235.55	4,227.30	4,227.05	4,242.60	4,249.00	4,249.25	4,251.35	4,254.15
15	4,258.90	4,260.70	4,261.00	4,256.70	4,233.60	4,227.30	4,226.95	4,241.40	4,248.95	4,249.25	4,251.45	4,254.25
16	4,259.00	4,260.75	4,261.00	4,256.20	4,231.80	4,227.30	4,226.80	4,241.10	4,248.85	4,249.20	4,251.60	4,254.35
17	4,259.05	4,260.80	4,260.95	4,255.65	4,229.80	4,227.30	4,226.70	4,241.40	4,248.80	4,249.15	4,251.75	4,254.40
18	4,259.15	4,260.85	4,260.95	4,255.05	4,227.30	4,227.25	4,226.70	4,241.70	4,248.75	4,249.15	4,251.90	4,254.50
19	4,259.20	4,260.85	4,260.90	4,254.45	4,227.30	4,227.25	4,226.65	4,241.90	4,248.75	4,249.10	4,252.00	4,254.55
20	4,259.25	4,260.85	4,260.90	4,253.95	4,227.35	4,227.45	4,226.65	4,241.95	4,248.75	4,249.10	4,252.10	4,254.60
21	4,259.35	4,260.80	4,260.90	4,253.30	4,227.45	4,227.45	4,232.10	4,242.05	4,248.70	4,249.10	4,252.20	4,254.70
22	4,259.40	4,260.80	4,260.90	4,252.40	4,227.50	4,227.45	4,234.10	4,242.10	4,248.65	4,249.05	4,252.30	4,254.80
23	4,259.45	4,260.90	4,260.85	4,251.75	4,227.55	4,227.45	4,235.20	4,242.10	4,248.65	4,249.05	4,252.35	4,254.90
24	4,259.50	4,261.00	4,260.85	4,251.15	4,227.55	4,227.40	4,235.95	4,242.10	4,248.90	4,249.05	4,252.45	4,255.00
25	4,259.55	4,261.05	4,260.85	4,250.20	4,227.55	4,227.35	4,236.25	4,244.85	4,249.00	4,249.00	4,252.55	4,255.05
26	4,259.60	4,261.10	4,260.80	4,250.20	4,227.55	4,227.30	4,236.50	4,247.60	4,249.00	4,249.05	4,252.60	4,255.10
27	4,259.65	4,261.15	4,260.80	4,250.20	4,227.50	4,227.25	4,237.10	4,248.10	4,249.00	4,249.05	4,252.70	4,255.20
28	4,259.70	4,261.20	4,260.80	4,250.20	4,227.50	4,227.15	4,237.40	4,248.35	4,249.00	4,249.40	4,252.75	4,255.25
29	4,259.80	-----	4,260.80	4,250.20	4,227.50	4,227.10	4,238.00	4,248.45	4,249.00	4,249.50	4,252.85	4,255.35
30	4,259.85	-----	4,260.80	4,250.20	4,227.50	4,227.25	4,239.00	4,248.55	4,249.00	4,249.60	4,252.90	4,255.45
31	4,259.90	-----	4,260.80	-----	4,227.50	-----	4,244.90	4,249.00	-----	4,249.80	-----	4,255.50
MEAN	4,258.95	4,260.61	4,260.98	4,256.04	4,234.94	4,227.38	4,230.70	4,244.87	4,249.03	4,249.25	4,251.55	4,254.32
MAX	4,259.90	4,261.20	4,261.20	4,260.75	4,249.40	4,227.55	4,244.90	4,249.00	4,249.40	4,249.80	4,252.90	4,255.50
MIN	4,257.95	4,259.95	4,260.80	4,250.20	4,227.30	4,227.10	4,226.65	4,241.10	4,248.65	4,249.00	4,249.85	4,253.00

CAL YR 1971 MEAN 4,248.14 MAX 4,261.20 MIN 4,226.65

REVISIONS (WATER YEARS).--WSP 1512: 1932. WSP 1632: 1942. WSP 1712: 1944.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	.37	.45	.84	1.5	86	75	728	67	70	67	74
2	.35	.26	.45	.84	1.5	89	75	728	67	66	69	93
3	65	.41	.45	.84	1.5	90	75	729	69	67	69	96
4	101	.33	.45	.80	1.3	90	75	736	69	69	68	104
5	101	.48	.64	.80	1.3	91	75	734	69	70	647	102
6	101	.50	.64	.80	1.3	91	76	726	70	67	1,070	95
7	101	.50	.64	.80	1.3	91	77	729	70	69	1,070	95
8	103	.60	.64	.91	1.4	91	78	737	71	68	1,070	90
9	98	.60	.64	.86	1.5	92	548	733	68	64	1,060	84
10	95	.65	.64	.85	1.5	93	1,050	726	66	64	1,070	95
11	97	.70	.64	.87	1.5	94	1,040	729	68	65	1,070	89
12	98	.70	.64	.84	1.7	95	1,040	728	69	69	1,080	96
13	98	.75	.64	.84	1.9	96	1,040	726	71	70	1,110	96
14	83	.75	.64	.84	2.1	96	893	724	70	72	1,110	97
15	77	.80	.64	.94	2.1	97	719	725	71	71	942	98
16	78	.80	.64	.88	2.1	97	714	725	72	70	96	99
17	79	.84	.64	.98	2.1	98	725	719	72	68	83	92
18	79	1.0	.64	1.1	39	98	740	296	71	68	67	98
19	79	3.9	.64	.84	89	98	732	73	71	70	68	91
20	80	.45	.64	.84	92	79	732	73	70	69	68	82
21	81	.64	.64	.84	44	70	731	74	69	65	86	75
22	81	.84	.64	.84	1.8	71	725	74	70	71	99	72
23	82	.50	.64	.84	1.8	72	729	71	71	68	100	74
24	82	.54	.84	.85	1.9	72	739	71	72	68	70	75
25	87	.45	.84	.88	2.0	73	343	74	69	68	6.9	71
26	93	.45	.84	1.1	2.0	73	79	74	72	66	60	75
27	94	.45	.84	1.1	2.0	74	79	73	68	66	72	74
28	92	.45	.84	1.1	30	74	79	73	66	66	73	74
29	93	.45	.84	1.3	-----	74	80	73	69	68	74	74
30	95	.45	.84	1.3	-----	74	506	73	70	79	74	74
31	72	-----	.84	1.5	-----	75	-----	68	-----	73	75	-----
TOTAL	2,565.70	20.61	20.68	28.96	333.1	2,654	14,669	13,622	2,087	2,124	12,743.9	2,606
MEAN	82.8	.69	.67	.93	11.9	85.6	489	439	69.6	68.5	411	86.9
MAX	103	3.9	.84	1.5	92	98	1,050	737	72	79	1,110	104
MIN	.35	.26	.45	.80	1.3	70	75	68	66	64	6.9	71
AC-FT	5,090	41	41	57	661	5,260	29,100	27,020	4,140	4,210	25,280	5,170
CAL YR 1970	TOTAL	61,138.45	MEAN	168	MAX	1,070	MIN	.26	AC-FT	121,300		
WTR YR 1971	TOTAL	53,474.95	MEAN	147	MAX	1,110	MIN	.26	AC-FT	106,100		

08384500 Pecos River below Alamogordo Dam, N. Mex.

LOCATION.--Lat 34°36'15", long 104°23'14", in lot 1, sec.2, T.4 N., R.24 E., DeBaca County, on left bank 1,200 ft downstream from Alamogordo Dam, 2.9 miles upstream from Salado Creek, 4.6 miles northeast of Guadalupe, and 12.2 miles northwest of Fort Sumner.

DRAINAGE AREA.--4,390 sq mi, approximately (contributing area).

PERIOD OF RECORD.--October 1912 to April 1926, August 1926 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1944, published as "near Guadalupe."

GAGE.--Water-stage recorder and Parshall flume, with concrete control above top of flume. Datum of gage is 4,142.67 ft above mean sea level (Bureau of Reclamation datum). Prior to Sept. 10, 1936, at site 1.5 miles upstream at different datum. Sept. 14, 1936, to Mar. 8, 1941, and June 11, to Sept. 21, 1941, at site 0.2 mile downstream at different datums.

AVERAGE DISCHARGE.--23 calendar years (1913-25, 1927-36), 236 cfs (171,000 acre-ft per year), prior to completion of Alamogordo Dam; 35 calendar years (1937-71), 212 cfs (153,600 acre-ft per year); 20 calendar years (1952-71), 172 cfs (124,600 acre-ft per year).

EXTREMES. Current year: Maximum daily discharge, 1,110 cfs Aug. 13, 14 (gage height, 3.29 ft); minimum daily discharge, 0.26 cfs Oct. 31.

Period of record: Maximum discharge, 42,800 cfs Sept. 1, 1942, by computation of flow over spillway and through outlet gages of Alamogordo Dam by Bureau of Reclamation; maximum gage height, 13.58 ft Sept. 22, 1941, no flow at times.

Flood of June 2, 1937 probably exceeded 55,000 cfs at site 1.5 miles upstream.

REMARKS.--Records good. Diversion for irrigation of about 12,500 acres (1959 determination) above station. Flow regulated by Alamogordo Reservoir (see sta 08384000).

REVISIONS (WATER YEARS).--WSP 1512: 1932. WSP 1632: 1942. WSP 1712: 1944.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.84	1.5	86	75	728	67	70	67	74	64	.29	.45
2	.84	1.5	89	75	728	67	66	69	93	75	.38	.45
3	.84	1.5	90	75	729	69	67	69	96	75	.38	.45
4	.80	1.3	90	75	736	69	69	68	104	77	.41	.45
5	.80	1.3	91	75	734	69	70	647	102	77	.51	.45
6	.80	1.3	91	76	726	70	67	1,070	97	81	.51	.28
7	.80	1.3	91	77	729	70	69	1,070	95	85	.51	.28
8	.91	1.4	91	78	737	71	68	1,070	90	85	.51	.28
9	.86	1.5	92	548	733	68	64	1,060	84	85	.51	.28
10	.85	1.5	93	1,050	726	66	64	1,070	95	85	.50	.28
11	.87	1.5	94	1,040	729	68	65	1,070	89	86	.51	.28
12	.84	1.7	95	1,040	728	69	69	1,080	96	86	.54	.28
13	.84	1.9	96	1,040	726	71	70	1,110	96	86	1.1	.28
14	.84	2.1	96	893	724	70	72	1,110	97	87	1.7	.28
15	.94	2.1	97	719	725	71	71	942	98	86	.54	.45
16	.88	2.1	97	714	725	72	70	96	99	87	.63	.45
17	.98	2.1	98	725	719	72	68	83	92	87	5.1	.45
18	1.1	39	98	740	296	71	68	67	98	86	.55	.45
19	.84	89	98	732	73	71	70	68	91	86	.38	.45
20	.84	92	79	732	73	70	69	68	82	86	.38	.45
21	.84	44	70	731	74	69	65	86	75	86	.39	.45
22	.84	1.8	71	725	74	70	71	99	72	87	.39	.28
23	.84	1.8	72	729	71	71	68	100	74	86	.38	.28
24	.85	1.9	72	739	71	72	68	70	75	86	.28	.28
25	.88	2.0	73	343	74	69	68	6.9	71	87	.28	.28
26	1.1	2.0	73	79	74	72	66	60	75	86	.28	.28
27	1.1	2.0	74	79	73	68	66	72	74	87	.28	.28
28	1.1	30	74	79	73	66	66	73	74	87	.28	.28
29	1.3	-----	74	80	73	69	68	74	74	68	.28	.45
30	1.3	-----	74	506	73	70	79	74	74	.30	.28	.45
31	1.5	-----	75	-----	68	-----	73	75	-----	.26	-----	.45
TOTAL	28.96	333.1	2,654	14,669	13,622	2,087	2,124	12,743.9	2,606	2,412.56	19.06	11.23
MEAN	.93	11.9	85.6	489	439	69.6	68.5	411	86.9	77.8	.64	.36
MAX	1.5	92	98	1,050	737	72	79	1,110	104	87	5.1	.45
MIN	.80	1.3	70	75	68	66	64	6.9	71	.26	.28	.28
AC-FT	57	661	5,260	29,100	27,020	4,140	4,210	25,280	5,170	4,790	38	22

CAL YR 1971 TOTAL 53,310.81 MEAN 146 MAX 1,110 MIN .26 AC-FT 105,700

LOCATION.--Lat 34°30'30", long 104°16'40", in SW $\frac{1}{4}$ sec. 1, T.3 N., R.25 E., DeBaca County, on right bank of concrete canal, 200 ft downstream from diversion dam on Pecos River, and 3.0 miles northwest of Fort Sumner.

GAGE.--Water-stage recorder. Datum of gage is 4,034.7 ft above mean sea level (Bureau of Reclamation Bench Mark). Prior to March 1954 at site 2.4 miles downstream at different datum. April 1954 to March 1965 at site 1.1 miles downstream at datum 1.7 ft lower.

EXTREMES.--Current year: Maximum daily discharge, 100 cfs Apr. 26; no flow many days.
Period of record: Maximum daily discharge, 174 cfs July 22, 1941; no flow many days each year.

REMARKS.--Records good. Canal diverts water from Pecos River for irrigation of about 6,600 acres (1961 determination) by the Fort Sumner Irrigation District.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	37			0	39	74	93	65	66	66	74
2	0	3.6			0	82	74	91	67	65	68	75
3	0	5.0			0	87	74	87	67	60	68	91
4	69	0			0	88	76	87	68	62	68	93
5	92	0			0	89	76	86	66	63	69	96
6	95	0			0	91	79	86	65	64	77	96
7	96	0			0	91	77	86	66	60	82	92
8	98	0			0	91	76	86	67	64	79	93
9	97	0			0	90	82	85	68	62	91	82
10	93	0			0	91	93	85	62	58	98	91
11	94	0			0	92	86	85	64	60	70	92
12	96	0			0	94	82	85	66	61	78	86
13	95	0			0	96	87	85	66	65	88	94
14	94	0			0	96	90	85	65	65	88	93
15	82	0			0	94	80	85	64	67	89	94
16	81	0			0	96	87	85	64	65	83	96
17	79	0			0	98	87	85	65	64	99	94
18	80	0			0	99	87	91	62	64	94	92
19	81	0			39	99	86	93	63	66	76	94
20	82	0			81	93	85	77	65	75	72	88
21	82	0			35	71	84	74	66	58	72	76
22	82	0			0	70	84	71	63	74	96	73
23	85	0			0	71	86	69	63	65	98	83
24	84	0			0	71	87	68	66	67	79	90
25	84	0			0	72	96	74	65	68	.82	77
26	91	0			0	72	100	74	62	66	23	77
27	95	0			0	72	91	73	66	74	70	77
28	94	0			0	72	87	73	60	64	73	77
29	91	0			-----	73	83	75	62	82	72	77
30	93	0			-----	74	86	72	64	70	73	86
31	95	-----			-----	74	-----	70	-----	79	74	-----
TOTAL	2,480	45.6	0	0	155	2,588	2,522	2,521	1,942	2,043	2,333.82	2,599
MEAN	80.0	1.52	0	0	5.54	83.5	84.1	81.3	64.7	65.9	75.3	86.6
MAX	98	37	0	0	81	99	100	93	68	82	99	96
MIN	0	0	0	0	0	39	74	68	60	58	.82	73
AC-FT	4,920	90	0	0	307	5,130	5,000	5,000	3,850	4,050	4,630	5,160
CAL YR 1970	TOTAL	19,005.50	MEAN	52.1	MAX	112	MIN	0	AC-FT	37,700		
WTR YR 1971	TOTAL	19,229.42	MEAN	52.7	MAX	100	MIN	0	AC-FT	38,140		

08385000 Fort Sumner main canal near Fort Sumner, N. Mex.

LOCATION.--Lat 34°30'30", long 104°16'40", in SW¼SW¼ sec.1, T.3 N., R.25 E., DeBaca County, on right bank of concrete canal, 200 ft downstream from diversion dam on Pecos River, and 3.0 miles northwest of Fort Sumner.

PERIOD OF RECORD.--March 1939 to February 1943 (published in WSP 1732), April 1954 to current year (monthly discharge only prior to October 1965).

GAGE.--Water-stage recorder. Datum of gage is 4,034.7 ft above mean sea level (Bureau of Reclamation Bench Mark). Prior to March 1954 at site 2.4 miles downstream at different datum. April 1954 to March 1965 at site 1.1 miles downstream at datum 1.7 ft lower.

AVERAGE DISCHARGE.--20 calendar years (1940-42, 1955-71), 48.4 cfs (35,070 acre-ft per year); 17 calendar years (1955-71), 50.7 cfs (36,730 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 100 cfs Apr. 26; no flow many days.

Period of record: Maximum daily discharge, 174 cfs July 22, 1941; no flow many days each year.

REMARKS.--Records good. Canal diverts water from Pecos River for irrigation of about 6,600 acres (1961 determination) by the Fort Sumner Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		0	39	74	93	65	66	66	74	69		
2		0	82	74	91	67	65	68	75	72		
3		0	87	74	87	67	60	68	91	74		
4		0	88	76	87	68	62	68	93	74		
5		0	89	76	86	66	63	69	96	75		
6		0	91	79	86	65	64	77	96	76		
7		0	91	77	86	66	60	82	92	84		
8		0	91	76	86	67	64	79	93	84		
9		0	90	82	85	68	62	91	82	84		
10		0	91	93	85	62	58	98	91	82		
11		0	92	86	85	64	60	70	92	84		
12		0	94	82	85	66	61	78	86	85		
13		0	96	87	85	66	65	88	94	86		
14		0	96	90	85	65	65	88	93	86		
15		0	94	80	85	64	67	89	94	85		
16		0	96	87	85	64	65	83	96	83		
17		0	98	87	85	65	64	99	94	84		
18		0	99	87	91	62	64	94	92	85		
19		39	99	86	93	63	66	76	94	91		
20		81	93	85	77	65	75	72	88	88		
21		35	71	84	74	66	58	72	76	87		
22		0	70	84	71	63	74	96	73	88		
23		0	71	86	69	63	65	98	83	90		
24		0	71	87	68	66	67	79	90	87		
25		0	72	96	74	65	68	.82	77	90		
26		0	72	100	74	62	66	23	77	94		
27		0	72	91	73	66	74	70	77	88		
28		0	72	87	73	60	64	73	77	84		
29		-----	73	83	75	62	82	72	77	82		
30		-----	74	86	72	64	70	73	86	54		
31		-----	74	-----	70	-----	79	74	-----	6.7	-----	
TOTAL	0	155	2,588	2,522	2,521	1,942	2,043	2,333.82	2,599	2,481.7	0	0
MEAN	0	5.54	83.5	84.1	81.3	64.7	65.9	75.3	86.6	80.1	0	0
MAX	0	81	99	100	93	68	82	99	96	94	0	0
MIN	0	0	39	74	68	60	58	.82	73	6.7	0	0
AC-FT	0	307	5,130	5,000	5,000	3,850	4,050	4,630	5,160	4,920	0	0

CAL YR 1971 TOTAL 19,185.52 MEAN 52.6 MAX 100 MIN 0 AC-FT 38,050

08386000 Pecos River near Acme, N. Mex.

LOCATION.--Lat 33°32'10", long 104°22'34", in SW 1/4 sec. 14, T. 9 S., R. 25 E., Chaves County, on right bank 3.0 miles downstream from U. S. Highway 70, 3.7 miles downstream from Salt Creek, 4.7 miles southwest of Acme, and 14 miles northeast of Roswell.

DRAINAGE AREA.--11,380 sq mi, approximately (contributing area).

PERIOD OF RECORD.--September 1921 to June 1923, July 1937 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 3,507 ft (from topographic map). Prior to Nov. 1, 1938, at site on highway bridge three miles upstream at various datums. Since Oct. 25, 1963, supplemental water-stage recorder at site opposite base gage at same datum.

AVERAGE DISCHARGE.--34 years (1937-71), 197 cfs (142,700 acre-ft per year); 20 calendar years (1951-70), 158 cfs (114,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,860 cfs Aug. 25 (gage height, 6.87 ft); no flow many days. Period of record: Maximum discharge, 45,000 cfs Sept. 23, 1941 (gage height, 13.71 ft), from rating curve extended above 26,000 cfs; no flow at times. The flood of May 28, 1937, reached a discharge of 53,000 cfs (gage height, 14.82 ft, from floodmarks, site and datum then in use), by slope-area method, but may have been exceeded by the flood of Oct. 1, 1904.

REMARKS.--Records fair except those below 10 cfs, which are poor. Flow regulated by Alamogordo Reservoir (see sta 08384000). Diversions for irrigation of about 20,000 acres (1959 determination) above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	39	22	14	10	18	11	70	17	0	45	36
2	54	41	21	12	10	15	11	60	14	0	15	30
3	56	43	20	9.0	9.7	13	10	390	11	0	7.8	19
4	52	49	20	2.0	9.3	16	9.3	495	8.9	0	18	14
5	46	44	20	3.0	9.3	13	11	548	7.4	0	6.4	57
6	43	40	20	3.0	9.3	11	10	548	5.5	0	4.3	21
7	44	38	19	4.0	8.0	17	11	566	4.3	0	0	12
8	63	35	19	6.0	5.0	18	11	591	3.8	0	232	8.1
9	41	31	19	7.0	7.0	21	9.3	591	2.8	0	877	9.7
10	38	30	19	9.0	7.5	19	8.1	566	1.4	0	710	12
11	43	30	18	10	8.5	14	67	557	.85	0	943	34
12	40	30	18	18	9.3	11	616	574	.51	0	1,550	10
13	37	30	18	21	10	9.7	715	557	.34	0	943	8.1
14	51	28	18	30	10	8.9	753	574	.32	0	998	4.9
15	75	28	18	28	9.3	8.5	762	574	0	0	987	1.7
16	80	27	17	22	9.3	8.9	616	566	0	0	921	.68
17	80	26	18	20	8.9	8.9	582	566	0	0	730	19
18	71	25	16	18	8.5	8.1	591	574	0	0	620	87
19	71	24	16	17	7.6	8.5	608	566	0	0	204	22
20	77	24	16	16	7.6	10	616	409	0	0	100	6.4
21	80	24	16	16	7.0	11	566	168	228	0	71	4.3
22	79	23	16	15	6.0	14	548	105	33	0	52	1.9
23	73	22	13	14	12	19	540	71	10	0	45	22
24	71	22	12	13	23	20	502	52	3.1	0	38	79
25	63	22	14	12	51	18	495	45	0	0	1,080	91
26	54	22	14	12	36	14	548	37	0	0	582	85
27	43	22	15	12	26	13	336	32	0	0	334	75
28	39	22	16	12	22	11	170	31	0	8.1	137	56
29	39	22	16	12	-----	11	112	91	0	32	77	44
30	38	22	16	11	-----	11	84	26	0	73	63	42
31	36	-----	14	10	-----	11	-----	21	-----	50	45	-----
TOTAL	1,733	885	534	408.0	357.1	410.5	9,928.7	10,621	352.22	163.1	12,435.5	912.78
MEAN	55.9	29.5	17.2	13.2	12.8	13.2	331	343	11.7	5.26	401	30.4
MAX	80	49	22	30	51	21	762	591	228	73	1,550	91
MIN	36	22	12	2.0	5.0	8.1	8.1	21	0	0	0	.68
AC-FT	3,440	1,760	1,060	809	708	814	19,690	21,070	699	324	24,670	1,810
CAL YR 1970	TOTAL 53,005.59	MEAN 145	MAX 4,300	MIN 0	AC-FT 105,100							
WTR YR 1971	TOTAL 38,740.90	MEAN 106	MAX 1,550	MIN 0	AC-FT 76,840							

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-12	0400	6.92	†2,790	8-25	0330	6.87	2,860

† Includes release from Alamogordo Reservoir.

08386000 Pecos River near Acme, N. Mex.

LOCATION.--Lat 33°32'10", long 104°22'34", in SW¼NW¼ sec.14, T.9 S., R.25 E., Chaves County, on right bank 3.0 miles downstream from U. S. Highway 70, 3.7 miles downstream from Salt Creek, 4.7 miles southwest of Acme, and 14 miles northeast of Roswell.

DRAINAGE AREA.--11,380 sq mi, approximately (contributing area).

PERIOD OF RECORD.--September 1921 to June 1923, July 1937 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 3,507 ft (from topographic map). Prior to Nov. 1, 1938, at site on highway bridge three miles upstream at various datums. Since Oct. 25, 1963, supplemental water-stage recorder at site opposite base gage at same datum.

AVERAGE DISCHARGE.--34 calendar years (1938-71), 197 cfs (142,700 acre-ft per year); 20 calendar years (1952-71), 156 cfs (113,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,860 cfs Aug. 25 (gage height, 6.87 ft); no flow many days.

Period of record: Maximum discharge, 45,000 cfs Sept. 23, 1941 (gage height, 13.71 ft), from rating curve extended above 26,000 cfs; no flow at times.

The flood of May 28, 1937, reached a discharge of 53,000 cfs (gage height, 14.82 ft, from floodmarks, site and datum then in use), by slope-area method, but may have been exceeded by the flood of Oct. 1, 1904.

REMARKS.--Records fair except those below 10 cfs, which are poor. Flow regulated by Alamogordo Reservoir (see sta 08384000). Diversions for irrigation of about 20,000 acres (1959 determination) above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	14	10	18	11	70	17	0	45	36	38	71	13
2	12	10	15	11	60	14	0	15	30	50	65	18
3	9.0	9.7	13	10	390	11	0	7.8	19	38	42	19
4	2.0	9.3	16	9.3	495	8.9	0	18	14	42	30	21
5	3.0	9.3	13	11	548	7.4	0	6.4	57	27	26	27
6	3.0	9.3	11	10	548	5.5	0	4.3	21	22	21	25
7	4.0	8.0	17	11	566	4.3	0	0	12	23	19	19
8	6.0	5.0	18	11	591	3.8	0	232	8.1	27	19	17
9	7.0	7.0	21	9.3	591	2.8	0	877	9.7	19	18	15
10	9.0	7.5	19	8.1	566	1.4	0	710	12	19	17	14
11	10	8.5	14	67	557	.85	0	943	34	28	17	15
12	18	9.3	11	616	574	.51	0	1,550	10	20	16	14
13	21	10	9.7	715	557	.34	0	943	8.1	13	16	14
14	30	10	8.9	753	574	.32	0	998	4.9	12	15	14
15	28	9.3	8.5	762	574	0	0	987	1.7	14	16	15
16	22	9.3	8.9	616	566	0	0	921	.68	11	20	14
17	20	8.9	8.9	582	566	0	0	730	19	7.4	22	11
18	18	8.5	8.1	591	574	0	0	620	87	6.1	27	10
19	17	7.6	8.5	608	566	0	0	204	22	11	41	11
20	16	7.6	10	616	409	0	0	100	6.4	18	23	11
21	16	7.0	11	566	168	228	0	71	4.3	37	17	12
22	15	6.0	14	548	105	33	0	52	1.9	45	18	13
23	14	12	19	540	71	10	0	45	22	41	17	13
24	13	23	20	502	52	3.1	0	38	79	26	16	12
25	12	51	18	495	45	0	0	1,080	91	26	15	12
26	12	36	14	548	37	0	0	582	85	33	14	13
27	12	26	13	336	32	0	0	334	75	42	13	12
28	12	22	11	170	31	0	8.1	137	56	52	12	12
29	12	-----	11	112	91	0	32	77	44	87	12	12
30	11	-----	11	84	26	0	73	63	42	75	11	12
31	10	-----	11	-----	21	-----	50	45	-----	68	-----	12
TOTAL	408.0	357.1	410.5	9,928.7	10,621	352.22	163.1	12,435.5	912.78	977.5	686	452
MEAN	13.2	12.8	13.2	331	343	11.7	5.26	401	30.4	31.5	22.9	14.6
MAX	30	51	21	762	591	228	73	1,550	91	87	71	27
MIN	2.0	5.0	8.1	8.1	21	0	0	0	.68	6.1	11	10
AC-FT	809	708	814	19,690	21,070	699	324	24,670	1,810	1,940	1,360	897

CAL YR 1971 TOTAL 37,704.40 MEAN 103 MAX 1,550 MIN 0 AC-FT 74,790

PEAK DISCHARGE (BASE, 2,500 CFS).--Aug. 12 (0400) 2,790 cfs (6.92 ft), includes release from Alamogordo Reservoir; Aug. 25 (0330) 2,860 cfs (6.87 ft).

08387000 Rio Ruidoso at Hollywood, N. Mex.

LOCATION.--Lat 33°19'43", long 105°36'34", in SE¼ sec. 30, T.11 S., R.14 E., Lincoln County, on right upstream bridge abutment on road leading to Ruidoso Downs race track, 0.2 mile north of U. S. Highway 70, 1.1 miles east of the Hollywood Post Office, 1.2 miles downstream from the Ruidoso sewage disposal plant, 1.8 miles downstream from Gavilan Canyon, and 2.8 miles downstream from Carrizo Creek.

DRAINAGE AREA.--120 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 6,365.42 ft above mean sea level. Prior to Oct. 14, 1961, at datum 0.30 ft higher. Oct. 14, 1961, to Mar. 8, 1962, at datum 0.60 ft higher. Mar. 9, 1962, to June 18, 1965, at datum 1.0 ft higher.

AVERAGE DISCHARGE.--18 years, 11.4 cfs (8,260 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 162 cfs July 29 (gage height, 2.29 ft); minimum, 0.94 cfs May 29, June 25. Period of record: Maximum discharge, 1,340 cfs June 17, 1965 (gage height, 9.05 ft), from rating curve extended above 110 cfs on basis of slope-area measurement of peak flow; minimum, 0.30 cfs Jan. 1, 1962, May 8-9, 1964. The flood of Sept. 29, 1941, is probably the highest since at least 1904 (discharge not determined).

REMARKS.--Records good. Figures of discharge do not include F. Herrera ditch-S., which diverts from right bank 1.5 miles upstream and bypasses station for irrigation of 75 acres (1959 determination) below. See monthly table below for record of ditch. Village of Ruidoso diverts from right bank 7 miles upstream for municipal use and returns a portion of this to river as effluent from sewage disposal plant 1.2 miles upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	2.7	3.1	2.9	3.1	3.0	2.0	2.9	1.7	1.4	30	12
2	3.7	2.8	2.6	3.0	3.1	2.9	2.1	2.8	1.7	1.5	23	11
3	3.9	2.9	2.6	2.8	3.1	2.6	2.2	2.9	1.4	1.6	18	11
4	5.4	3.4	2.5	2.0	3.2	3.1	2.1	2.6	1.4	1.6	16	9.2
5	4.8	3.9	2.5	1.5	3.1	2.8	2.7	2.3	1.4	1.6	15	8.6
6	4.1	3.9	2.5	1.5	2.9	2.6	1.7	2.0	1.4	1.5	13	8.0
7	3.8	3.7	2.6	2.0	2.8	2.5	1.5	1.9	1.9	1.5	16	9.5
8	3.8	3.9	2.8	3.0	2.6	2.8	1.6	1.9	1.5	1.5	17	10
9	4.0	3.9	3.0	3.5	2.6	3.0	1.6	1.9	1.4	1.5	24	10
10	4.0	3.7	2.7	3.0	2.7	3.0	1.7	1.9	1.4	1.5	23	9.3
11	4.0	2.7	2.6	2.7	2.8	3.0	1.7	2.3	1.3	1.6	23	8.0
12	3.9	2.7	2.2	2.7	2.5	3.1	1.7	2.6	1.6	1.5	23	7.5
13	3.9	3.4	2.4	2.6	2.8	3.2	1.9	2.7	2.2	1.5	24	7.2
14	3.4	4.2	2.6	2.6	2.8	3.6	1.9	3.0	2.2	1.5	24	6.9
15	3.0	3.9	3.0	2.5	2.4	3.4	1.9	2.9	2.1	1.4	23	6.6
16	3.7	3.7	3.0	2.7	2.4	3.3	2.3	2.6	1.9	1.4	30	6.3
17	3.7	4.2	3.5	2.7	2.6	3.3	2.7	2.2	1.6	1.4	30	6.2
18	3.9	3.9	3.2	2.9	3.0	3.3	2.4	1.8	2.1	1.4	28	6.6
19	4.2	3.8	3.3	2.9	2.8	3.1	3.0	1.9	2.2	1.4	30	7.8
20	3.9	3.6	3.3	2.8	3.4	3.5	3.0	2.5	2.1	1.5	35	6.7
21	3.7	3.9	3.4	2.8	3.2	3.4	2.8	2.4	2.0	1.8	33	5.9
22	3.8	3.8	3.2	2.8	3.1	3.3	2.7	2.1	2.0	1.6	30	6.3
23	4.1	3.7	2.5	2.8	2.7	3.2	2.7	1.9	1.7	3.1	26	11
24	4.0	3.5	2.5	3.0	2.7	3.0	2.4	1.8	1.8	13	22	8.1
25	4.0	3.5	2.7	3.0	2.8	3.0	2.4	1.6	1.4	7.0	23	7.1
26	4.1	3.2	3.0	3.1	3.1	3.0	2.3	1.6	1.5	4.2	19	6.5
27	4.0	3.3	3.9	3.2	2.9	3.1	2.3	1.6	1.5	15	16	6.1
28	4.1	3.2	4.6	3.3	2.8	3.4	2.3	1.8	1.4	9.5	14	6.1
29	3.9	3.2	4.0	3.4	-----	3.3	2.5	1.4	1.4	41	13	5.8
30	3.3	3.4	3.0	3.3	-----	2.8	2.9	1.6	1.4	50	13	9.8
31	2.7	-----	2.8	3.1	-----	1.9	-----	1.6	-----	41	12	-----
TOTAL	120.4	105.6	91.6	86.1	80.0	94.5	67.0	67.0	50.6	217.0	686	241.1
MEAN	3.88	3.52	2.95	2.78	2.86	3.05	2.23	2.16	1.69	7.00	22.1	8.04
MAX	5.4	4.2	4.6	3.5	3.4	3.6	3.0	3.0	2.2	50	35	12
MIN	2.7	2.7	2.2	1.5	2.4	1.9	1.5	1.4	1.3	1.4	12	5.8
AC-FT	239	209	182	171	159	187	133	133	100	430	1,360	478
(†)	9.4	11	21	16	26	21	64	41	34	32	7.5	12

CAL YR 1970 TOTAL 2,785.7 MEAN 7.63 MAX 32 MIN 2.2 AC-FT 5,530
WTR YR 1971 TOTAL 1,906.9 MEAN 5.22 MAX 50 MIN 1.3 AC-FT 3,780

PEAK DISCHARGE (BASE, 100 CFS).--July 29 (2345) 162 cfs (2.29 ft).

† Diversion, in acre-feet, by F. Herrera ditch-S.

08387000 Rio Ruidoso at Hollywood, N. Mex.

LOCATION.--Lat 33°19'43", long 105°36'34", in SE¼NE¼ sec.30, T.11 S., R.14 E., Lincoln County, on right upstream bridge abutment on road leading to Ruidoso Downs race track, 0.2 mile north of U. S. Highway 70, 1.1 miles east of the Hollywood Post Office, 1.2 miles downstream from the Ruidoso sewage disposal plant, 1.8 miles downstream from Gavilan Canyon, and 2.8 miles downstream from Carrizo Creek.

DRAINAGE AREA.--120 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 6,365.42 ft above mean sea level. Prior to Oct. 14, 1961, at datum 0.30 ft higher. Oct. 14, 1961, to Mar. 8, 1962, at datum 0.60 ft higher. Mar. 9, 1962, to June 18, 1965, at datum 1.0 ft higher.

AVERAGE DISCHARGE.--18 calendar years, 11.6 cfs (8,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 229 cfs Oct. 26 (gage height, 2.59 ft); minimum, 0.94 cfs May 29, June 25.

Period of record: Maximum discharge, 1,340 cfs June 17, 1965 (gage height, 9.05 ft), from rating curve extended above 110 cfs on basis of slope-area measurement of peak flow; minimum, 0.30 cfs Jan. 1, 1962, May 8-9, 1964.

The flood of Sept. 29, 1941, is probably the highest since at least 1904 (discharge not determined).

REMARKS.--Records good. Figures of discharge do not include F. Herrera ditch-S., which diverts from right bank 1.5 miles upstream and bypasses station for irrigation of 75 acres (1959 determination) below. See monthly table below for record of ditch. Village of Ruidoso diverts from right bank 7 miles upstream for municipal use and returns a portion of this to river as effluent from sewage disposal plant 1.2 miles upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.9	3.1	3.0	2.0	2.9	1.7	1.4	30	12	8.2	35	14
2	3.0	3.1	2.9	2.1	2.8	1.7	1.5	23	11	7.6	31	14
3	2.8	3.1	2.6	2.2	2.9	1.4	1.6	18	11	7.4	27	13
4	2.0	3.2	3.1	2.1	2.6	1.4	1.6	16	9.2	7.4	24	13
5	1.5	3.1	2.8	2.7	2.3	1.4	1.6	15	8.6	7.3	21	13
6	1.5	2.9	2.6	1.7	2.0	1.4	1.5	13	8.0	7.0	19	11
7	2.0	2.8	2.5	1.5	1.9	1.9	1.5	16	9.5	6.6	18	12
8	3.0	2.6	2.8	1.6	1.9	1.5	1.5	17	10	6.3	16	11
9	3.5	2.6	3.0	1.6	1.9	1.4	1.5	24	10	6.4	15	11
10	3.0	2.7	3.0	1.7	1.9	1.4	1.5	23	9.3	6.1	14	10
11	2.7	2.8	3.0	1.7	2.3	1.3	1.6	23	8.0	6.1	14	10
12	2.7	2.5	3.1	1.7	2.6	1.6	1.5	23	7.5	6.3	13	9.7
13	2.6	2.8	3.2	1.9	2.7	2.2	1.5	24	7.2	6.1	12	10
14	2.6	2.8	3.6	1.9	3.0	2.2	1.5	24	6.9	5.8	12	10
15	2.5	2.4	3.4	1.9	2.9	2.1	1.4	23	6.6	5.7	15	9.4
16	2.7	2.4	3.3	2.3	2.6	1.9	1.4	30	6.3	5.8	18	10
17	2.7	2.6	3.3	2.7	2.2	1.6	1.4	30	6.2	6.9	19	7.7
18	2.9	3.0	3.3	2.4	1.8	2.1	1.4	28	6.6	9.2	16	9.6
19	2.9	2.8	3.1	3.0	1.9	2.2	1.4	30	7.8	9.6	15	11
20	2.8	3.4	3.5	3.0	2.5	2.1	1.5	35	6.7	7.9	14	9.7
21	2.8	3.2	3.4	2.8	2.4	2.0	1.8	33	5.9	7.6	14	9.4
22	2.8	3.1	3.3	2.7	2.1	2.0	1.6	30	6.3	8.0	14	9.4
23	2.8	2.7	3.2	2.7	1.9	1.7	3.1	26	11	8.2	14	10
24	3.0	2.7	3.0	2.4	1.8	1.8	13	22	8.1	8.3	14	12
25	3.0	2.8	3.0	2.4	1.6	1.4	7.0	23	7.1	27	14	13
26	3.1	3.1	3.0	2.3	1.6	1.5	4.2	19	6.5	151	14	17
27	3.2	2.9	3.1	2.3	1.6	1.5	15	16	6.1	113	14	20
28	3.3	2.8	3.4	2.3	1.8	1.4	9.5	14	6.1	71	14	21
29	3.4	-----	3.3	2.5	1.4	1.4	41	13	5.8	54	14	29
30	3.3	-----	2.8	2.9	1.6	1.4	50	13	9.8	47	14	27
31	3.1	-----	1.9	-----	1.6	-----	41	12	-----	42	-----	26
TOTAL	86.1	80.0	94.5	67.0	67.0	50.6	217.0	686	241.1	676.8	508	412.9
MEAN	2.78	2.86	3.05	2.23	2.16	1.69	7.00	22.1	8.04	21.8	16.9	13.3
MAX	3.5	3.4	3.6	3.0	3.0	2.2	50	35	12	151	35	29
MIN	1.5	2.4	1.9	1.5	1.4	1.3	1.4	12	5.8	5.7	12	7.7
AC-FT	171	159	187	133	133	100	430	1,360	478	1,340	1,010	819
(+)	16	26	21	64	41	34	32	7.5	12	17	19	8.0

CAL YR 1971 TOTAL 3,187.0 MEAN 8.73 MAX 151 MIN 1.3 AC-FT 6,320

PEAK DISCHARGE (BASE, 100 CFS).--July 29 (2345) 162 cfs (2.29 ft); October 26 (1100) 229 cfs (2.59 ft).

+ Diversion, in acre-feet, by F. Herrera ditch-S.

08387600 Eagle Creek below South Fork, near Alto, N. Mex.

LOCATION.--Lat 33°23'33", long 105°43'16", in SE¼SW¼ sec.31, T.10 S., R.13 E., Lincoln County, at right bank, 100 ft downstream from culvert under State Road No. 532, 0.1 mile downstream from South Fork, and 2.4 miles west of Alto.

DRAINAGE AREA.--8.14 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,600 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 49 cfs Aug. 7 (gage height, 3.15 ft) from rating curve extended above 21 cfs; minimum, 0.06 cfs July 18.

Period of record: Maximum discharge, 63 cfs July 25, 1970 (gage height, 3.24 ft) from rating curve extended above 21 cfs; minimum, 0.06 cfs July 18, 1971.

REMARKS.--Records fair. No diversions for irrigation above station. Some water is stored in small unregulated recreational ponds on the Mescalero Apache Indian Reservation upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.34	.31	.35	.40	.35	.31	.22	.09	.08	.22	.34
2	.33	.34	.31	.35	.50	.35	.30	.19	.09	.08	.19	.56
3	.32	.33	.31	.25	.40	.20	.29	.19	.09	.08	.19	.51
4	.47	.31	.31	.10	.35	.45	.29	.16	.09	.07	.47	.47
5	.40	.31	.31	.10	.35	.70	.29	.19	.09	.07	.34	.47
6	.37	.31	.31	.20	.35	.40	.29	.19	.09	.08	.31	.43
7	.36	.31	.31	.30	.30	.35	.29	.19	.09	.08	5.8	.43
8	.36	.32	.31	.30	.20	.30	.27	.19	.08	.09	3.9	.51
9	.35	.31	.31	.30	.20	.30	.28	.19	.08	.09	4.9	.88
10	.34	.32	.31	.33	.25	.30	.27	.19	.08	.09	3.0	.63
11	.34	.32	.25	.36	.33	.30	.27	.19	.08	.10	2.5	.73
12	.34	.32	.20	.37	.35	.30	.26	.19	.07	.10	2.1	.70
13	.33	.32	.25	.37	.35	.30	.22	.19	.07	.08	2.3	.68
14	.33	.33	.28	.37	.35	.30	.24	.19	.08	.08	2.3	.69
15	.34	.32	.31	.33	.35	.30	.22	.19	.08	.08	1.8	.64
16	.35	.32	.31	.38	.35	.30	.21	.19	.08	.08	1.4	.65
17	.37	.33	.31	.39	.35	.30	.22	.19	.08	.08	1.1	.60
18	.39	.32	.31	.39	.35	.29	.22	.19	.08	.08	1.2	.60
19	.38	.32	.31	.40	.35	.25	.22	.19	.08	.08	.92	.60
20	.37	.31	.31	.39	.50	.34	.23	.16	.08	.09	.73	.56
21	.37	.31	.31	.40	.40	.33	.23	.13	.08	.08	.73	.56
22	.37	.32	.33	.40	.30	.33	.23	.13	.08	.08	.73	.60
23	.37	.33	.25	.35	.35	.33	.23	.11	.08	.43	.69	1.0
24	.36	.33	.25	.30	.40	.33	.23	.13	.08	.25	.69	.79
25	.35	.33	.33	.30	.45	.33	.23	.13	.07	.07	.73	.71
26	.34	.33	.34	.30	.50	.33	.22	.13	.07	.07	.69	.88
27	.34	.31	.30	.30	.35	.31	.22	.13	.07	.19	.69	.82
28	.34	.33	.25	.30	.35	.31	.16	.13	.07	.08	.69	.79
29	.33	.32	.35	.30	-----	.31	.22	.09	.07	.08	.69	.76
30	.34	.31	.35	.50	-----	.31	.19	.09	.07	.11	.69	1.1
31	.34	-----	.35	.70	-----	.31	-----	.09	-----	.13	.64	-----
TOTAL	11.02	9.63	9.35	10.48	10.03	10.21	7.35	5.06	2.39	3.23	43.33	19.69
MEAN	.36	.32	.30	.34	.36	.33	.25	.16	.080	.10	1.40	.66
MAX	.47	.34	.35	.70	.50	.70	.31	.22	.09	.43	5.8	1.1
MIN	.32	.31	.20	.10	.20	.20	.16	.09	.07	.07	.19	.34
AC-FT	22	19	19	21	20	20	15	10	4.7	6.4	86	39

CAL YR 1970 TOTAL 421.64 MEAN 1.16 MAX 5.3 MIN .20 AC-FT 836
WTR YR 1971 TOTAL 141.77 MEAN .39 MAX 5.8 MIN .07 AC-FT 281

PEAK DISCHARGE (BASE, 25 CFS).--Aug. 7 (1965) 49 cfs (3.15 ft).

08387600 Eagle Creek below South Fork, near Alto, N. Mex.

LOCATION.--Lat 33°23'33", long 105°43'16", in SE¼SW¼ sec.31, T.10 S., R.13 E., Lincoln County, at right bank, 100 ft downstream from culvert under State Road No. 532, 0.1 mile downstream from South Fork, and 2.4 miles west of Alto.

DRAINAGE AREA.--8.14 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,600 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 49 cfs Aug. 7 (gage height, 3.15 ft) from rating curve extended above 21 cfs; minimum, 0.06 cfs July 18.

Period of record: Maximum discharge, 63 cfs July 25, 1970 (gage height, 3.24 ft) from rating curve extended above 21 cfs; minimum, 0.06 cfs July 18, 1971.

REMARKS.--Records fair. No diversions for irrigation above station. Some water is stored in small unregulated recreational ponds on the Mescalero Apache Indian Reservation upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.35	.40	.35	.31	.22	.09	.08	.22	.34	.78	2.2	1.2
2	.35	.50	.35	.30	.19	.09	.08	.19	.56	.75	2.1	1.1
3	.25	.40	.20	.29	.19	.09	.08	.19	.51	.75	1.8	1.0
4	.10	.35	.45	.29	.16	.09	.07	.47	.47	.75	1.6	1.1
5	.10	.35	.70	.29	.19	.09	.07	.34	.47	.79	1.5	1.1
6	.20	.35	.40	.29	.19	.09	.08	.31	.43	.81	1.4	1.0
7	.30	.30	.35	.29	.19	.09	.08	5.8	.43	.78	1.3	1.0
8	.30	.20	.30	.27	.19	.08	.09	3.9	.51	.78	1.2	.97
9	.30	.20	.30	.28	.19	.08	.09	4.9	.88	.77	1.2	.94
10	.33	.25	.30	.27	.19	.08	.09	3.0	.63	.69	1.1	.94
11	.36	.33	.30	.27	.19	.08	.10	2.5	.73	.63	1.0	.95
12	.37	.35	.30	.26	.19	.07	.10	2.1	.70	.63	.95	.88
13	.37	.35	.30	.22	.19	.07	.08	2.3	.68	.64	.90	.91
14	.37	.35	.30	.24	.19	.08	.08	2.3	.69	.66	.85	.91
15	.33	.35	.30	.22	.19	.08	.08	1.8	.64	.65	1.4	.87
16	.38	.35	.30	.21	.19	.08	.08	1.4	.65	.64	2.3	.88
17	.39	.35	.30	.22	.19	.08	.08	1.1	.60	.72	2.6	.75
18	.39	.35	.29	.22	.19	.08	.08	1.2	.60	.82	2.3	.84
19	.40	.35	.25	.22	.19	.08	.08	.92	.60	.89	2.0	.85
20	.39	.50	.34	.23	.16	.08	.09	.73	.56	.86	1.8	.78
21	.40	.40	.33	.23	.13	.08	.08	.73	.56	.80	1.7	.75
22	.40	.30	.33	.23	.13	.08	.08	.73	.60	.77	1.6	.78
23	.35	.35	.33	.23	.11	.08	.43	.69	1.0	.76	1.5	1.1
24	.30	.40	.33	.23	.13	.08	.25	.69	.79	.75	1.4	1.2
25	.30	.45	.33	.23	.13	.07	.07	.73	.71	5.2	1.4	1.2
26	.30	.50	.33	.22	.13	.07	.07	.69	.88	19	1.4	1.3
27	.30	.35	.31	.22	.13	.07	.19	.69	.82	11	1.3	1.4
28	.30	.35	.31	.16	.13	.07	.08	.69	.79	6.8	1.2	1.7
29	.30	-----	.31	.22	.09	.07	.08	.69	.76	4.2	1.2	2.5
30	.50	-----	.31	.19	.09	.07	.11	.69	1.1	3.2	1.2	2.5
31	.70	-----	.31	-----	.09	-----	.13	.64	-----	2.6	-----	2.5
TOTAL	10.48	10.03	10.21	7.35	5.06	2.39	3.23	43.33	19.69	69.87	45.40	35.90
MEAN	.34	.36	.33	.25	.16	.080	.10	1.40	.66	2.25	1.51	1.16
MAX	.70	.50	.70	.31	.22	.09	.43	5.8	1.1	19	2.6	2.5
MIN	.10	.20	.20	.16	.09	.07	.07	.19	.34	.63	.85	.75
AC-FT	21	20	20	15	10	4.7	6.4	86	39	139	90	71

CAL YR 1971 TOTAL 262.94 MEAN .72 MAX 19 MIN .07 AC-FT 522

PEAK DISCHARGE (BASE, 25 CFS).--Aug. 7 (1965) 49 cfs (3.15 ft).

08387800 Eagle Creek near Alto, N. Mex.

LOCATION.--Lat 33°23'29", long 105°36'39", in SW¼SE¼SE¼ sec.31, T.10 S., R.14 E., Lincoln County, on left bank 500 ft northeast of windmill, 200 ft north of Lincoln National Forest boundary, and 4.0 miles east of Alto.

DRAINAGE AREA.--15.7 sq mi.

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

GAGE.--Water stage recorder and concrete control. Altitude of gage is 6,838 ft (from topographic map).

EXTREMES.--Water year 1970: Maximum discharge, 27 cfs July 23 (gage height, 1.51 ft); no flow most of time.

Water year 1971: Maximum discharge, 31 cfs July 26 (gage height, 1.57 ft); no flow most of time.

Period of record: Maximum discharge, 31 cfs July 26, 1971 (gage height, 1.57 ft); no flow most of time.

REMARKS.--Records excellent except those prior to April 1971, which are poor. Discharge at this station is affected by Alto Reservoir and municipal water supply diversions for Ruidoso and Capitan.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.10				0	.02	.07		.04	0	
2	0	.10				0	.07	.06		0	.14	
3	0	.10				0	.06	.05		0	0	
4	0	.10				0	0	.04		0	0	
5	0	.10				0	.06	.03		0	.03	
6	0	.11				0	.18	.03		0	0	
7	0	.12				0	.37	.02		0	0	
8	0	.08				0	.17	.01		0	.14	
9	0	.03				0	.16	0		0	0	
10	0	0				0	1.1	0		0	.16	
11	0	0				0	1.2	0		0	.10	
12	0	.04				0	1.4	0		0	0	
13	0	.10				0	1.3	0		0	0	
14	0	.20				0	.73	0		0	0	
15	0	.04				0	.69	0		0	0	
16	0	0				0	.73	0		0	0	
17	0	0				.10	.56	0		0	0	
18	0	.06				.05	.52	0		0	0	
19	0	0				.05	.91	0		0	0	
20	0	0				.20	.45	0		0	.09	
21	.20	0				.20	.18	0		0	0	
22	.10	0				.10	.13	0		0	0	
23	.05	0				.10	.11	0		.50	0	
24	0	0				.05	.11	0		0	0	
25	0	0				.05	.10	0		0	0	
26	.20	0				.10	.09	0		.10	0	
27	.10	0				.10	.09	0		.68	0	
28	.10	0				.10	.09	0		0	0	
29	.10	0				.10	.09	0		0	0	
30	.10	0				.15	.08	0		0	0	
31	.10	-----				.13	-----	0	-----	0	0	-----
TOTAL	1.05	1.28	0	0	0	1.58	11.75	.31	0	1.32	.66	0
MEAN	.034	.043	0	0	0	.051	.39	.010	0	.043	.021	0
MAX	.20	.20	0	0	0	.20	1.4	.07	0	.68	.16	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	2.1	2.5	0	0	0	3.1	23	.6	0	2.6	1.3	0

WTR YR 1970 TOTAL 17.95 MEAN .049 MAX 1.4 MIN 0 AC-FT 36

PEAK DISCHARGE (BASE, 25 CFS).--July 23 (1900) 27 cfs (1.51 ft).

08387800 Eagle Creek near Alto, N. Mex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									0	0	.09	
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	.35	
10									0	0	.47	
11									0	0	1.1	
12									0	0	.89	
13									0	0	0	
14									0	0	.44	
15									0	0	.06	
16									0	0	0	
17									0	0	.28	
18									0	0	1.2	
19									0	0	.18	
20									.78	0	0	
21									0	0	0	
22									0	0	0	
23									0	0	.16	
24									0	0	.03	
25									0	.22	0	
26									0	.61	0	
27									0	.19	0	
28									0	0	.06	
29									0	.30	0	
30									0	1.2	0	
31										.12	0	
TOTAL	0	0	0	0	0	0	0	0	.78	2.64	5.31	0
MEAN	0	0	0	0	0	0	0	0	.026	.085	.17	0
MAX	0	0	0	0	0	0	0	0	.78	1.2	1.2	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	1.6	5.2	11	0
CAL YR 1970	TOTAL	15.62	MEAN .043	MAX 1.4	MIN 0	AC-FT 31						
WTR YR 1971	TOTAL	8.73	MEAN .024	MAX 1.2	MIN 0	AC-FT 17						

PEAK DISCHARGE (BASE, 25 CFS).--July 26 (2330) 31 cfs (1.57 ft); July 29 (2300) 26 cfs (1.47 ft).

08387800 Eagle Creek near Alto, N. Mex.

LOCATION.--Lat 33°23'29", long 105°36'39", in SW¼SE¼SE¼ sec.31, T.10 S., R.14 E., Lincoln County, on left bank 500 ft northeast of windmill, 200 ft north of Lincoln National Forest boundary, and 4.0 miles east of Alto.

DRAINAGE AREA.--15.7 sq mi.

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

GAGE.--Water stage recorder and concrete control. Altitude of gage is 6,838 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 31 cfs July 26 (gage height, 1.57 ft); no flow most of time.
Period of record: Maximum discharge, 31 cfs July 26, 1971 (gage height, 1.57 ft); no flow most of time.

REMARKS.--Records excellent except those prior to April 1971, which are poor. Discharge at this station is affected by Alto Reservoir and municipal water supply diversions for Ruidoso and Capitan.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	0	.09		0		
2						0	0	0		0		
3						0	0	0		0		
4						0	0	0		0		
5						0	0	0		0		
6						0	0	0		0		
7						0	0	0		0		
8						0	0	0		0		
9						0	0	.35		0		
10						0	0	.47		0		
11						0	0	1.1		0		
12						0	0	.89		0		
13						0	0	0		0		
14						0	0	.44		0		
15						0	0	.06		0		
16						0	0	0		0		
17						0	0	.28		0		
18						0	0	1.2		0		
19						0	0	.18		0		
20						.78	0	0		0		
21						0	0	0		0		
22						0	0	0		0		
23						0	0	.16		0		
24						0	0	.03		0		
25						0	.22	0		0		
26						0	.61	0		2.2		
27						0	.19	0		.93		
28						0	0	.06		0		
29		-----				0	.30	0		0		
30		-----				0	1.2	0		0		
31		-----		-----		-----	.12	0	-----	0	-----	
TOTAL	0	0	0	0	0	.78	2.64	5.31	0	3.13	0	0
MEAN	0	0	0	0	0	.026	.085	.17	0	.10	0	0
MAX	0	0	0	0	0	.78	1.2	1.2	0	2.2	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	1.6	5.2	11	0	6.2	0	0

CAL YR 1971 TOTAL 11.86 MEAN .033 MAX 2.2 MIN 0 AC-FT 24

PEAK DISCHARGE (BASE, 25 CFS).--July 26 (2330) 31 cfs (1.57 ft); July 29 (2300) 26 cfs (1.47 ft).

08390500 Rio Hondo at Diamond A Ranch, near Roswell, N. Mex.

LOCATION.--Lat 33°20'57", long 104°51'05", in NE¼NE¼ sec.20, T.11 S., R.21 E., Chaves County, on right bank 15 ft downstream from county road bridge at Diamond A Ranch, 1.3 miles south of U. S. Highway 70-380, 13 miles upstream from Two Rivers Reservoir, 21 miles upstream from mouth of Rocky Arroyo, and 18 miles west of Roswell.

DRAINAGE AREA.--947 sq mi (contributing area).

PERIOD OF RECORD.--May 1908 to August 1909, May 1939 to current year. Monthly discharge only for 1908-9, published in Technical Report No. 7, State of New Mexico, Streamflow and Reservoir Content 1888-1954.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,190 ft (from topographic map). Prior to Nov. 11, 1965, at site on opposite bank at same datum. Supplemental water-stage recorder on opposite bank since Nov. 11, 1965, at same datum.

AVERAGE DISCHARGE.--32 years (1939-71), 23.1 cfs (16,740 acre-ft per year); 20 calendar years (1951-70), 12.4 cfs (8,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,900 cfs Aug. 1 (gage height, 26.20 ft) from rating curve extended as explained below; no flow most of time.

Period of record: Maximum discharge, 54,800 cfs June 18, 1965 (gage height, 26.40 ft), from rating curve extended above 3,000 cfs on basis of slope-area measurement of peak flow; maximum gage height, 28.78 ft, Sept. 22, 1941; no flow most of time.

A flood on June 1, 1937, reached a discharge of 24,900 cfs at Riverside about 13 miles upstream. Other major floods occurred Oct. 31, 1901, Sept. 29, 30, 1904, and July 25, 1905.

REMARKS.--Records poor. Diversions and ground-water withdrawals above station for irrigation above and below station of about 6,500 acres (1959 determination).

REVISIONS (WATER YEARS).--WSP 1392: Drainage area. WSP 1512: 1939-40(F), 1941, 1942-43(F), 1946(F).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0					0	1,570	0
2					0					0	34	0
3					0					0	9.9	0
4					0					0	3.7	1.2
5					0					0	.25	0
6					.50					0	0	0
7					0					0	0	0
8					.10					0	1.6	0
9					.05					0	100	0
10					0					0	38	0
11					0					0	107	0
12					0					0	49	0
13					0					0	14	0
14					0					0	90	0
15					0					0	100	0
16					0					0	22	0
17					0					0	14	0
18					0					0	135	0
19					0					0	149	0
20					0					0	61	0
21					0					0	26	0
22					0					0	15	0
23					0					85	35	.54
24					0					131	17	0
25					0					0	9.5	0
26					0					0	6.2	0
27					0					0	4.8	0
28					0					48	2.9	0
29					-----					3.7	.40	0
30					-----					179	0	0
31		-----			-----		-----		-----	87	0	-----
TOTAL	0	0	0	0	.65	0	0	0	0	533.7	2,615.25	1.74
MEAN	0	0	0	0	.023	0	0	0	0	17.2	84.4	.058
MAX	0	0	0	0	.50	0	0	0	0	179	1,570	1.2
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	1.3	0	0	0	0	1,060	5,190	3.5

CAL YR 1970 TOTAL 398.20 MEAN 1.09 MAX 113 MIN 0 AC-FT 790
WTR YR 1971 TOTAL 3,151.34 MEAN 8.63 MAX 1,570 MIN 0 AC-FT 6,250

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-23	2300	14.15	1,240	8-1	0300	26.20	12,900
7-30	2030	14.55	1,300				

08390500 Rio Hondo at Diamond A Ranch, near Roswell, N. Mex.

LOCATION.--Lat 33°20'57", long 104°51'05", in NE¼NE¼ sec.20, T.11 S., R.21 E., Chaves County, on right bank 15 ft downstream from county road bridge at Diamond A Ranch, 1.3 miles south of U. S. Highway 70-380, 13 miles upstream from Two Rivers Reservoir, 21 miles upstream from mouth of Rocky Arroyo, and 18 miles west of Roswell.

DRAINAGE AREA.--947 sq mi (contributing area).

PERIOD OF RECORD.--May 1908 to August 1909, May 1939 to current year. Monthly discharge only for 1908-9, published in Technical Report No. 7, State of New Mexico, Streamflow and Reservoir Content 1888-1954.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,190 ft (from topographic map). Prior to Nov. 11, 1965, at site on opposite bank at same datum. Supplemental water-stage recorder on opposite bank since Nov. 11, 1965, at same datum.

AVERAGE DISCHARGE.--32 calendar years (1940-71), 23.1 cfs (16,740 acre-ft per year); 20 calendar years (1952-71), 12.7 cfs (9,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,900 cfs Aug. 1 (gage height, 26.20 ft) from rating curve extended as explained below; no flow most of time.

Period of record: Maximum discharge, 54,800 cfs June 18, 1965 (gage height, 26.40 ft), from rating curve extended above 3,000 cfs on basis of slope-area measurement of peak flow; maximum gage height, 28.78 ft, Sept. 22, 1941; no flow most of time.

A flood on June 1, 1937, reached a discharge of 24,900 cfs at Riverside about 13 miles upstream. Other major floods occurred Oct. 31, 1901, Sept. 29, 30, 1904, and July 25, 1905.

REMARKS.--Records poor. Diversions and ground-water withdrawals above station for irrigation above and below station of about 6,500 acres (1959 determination).

REVISIONS (WATER YEARS).--WSP 1392: Drainage area. WSP 1512: 1939-40(P), 1941, 1942-43(P), 1946(P).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		0					0	1,570	0	0	16	
2		0					0	34	0	0	11	
3		0					0	9.9	0	0	1.8	
4		0					0	3.7	1.2	0	.16	
5		0					0	.25	0	0	.07	
6		.50					0	0	0	0	0	
7		0					0	0	0	0	0	
8		.10					0	1.6	0	0	0	
9		.05					0	100	0	0	0	
10		0					0	38	0	0	0	
11		0					0	107	0	0	0	
12		0					0	49	0	0	0	
13		0					0	14	0	0	0	
14		0					0	90	0	0	0	
15		0					0	100	0	0	0	
16		0					0	22	0	0	0	
17		0					0	14	0	0	0	
18		0					0	135	0	0	0	
19		0					0	149	0	0	0	
20		0					0	61	0	0	0	
21		0					0	26	0	0	0	
22		0					0	15	0	0	0	
23		0					85	35	.54	0	0	
24		0					131	17	0	0	0	
25		0					0	9.5	0	0	0	
26		0					0	6.2	0	0	0	
27		0					0	4.8	0	20	0	
28		0					48	2.9	0	54	0	
29		-----					3.7	.40	0	36	0	
30		-----					179	0	0	24	0	
31		-----		-----		-----	87	0	-----	24	-----	
TOTAL	0	.65	0	0	0	0	533.7	2,615.25	1.74	158	29.03	0
MEAN	0	.023	0	0	0	0	17.2	84.4	.058	5.10	.97	0
MAX	0	.50	0	0	0	0	179	1,570	1.2	54	16	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	1.3	0	0	0	0	1,060	5,190	3.5	313	58	0

CAL YR 1971 TOTAL 3,338.37 MEAN 9.15 MAX 1,570 MIN 0 AC-FT 6,620

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-23	2300	14.15	1,240	8-1	0300	26.20	12,900
7-30	2030	14.55	1,300				

08390600 Two Rivers Reservoir near Roswell, N. Mex.

LOCATION.--Rio Hondo Reservoir: Lat 33°17'55", long 104°43'20", in SW¼SE¼NE¼ sec.4, T.12 S., R.22 E., Chaves County, near center of Diamond A Dam on Rio Hondo, 13 miles southwest of Roswell, Rocky Arroyo Reservoir: Lat 33°16'20", long 104°43'20", in NW¼SE¼NE¼ sec.16, T.12 S., R.22 E., Chaves County, at left end of Rocky Dam on Rocky Arroyo, and 14 miles southwest of Roswell.

DRAINAGE AREA.--1,027 sq mi (Rio Hondo, 963 sq mi; Rocky Arroyo, 64 sq mi).

PERIOD OF RECORD.--July 1963 to current year. Prior to October 1965 (monthend contents only).

GAGE.--Water-stage recorders. Datum of gages is mean sea level.

EXTREMES.--Current year: Maximum contents at 2400 hours of Rio Hondo Reservoir, 720 acre-ft Aug. 1 (elevation, 3,981.60 ft); no contents most of time. Maximum contents at 2400 hours of Rocky Arroyo Reservoir, 538 acre-ft Aug. 1 (elevation, 3,953.70 ft); no contents most of time.
Period of record: Maximum contents at 0800 hours of Rio Hondo Reservoir, 1,260 acre-ft July 29, 1965 (elevation, 3,985.7 ft); Rocky Arroyo Reservoir at 0800 hours, 6,090 acre-ft June 18, 1965 (elevation, 3,970.7 ft); no contents both reservoirs most of time.

REMARKS.--Two Rivers Reservoir, completed July 16, 1963, is formed by earthfill dams on Rio Hondo, which forms Rio Hondo Reservoir; and Rocky Arroyo which forms Rocky Arroyo Reservoir. Above elevation 3,980.0 ft the pools of the two reservoirs combine to form Two Rivers Reservoir with a total capacity of 167,900 acre-ft at elevation 4,032.0 ft (crest of ungated spillway). Capacity of Rio Hondo Reservoir, 550 acre-ft between elevations 3,957.0 (sill of outlet gate) and 3,980.0 ft. Capacity of Rocky Arroyo Reservoir, 14,240 acre-ft between elevations 3,945.0 (sill of outlet gate) and 3,980.0 ft. No dead storage in Rio Hondo Reservoir, or Rocky Arroyo Reservoir. Primary objective of project is flood control. Outlet conduits in Rocky Dam have fixed openings. Figures given herein represent total contents at 2400 hours (in table, reservoirs separated as indicated).

COOPERATION.--Records furnished by Corps of Engineers.

ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET, AT 2400 HOURS, OCTOBER 1970 TO DECEMBER 1971

	<u>Rio Hondo Res.</u>		<u>Rocky Arroyo Res.</u>	
	<u>Elevation (ft)</u>	<u>Contents (acre-ft)</u>	<u>Elevation (ft)</u>	<u>Contents (acre-ft)</u>
July 24	3,975.0	186	3,952.6	413
25			3,951.8	336
26			3,951.4	301
27			3,951.4	301
28			3,951.2	284
29			3,951.0	266
30			3,951.1	275
31	3,977.0	305	3,951.6	319
Aug. 1	3,981.6	720	3,953.7	538
2			3,952.2	372
3			3,951.0	266
4			3,950.0	202
5			3,947.2	88

NOTE.--Storage only on days listed above.

08390800 Rio Hondo below Diamond A Dam, near Roswell, N. Mex.

LOCATION.--Lat 33°18'05", long 104°43'12", in NE¼SE¼NE¼ sec.4, T.12 S., R.22 E., Chaves County, on left bank, 500 ft downstream from outlet conduit of Diamond A Dam (Two Rivers Reservoir) and 13 miles southwest of Roswell.

DRAINAGE AREA.--963 sq mi (contributing area).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,949.68 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--8 years, 7.24 cfs (5,250 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 326 cfs July 30 (gage height, 3.53 ft); no flow most of time.

Period of record: Maximum discharge, 659 cfs July 29, 1965 (gage height, 4.91 ft); no flow most of time.

REMARKS.--Records poor. Diversions and ground-water withdrawals for irrigation of about 6,500 acres (1959 determination) above station. This record represents the outflow from Two Rivers Reservoir through Diamond A Dam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	241	0
2										0	181	0
3										0	13	0
4										0	2.0	0
5										0	.13	0
6										0	0	0
7										0	0	0
8										0	2.2	0
9										0	86	0
10										0	57	0
11										0	18	0
12										0	110	0
13										0	15	0
14										0	70	0
15										0	87	0
16										0	55	0
17										0	15	0
18										0	105	0
19										0	133	0
20										0	57	0
21										0	15	0
22										0	5.0	0
23										0	11	.20
24										121	15	.05
25										15	10	0
26										.16	2.0	0
27										.05	0	0
28										30	0	0
29										3.7	0	0
30										135	0	0
31										28	0	0
TOTAL	0	0	0	0	0	0	0	0	0	332.91	1,305.33	.25
MEAN	0	0	0	0	0	0	0	0	0	10.7	42.1	.008
MAX	0	0	0	0	0	0	0	0	0	135	241	.20
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	660	2,590	.5
CAL YR 1970	TOTAL	212.62	MEAN	.58	MAX	98	MIN	0	AC-FT	422		
WTR YR 1971	TOTAL	1,638.49	MEAN	4.49	MAX	241	MIN	0	AC-FT	3,250		

08390800 Rio Hondo below Diamond A Dam, near Roswell, N. Mex.

LOCATION.--Lat 33°18'05", long 104°43'12", in NE¼SE¼NE¼ sec.4, T.12 S., R.22 E., Chaves County, on left bank, 500 ft downstream from outlet conduit of Diamond A Dam (Two Rivers Reservoir) and 13 miles southwest of Roswell.

DRAINAGE AREA.--963 sq mi (contributing area).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,949.68 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--8 calendar years, 7.29 cfs (5,280 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 326 cfs July 30 (gage height, 3.53 ft); no flow most of time.
Period of record: Maximum discharge, 659 cfs July 29, 1965 (gage height, 4.91 ft); no flow most of time.

REMARKS.--Records poor. Diversions and ground-water withdrawals for irrigation of about 6,500 acres (1959 determination) above station. This record represents the outflow from Two Rivers Reservoir through Diamond A Dam.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	241	0	0	14	
2							0	181	0	0	2.1	
3							0	13	0	0	.23	
4							0	2.0	0	0	0	
5							0	.13	0	0	0	
6							0	0	0	0	0	
7							0	0	0	0	0	
8							0	2.2	0	0	0	
9							0	86	0	0	0	
10							0	57	0	0	0	
11							0	18	0	0	0	
12							0	110	0	0	0	
13							0	15	0	0	0	
14							0	70	0	0	0	
15							0	87	0	0	0	
16							0	55	0	0	0	
17							0	15	0	0	0	
18							0	105	0	0	0	
19							0	133	0	0	0	
20							0	57	0	0	0	
21							0	15	0	0	0	
22							0	5.0	0	0	0	
23							0	11	.20	0	0	
24							121	15	.05	0	0	
25							15	10	0	0	0	
26							.16	2.0	0	0	0	
27							.05	0	0	0	0	
28							30	0	0	39	0	
29							3.7	0	0	27	0	
30							135	0	0	14	0	
31							28	0		19		
TOTAL	0	0	0	0	0	0	332.91	1,305.33	.25	99	16.33	0
MEAN	0	0	0	0	0	0	10.7	42.1	.008	3.19	.54	0
MAX	0	0	0	0	0	0	135	241	.20	39	14	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	660	2,590	.5	196	32	0

CAL YR 1971 TOTAL 1,753.82 MEAN 4.81 MAX 241 MIN 0 AC-FT 3,480

08393200 Rocky Arroyo above Two Rivers Reservoir, near Roswell, N. Mex.

LOCATION.--Lat 33°17'07", long 104°47'47", in NE¼SW¼ sec.11, T. 12 S., R.21½ E., Chaves County, on left bank, 2.1 miles upstream from mouth of Buchanan Draw, 5.2 miles upstream from Rocky Dam (Two Rivers Reservoir), and 17 miles southwest of Roswell.

DRAINAGE AREA.--31 sq mi, approximately.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,059.17 ft above mean sea level (Corps of Engineers datum). Prior to Dec. 7, 1968, at site on opposite bank at datum 3.72 ft lower.

AVERAGE DISCHARGE.--8 years, 1.11 cfs (804 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,660 cfs July 24 (gage height, 5.45 ft); no flow most of time.

Period of record: Maximum discharge, 12,000 cfs July 5, 1968 (gage height 11.53 ft, from floodmarks, present datum), from rating curve extended above 350 cfs on basis of slope-area measurements at gage heights 5.92, 7.14, and 11.53 ft, present datum; no flow most of time.

REMARKS.--Records good. No diversions above station. Flow past station represents inflow to Two Rivers Reservoir.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	112	
2										0	4.09	
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	12	
12										0	1.7	
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										180	0	
25										.31	0	
26										0	0	
27										10	0	
28										4.7	0	
29										0	0	
30										25	0	
31										33	0	
TOTAL	0	0	0	0	0	0	0	0	0	253.01	125.79	0
MEAN	0	0	0	0	0	0	0	0	0	8.16	4.06	0
MAX	0	0	0	0	0	0	0	0	0	180	112	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	502	250	0
CAL YR 1970	TOTAL 120.80		MEAN .33		MAX 104		MIN 0		AC-FT 240			
WTR YR 1971	TOTAL 378.80		MEAN 1.04		MAX 180		MIN 0		AC-FT 751			

PEAK DISCHARGE (BASE, 90 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-24	0330	5.45	1,660	8- 1	0000	4.84	1,150
7-30	0600	2.92	155				

08393200 Rocky Arroyo above Two Rivers Reservoir, near Roswell, N. Mex.

LOCATION.--Lat 33°17'07", long 104°47'47", in NE¼SW¼ sec.11, T. 12 S., R.21½ E., Chaves County, on left bank, 2.1 miles upstream from mouth of Buchanan Draw, 5.2 miles upstream from Rocky Dam (Two Rivers Reservoir), and 17 miles southwest of Roswell.

DRAINAGE AREA.--31 sq mi, approximately.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,059.17 ft above mean sea level (Corps of Engineers datum). Prior to Dec. 7, 1968, at site on opposite bank at datum 3.72 ft lower.

AVERAGE DISCHARGE.--8 calendar years, 1.11 cfs (804 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,660 cfs July 24 (gage height, 5.45 ft); no flow most of time.

Period of record: Maximum discharge, 12,000 cfs July 5, 1968 (gage height 11.53 ft, from floodmarks, present datum), from rating curve extended above 350 cfs on basis of slope-area measurements at gage heights 5.92, 7.14, and 11.53 ft, present datum; no flow most of time.

REMARKS.--Records good. No diversions above station. Flow past station represents inflow to Two Rivers Reservoir.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	112				
2							0	.09				
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	12				
12							0	1.7				
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							180	0				
25							.31	0				
26							0	0				
27							10	0				
28							4.7	0				
29		-----					0	0				
30		-----					25	0				
31		-----		-----		-----	33	0	-----		-----	
TOTAL	0	0	0	0	0	0	253.01	125.79	0	0	0	0
MEAN	0	0	0	0	0	0	8.16	4.06	0	0	0	0
MAX	0	0	0	0	0	0	180	112	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	502	250	0	0	0	0

CAL YR 1971 TOTAL 378.80 MEAN 1.04 MAX 180 MIN 0 AC-FT 751

PEAK DISCHARGE (BASE, 90 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-24	0330	5.45	1,660	8-1	0000	4.84	1,150
7-30	0600	2.92	155				

08393300 Rocky Arroyo below Rocky Dam, near Roswell, N. Mex.

LOCATION.--Lat 33°15'58", long 104°42'06", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.15, T.12 S., R.22 E., Chaves County, on left bank, 1.4 miles downstream from Rocky Dam (Two Rivers Reservoir) and 13 miles southwest of Roswell.

DRAINAGE AREA.--65 sq mi, approximately.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,906.90 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--8 years, 2.40 cfs 1,740 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 221 cfs July 24 (gage height, 4.70 ft); no flow most of time.

Period of record: Maximum discharge, 548 cfs Aug. 21, 1966 (gage height, 4.57 ft), from rating curve extended above 260 cfs; no flow most of time.

REMARKS.--Records poor. No diversions above station. This record represents the outflow from Two Rivers Reservoir through Rocky Dam plus any runoff in the 1.4 miles of intervening area between the dam and the gage. Outlet conduits in Rocky Dam have fixed openings.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	76	
2										0	69	
3										0	38	
4										0	22	
5										0	29	
6										0	9.0	
7										0	1.1	
8										0	.11	
9										0	.21	
10										0	.02	
11										0	0	
12										0	0	
13										0	0	
14										0	1.1	
15										0	.44	
16										0	.04	
17										0	0	
18										0	0	
19										0	0	
20										0	0	
21										0	0	
22										0	0	
23										0	0	
24										67	3.0	
25										29	1.6	
26										12	.15	
27										8.6	.02	
28										12	0	
29										6.6	0	
30										22	0	
31										18	0	
TOTAL	0	0	0	0	0	0	0	0	0	175.2	250.79	0
MEAN	0	0	0	0	0	0	0	0	0	5.65	8.09	0
MAX	0	0	0	0	0	0	0	0	0	67	76	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	348	497	0
CAL YR 1970	TOTAL	11.32	MEAN	.03	MAX	7.3	MIN	0	AC-FT	22		
WTR YR 1971	TOTAL	425.99	MEAN	1.17	MAX	76	MIN	0	AC-FT	845		

08393300 Rocky Arroyo below Rocky Dam, near Roswell, N. Mex.

LOCATION.--Lat 33°15'58", long 104°42'06", in SE¼NE¼SE¼ sec.15, T.12 S., R.22 E., Chaves County, on left bank, 1.4 miles downstream from Rocky Dam (Two Rivers Reservoir) and 13 miles southwest of Roswell.

DRAINAGE AREA.--65 sq mi, approximately.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,906.90 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--8 calendar years, 2.40 cfs (1,740 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 221 cfs July 24 (gage height, 4.70 ft); no flow most of time.

Period of record: Maximum discharge, 548 cfs Aug. 21, 1966 (gage height, 4.57 ft), from rating curve extended above 260 cfs; no flow most of time.

REMARKS.--Records poor. No diversions above station. This record represents the outflow from Two Rivers Reservoir through Rocky Dam plus any runoff in the 1.4 miles of intervening area between the dam and the gage. Outlet conduits in Rocky Dam have fixed openings.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	76				
2							0	69				
3							0	38				
4							0	22				
5							0	29				
6							0	9.0				
7							0	1.1				
8							0	.11				
9							0	.21				
10							0	.02				
11							0	0				
12							0	0				
13							0	0				
14							0	1.1				
15							0	.44				
16							0	.04				
17							0	0				
18							0	0				
19							0	0				
20							0	0				
21							0	0				
22							0	0				
23							0	0				
24							67	3.0				
25							29	1.6				
26							12	.15				
27							8.6	.02				
28							12	0				
29		-----					6.6	0				
30		-----					22	0				
31		-----		-----		-----	18	0	-----		-----	
TOTAL	0	0	0	0	0	0	175.2	250.79	0	0	0	0
MEAN	0	0	0	0	0	0	5.65	8.09	0	0	0	0
MAX	0	0	0	0	0	0	67	76	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	348	497	0	0	0	0
CAL YR 1971	TOTAL	425.99	MEAN	1.17	MAX	76	MIN	0	AC-FT	845		

08393600 North Spring River at Roswell, N. Mex.

LOCATION.--Lat 33°23'47", long 104°32'53", in NW¼SW¼SE¼ sec.31, T.10 S., R.24 E., Chaves County, in Roswell Municipal Golf Course, on left bank 2,400 ft upstream from Montana Avenue, and 2 blocks north of West Second Street.

DRAINAGE AREA.--19.5 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,575 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 0.039 cfs (28 acre-ft per year).

EXTREMES.--Current year: No flow during year.

Period of record: Maximum discharge, 387 cfs June 13, 1964 (gage height, 4.65 ft), from rating curve extended above 80 cfs on basis of slope-area measurement; no flow most of time.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0
MAX	0	0	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR 1970	TOTAL 2.72	MEAN .0080	MAX 1.4	MIN 0	AC-FT 5.4							
WTR YR 1971	TOTAL 0.00	MEAN .0000	MAX .00	MIN 0	AC-FT .0							

08393600 North Spring River at Roswell, N. Mex.

LOCATION.--Lat 33°23'47", long 104°32'53", in NW¼SW¼SE¼ sec.31, T.10 S., R.24 E., Chaves County, in Roswell Municipal Golf Course, on left bank 2,400 ft upstream from Montana Avenue, and 2 blocks north of West Second Street.

DRAINAGE AREA.--19.5 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,575 ft (from topographic map).

AVERAGE DISCHARGE.--13 calendar years, 0.039 cfs (28 acre-ft per year).

EXTREMES.--Current year: No flow during year.

Period of record: Maximum discharge, 387 cfs June 13, 1964 (gage height, 4.65 ft), from rating curve extended above 80 cfs on basis of slope-area measurement; no flow most of time.

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

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
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16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29		-----										
30		-----										
31		-----		-----		-----			-----		-----	
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0
MAX	0	0	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR 1971	TOTAL 0	MEAN 0	MAX 0	MIN 0	AC-FT 0							

08394100 Pecos River near Hagerman, N. Mex.

LOCATION.--Lat 33°10'08", long 104°18'24", in SE¼SW¼SE¼ sec.23, T.13 S., R.26 E., Chaves County, on left bank 3.4 miles upstream from Rio Felix, and 4.9 miles north of Hagerman.

DRAINAGE AREA.--13,630 sq mi, approximately (contributing area).

PERIOD OF RECORD.--February 1968 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder. Altitude of gage is 3,390 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge not determined; no flow many days June and July.

Period of record: Maximum discharge not determined; no flow many days June and July 1971.

REMARKS.--Records fair. Flow partly regulated by Alamogordo Reservoir (see sta 08384000). Diversions and ground-water withdrawals for irrigation of about 80,000 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	55	41	41	33	34	19	92	37	.85	73	65
2	84	54	42	41	33	33	18	82	31	0	91	52
3	79	55	42	42	33	33	19	105	23	1.1	111	53
4	79	55	42	40	33	33	21	413	22	1.8	65	40
5	73	57	41	32	35	35	18	466	18	.49	26	36
6	67	62	40	30	35	33	17	518	18	0	18	38
7	61	57	41	35	39	33	17	548	12	0	14	41
8	57	56	40	33	37	35	18	554	10	0	11	29
9	72	54	40	38	36	37	13	560	8.7	0		24
10	64	51	39	42	31	38	18	566	9.6	0		22
11	55	51	39	40	30	42	20	560	8.4	0		21
12	54	50	39	40	29	39	182	560	8.7	0		29
13	55	50	40	40	31	33	586	554	8.7	0		28
14	52	50	39	45	34	31	725	530	6.2	0		17
15	56	49	40	47	33	28	711	500	5.2	0		16
16	76	48	36	54	34	25	684	512	3.9	0		14
17	90	48	40	55	36	25	500	518	4.4	0		12
18	90	47	41	49	32	21	512	500	.64	0	418	13
19	82	46	42	47	31	21	530	483	.24	0	358	42
20	78	42	42	45	31	20	592	455	2.5	0	177	51
21	82	41	42	44	31	23	573	264	4.0	0	118	28
22	82	40	42	44	32	21	512	145	121	0	95	17
23	82	40	42	44	33	22	530	108	50	0	71	20
24	79	39	42	42	33	23	530	89	22	0	57	24
25	79	40	41	41	40	26	536	69	9.6	0		55
26	73	40	39	39	65	28	548	60	4.4	0		87
27	65	40	40	38	45	26	530	54	3.2	8.8	328	84
28	60	40	40	37	35	27	255	47	2.3	2.0	199	78
29	55	41	40	36	-----	21	170	46	2.2	1.1	143	64
30	56	42	41	35	-----	19	123	81	0	18	97	57
31	56	-----	41	35	-----	19	-----	46	-----	55	78	-----
TOTAL	2,183	1,440	1,256	1,271	980	884	9,527	10,085	456.88	89.14		1,157
MEAN	70.4	48.0	40.5	41.0	35.0	28.5	318	325	15.2	2.88		38.6
MAX	90	62	42	55	65	42	725	566	121	55		87
MIN	52	39	36	30	29	19	13	46	0	0		12
AC-FT	4,330	2,860	2,490	2,520	1,940	1,750	18,900	20,000	906	177		2,290

08394100 Pecos River near Hagerman, N. Mex.

LOCATION.--Lat 33°10'08", long 104°18'24", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.23, T.13 S., R.26 E., Chaves County, on left bank 3.4 miles upstream from Rio Felix, and 4.9 miles north of Hagerman.

DRAINAGE AREA.--13,630 sq mi, approximately (contributing area).

PERIOD OF RECORD.--February 1968 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder. Altitude of gage is 3,390 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge not determined; no flow many days June and July.

Period of record: Maximum discharge not determined; no flow many days June and July 1971.

REMARKS.--Records fair. Flow partly regulated by Alamogordo Reservoir (see sta 08384000). Diversions and ground-water withdrawals for irrigation of about 80,000 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	41	33	34	19	92	37	.85	73	65	52	87	31
2	41	33	33	18	82	31	0	91	52	50	95	35
3	42	33	33	19	105	23	1.1	111	53	46	97	37
4	40	33	33	21	413	22	1.8	65	40	50	78	42
5	32	35	35	18	466	18	.49	26	36	46	62	47
6	30	35	33	17	518	18	0	18	38	42	52	51
7	35	39	33	17	548	12	0	14	41	35	48	51
8	33	37	35	18	554	10	0	11	29	30	46	50
9	38	36	37	13	560	8.7	0		24	33	42	54
10	42	31	38	18	566	9.6	0		22	36	40	50
11	40	30	42	20	560	8.4	0		21	28	39	48
12	40	29	39	182	560	8.7	0		29	32	37	46
13	40	31	33	586	554	8.7	0		28	38	36	45
14	45	34	31	725	530	6.2	0		17	31	35	45
15	47	33	28	711	500	5.2	0		16	26	35	45
16	54	34	25	684	512	3.9	0		14	24	38	45
17	55	36	25	500	518	4.4	0		12	25	44	45
18	49	32	21	512	500	.64	0	418	13	23	42	45
19	47	31	21	530	483	.24	0	358	42	23	42	45
20	45	31	20	592	455	2.5	0	177	51	24	48	46
21	44	31	23	573	264	4.0	0	118	28	25	52	44
22	44	32	21	512	145	121	0	95	17	31	44	44
23	44	33	22	530	108	50	0	71	20	48	41	44
24	42	33	23	530	89	22	0	57	24	54	39	45
25	41	40	26	536	69	9.6	0		55	49	38	44
26	39	65	28	548	60	4.4	0		87	42	37	44
27	38	45	26	530	54	3.2	8.8	328	84	45	35	42
28	37	35	27	255	47	2.3	2.0	199	78	50	33	42
29	36	-----	21	170	46	2.2	1.1	143	64	61	32	42
30	35	-----	19	123	81	0	18	97	57	85	32	42
31	35	-----	19	-----	46	-----	55	78	-----	94	-----	42
TOTAL	1,271	980	884	9,527	10,085	456.88	89.14		1,157	1,278	1,426	1,378
MEAN	41.0	35.0	28.5	318	325	15.2	2.88		38.6	41.2	47.5	44.5
MAX	55	65	42	725	566	121	55		87	94	97	54
MIN	30	29	19	13	46	0	0		12	23	32	31
AC-FT	2,520	1,940	1,750	18,900	20,000	906	177		2,290	2,530	2,830	2,730

08394500 Rio Felix at old highway bridge, near Hagerman, N. Mex.

LOCATION.--Lat 33°07'30", long 104°20'40", in SW¼SW¼SE¼ sec.4, T.14 S., R.26 E., Chaves County, near left bank on downstream side of abandoned bridge pier, 0.6 mile upstream from alternate U. S. Highway 285, 1.3 miles northwest of Hagerman, and 2.7 miles upstream from mouth.

DRAINAGE AREA.--932 sq mi (contributing area).

PERIOD OF RECORD.--April 1939 to current year. March 1932 to April 1939 at site 1 mile downstream; records for periods of low flow not equivalent, owing to inflow between sites.

GAGE.--Water-stage recorder. Datum of gage is 3,403.40 ft above mean sea level.

AVERAGE DISCHARGE.--32 years, 15.0 cfs (10,870 acre-ft per year); 20 calendar years (1951-70), 11.4 cfs (8,260 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,630 cfs Aug. 1 (gage height, 16.65 ft); no flow most of time.

Period of record: Maximum discharge, 74,000 cfs Oct. 7, 1954 (gage height, 27.5 ft, from floodmarks), from rating curve extended above 12,000 cfs on basis of slope-area measurement at point 5.5 miles upstream from gage (adjusted for channel storage); no flow for many periods.

Flood in 1954 is the highest since 1894 (information from local residents). Flood of Oct. 1, 1904, is probably second highest. Another major flood occurred in April 1915.

REMARKS.--Records poor. Diversions for irrigation of about 350 acres (1959 determination) above station.

REVISIONS (WATER YEARS).--WSP 928: 1940(M). WSP 1562: 1939-40, 1941(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0							0	1,360	0
2	0	0	0							0	154	0
3	0	0	.31							0	26	0
4	0	0	.50							0	13	0
5	0	0	.09							0	.96	0
6	0	.02	.50							0	4.3	0
7	0	.36	.50							0	3.8	0
8	0	.02	2.2							0	2.5	0
9	0	0	1.9							0	2.4	0
10	0	0	.01							0	24	0
11	.41	0	0							0	19	0
12	.39	0	0							0	138	0
13	.03	0	2.0							0	37	0
14	0	0	3.9							0	2.3	0
15	0	0	1.5							0	21	0
16	0	0	.17							0	34	0
17	.78	0	0							0	23	0
18	4.1	0	0							0	288	0
19	.55	0	0							0	50	0
20	.05	.38	0							0	0	0
21	0	.10	0							0	0	0
22	0	0	0							0	0	0
23	0	0	0							0	0	0
24	0	0	0							0	0	.48
25	0	0	0							0	130	6.8
26	0	0	0							0	3.3	.14
27	0	.87	0							.13	0	2.0
28	0	.40	0							0	0	0
29	0	.01	0							0	0	0
30	0	0	0							2.8	0	0
31	0	-----	0				-----		-----	21	0	-----
TOTAL	6.31	2.16	13.58	0	0	0	0	0	0	23.93	2,336.56	9.42
MEAN	.20	.072	.44	0	0	0	0	0	0	.77	75.4	.31
MAX	4.1	.87	3.9	0	0	0	0	0	0	21	1,360	6.8
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	13	4.3	27	0	0	0	0	0	0	47	4,630	19

CAL YR 1970 TOTAL 43.10 MEAN .12 MAX 10 MIN 0 AC-FT 85
WTR YR 1971 TOTAL 2,391.96 MEAN 6.55 MAX 1,360 MIN 0 AC-FT 4,740

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-1	0900	16.65	5,630	8-25	0500	9.57	754
8-18	1500	12.72	1,890				

08394500 Rio Felix at old highway bridge, near Hagerman, N. Mex.

LOCATION.--Lat 33°07'30", long 104°20'40", in SW¼SW¼SE¼ sec.4, T.14 S., R.26 E., Chaves County, near left bank on downstream side of abandoned bridge pier, 0.6 mile upstream from alternate U. S. Highway 285, 1.3 miles northwest of Hagerman, and 2.7 miles upstream from mouth.

DRAINAGE AREA.--932 sq mi (contributing area).

PERIOD OF RECORD.--April 1939 to current year. March 1932 to April 1939 at site 1 mile downstream; records for periods of low flow not equivalent, owing to inflow between sites.

GAGE.--Water-stage recorder. Datum of gage is 3,403.40 ft above mean sea level.

AVERAGE DISCHARGE.--32 calendar years, 15.0 cfs (10,870 acre-ft per year); 20 calendar years (1952-71), 11.7 cfs (8,480 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,630 cfs Aug. 1 (gage height, 16.65 ft); no flow most of time.

Period of record: Maximum discharge, 74,000 cfs Oct. 7, 1954 (gage height, 27.5 ft, from floodmarks), from rating curve extended above 12,000 cfs on basis of slope-area measurement at point 5.5 miles upstream from gage (adjusted for channel storage); no flow for many periods.

Flood in 1954 is the highest since 1894 (information from local residents). Flood of Oct. 1, 1904, is probably second highest. Another major flood occurred in April 1915.

REMARKS.--Records poor. Diversions for irrigation of about 350 acres (1959 determination) above station.

REVISIONS (WATER YEARS).--WSP 928: 1940(M). WSP 1562: 1939-40, 1941(N).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	1,360	0	0	9.9	7.1
2							0	154	0	0	.56	7.8
3							0	26	0	0	0	8.2
4							0	13	0	0	1.0	8.9
5							0	.96	0	0	6.9	8.2
6							0	4.3	0	0	3.0	9.4
7							0	3.8	0	0	2.0	8.0
8							0	2.5	0	0	3.6	6.9
9							0	2.4	0	.98	4.1	.16
10							0	24	0	5.7	3.6	0
11							0	19	0	2.8	3.6	0
12							0	138	0	0	4.1	0
13							0	37	0	0	4.4	0
14							0	2.3	0	0	6.1	0
15							0	21	0	0	6.7	0
16							0	34	0	0	8.4	0
17							0	23	0	0	12	0
18							0	288	0	0	9.9	0
19							0	50	0	0	8.2	0
20							0	0	0	7.0	7.1	0
21							0	0	0	8.0	6.9	0
22							0	0	0	5.3	6.5	0
23							0	0	0	4.4	6.5	0
24							0	0	.48	4.8	6.3	0
25							0	130	6.8	5.1	6.3	0
26							0	3.3	.14	5.3	6.9	0
27							.13	0	2.0	4.3	6.1	0
28							0	0	0	5.9	6.9	0
29							0	0	0	8.7	6.5	0
30		-----					2.8	0	0	21	6.9	0
31		-----		-----		-----	21	0	-----	15	-----	0
TOTAL	0	0	0	0	0	0	23.93	2,336.56	9.42	104.28	170.96	64.66
MEAN	0	0	0	0	0	0	.77	75.4	.31	3.36	5.70	2.09
MAX	0	0	0	0	0	0	21	1,360	6.8	21	12	9.4
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	47	4,630	19	207	339	128

CAL YR 1971 TOTAL 2,709.81 MEAN 7.42 MAX 1,360 MIN 0 AC-FT 5,370

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8- 1	0900	16.65	5,630	8-25	0500	9.57	754
8-18	1500	12.72	1,890				

08395500 Pecos River near Lake Arthur, N. Mex.

LOCATION.--Lat 32°59'18", long 104°19'20", in SW¼NE¼ sec.27, T.15 S., R.26 E., Chaves County, on left bank 400 ft upstream from county bridge, 2.5 miles east of Lake Arthur, 7 miles upstream from Cottonwood Creek, and 11 miles northeast of Artesia.

DRAINAGE AREA.--14,760 sq mi, approximately (contributing area).

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

GAGE.--Water-stage recorder and rock control. Datum of gage is 3,327.07 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 255 cfs (184,700 acre-ft per year); 20 calendar years (1951-70), 184 cfs (133,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,650 cfs Aug. 1 (gage height, 6.51 ft); minimum, 0.78 cfs July 19.

Period of record: Maximum discharge, 49,600 cfs Sept. 24, 1941 (gage height, 21.90 ft), from rating curve extended above 16,100 cfs on basis of slope-area measurement at gage height 21.77 ft; no flow at times in 1947, 1953-4, 1962, 1964.

Flood of May 30, 1937, reached a stage of 21.77 ft (discharge, 51,500 cfs, on basis of slope-area measurement of peak flow), but may have been exceeded by floods in 1904 and 1919.

REMARKS.--Records good. Flow partly regulated by Alamogordo Reservoir (see sta 08384000). Diversions and ground-water withdrawals for irrigation of about 124,000 acres (1959 determination) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	56	46	42	37	40	4.8	97	19	1.7	827	59
2	87	63	46	43	26	35	5.3	76	11	2.2	363	45
3	84	59	43	46	26	38	7.1	68	8.5	2.5	126	49
4	81	59	45	43	30	31	2.9	246	10	1.9	102	47
5	78	57	46	37	32	23	8.7	419	6.9	1.5	43	29
6	69	60	44	34	35	19	6.1	476	5.0	2.5	15	25
7	62	63	46	32	33	29	4.3	499	3.6	2.7	18	22
8	60	61	46	42	39	32	3.3	499	3.9	1.4	17	21
9	55	56	45	50	34	28	10	513	3.3	1.4	130	9.5
10	72	41	45	54	29	25	11	528	2.7	1.2	817	7.2
11	63	41	43	48	27	31	21	518	2.7	1.1	737	4.5
12	56	37	44	45	24	33	27	518	6.9	1.1	1,250	4.2
13	57	37	44	44	26	26	404	528	8.0	1.0	1,240	8.6
14	57	35	45	46	34	30	588	504	6.5	.94	832	17
15	54	40	47	50	35	24	623	489	4.6	1.0	877	10
16	65	43	43	52	35	15	639	479	2.7	.96	1,030	6.3
17	88	39	39	60	29	13	466	475	2.3	.94	984	6.0
18	98	37	41	61	28	13	431	513	2.1	.90	722	7.5
19	91	43	43	55	26	10	434	518	2.3	.89	583	7.2
20	89	42	45	54	20	13	490	508	2.1	1.2	231	32
21	82	47	47	51	19	11	519	371	2.1	1.2	152	38
22	81	46	46	50	32	13	455	155	22	1.2	113	19
23	84	44	47	50	26	11	468	111	18	1.3	83	24
24	85	42	46	49	23	7.5	483	71	5.3	1.1	64	29
25	84	39	46	49	16	6.6	469	46	3.3	1.2	483	28
26	87	43	46	44	14	7.0	457	31	1.8	1.1	813	66
27	81	44	44	42	20	6.7	467	23	1.6	1.8	395	81
28	70	42	46	42	40	5.1	313	22	1.6	1.3	249	71
29	58	44	39	42	-----	5.0	172	23	1.7	1.9	146	63
30	54	45	36	40	-----	6.1	125	23	1.6	6.9	110	55
31	55	-----	37	38	-----	3.4	-----	47	-----	11	73	-----
TOTAL	2,277	1,405	1,366	1,435	795	590.4	8,114.5	9,394	173.1	59.03	13,625	891.0
MEAN	73.5	46.8	44.1	46.3	28.4	19.0	270	303	5.77	1.90	440	29.7
MAX	98	63	47	61	40	40	639	528	22	11	1,250	81
MIN	54	35	36	32	14	3.4	2.9	22	1.6	.89	15	4.2
AC-FT	4,520	2,790	2,710	2,850	1,580	1,170	16,100	18,630	343	117	27,030	1,770
CAL YR 1970	TOTAL 51,117.10	MEAN 140	MAX 2,480	MIN 2.5	AC-FT 101,400							
WTR YR 1971	TOTAL 40,125.03	MEAN 110	MAX 1,250	MIN .89	AC-FT 79,590							

PEAK DISCHARGE (BASE, 2,500 CFS).--Aug. 1 (1945) 2,650 cfs (6.51 ft).

08395500 Pecos River near Lake Arthur, N. Mex.

LOCATION.--Lat 32°59'18", long 104°19'20", in SW¼NE¼ sec.27, T.15 S., R.26 E., Chaves County, on left bank 400 ft upstream from county bridge, 2.5 miles east of Lake Arthur, 7 miles upstream from Cottonwood Creek, and 11 miles northeast of Artesia.

DRAINAGE AREA.--14,760 sq mi, approximately (contributing area).

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

GAGE.--Water-stage recorder and rock control. Datum of gage is 3,327.07 ft above mean sea level.

AVERAGE DISCHARGE.--33 calendar years, 254 cfs (184,000 acre-ft per year); 20 calendar years (1952-71), 181 cfs (131,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,650 cfs Aug. 1 (gage height, 6.51 ft); minimum, 0.78 cfs July 19.

Period of record: Maximum discharge, 49,600 cfs Sept. 24, 1941 (gage height, 21.90 ft), from rating curve extended above 16,100 cfs on basis of slope-area measurement at gage height 21.77 ft; no flow at times in 1947, 1953-4, 1962, 1964.

Flood of May 30, 1937, reached a stage of 21.77 ft (discharge, 51,500 cfs, on basis of slope-area measurement of peak flow), but may have been exceeded by floods in 1904 and 1919.

REMARKS.--Records good. Flow partly regulated by Alamogordo Reservoir (see sta 08384000). Diversions and ground-water withdrawals for irrigation of about 124,000 acres (1959 determination) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	42	37	40	4.8	97	19	1.7	827	59	46	96	41
2	43	26	35	5.3	76	11	2.2	363	45	46	85	45
3	46	26	38	7.1	68	8.5	2.5	126	49	39	87	47
4	43	30	31	2.9	246	10	1.9	102	47	35	80	51
5	37	32	23	8.7	419	6.9	1.5	43	29	33	58	58
6	34	35	19	6.1	476	5.0	2.5	15	25	31	53	59
7	32	33	29	4.3	499	3.6	2.7	18	22	32	44	65
8	42	39	32	3.3	499	3.9	1.4	17	21	26	42	65
9	50	34	28	10	513	3.3	1.4	130	9.5	26	41	63
10	54	29	25	11	528	2.7	1.2	817	7.2	39	44	62
11	48	27	31	21	518	2.7	1.1	737	4.5	41	45	56
12	45	24	33	27	518	6.9	1.1	1,250	4.2	34	40	54
13	44	26	26	404	528	8.0	1.0	1,240	8.6	30	34	52
14	46	34	30	588	504	6.5	.94	832	17	35	34	52
15	50	35	24	623	489	4.6	1.0	877	10	35	36	50
16	52	35	15	639	479	2.7	.96	1,030	6.3	27	49	51
17	60	29	13	466	475	2.3	.94	984	6.0	27	44	50
18	61	28	13	431	513	2.1	.90	722	7.5	31	52	51
19	55	26	10	434	518	2.3	.89	583	7.2	30	48	50
20	54	20	13	490	508	2.1	1.2	231	32	30	47	50
21	51	19	11	519	371	2.1	1.2	152	38	27	55	50
22	50	32	13	455	155	22	1.2	113	19	36	57	50
23	50	26	11	468	111	18	1.3	83	24	39	50	50
24	49	23	7.5	483	71	5.3	1.1	64	29	52	48	50
25	49	16	6.6	469	46	3.3	1.2	483	28	58	47	51
26	44	14	7.0	457	31	1.8	1.1	813	66	54	45	51
27	42	20	6.7	467	23	1.6	1.8	395	81	47	44	50
28	42	40	5.1	313	22	1.6	1.3	249	71	52	43	49
29	42	-----	5.0	172	23	1.7	1.9	146	63	58	42	49
30	40	-----	6.1	125	23	1.6	6.9	110	55	74	42	49
31	38	-----	3.4	-----	47	-----	11	73	-----	106	-----	48
TOTAL	1,435	795	590.4	8,114.5	9,394	173.1	59.03	13,625	891.0	1,276	1,532	1,619
MEAN	46.3	28.4	19.0	270	303	5.77	1.90	440	29.7	41.2	51.1	52.2
MAX	61	40	40	639	528	22	11	1,250	81	106	96	65
MIN	32	14	3.4	2.9	22	1.6	.89	15	4.2	26	34	41
AC-FT	2,850	1,580	1,170	16,100	18,630	343	117	27,030	1,770	2,530	3,040	3,210

CAL YR 1971 TOTAL 39,504.03 MEAN 108 MAX 1,250 MIN .89 AC-FT 78,360

PEAK DISCHARGE (BASE, 2,500 CFS).--Aug. 1 (1945) 2,650 cfs (6.51 ft).

08396500 Pecos River near Artesia, N. Mex.

LOCATION.--Lat 32°50'25", long 104°19'23", in NW¼ sec.18, T.17 S., R.27 E., Eddy County, near left bank on downstream end of bridge pier on State Highway 83, 4.3 miles east of Artesia, 7.0 miles north of mouth of Rio Pecos, and 17 miles north of McMillan Dam.

DRAINAGE AREA.--15,300 sq mi, approximately (contributing area).

PERIOD OF RECORD.--September 1905 to June 1909, August 1909 to current year. Monthly discharge only for some periods, published in WSP 1312 and 1712. Records for Aug. 22-31, 1934 and October 1936 to April 1937, published in WSP 763 and 828, respectively are not reliable and should not be used. Prior to February 1936, published as "near Dayton."

GAGE.--Water-stage recorder. Datum of gage is 3,291.05 ft (Bureau of Reclamation bench mark). Prior to Aug. 27, 1914, nonrecording gage and Aug. 27, 1914, to Feb. 20, 1936, water-stage recorder at site 6.5 miles downstream at different datum. Feb. 21, 1936, to Apr. 4, 1941, water-stage recorder at site 600 ft downstream at different datum.

AVERAGE DISCHARGE.--30 years (1905-8, 1909-36), 365 cfs (264,200 acre-ft per year), prior to completion of Alamogordo Reservoir; 35 years (1936-71), 274 cfs (198,500 acre-ft per year); 20 calendar years (1951-70), 179 cfs (129,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,690 cfs Aug. 13 (gage height, 8.57 ft); minimum, 0.21 cfs July 6.

Period of record: Maximum discharge probably occurred May 30, 1937, when a discharge of 51,500 cfs was measured by slope-area method at a point 15 miles upstream (gage height, 14.7 ft, site and datum then in use); no flow at times in 1934, 1946-47, 1953-54, 1957, 1964-65.

Greatest flood since at least 1893 occurred Oct. 2, 1904 (discharge not determined; the peak inflow to Lake McMillan, which includes Rio Pecos and Fourmile Draw, was estimated as 82,000 cfs). The second highest flood occurred July 25, 1905 (discharge below Rio Pecos, 50,300 cfs, based on gain in storage and spill from Lake McMillan). The floods in August 1893 and October 1904 damaged McMillan Dam and washed out Avalon Dam.

REMARKS.--Records fair except those for discharges below 10 cfs, which are poor. Flow partly regulated by Alamogordo Reservoir (see sta 08384000) since August 1937. Diversions and ground-water withdrawals for irrigation of about 154,000 acres (1959 determination) above station. Discharge represents inflow to Lake McMillan (see sta 08400500) which is part of the storage system for the irrigation of about 25,000 acres of the Carlsbad project. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1312 and 1512: 1913, 1915, 1917-18(M), 1920, 1923, 1931-36. WSP 1712: 1906(M), 1908-11(M), 1919, 1921-23(M), 1929, 1931-32(M), 1935-36(M), 1937, 1939(M), 1941(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	52	49	33	39	40	6.2	90	39	.86	278	49
2	84	54	50	41	36	44	6.2	63	21	.94	601	43
3	92	58	50	44	27	39	6.5	57	14	.86	142	47
4	90	54	48	39	26	41	8.5	104	11	.70	69	57
5	81	56	50	35	30	34	6.2	377	11	.62	48	45
6	73	54	50	33	34	25	7.5	454	8.5	.54	16	41
7	67	59	50	35	38	22	8.5	490	6.2	.62	8.1	28
8	60	62	51	40	36	26	6.8	503	5.5	.62	6.8	25
9	60	53	50	48	42	30	4.9	477	5.2	.62	9.4	23
10	59	48	49	59	38	30	7.5	503	4.2	.62	540	14
11	73	37	49	56	31	26	12	524	3.3	.62	678	6.2
12	63	41	47	53	27	33	18	530	3.5	.78	856	5.9
13	59	34	47	50	26	35	167	532	4.2	.78	1,310	4.7
14	54	36	49	49	27	28	513	516	7.8	.70	886	4.4
15	56	39	45	49	36	28	607	508	4.4	.62	829	15
16	60	44	47	53	37	23	610	495	4.2	.54	889	6.8
17	74	42	48	58	36	18	513	479	2.2	.54	994	2.6
18	98	38	45	64	31	15	408	503	1.4	.54	748	5.5
19	100	37	46	62	29	15	414	535	1.4	.54	688	8.5
20	87	41	47	58	27	14	459	527	15	.62	308	8.5
21	87	42	44	59	23	15	505	466	13	.62	181	27
22	80	46	45	59	20	12	456	211	3.8	.70	119	23
23	78	45	47	57	32	14	444	125	17	.62	94	23
24	81	44	49	53	27	14	474	78	9.9	.62	62	34
25	83	40	49	53	25	10	464	56	3.1	.54	105	32
26	83	42	49	53	17	9.0	446	31	1.4	.46	880	34
27	80	48	48	42	16	9.0	444	22	1.7	.62	479	74
28	74	49	47	44	21	8.5	396	19	1.1	.62	303	72
29	63	47	48	46	-----	7.5	172	21	.86	.46	176	68
30	56	49	39	45	-----	7.1	124	21	.86	10	119	57
31	53	-----	36	41	-----	7.8	-----	29	-----	9.1	78	-----
TOTAL	2,296	1,391	1,468	1,511	834	679.9	7,714.8	9,346	225.72	37.64	12,500.3	884.1
MEAN	74.1	46.4	47.4	48.7	29.8	21.9	257	301	7.52	1.21	403	29.5
MAX	100	62	51	64	42	44	610	535	39	10	1,310	74
MIN	53	34	36	33	16	7.1	4.9	19	.86	.46	6.8	2.6
AC-FT	4,550	2,760	2,910	3,000	1,650	1,350	15,300	18,540	448	75	24,790	1,750
CAL YR 1970	TOTAL 50,438.50	MEAN 138	MAX 2,580	MIN 1.8	AC-FT 100,000							
WTR YR 1971	TOTAL 38,888.46	MEAN 107	MAX 1,310	MIN .46	AC-FT 77,140							

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

08396500 Pecos River near Artesia, N. Mex.

LOCATION.--Lat 32°50'25", long 104°19'23", in NW 1/4 sec. 18, T.17 S., R.27 E., Eddy County, near left bank on downstream end of bridge pier on State Highway 83, 4.3 miles east of Artesia, 7.0 miles north of mouth of Rio Pecos, and 17 miles north of McMillan Dam.

DRAINAGE AREA.--15,300 sq mi, approximately (contributing area).

PERIOD OF RECORD.--September 1905 to June 1909, August 1909 to current year. Monthly discharge only for some periods, published in WSP 1312 and 1712. Records for Aug. 22-31, 1934 and October 1936 to April 1937, published in WSP 763 and 828, respectively are not reliable and should not be used. Prior to February 1936, published as "near Dayton."

GAGE.--Water-stage recorder. Datum of gage is 3,291.05 ft (Bureau of Reclamation bench mark). Prior to Aug. 27, 1914, nonrecording gage and Aug. 27, 1914, to Feb. 20, 1936, water-stage recorder at site 6.5 miles downstream at different datum. Feb. 21, 1936, to Apr. 4, 1941, water-stage recorder at site 600 ft downstream at different datum.

AVERAGE DISCHARGE.--30 calendar years (1906-8, 1910-36), 363 cfs (263,000 acre-ft per year), prior to completion of Alamogordo Reservoir; 35 calendar years (1937-71), 272 cfs (197,100 acre-ft per year); 20 calendar years (1952-71), 176 cfs (127,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,690 cfs Aug. 13 (gage height, 8.57 ft); minimum, 0.21 cfs July 6.

Period of record: Maximum discharge probably occurred May 30, 1937, when a discharge of 51,500 cfs was measured by slope-area method at a point 15 miles upstream (gage height, 14.7 ft, site and datum then in use); no flow at times in 1934, 1946-47, 1953-54, 1957, 1964-65.

Greatest flood since at least 1893 occurred Oct. 2, 1904 (discharge not determined; the peak inflow to Lake McMillan, which includes Rio Pecos and Fourmile Draw, was estimated as 82,000 cfs). The second highest flood occurred July 25, 1905 (discharge below Rio Pecos, 50,300 cfs, based on gain in storage and spill from Lake McMillan). The floods in August 1893 and October 1904 damaged McMillan Dam and washed out Avalon Dam.

REMARKS.--Records fair except those for discharges below 10 cfs, which are poor. Flow partly regulated by Alamogordo Reservoir (see sta 08384000) since August 1937. Diversions and ground-water withdrawals for irrigation of about 154,000 acres (1959 determination) above station. Discharge represents inflow to Lake McMillan (see sta 08400500) which is part of the storage system for the irrigation of about 25,000 acres of the Carlsbad project. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1312 and 1512: 1913, 1915, 1917-18(M), 1920, 1923, 1931-36. WSP 1712: 1906(M), 1908-11(M), 1919, 1921-23(M), 1929, 1931-32(M), 1935-36(M), 1937, 1939(M), 1941(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	33	39	40	6.2	90	39	.86	278	49	50	97	44
2	41	36	44	6.2	63	21	.94	601	43	45	88	46
3	44	27	39	6.5	57	14	.86	142	47	43	88	45
4	39	26	41	8.5	104	11	.70	69	57	38	88	49
5	35	30	34	6.2	377	11	.62	48	45	35	76	58
6	33	34	25	7.5	454	8.5	.54	16	41	32	57	60
7	35	38	22	8.5	490	6.2	.62	8.1	28	32	51	60
8	40	36	26	6.8	503	5.5	.62	6.8	25	32	43	67
9	48	42	30	4.9	477	5.2	.62	9.4	23	45	40	65
10	59	38	30	7.5	503	4.2	.62	540	14	36	38	64
11	56	31	26	12	524	3.3	.62	678	6.2	43	45	60
12	53	27	33	18	530	3.5	.78	856	5.9	44	46	56
13	50	26	35	167	532	4.2	.78	1,310	4.7	37	39	53
14	49	27	28	513	516	7.8	.70	886	4.4	34	36	51
15	49	36	28	607	508	4.4	.62	829	15	39	37	50
16	53	37	23	610	495	4.2	.54	889	6.8	35	44	51
17	58	36	18	513	479	2.2	.54	994	2.6	29	50	51
18	64	31	15	408	503	1.4	.54	748	5.5	28	48	52
19	62	29	15	414	535	1.4	.54	688	8.5	33	57	53
20	58	27	14	459	527	15	.62	308	8.5	33	54	52
21	59	23	15	505	466	13	.62	181	27	32	53	52
22	59	20	12	456	211	3.8	.70	119	23	31	65	50
23	57	32	14	444	125	17	.62	94	23	39	60	49
24	53	27	14	474	78	9.9	.62	62	34	46	52	49
25	53	25	10	464	56	3.1	.54	105	32	57	49	48
26	53	17	9.0	446	31	1.4	.46	880	34	64	47	49
27	42	16	9.0	444	22	1.7	.62	479	74	56	45	48
28	44	21	8.5	396	19	1.1	.62	303	72	53	44	47
29	46	-----	7.5	172	21	.86	.46	176	68	58	42	47
30	45	-----	7.1	124	21	.86	10	119	57	65	46	47
31	41	-----	7.8	-----	29	-----	9.1	78	-----	87	-----	47
TOTAL	1,511	834	679.9	7,714.8	9,346	225.72	37.64	12,500.3	884.1	1,331	1,625	1,620
MEAN	48.7	29.8	21.9	257	301	7.52	1.21	403	29.5	42.9	54.2	52.3
MAX	64	42	44	610	535	39	10	1,310	74	87	97	67
MIN	33	16	7.1	4.9	19	.86	.46	6.8	2.6	28	36	44
AC-FT	3,000	1,650	1,350	15,300	18,540	448	75	24,790	1,750	2,640	3,220	3,210

CAL YR 1971 TOTAL 38,309.46 MEAN 105 MAX 1,310 MIN .46 AC-FT 75,990

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

08398500 Rio Penasco at Dayton, N. Mex.

LOCATION.--Lat 32°44'36", long 104°24'49", in NE¼SE¼SE¼ sec.18, T.18 S., R.26 E., Eddy County, on right bank 1.2 miles upstream from U. S. Highway 285, 1.9 miles northwest of old Dayton railway station, 6 miles upstream from mouth, and 7 miles south of Artesia.

DRAINAGE AREA.--1,060 sq mi, approximately.

PERIOD OF RECORD.--April 1951 to current year. Prior to October 1953, published as "near Dayton."

GAGE.--Water-stage recorder and rock control. Datum of gage is 3,387.17 ft above mean sea level. Prior to May 9, 1968, at site 2.4 miles downstream, at datum 46.28 ft lower.

AVERAGE DISCHARGE.--20 years, 5.74 cfs (4,160 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,440 cfs July 24 (gage height, about 3.30 ft); no flow most of time.

Period of record: Maximum discharge, 29,800 cfs Aug. 23, 1966 (gage height, 16.4 ft, from floodmarks, present site and datum), from rating curve extended above 6,000 cfs on basis of slope-area measurements at gage heights 6.82 and 7.90 ft, at previous site and datum; no flow most of time.

Flood of about Sept. 22, 1941, reached a stage of about 9 ft, previous site and datum (from old logs), and peak discharge for station "near Dunken" (about 50 miles upstream) was 70,000 cfs (as determined for that station in 1956, from floodmarks and rating curve extended above 36,300 cfs).

REMARKS.--Records fair. Diversions and ground-water withdrawals for irrigation of about 3,000 acres (1959 determination) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1242: 1951(M). WSP 1512: 1956. WSP 1923: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	130	
2										0	.15	
3										0	.03	
4										0	.01	
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	.02	
15										0	0	
16										0	0	
17										0	0	
18										0	30	
19										0	5.3	
20										0	.03	
21										0	.01	
22										0	0	
23										0	0	
24										85	0	
25										5.0	.06	
26										1.0	.01	
27										.10	0	
28										.05	0	
29										.05	0	
30										74	0	
31										.75	0	
TOTAL	0	0	0	0	0	0	0	0	0	165.95	165.62	0
MEAN	0	0	0	0	0	0	0	0	0	5.35	5.34	0
MAX	0	0	0	0	0	0	0	0	0	85	130	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	329	329	0

CAL YR 1970 TOTAL 84.31 MEAN .23 MAX 52 MIN 0 AC-FT 167
WTR YR 1971 TOTAL 331.57 MEAN .91 MAX 130 MIN 0 AC-FT 658

PEAK DISCHARGE (BASE, 750 CFS).--July 24 (time unknown) 1,440 (3.30 ft).

NOTE.--No gage-height record July 2-30.

08398500 Rio Penasco at Dayton, N. Mex.

LOCATION.--Lat 32°44'36", long 104°24'49", in NE¼SE¼ sec.18, T.18 S., R.26 E., Eddy County, on right bank 1.2 miles upstream from U. S. Highway 285, 1.9 miles northwest of old Dayton railway station, 6 miles upstream from mouth, and 7 miles south of Artesia.

DRAINAGE AREA.--1,060 sq mi, approximately.

PERIOD OF RECORD.--April 1951 to current year. Prior to October 1953, published as "near Dayton."

GAGE.--Water-stage recorder and rock control. Datum of gage is 3,387.17 ft above mean sea level. Prior to May 9, 1968, at site 2.4 miles downstream, at datum 46.28 ft lower.

AVERAGE DISCHARGE.--20 calendar years, 5.73 cfs (4,150 acre-ft per year); 20 calendar years (1952-71), 5.73 cfs (4,150 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,440 cfs July 24 (gage height, about 3.30 ft); no flow most of time.

Period of record: Maximum discharge, 29,800 cfs Aug. 23, 1966 (gage height, 16.4 ft, from floodmarks, present site and datum), from rating curve extended above 6,000 cfs on basis of slope-area measurements at gage heights 6.82 and 7.90 ft, at previous site and datum; no flow most of time.

Flood of about Sept. 22, 1941, reached a stage of about 9 ft, previous site and datum (from old logs), and peak discharge for station "near Dunken" (about 50 miles upstream) was 70,000 cfs (as determined for that station in 1956, from floodmarks and rating curve extended above 36,300 cfs).

REMARKS.--Records fair. Diversions and ground-water withdrawals for irrigation of about 3,000 acres (1959 determination) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1242: 1951(M). WSP 1512: 1956. WSP 1923: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	130				
2							0	.15				
3							0	.03				
4							0	.01				
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	.02				
15							0	0				
16							0	0				
17							0	0				
18							0	30				
19							0	5.3				
20							0	.03				
21							0	.01				
22							0	0				
23							0	0				
24							85	0				
25							5.0	.06				
26							1.0	.01				
27							.10	0				
28							.05	0				
29		-----					.05	0				
30		-----					74	0				
31		-----		-----		-----	.75	0	-----		-----	
TOTAL	0	0	0	0	0	0	165.95	165.62	0	0	0	0
MEAN	0	0	0	0	0	0	5.35	5.34	0	0	0	0
MAX	0	0	0	0	0	0	85	130	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	329	329	0	0	0	0

CAL YR 1971 TOTAL 331.57 MEAN .91 MAX 130 MIN 0 AC-FT 658

PEAK DISCHARGE (BASE, 750 CFS).--July 24 (time unknown) 1,440 cfs (3.30 ft).

NOTE.--No gage-height record July 2-30.

08399500 Pecos River (Kaiser Channel) near Lakewood, N. Mex.

LOCATION.--Lat 32°41'22", long 104°17'53", in NW¼SE¼ sec.5, T. 19 S., R.27 E., Eddy County, on left bank 3 miles upstream from high-water line of Lake McMillan, 6 miles northeast of Lakewood, 7 miles northeast of gates in McMillan Dam, and 12 miles southeast of Artesia.

PERIOD OF RECORD.--May 1950 to current year. Prior to October 1954, published as Kaiser Lake-McMillan Channel near Lakewood.

GAGE.--Water-stage recorder. Datum of gage is 3,268.53 ft above mean sea level (Bureau of Reclamation bench mark). Prior to Mar. 23, 1955, at site 3 miles downstream at datum 7.83 ft lower. Mar. 23, 1955, to Sept. 30, 1963, at present site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--21 years, 153 cfs (110,800 acre-ft per year); 20 calendar years (1951-70), 156 cfs (113,000 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 1,480 cfs Aug. 13; no flow at times.

Period of record: Maximum daily discharge, 2,920 cfs July 12, 1960; no flow at times in most years.

REMARKS.---Records fair. Flow partly regulated by Alamogordo Reservoir (see sta 08384000). Diversions and ground-water withdrawals for irrigation of about 170,000 acres (1959 determination) above station. Above about 1,500 cfs flow will begin bypassing station and, depending on the magnitude and duration of flow, may reach Lake McMillan.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	51	43	35	36	28	4.7	96	36	0	9.8	55
2	77	49	45	38	36	40	3.4	70	20	0	872	42
3	78	54	45	43	28	36	4.0	50	10	0	170	40
4	84	53	43	28	25	36	4.7	56	6.4	0	67	48
5	78	53	43	23	27	33	5.5	308	4.9	0	52	47
6	73	51	44	23	28	25	3.4	409	4.9	0	15	32
7	64	53	44	25	35	21	6.1	452	3.2	0	5.9	25
8	56	56	46	29	32	21	5.2	482	1.8	0	2.2	18
9	55	51	44	34	35	23	4.5	480	1.0	0	1.3	24
10	52	48	43	44	38	28	3.4	509	.72	0	348	15
11	65	35	42	48	30	24	7.0	523	.48	0	687	6.4
12	60	36	40	48	27	27	8.7	515	.11	0	721	2.6
13	53	35	40	45	25	31	101	515	0	0	1,480	2.2
14	51	30	43	43	25	28	461	512	0	0	977	1.3
15	47	34	44	43	31	24	579	493	0	0	783	1.8
16	52	35	37	46	34	25	585	461	0	0	818	8.1
17	59	40	44	49	35	18	531	452	0	0	967	2.2
18	84	35	40	55	34	15	426	461	0	0	805	.60
19	93	32	40	56	28	13	420	496	0	0	710	1.8
20	88	35	42	53	28	11	444	498	0	0	353	4.8
21	85	35	40	51	26	12	488	474	7.9	0	210	9.0
22	77	40	41	52	19	10	474	266	2.1	0	154	28
23	76	40	42	49	27	12	442	131	.11	0	197	29
24	76	39	46	47	30	12	466	89	7.6	0	106	30
25	76	37	47	47	26	8.3	463	62	1.9	0	301	29
26	76	37	46	46	22	7.0	447	40	.10	0	875	26
27	76	41	46	40	16	6.4	431	23	0	0	538	55
28	72	43	45	37	17	6.4	407	18	0	0	370	73
29	66	42	46	40	-----	5.8	199	17	0	0	231	61
30	54	40	42	40	-----	4.9	128	19	0	12	124	53
31	50	-----	35	39	-----	4.9	-----	16	-----	9.1	84	-----
TOTAL	2,134	1,260	1,328	1,296	800	596.7	7,552.6	8,993	109.22	21.1	13,034.2	770.80
MEAN	68.8	42.0	42.8	41.8	28.6	19.2	252	290	3.64	.68	420	25.7
MAX	93	56	47	56	38	40	585	523	36	12	1,480	73
MIN	47	30	35	23	16	4.9	3.4	16	0	0	1.3	.60
AC-FT	4,230	2,500	2,630	2,570	1,590	1,160	14,980	17,840	217	42	25,850	1,530
CAL YR 1970	TOTAL 48,754.84		MEAN 134		MAX 1,880		MIN 0		AC-FT 96,710			
WTR YR 1971	TOTAL 37,895.62		MEAN 104		MAX 1,480		MIN 0		AC-FT 75,170			

LOCATION.--Lat 32°41'22", long 104°17'53", in NW¼SE¼ sec.5, T. 19 S., R.27 E., Eddy County, on left bank 3 miles upstream from high-water line of Lake McMillan, 6 miles northeast of Lakewood, 7 miles northeast of gates in McMillan Dam, and 12 miles southeast of Artesia.

GAGE.--Water-stage recorder. Datum of gage is 3,268.53 ft above mean sea level (Bureau of Reclamation bench mark). Prior to Mar. 23, 1955, at site 3 miles downstream at datum 7.83 ft lower. Mar. 23, 1955, to Sept. 30, 1963, at present site at datum 2.00 ft higher.

EXTREMES.---Current year: Maximum daily discharge, 1,480 cfs Aug. 13; no flow at times.

Period of record: Maximum daily discharge, 2,920 cfs July 12, 1960; no flow at times in most years.

REMARKS.--Records fair. Flow partly regulated by Alamogordo Reservoir (see sta 08384000). Diversions and ground-water withdrawals for irrigation of about 170,000 acres (1959 determination) above station. Above about 1,500 cfs flow will begin bypassing station and, depending on the magnitude and duration of flow, may reach Lake McMillan.

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	35	36	28	4.7	96	36	0	9.8	55	45	97	44
2	38	36	40	3.4	70	20	0	872	42	39	87	44
3	43	28	36	4.0	50	10	0	170	40	38	80	44
4	28	25	36	4.7	56	6.4	0	67	48	32	82	45
5	23	27	33	5.5	308	4.9	0	52	47	29	78	51
6	23	28	25	3.4	409	4.9	0	15	32	30	57	54
7	25	35	21	6.1	452	3.2	0	5.9	25	25	51	54
8	29	32	21	5.2	482	1.8	0	2.2	18	27	42	59
9	34	35	23	4.5	480	1.0	0	1.3	24	28	41	60
10	44	38	28	3.4	509	.72	0	348	15	40	37	58
11	48	30	24	7.0	523	.48	0	687	6.4	29	40	57
12	48	27	27	8.7	515	.11	0	721	2.6	34	42	52
13	45	25	31	101	515	0	0	1,480	2.2	31	41	50
14	43	25	28	461	512	0	0	977	1.3	26	33	48
15	43	31	24	579	493	0	0	783	1.8	28	34	47
16	46	34	25	585	461	0	0	818	8.1	31	41	46
17	49	35	18	531	452	0	0	967	2.2	25	47	46
18	55	34	15	426	461	0	0	805	.60	21	42	46
19	56	28	13	420	496	0	0	710	1.8	24	50	47
20	53	28	11	444	498	0	0	353	4.8	28	48	46
21	51	26	12	488	474	7.9	0	210	9.0	27	47	46
22	52	19	10	474	266	2.1	0	154	28	23	52	46
23	49	27	12	442	131	.11	0	197	29	28	57	45
24	47	30	12	466	89	7.6	0	106	30	32	52	44
25	47	26	8.3	463	62	1.9	0	301	29	42	47	44
26	46	22	7.0	447	40	.10	0	875	26	50	46	45
27	40	16	6.4	431	23	0	0	538	55	46	45	44
28	37	17	6.4	407	18	0	0	370	73	44	45	43
29	40	-----	5.8	199	17	0	0	231	61	42	42	44
30	40	-----	4.9	128	19	0	12	124	53	48	46	44
31	39	-----	4.9	-----	16	-----	9.1	84	-----	64	-----	43
TOTAL	1,296	800	596.7	7,552.6	8,993	109.22	21.1	13,034.2	770.80	1,056	1,549	1,486
MEAN	41.8	28.6	19.2	252	290	3.64	.68	420	25.7	34.1	51.6	47.9
MAX	56	38	40	585	523	36	12	1,480	73	64	97	60
MIN	23	16	4.9	3.4	16	0	0	1.3	.60	21	33	43
AC-FT	2,570	1,590	1,180	14,980	17,840	217	42	25,850	1,530	2,090	3,070	2,950

CAL YR 1971 TOTAL 37,264.62 MEAN 102 MAX 1,480 MIN 0 AC-FT 73,910

08400000 Fourmile Draw near Lakewood, N. Mex.

LOCATION.--Lat 32°40'20", long 104°22'07", in SW 1/4 sec. 10, T.19 S., R.26 E., Eddy County, in left side of channel 360 ft downstream from ford on Lakewood - Dayton road, 1.9 miles downstream from U. S. Highway 285, 2.8 miles north of Lakewood, 3.7 miles upstream from mouth, and 11.5 miles south of Artesia.

DRAINAGE AREA.--265 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 3,299.14 ft above mean sea level. Oct. 1, 1951, to June 19, 1962, at site 1.8 miles upstream at datum 30.61 ft higher. June 19, 1962, to Oct. 12, 1966, at site 410 ft upstream at datum 6.08 ft higher.

AVERAGE DISCHARGE.--20 years, 3.36 cfs (2,430 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,580 cfs Aug. 1 (gage height, 8.31 ft); no flow most of time.

Period of record: Maximum discharge, 29,300 cfs Aug. 23, 1966 (gage height, 19.9 ft, from floodmarks, present datum), from rating curve extended above 600 cfs on basis of slope-area measurement of peak flow; no flow most of time.

The flood of Aug. 23, 1966 (information from local resident) is believed to be the greatest since at least 1920.

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

REVISIONS (WATER YEARS).--WRD 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											446	
2											23	
3											.05	
4											0	
5											0	
6											0	
7											0	
8											0	
9											0	
10											0	
11											0	
12											0	
13											0	
14											0	
15											0	
16											0	
17											0	
18											0	
19											0	
20											0	
21											0	
22											0	
23											0	
24											0	
25											0	
26											0	
27											0	
28											0	
29											0	
30											0	
31											0	
TOTAL	0	0	0	0	0	0	0	0	0	0	469.05	0
MEAN	0	0	0	0	0	0	0	0	0	0	15.1	0
MAX	0	0	0	0	0	0	0	0	0	0	446	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	930	0
CAL YR 1970	TOTAL	42.06	MEAN	.12	MAX	42	MIN	0	AC-FT	83		
WTR YR 1971	TOTAL	469.05	MEAN	1.29	MAX	446	MIN	0	AC-FT	930		

PEAK DISCHARGE (BASE, 200 CFS).--Aug. 1 (1330) 2,580 cfs (8.31 ft).

08400000 Fourmile Draw near Lakewood, N. Mex.

LOCATION.--Lat 32°40'20", long 104°22'07", in SW¼NW¼SE¼ sec.10, T.19 S., R.26 E., Eddy County, in left side of channel 360 ft downstream from ford on Lakewood - Dayton road, 1.9 miles downstream from U. S. Highway 285, 2.8 miles north of Lakewood, 3.7 miles upstream from mouth, and 11.5 miles south of Artesia.

DRAINAGE AREA.--265 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 3,299.14 ft above mean sea level. Oct. 1, 1951, to June 19, 1962, at site 1.8 miles upstream at datum 30.61 ft higher. June 19, 1962, to Oct. 12, 1966, at site 410 ft upstream at datum 6.08 ft higher.

AVERAGE DISCHARGE.--20 calendar years, 3.36 cfs (2,430 acre-ft per year); 20 calendar years (1952-71), 3.36 cfs (2,430 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,580 cfs Aug. 1 (gage height, 8.31 ft); no flow most of time.
 Period of record: Maximum discharge, 29,300 cfs Aug. 23, 1966 (gage height, 19.9 ft, from floodmarks, present datum), from rating curve extended above 600 cfs on basis of slope-area measurement of peak flow; no flow most of time.
 The flood of Aug. 23, 1966 (information from local resident) is believed to be the greatest since at least 1920.

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

REVISIONS (WATER YEARS).--WRD 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1								446				
2								23				
3								.05				
4								0				
5								0				
6								0				
7								0				
8								0				
9								0				
10								0				
11								0				
12								0				
13								0				
14								0				
15								0				
16								0				
17								0				
18								0				
19								0				
20								0				
21								0				
22								0				
23								0				
24								0				
25								0				
26								0				
27								0				
28								0				
29		-----						0				
30		-----						0				
31		-----		-----		-----		0	-----		-----	
TOTAL	0	0	0	0	0	0	0	469.05	0	0	0	0
MEAN	0	0	0	0	0	0	0	15.1	0	0	0	0
MAX	0	0	0	0	0	0	0	446	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	930	0	0	0	0

CAL YR 1971 TOTAL 469.05 MEAN 1.29 MAX 446 MIN 0 AC-FT 930

PEAK DISCHARGE (BASE, 200 CFS).--Aug. 1 (1330) 2,580 cfs (8.31 ft).

08400500 Lake McMillan near Lakewood, N. Mex.

LOCATION.--Lat 32°35'42", long 104°20'49", in NE¼NE¼ sec.11, T.20 S., R.26 E., Eddy County, near outlet gates of McMillan Dam on Pecos River, 3.4 miles southeast of Lakewood.

DRAINAGE AREA.--16,990 sq mi, approximately (contributing area).

PERIOD OF RECORD.--January 1939 to September 1965 (monthend contents only), October 1965 to current year. Monthend gage heights January 1918 to December 1938 in files of Pecos River Commission.

GAGE.--Nonrecording gage. Datum of gage is 3,241.6 ft above mean sea level (Bureau of Reclamation datum).

EXTREMES.--Current year: Maximum contents, 21,180 acre-ft May 22 (gage height, 23.60 ft); minimum, 854 acre-ft July 29 (gage height, 15.95 ft).

Period of record: Maximum contents observed, 68,500 acre-ft Sept. 26, 1941 (gage height, 29.95 ft); no storage for periods in 1944-54, 1957, 1964, 1965.

REMARKS.--Lake is formed by McMillan Dam, an earthfill structure, completed and storage began in 1893. The structure was damaged by floods of October 1893 and Oct. 2, 1904. Capacity, 27,300 acre-ft between gage heights 0.0 ft (sill of outlet gate) and 24.9 ft (crest of spillway 2). Flashboards may be used to increase this capacity. Maximum capacity without spill, 33,620 acre-ft at gage height 26.1 ft (crest of spillway 1). No dead storage. No storage allocated to flood control. Figures given herein represent usable contents and are computed from daily readings at 0800 hours. Gage heights may be affected by variable drawdown due to flow through gates. Water is used for irrigation by Carlsbad Irrigation District.

COOPERATION.--Gage-height record and capacity table furnished by Carlsbad Irrigation District.

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20,320	18,680	17,880	17,690	17,880	16,740	10,180	12,210	18,280	6,540	1,160	18,680
2	20,320	18,680	17,880	17,690	17,880	16,740	9,500	12,210	17,880	5,960	1,740	18,080
3	20,530	18,680	17,880	17,690	17,880	16,740	8,720	12,210	17,690	5,520	2,840	17,500
4	20,530	18,680	17,880	17,690	17,880	16,560	8,080	12,060	17,500	5,190	3,120	17,120
5	20,740	18,680	17,880	17,690	17,880	16,560	7,480	11,760	17,120	4,970	3,220	16,930
6	20,740	18,680	17,880	17,690	17,880	16,380	6,880	12,060	16,740	4,540	3,220	16,560
7	20,740	18,680	17,880	17,690	17,880	16,380	6,310	12,660	16,380	4,220	3,220	15,840
8	20,740	18,680	17,880	17,690	17,880	16,200	5,740	13,460	16,200	3,610	3,120	14,960
9	20,740	18,680	17,880	17,690	17,690	16,200	5,410	14,280	16,020	3,020	3,020	14,280
10	20,110	18,680	17,880	17,690	17,690	16,200	5,080	15,130	15,660	2,400	3,220	13,620
11	19,690	18,680	17,880	17,690	17,500	16,020	4,860	16,020	15,300	1,900	3,910	12,660
12	19,480	18,680	17,880	17,690	17,500	16,020	4,750	16,560	14,960	1,590	5,190	12,060
13	19,280	18,680	17,880	17,690	17,500	16,020	4,440	17,120	14,790	1,520	6,200	11,160
14	19,280	18,680	17,880	17,690	17,500	16,020	3,910	17,690	14,450	1,440	8,200	10,740
15	18,680	18,480	17,690	17,690	17,310	15,840	4,220	18,280	13,940	1,370	9,630	10,320
16	18,480	18,480	17,690	17,690	17,310	15,840	5,080	18,880	13,480	1,300	10,740	10,040
17	18,480	18,480	17,690	17,690	17,310	15,840	5,960	19,280	12,980	1,300	12,210	9,760
18	18,480	18,480	17,690	17,690	17,310	15,660	6,660	19,690	12,410	1,230	13,780	9,110
19	18,480	18,480	17,690	17,690	17,120	15,660	7,120	19,900	12,060	1,160	14,960	8,720
20	18,280	18,280	17,690	17,690	17,120	15,480	7,480	20,320	11,610	1,160	16,200	8,460
21	18,280	18,280	17,690	17,690	16,930	15,480	8,330	20,740	11,160	1,100	16,560	8,080
22	18,280	18,280	17,690	17,690	16,930	15,300	8,460	21,180	10,740	1,100	16,740	7,960
23	18,280	18,280	17,690	17,880	16,930	15,130	8,720	20,960	10,320	1,100	16,560	8,080
24	18,280	18,080	17,690	17,880	16,930	14,960	9,240	20,740	9,760	1,040	16,740	8,200
25	18,480	18,080	17,690	17,880	16,930	14,960	9,900	20,320	9,240	974	16,740	8,200
26	18,480	18,080	17,690	17,880	16,930	14,450	10,600	19,900	8,590	912	17,120	8,200
27	18,480	17,880	17,690	17,880	16,740	13,780	11,310	19,690	8,080	974	18,680	8,200
28	18,480	17,880	17,690	17,880	16,740	12,980	11,910	19,280	7,720	974	19,280	8,200
29	18,480	17,880	17,690	17,880	-----	12,210	12,360	19,080	7,360	854	19,280	8,330
30	18,680	17,880	17,690	17,880	-----	11,460	12,360	18,680	7,120	1,100	19,280	8,330
31	18,680	-----	17,690	17,880	-----	10,880	-----	18,480	-----	1,040	19,080	-----
MAX	20,740	18,680	17,880	17,880	17,880	16,740	12,360	21,180	18,280	6,540	19,280	18,680
MIN	18,280	17,880	17,690	17,690	16,740	10,880	3,910	11,760	7,120	854	1,160	7,960

WTR YR 1971 MAX 21,180 MIN 854

08400500 Lake McMillan near Lakewood, N. Mex.--Continued

GAGE HEIGHT, IN FEET, AT 800, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.40	23.00	22.80	22.75	22.80	22.50	20.45	21.15	22.90	19.00	16.20	23.00
2	23.40	23.00	22.80	22.75	22.80	22.50	20.20	21.15	22.80	18.75	16.60	22.85
3	23.45	23.00	22.80	22.75	22.80	22.50	19.90	21.15	22.75	18.55	17.25	22.70
4	23.45	23.00	22.80	22.75	22.80	22.45	19.65	21.10	22.70	18.40	17.40	22.60
5	23.50	23.00	22.80	22.75	22.80	22.45	19.40	21.00	22.60	18.30	17.45	22.55
6	23.50	23.00	22.80	22.75	22.80	22.40	19.15	21.10	22.50	18.10	17.45	22.45
7	23.50	23.00	22.80	22.75	22.80	22.40	18.90	21.30	22.40	17.95	17.45	22.25
8	23.50	23.00	22.80	22.75	22.80	22.35	18.65	21.55	22.35	17.65	17.40	22.00
9	23.50	23.00	22.80	22.75	22.75	22.35	18.50	21.80	22.30	17.35	17.35	21.80
10	23.35	23.00	22.80	22.75	22.75	22.35	18.35	22.05	22.20	17.00	17.45	21.60
11	23.25	23.00	22.80	22.75	22.70	22.30	18.25	22.30	22.10	16.70	17.80	21.30
12	23.20	23.00	22.80	22.75	22.70	22.30	18.20	22.45	22.00	16.50	18.40	21.10
13	23.15	23.00	22.80	22.75	22.70	22.30	18.05	22.60	21.95	16.45	18.85	20.80
14	23.15	23.00	22.80	22.75	22.70	22.30	17.80	22.75	21.85	16.40	19.70	20.65
15	23.00	22.95	22.75	22.75	22.65	22.25	17.95	22.90	21.70	16.35	20.25	20.50
16	22.95	22.95	22.75	22.75	22.65	22.25	18.35	23.05	21.55	16.30	20.65	20.40
17	22.95	22.95	22.75	22.75	22.65	22.25	18.75	23.15	21.40	16.30	21.15	20.30
18	22.95	22.95	22.75	22.75	22.65	22.20	19.05	23.25	21.25	16.25	21.65	20.05
19	22.95	22.95	22.75	22.75	22.60	22.20	19.25	23.30	21.10	16.20	22.00	19.90
20	22.90	22.90	22.75	22.75	22.60	22.15	19.40	23.40	20.95	16.20	22.35	19.80
21	22.90	22.90	22.75	22.75	22.55	22.15	19.75	23.50	20.80	16.15	22.45	19.65
22	22.90	22.90	22.75	22.75	22.55	22.10	19.80	23.60	20.65	16.15	22.50	19.60
23	22.90	22.90	22.75	22.80	22.55	22.05	19.90	23.55	20.50	16.15	22.45	19.65
24	22.90	22.85	22.75	22.80	22.55	22.00	20.10	23.50	20.30	16.10	22.50	19.70
25	22.95	22.85	22.75	22.80	22.55	22.00	20.35	23.40	20.10	16.05	22.50	19.70
26	22.95	22.85	22.75	22.80	22.55	21.85	20.60	23.30	19.85	16.00	22.60	19.70
27	22.95	22.80	22.75	22.80	22.50	21.65	20.85	23.25	19.65	16.05	23.00	19.70
28	22.95	22.80	22.75	22.80	22.50	21.40	21.05	23.15	19.50	16.05	23.15	19.70
29	22.95	22.80	22.75	22.80	-----	21.15	21.20	23.10	19.35	15.95	23.15	19.75
30	23.00	22.80	22.75	22.80	-----	20.90	21.20	23.00	19.25	16.15	23.15	19.75
31	23.00	-----	22.75	22.80	-----	20.70	-----	22.95	-----	16.10	23.10	-----
MEAN	23.14	22.94	22.77	22.76	22.67	22.09	19.43	22.54	21.38	16.83	20.17	20.85
MAX	23.50	23.00	22.80	22.80	22.80	22.50	21.20	23.60	22.90	19.00	23.15	23.00
MIN	22.90	22.80	22.75	22.75	22.50	20.70	17.80	21.00	19.25	15.95	16.20	19.60

WTR YR 1971 MAX 23.60 MIN 15.95

08400500 Lake McMillan near Lakewood, N. Mex.

LOCATION.--Lat 32°35'42", long 104°20'49", in NE 1/4 sec. 11, T.20 S., R.26 E., Eddy County, near outlet gates of McMillan Dam on Pecos River, 3.4 miles southeast of Lakewood.

DRAINAGE AREA.--16,990 sq mi, approximately (contributing area).

PERIOD OF RECORD.--January 1939 to September 1965 (monthend contents only), October 1965 to current year. Monthend gage heights January 1918 to December 1938 in files of Pecos River Commission.

GAUGE.--Nonrecording gage. Datum of gage is 3,241.6 ft above mean sea level (Bureau of Reclamation datum).

EXTREMES.--Current year: Maximum contents, 21,180 acre-ft May 22 (gage height, 23.60 ft); minimum, 854 acre-ft July 29 (gage height, 15.95 ft).

Period of record: Maximum contents observed, 68,500 acre-ft Sept. 26, 1941 (gage height, 29.95 ft); no storage for periods in 1944-54, 1957, 1964, 1965.

REMARKS.--Lake is formed by McMillan Dam, an earthfill structure, completed and storage began in 1893. The structure was damaged by floods of October 1893 and Oct. 2, 1904. Capacity, 27,300 acre-ft between gage heights 0.0 ft (sill of outlet gate) and 24.9 ft (crest of spillway 2). Flashboards may be used to increase this capacity. Maximum capacity without spill, 33,620 acre-ft at gage height 26.1 ft (crest of spillway 1). No dead storage. No storage allocated to flood control. Figures given herein represent usable contents and are computed from daily readings at 0800 hours. Gage heights may be affected by variable drawdown due to flow through gates. Water is used for irrigation by Carlsbad Irrigation District.

COOPERATION.--Gage-height record and capacity table furnished by Carlsbad Irrigation District.

CONTENTS, IN ACRE-FEET, AT 0800, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	17,690	17,880	16,740	10,180	12,210	18,280	6,540	1,160	18,680	8,460	6,660	8,590
2	17,690	17,880	16,740	9,500	12,210	17,880	5,960	1,740	18,080	8,460	6,770	8,720
3	17,690	17,880	16,740	8,720	12,210	17,690	5,520	2,840	17,500	8,460	7,000	8,590
4	17,690	17,880	16,560	8,080	12,060	17,500	5,190	3,120	17,120	8,460	7,000	8,720
5	17,690	17,880	16,560	7,480	11,760	17,120	4,970	3,220	16,930	8,460	7,120	8,850
6	17,690	17,880	16,380	6,880	12,060	16,740	4,540	3,220	16,560	8,330	7,240	8,850
7	17,690	17,880	16,380	6,310	12,660	16,380	4,220	3,220	15,840	8,080	7,240	8,850
8	17,690	17,880	16,200	5,740	13,460	16,200	3,610	3,120	14,960	7,960	7,360	8,980
9	17,690	17,690	16,200	5,410	14,280	16,020	3,020	3,020	14,280	7,840	7,480	9,110
10	17,690	17,690	16,200	5,080	15,130	15,660	2,400	3,220	13,620	7,840	7,480	9,110
11	17,690	17,500	16,020	4,860	16,020	15,300	1,900	3,910	12,660	7,720	7,480	9,240
12	17,690	17,500	16,020	4,750	16,560	14,960	1,590	5,190	12,060	7,720	7,480	9,370
13	17,690	17,500	16,020	4,440	17,120	14,790	1,520	6,200	11,160	7,840	7,600	9,370
14	17,690	17,500	16,020	3,910	17,690	14,450	1,440	8,200	10,740	7,720	7,600	9,500
15	17,690	17,310	15,840	4,220	18,280	13,940	1,370	9,630	10,320	7,720	7,600	9,500
16	17,690	17,310	15,840	5,080	18,880	13,480	1,300	10,740	10,040	7,600	7,720	9,500
17	17,690	17,310	15,840	5,960	19,280	12,980	1,300	12,210	9,760	7,480	7,720	9,500
18	17,690	17,310	15,660	6,660	19,690	12,410	1,230	13,780	9,110	7,240	7,840	9,630
19	17,690	17,120	15,660	7,120	19,900	12,060	1,160	14,960	8,720	7,000	7,840	9,630
20	17,690	17,120	15,480	7,480	20,320	11,610	1,160	16,200	8,460	6,540	7,840	9,630
21	17,690	16,930	15,480	8,330	20,740	11,160	1,100	16,560	8,080	6,420	7,960	9,760
22	17,690	16,930	15,300	8,460	21,180	10,740	1,100	16,740	7,960	6,310	7,960	9,760
23	17,880	16,930	15,130	8,720	20,960	10,320	1,100	16,560	8,080	6,080	7,960	9,760
24	17,880	16,930	14,960	9,240	20,740	9,760	1,040	16,740	8,200	6,080	8,080	9,900
25	17,880	16,930	14,960	9,900	20,320	9,240	974	16,740	8,200	6,080	8,080	9,900
26	17,880	16,930	14,450	10,600	19,900	8,590	912	17,120	8,200	6,080	8,200	9,900
27	17,880	16,740	13,780	11,310	19,690	8,080	974	18,680	8,200	6,200	8,200	9,900
28	17,880	16,740	12,980	11,910	19,280	7,720	974	19,280	8,200	6,310	8,200	10,040
29	17,880	-----	12,210	12,360	19,080	7,360	854	19,280	8,330	6,310	8,330	10,040
30	17,880	-----	11,460	18,680	7,120	1,100	19,280	8,330	6,420	8,330	8,330	10,040
31	17,880	-----	10,880	-----	18,480	-----	1,040	19,080	-----	6,540	-----	10,180
MAX	17,880	17,880	16,740	12,360	21,180	18,280	6,540	19,280	18,680	8,460	8,330	10,180
MIN	17,690	16,740	10,880	3,910	11,760	7,120	854	1,160	7,960	6,080	6,660	8,590

CAL YR 1971 MAX 21,180 MIN 854

08400500 Lake McMillan near Lakewood, N. Mex.--Continued

GAGE HEIGHT, IN FEET, AT 0800, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	22.75	22.80	22.50	20.45	21.15	22.90	19.00	16.20	23.00	19.80	19.05	19.85
2	22.75	22.80	22.50	20.20	21.15	22.80	18.75	16.60	22.85	19.80	19.10	19.90
3	22.75	22.80	22.50	19.90	21.15	22.75	18.55	17.25	22.70	19.80	19.20	19.85
4	22.75	22.80	22.45	19.65	21.10	22.70	18.40	17.40	22.60	19.80	19.20	19.90
5	22.75	22.80	22.45	19.40	21.00	22.60	18.30	17.45	22.55	19.80	19.25	19.95
6	22.75	22.80	22.40	19.15	21.10	22.50	18.10	17.45	22.45	19.75	19.30	19.95
7	22.75	22.80	22.40	18.90	21.30	22.40	17.95	17.45	22.25	19.65	19.30	19.95
8	22.75	22.80	22.35	18.65	21.55	22.35	17.65	17.40	22.00	19.60	19.35	20.00
9	22.75	22.75	22.35	18.50	21.80	22.30	17.35	17.35	21.80	19.55	19.40	20.05
10	22.75	22.75	22.35	18.35	22.05	22.20	17.00	17.45	21.60	19.55	19.40	20.05
11	22.75	22.70	22.30	18.25	22.30	22.10	16.70	17.80	21.30	19.50	19.40	20.10
12	22.75	22.70	22.30	18.20	22.45	22.00	16.50	18.40	21.10	19.50	19.40	20.15
13	22.75	22.70	22.30	18.05	22.60	21.95	16.45	18.85	20.80	19.55	19.45	20.15
14	22.75	22.70	22.30	17.80	22.75	21.85	16.40	19.70	20.65	19.50	19.45	20.20
15	22.75	22.65	22.25	17.95	22.90	21.70	16.35	20.25	20.50	19.50	19.45	20.20
16	22.75	22.65	22.25	18.35	23.05	21.55	16.30	20.65	20.40	19.45	19.50	20.20
17	22.75	22.65	22.25	18.75	23.15	21.40	16.30	21.15	20.30	19.40	19.50	20.20
18	22.75	22.65	22.20	19.05	23.25	21.25	16.25	21.65	20.05	19.30	19.55	20.25
19	22.75	22.60	22.20	19.25	23.30	21.10	16.20	22.00	19.90	19.20	19.55	20.25
20	22.75	22.60	22.15	19.40	23.40	20.95	16.20	22.35	19.80	19.00	19.55	20.25
21	22.75	22.55	22.15	19.75	23.50	20.80	16.15	22.45	19.65	18.95	19.60	20.30
22	22.75	22.55	22.10	19.80	23.60	20.65	16.15	22.50	19.60	18.90	19.60	20.30
23	22.80	22.55	22.05	19.90	23.55	20.50	16.15	22.45	19.65	18.80	19.60	20.30
24	22.80	22.55	22.00	20.10	23.50	20.30	16.10	22.50	19.70	18.80	19.65	20.35
25	22.80	22.55	22.00	20.35	23.40	20.10	16.05	22.50	19.70	18.80	19.65	20.35
26	22.80	22.55	21.85	20.60	23.30	19.85	16.00	22.60	19.70	18.80	19.70	20.35
27	22.80	22.50	21.65	20.85	23.25	19.65	16.05	23.00	19.70	18.85	19.70	20.35
28	22.80	22.50	21.40	21.05	23.15	19.50	16.05	23.15	19.70	18.90	19.70	20.40
29	22.80	-----	21.15	21.20	23.10	19.35	15.95	23.15	19.75	18.90	19.75	20.40
30	22.80	-----	20.90	21.20	23.00	19.25	16.15	23.15	19.75	18.95	19.75	20.40
31	22.80	-----	20.70	-----	22.95	-----	16.10	23.10	-----	19.00	-----	20.45
MEAN	22.76	22.67	22.09	19.43	22.54	21.38	16.83	20.17	20.85	19.31	19.47	20.17
MAX	22.80	22.80	22.50	21.20	23.60	22.90	19.00	23.15	23.00	19.80	19.75	20.45
MIN	22.75	22.50	20.70	17.80	21.00	19.25	15.95	16.20	19.60	18.80	19.05	19.85
CAL YR 1971	MEAN 20.63		MAX 23.60		MIN 15.95							

08401000 Pecos River below McMillan Dam, N. Mex.

LOCATION.--Lat 32°35'40", long 104°20'59", in NW 1/4 sec.11, T.20 S., R.26 E., Eddy County, on left bank 700 ft downstream from gates in McMillan Dam, and 3.4 miles southeast of Lakewood.

DRAINAGE AREA.--16,990 sq mi., approximately (contributing area).

PERIOD OF RECORD.--January 1906 to March 1908, January 1909 to December 1911, August 1939 to December 1940, December 1946 to current year (January 1906 and January 1910 to December 1911, gage heights and discharge measurements only). Published as "near Lakewood" 1906-11, and as "below McMillan Dam, near Lakewood" 1939-40.

GAGE.--Water-stage recorder and rock control. Datum of gage is 3,238.21 ft above mean sea level. See WSP 1732 for history of changes prior to Mar. 12, 1957. Supplemental water-stage recorders on McMillan Dam spillways, No. 1 and 2, were discontinued Sept. 30, 1970.

AVERAGE DISCHARGE.--26 years (1906-7, 1939-40, 1947-71), 99.3 cfs (71,940 acre-ft per year); 20 calendar years (1951-70), 102 cfs (73,900 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 371 cfs Sept. 8; no flow for many days.

1939-40, 1947-71: Maximum discharge, 16,500 cfs Aug. 23, 1966, includes flow of spillways; no flow for many days.

Flood of Oct. 2, 1904, may have reached 60,000 cfs. This station may have had a higher discharge in August 1893 when part of McMillan Dam was blasted to prevent total destruction of the dam (that flood was described as "highest in 50 years" and it also destroyed Avalon Dam).

REMARKS.--Records good. Flow regulated by Alamogordo Reservoir and Lake McMillan (see sta 08384000, 08400500). Diversions and ground-water withdrawals for irrigation of about 171,000 acres (1959 determination) above station.

REVISIONS (WATER YEARS).--WSP 1512: 1909.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0					0	310	83	68	255	.10	222
2	0					0	304	64	68	220	0	264
3	0					0	301	62	68	119	0	175
4	0					0	301	62	67	104	0	130
5	0					0	297	62	67	172	0	130
6	0					0	261	21	65	153	0	200
7	0					0	239	.17	65	195	0	330
8	0					0	200	.17	65	244	0	371
9	139					0	132	.15	67	264	.03	291
10	215					0	67	17	67	261	0	320
11	147					0	54	120	67	137	30	368
12	94					0	140	120	67	53	121	361
13	65					0	220	121	76	.05	127	288
14	109					0	217	121	127	.03	130	155
15	157					0	190	125	168	.01	114	116
16	45					0	108	125	168	0	37	183
17	.30					0	111	147	168	0	0	255
18	63					0	111	161	168	0	0	169
19	111					0	168	163	165	0	0	113
20	35					0	212	163	163	0	0	111
21	.17					0	212	163	163	0	0	111
22	.17					0	215	163	163	2.2	19	111
23	.17					0	143	163	163	.30	114	36
24	.17					0	114	163	217	.23	94	.17
25	.17					141	90	132	241	.20	69	.13
26	.17					285	62	118	205	.17	69	.11
27	.17					326	62	118	125	.15	71	.09
28	.17					323	107	85	92	.07	72	.09
29	.15				-----	323	125	69	171	.02	72	.09
30	.13				-----	320	125	69	241	.72	111	.07
31	.13	-----			-----	313	-----	69	-----	0	136	-----
TOTAL	1,182.07	0	0	0	0	2,031	5,198	3,049.49	3,785	2,181.15	1,386.13	4,810.75
MEAN	38.1	0	0	0	0	65.5	173	98.4	126	70.4	44.7	160
MAX	215	0	0	0	0	326	310	163	241	264	136	371
MIN	0	0	0	0	0	0	54	.15	65	0	0	.07
AC-FT	2,340	0	0	0	0	4,030	10,310	6,050	7,510	4,330	2,750	9,540
CAL YR 1970	TOTAL 30,980.98	MEAN 84.9	MAX 492	MIN 0	AC-FT 61,450							
WTR YR 1971	TOTAL 23,623.59	MEAN 64.7	MAX 371	MIN 0	AC-FT 46,860							

08401000 Pecos River below McMillan Dam, N. Mex.

LOCATION.--Lat 32°35'40", long 104°20'59", in NW 1/4 sec. 11, T.20 S., R.26 E., Eddy County, on left bank 700 ft downstream from gates in McMillan Dam and 3.4 miles southeast of Lakewood.

DRAINAGE AREA.--16,990 sq mi, approximately (contributing area).

PERIOD OF RECORD.--January 1906 to March 1908, January 1909 to December 1911, August 1939 to December 1940, December 1946 to current year (January 1906 and January 1910 to December 1911, gage heights and discharge measurements only). Published as "near Lakewood" 1906-11, and as "below McMillan Dam, near Lakewood" 1939-40.

GAGE.--Water-stage recorder and rock control. Datum of gage is 3,238.21 ft above mean sea level. See WSP 1732 for history of changes prior to Mar. 12, 1957. Supplemental water-stage recorders on McMillan Dam spillways, No. 1 and 2, were discontinued Sept. 30, 1970.

AVERAGE DISCHARGE.--28 calendar years (1907, 1909, 1940, 1947-71), 97.9 cfs (70,930 acre-ft per year); 20 calendar years (1952-71), 102 cfs (73,900 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 371 cfs Sept. 8; no flow for many days.

1939-40, 1947-71: Maximum discharge, 16,500 cfs Aug. 23, 1966, includes flow of spillways; no flow for many days.

Flood of Oct. 2, 1904, may have reached 60,000 cfs. This station may have had a higher discharge in August 1893 when part of McMillan Dam was blasted to prevent total destruction of the dam (that flood was described as "highest in 50 years" and it also destroyed Avalon Dam).

REMARKS.--Records good. Flow regulated by Alamogordo Reservoir and Lake McMillan (see sta 08384000, 08400500). Diversions and ground-water withdrawals for irrigation of about 171,000 acres (1959 determination) above station.

REVISIONS (WATER YEARS).--WSP 1512: 1909.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			0	310	83	68	255	.10	222	.03		
2			0	304	64	68	220	0	264	.03		
3			0	301	62	68	119	0	175	.03		
4			0	301	62	67	104	0	130	.01		
5			0	297	62	67	172	0	130	61		
6			0	261	21	65	153	0	200	95		
7			0	239	.17	65	195	0	330	80		
8			0	200	.17	65	244	0	371	64		
9			0	132	.15	67	264	.03	291	64		
10			0	67	17	67	261	0	320	64		
11			0	54	120	67	137	30	368	24		
12			0	140	120	67	53	121	361	.09		
13			0	220	121	76	.05	127	288	.07		
14			0	217	121	127	.03	130	155	.03		
15			0	190	125	168	.01	114	116	84		
16			0	108	125	168	0	37	183	92		
17			0	111	147	168	0	0	255	85		
18			0	111	161	168	0	0	169	153		
19			0	168	163	165	0	0	113	141		
20			0	212	163	163	0	0	111	111		
21			0	212	163	163	0	0	111	79		
22			0	215	163	163	2.2	19	111	34		
23			0	143	163	163	.30	114	36	32		
24			0	114	163	217	.23	94	.17	.02		
25			141	90	132	241	.20	69	.13	0		
26			285	62	118	205	.17	69	.11	0		
27			326	62	118	125	.15	71	.09	0		
28			323	107	85	92	.07	72	.09	0		
29		-----	323	125	69	171	.02	72	.09	0		
30		-----	320	125	69	241	.72	111	.07	0		
31		-----	313	-----	69	-----	0	136	-----	0	-----	
TOTAL	0	0	2,031	5,198	3,049.49	3,785	2,181.15	1,386.13	4,810.75	1,263.31	0	0
MEAN	0	0	65.5	173	98.4	126	70.4	44.7	160	40.8	0	0
MAX	0	0	326	310	163	241	264	136	371	153	0	0
MIN	0	0	0	54	.15	65	0	0	.07	0	0	0
AC-FT	0	0	4,030	10,310	6,050	7,510	4,330	2,750	9,540	2,510	0	0

CAL YR 1971 TOTAL 23,704.83 MEAN 64.9 MAX 371 MIN 0 AC-FT 47,020

08401200 South Seven Rivers near Lakewood, N. Mex.

LOCATION.--Lat 32°35'19", long 104°25'17", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.7, T.20 S., R.26 E., Eddy County, on downstream side of center pier of bridge on U.S. Highway 285, 0.4 mile south of Seven Rivers, 3.0 miles upstream from mouth, and 4.0 miles southwest of Lakewood.

DRAINAGE AREA.--220 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,276 ft (from topographic map). Prior to July 8, 1965, at site 400 ft upstream at datum 0.57 ft higher.

AVERAGE DISCHARGE.--8 years, 6.33 cfs (4,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,650 cfs Sept. 23 (gage height, 11.90 ft); no flow most of time.

Period of record: Maximum discharge, 25,500 cfs May 30, 1965 (gage height, 20.0 ft, from floodmarks, present site and datum), from rating curve extended above 5,700 cfs on basis of slope-area measurements at gage heights 18.15 and 20.0 ft; no flow most of time.

Maximum discharge since at least 1941, about 30,000 cfs (gage height, 22.8 ft, from old debris on left bank, former site and datum), from rating curve extended above 5,700 cfs on basis of slope-area measurement at gage height 21.8 ft. Probable date of flood, Oct. 7, 1954.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	83	0
2										0	.01	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	.85	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	42	0
19										0	1.6	0
20										0	0	0
21										0	0	0
22										0	0	2.5
23										0	0	453
24										0	0	.02
25										0	0	0
26										0	0	0
27										0	0	0
28										0	0	0
29										0	0	0
30										5.7	0	0
31		-----			-----		-----		-----	10	0	-----
TOTAL	0	0	0	0	0	0	0	0	0	15.7	127.46	455.52
MEAN	0	0	0	0	0	0	0	0	0	.51	4.11	15.2
MAX	0	0	0	0	0	0	0	0	0	10	83	453
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	31	253	904

CAL YR 1970 TOTAL 612.20 MEAN 1.68 MAX 258 MIN 0 AC-FT 1,210
WTR YR 1971 TOTAL 598.68 MEAN 1.64 MAX 453 MIN 0 AC-FT 1,190

PEAK DISCHARGE (BASE, 450 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-18	1930	7.07	720	9-23	0030	11.90	4,650

08401200 South Seven Rivers near Lakewood, N. Mex.

LOCATION.--Lat 32°35'19", long 104°25'17", in SE 1/4 Sec. 7, T.20 S., R.26 E., Eddy County, on downstream side of center pier of bridge on U.S. Highway 285, 0.4 mile south of Seven Rivers, 3.0 miles upstream from mouth, and 4.0 miles southwest of Lakewood.

DRAINAGE AREA.--220 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,276 ft (from topographic map). Prior to July 8, 1965, at site 400 ft upstream at datum 0.57 ft higher.

AVERAGE DISCHARGE.--8 calendar years, 6.34 cfs (4,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,650 cfs Sept. 23 (gage height, 11.90 ft); no flow most of time.

Period of record: Maximum discharge, 25,500 cfs May 30, 1965 (gage height, 20.0 ft, from floodmarks, present site and datum), from rating curve extended above 5,700 cfs on basis of slope-area measurements at gage heights 18.15 and 20.0 ft; no flow most of time.

Maximum discharge since at least 1941, about 30,000 cfs (gage height, 22.8 ft, from old debris on left bank, former site and datum), from rating curve extended above 5,700 cfs on basis of slope-area measurement at gage height 21.8 ft. Probable date of flood, Oct. 7, 1954.

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

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	83	0			
2							0	.01	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	.85	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	42	0			
19							0	1.6	0			
20							0	0	0			
21							0	0	0			
22							0	0	2.5			
23							0	0	453			
24							0	0	.02			
25							0	0	0			
26							0	0	0			
27							0	0	0			
28							0	0	0			
29		-----					0	0	0			
30		-----					5.7	0	0			
31		-----		-----		-----	10	0	-----		-----	
TOTAL	0	0	0	0	0	0	15.7	127.46	455.52	0	0	0
MEAN	0	0	0	0	0	0	.51	4.11	15.2	0	0	0
MAX	0	0	0	0	0	0	10	83	453	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	31	253	904	0	0	0

CAL YR 1971 TOTAL 598.68 MEAN 1.64 MAX 453 MIN 0 AC-FT 1,190

PEAK DISCHARGE (BASE, 450 CFS).--Aug. 18 (1930) 720 cfs (7.07 ft); Sept. 23 (0030) 4,650 cfs (11.90 ft).

08401500 Pecos River below Major Johnson Springs near Carlsbad, N. Mex.

LOCATION.--Lat 32°31'54", long 104°22'40", in SW¼NW¼ sec.27, T.20 S., R.26 E., Eddy County, on left bank, at mouth of Willow Draw, 2.4 miles downstream from South Seven Rivers, 4.2 miles southeast of Seven Rivers, 6.0 miles south of Lakewood, and 11.5 miles northwest of Carlsbad.

DRAINAGE AREA.--17,650 sq mi, approximately (contributing area).

PERIOD OF RECORD.--October to December 1971 (operated as a low-flow station only). Records for January 1947 to September 1950 at site 0.5 mile upstream not equivalent owing to spring inflow between sites.

GAGE.--Water stage recorder. Altitude of gage is 3,202 ft (from topographic map).

EXTREMES.--Maximum discharge during period, not determined; minimum, 21 cfs Dec. 10.

REMARKS.--Records good. Diversions and ground-water withdrawal for irrigation of about 173,000 acres (1959 determination) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1										33	26	25
2										33	26	25
3										32	26	25
4										32	26	26
5										70	26	26
6										125	26	25
7										115	26	26
8										85	26	25
9										95	25	25
10										85	25	25
11										65	24	25
12										32	24	25
13										31	24	25
14										31	24	25
15										78	25	25
16										125	25	25
17										102	24	25
18										176	24	26
19										175	24	26
20										142	24	26
21										102	24	26
22										72	24	26
23										67	24	26
24										30	24	26
25										29	24	26
26										28	24	26
27										28	24	26
28										28	25	26
29										27	26	26
30										27	26	26
31										26		26
TOTAL										2,126	745	792
MEAN										68.6	24.8	25.5
MAX										176	26	26
MIN										26	24	25
AC-FT										4,220	1,480	1,570

08401900 Rocky Arroyo at highway bridge, near Carlsbad, N. Mex.

LOCATION.--Lat 32°30'23", long 104°22'28", in SE¼SE¼ sec.3, T.21 S., R.25 E., Eddy County, at downstream end of bridge pier nearest left bank on U. S. Highway 285, 2 miles upstream from mouth, and 10 miles northwest of Carlsbad.

DRAINAGE AREA.--285 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,248 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 10.4 cfs (7,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 53 cfs Aug. 19 (gage height, 4.73 ft); no flow most of time.

Period of record: Maximum discharge, 31,600 cfs Aug. 23, 1966 (gage height, 15.35 ft), from rating curve extended above 5,500 cfs on basis of slope-area measurement of peak flow; no flow most of time.

Since about 1941 the highest peak probably occurred Oct. 7, 1954, discharge 63,600 cfs (gage height, 19.2 ft, from high-water marks on downstream end of bridge pier), by slope-area measurement at site 5 miles upstream.

REMARKS.--Records fair. Diversions for irrigation of 220 acres (from Agricultural Stabilization and Conservation Service) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											0	
2											0	
3											0	
4											0	
5											0	
6											0	
7											0	
8											0	
9											0	
10											0	
11											0	
12											0	
13											0	
14											0	
15											0	
16											0	
17											0	
18											0	
19											9.7	
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	9.7	0
MEAN	0	0	0	0	0	0	0	0	0	0	.31	0
MAX	0	0	0	0	0	0	0	0	0	0	9.7	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	19	0
CAL YR 1970	TOTAL	1,098.76	MEAN	3.01	MAX	537	MIN	0	AC-FT	2,180		
WTR YR 1971	TOTAL	9.70	MEAN	.02	MAX	9	MIN	0	AC-FT	19		

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

08401900 Rocky Arroyo at highway bridge, near Carlsbad, N. Mex.

LOCATION.--Lat 32°30'23", long 104°22'28", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.21 S., R.25 E., Eddy County, at downstream end of bridge pier nearest left bank on U. S. Highway 285, 2 miles upstream from mouth, and 10 miles northwest of Carlsbad.

DRAINAGE AREA.--285 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,248 ft (from topographic map).

AVERAGE DISCHARGE.--8 calendar years, 10.4 cfs (7,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 53 cfs Aug. 19 (gage height, 4.73 ft); no flow most of time.

Period of record: Maximum discharge, 31,600 cfs Aug. 23, 1966 (gage height, 15.35 ft), from rating curve extended above 5,500 cfs on basis of slope-area measurement of peak flow; no flow most of time.

Since about 1941 the highest peak probably occurred Oct. 7, 1954, discharge 63,600 cfs (gage height, 19.2 ft, from high-water marks on downstream end of bridge pier), by slope-area measurement at site 5 miles upstream.

REMARKS.--Records fair. Diversions for irrigation of 220 acres (from Agricultural Stabilization and Conservation Service) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1								0				
2								0				
3								0				
4								0				
5								0				
6								0				
7								0				
8								0				
9								0				
10								0				
11								0				
12								0				
13								0				
14								0				
15								0				
16								0				
17								0				
18								0				
19								9.7				
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	9.7	0	0	0	0
MEAN	0	0	0	0	0	0	0	.31	0	0	0	0
MAX	0	0	0	0	0	0	0	9.7	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	19	0	0	0	0

CAL YR 1971 TOTAL 9.7 MEAN .027 MAX 9.7 MIN 0 AC-FT 19

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

08402000 Pecos River at damsite 3, near Carlsbad, N. Mex.

LOCATION.--Lat 32°30'40", long 104°19'58", in lot 14, sec.6, T.21 S., R.26 E., Eddy County, on right bank at damsite 3 of Carlsbad project of Bureau of Reclamation, about 1 mile upstream from flow line of Lake Avalon, 1.3 miles downstream from Rocky Arroyo, and 8 miles northwest of Carlsbad.

DRAINAGE AREA.--17,980 sq mi, approximately (contributing area).

PERIOD OF RECORD.--August 1939 to December 1940, August 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,171.31 ft above mean sea level (Bureau of Reclamation datum). Prior to Aug. 10, 1944, at site 1,000 ft downstream, at datum 1.00 ft higher. Aug. 10, 1944, to Dec. 31, 1966, at present site at datum 1.00 ft higher.

AVERAGE DISCHARGE.--28 years, 166 cfs (120,300 acre-ft per year); 20 calendar years (1951-70), 161 cfs (116,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,560 cfs Sept. 23 (gage height, 4.78 ft); minimum, 13 cfs July 29.

Period of record: Maximum discharge, 69,000 cfs Aug. 23, 1966 (gage height, 20.32 ft, from floodmark), from rating curve extended above 25,000 cfs on basis of slope-area measurement at gage height 18.53 ft; minimum, 4.3 cfs Aug. 5, 1954.

Peaks which probably exceeded 40,000 cfs occurred in August 1893, Oct. 2, 1904, July 25, 1905, Apr. 17, 1915, Aug. 7, 1916, and May 30, 1937, based primarily on records for station "at Carlsbad." Peak of May 22, 1941, was estimated at 60,000 cfs. Floods of 1893 and 1904 originated above McMillan Dam and contributed to the two failures of Avalon Dam.

REMARKS.--Records good. Flow regulated by Alamogordo Reservoir and Lake McMillan (see sta 08384000, 08400500). Diversions and ground-water withdrawals for irrigation of about 173,000 acres (1959 determination) above station. Discharge represents inflow to Lake Avalon.

REVISIONS (WATER YEARS).--WSP 1512: 1946-47(M), 1948(P), 1949, 1950(P). WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	39	36	35	34	33	308	135	90	266	60	200
2	38	38	36	35	34	34	305	87	94	247	31	275
3	38	38	36	35	34	32	305	85	94	172	19	229
4	39	38	36	35	34	32	305	81	90	98	18	152
5	39	38	36	34	34	31	305	81	90	193	18	152
6	35	38	36	34	34	32	282	74	89	174	20	187
7	36	38	36	34	34	32	256	34	89	191	19	296
8	39	38	36	35	34	31	237	32	90	250	18	357
9	85	38	35	34	34	32	188	31	90	262	22	318
10	216	38	36	34	34	31	110	32	89	282	39	296
11	185	39	36	34	34	30	79	108	90	182	22	350
12	132	39	36	34	34	30	111	144	90	103	105	350
13	92	38	36	34	34	29	231	142	90	28	139	310
14	106	38	36	34	35	29	231	144	130	24	144	210
15	196	38	35	34	34	30	240	146	185	24	139	135
16	123	38	35	34	35	31	142	144	193	23	94	169
17	45	38	35	34	34	30	135	159	193	21	28	250
18	54	38	35	35	34	30	135	185	193	19	23	220
19	137	38	35	35	33	29	175	185	193	19	61	137
20	112	38	35	35	35	29	225	185	191	18	26	135
21	42	38	35	34	34	30	225	185	191	18	26	132
22	38	38	35	36	34	29	225	182	191	18	26	135
23	39	39	34	35	34	29	175	185	188	17	86	396
24	38	36	34	34	34	29	135	188	210	17	115	45
25	38	36	34	34	34	68	115	172	253	15	83	34
26	38	36	34	35	34	253	90	142	250	15	83	32
27	39	36	34	34	34	308	90	142	156	15	83	32
28	38	38	34	34	34	312	105	126	132	14	83	32
29	39	38	34	35	-----	312	150	94	143	13	85	31
30	39	38	35	34	-----	312	149	92	240	111	106	31
31	39	-----	35	34	-----	308	-----	92	-----	22	149	-----
TOTAL	2,210	1,136	1,091	1,067	954	2,607	5,764	3,814	4,407	2,871	1,970	5,628
MEAN	71.3	37.9	35.2	34.4	34.1	84.1	192	123	147	92.6	63.5	188
MAX	216	39	36	36	35	312	308	188	253	282	149	396
MIN	35	36	34	34	33	29	79	31	89	13	18	31
AC-FT	4,380	2,250	2,160	2,120	1,890	5,170	11,430	7,570	8,740	5,690	3,910	11,160

CAL YR 1970 TOTAL 44,028 MEAN 121 MAX 790 MIN 33 AC-FT 87,330
WTR YR 1971 TOTAL 33,519 MEAN 91.8 MAX 396 MIN 13 AC-FT 66,480

PEAK DISCHARGE (BASE, 1,700 CFS).--No peak above base.

08402000 Pecos River at damsite 3, near Carlsbad, N. Mex.

LOCATION.--Lat 32°30'40", long 104°19'58", in lot 14, sec.6, T.21 S., R.26 E., Eddy County, on right bank at damsite 3 of Carlsbad project of Bureau of Reclamation, about 1 mile upstream from flow line of Lake Avalon, 1.3 miles downstream from Rocky Arroyo, and 8 miles northwest of Carlsbad.

DRAINAGE AREA.--17,980 sq mi, approximately (contributing area).

PERIOD OF RECORD.--August 1939 to December 1940, August 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,171.31 ft above mean sea level (Bureau of Reclamation datum). Prior to Aug. 10, 1944, at site 1,000 ft downstream, at datum 1.00 ft higher. Aug. 10, 1944, to Dec. 31, 1966, at present site at datum 1.00 ft higher.

AVERAGE DISCHARGE.--28 calendar years (1940, 1945-71), 165 cfs (119,000 acre-ft per year); 20 calendar years (1952-71), 157 cfs (113,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,560 cfs Sept. 23 (gage height, 4.78 ft); minimum, 13 cfs July 29.

Period of record: Maximum discharge, 69,000 cfs Aug. 23, 1966 (gage height, 20.32 ft, from floodmark), from rating curve extended above 25,000 cfs on basis of slope-area measurement at gage height 18.53 ft; minimum, 4.3 cfs Aug. 5, 1954.

Peaks which probably exceeded 40,000 cfs occurred in August 1893, Oct. 2, 1904, July 25, 1905, Apr. 17, 1915, Aug. 7, 1916, and May 30, 1937, based primarily on records for station "at Carlsbad." Peak of May 22, 1941, was estimated at 60,000 cfs. Floods of 1893 and 1904 originated above McMillan Dam and contributed to the two failures of Avalon Dam.

REMARKS.--Records good. Flow regulated by Alamogordo Reservoir and Lake McMillan (see sta 08384000, 08400500). Diversions and ground-water withdrawals for irrigation of about 173,000 acres (1959 determination) above station. Discharge represents inflow to Lake Avalon.

REVISIONS (WATER YEARS).--WSP 1512: 1946-47(M), 1948(P), 1949, 1950(P). WSP 1712: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	35	34	33	308	135	90	266	60	200	30	24	23
2	35	34	34	305	87	94	247	31	275	30	24	23
3	35	34	32	305	85	94	172	19	229	29	23	23
4	35	34	32	305	81	90	98	18	152	29	23	23
5	34	34	31	305	81	90	193	18	152	40	23	24
6	34	34	32	282	74	89	174	20	187	117	23	23
7	34	34	32	256	34	89	191	19	296	106	23	23
8	35	34	31	237	32	90	250	18	357	79	23	23
9	34	34	32	188	31	90	262	22	318	89	23	23
10	34	34	31	110	32	89	282	39	296	78	23	23
11	34	34	30	79	108	90	182	22	350	71	23	23
12	34	34	30	111	144	90	103	105	350	33	23	24
13	34	34	29	231	142	90	28	139	310	30	23	24
14	34	35	29	231	144	130	24	144	210	29	23	23
15	34	34	30	240	146	185	24	139	135	48	24	23
16	34	35	31	142	144	193	23	94	169	119	29	24
17	34	34	30	135	159	193	21	28	250	89	23	24
18	35	34	30	135	185	193	19	23	220	139	23	24
19	35	33	29	175	185	193	19	61	137	164	23	22
20	35	35	29	225	185	191	18	26	135	135	23	23
21	34	34	30	225	185	191	18	26	132	94	23	23
22	36	34	29	225	182	191	18	26	135	78	23	23
23	35	34	29	175	185	188	17	86	396	62	23	24
24	34	34	29	135	188	210	17	115	45	31	23	24
25	34	34	68	115	172	253	15	83	34	29	23	24
26	35	34	253	90	142	250	15	83	32	25	23	24
27	34	34	308	90	142	156	15	83	32	25	22	24
28	34	34	312	105	126	132	14	83	32	27	23	24
29	35	-----	312	150	94	143	13	85	31	26	23	24
30	34	-----	312	149	92	240	111	106	31	26	24	24
31	34	-----	308	-----	92	-----	22	149	-----	25	-----	24
TOTAL	1,067	954	2,607	5,764	3,814	4,407	2,871	1,970	5,628	1,932	699	727
MEAN	34.4	34.1	84.1	192	123	147	92.6	63.5	188	62.3	23.3	23.5
MAX	36	35	312	308	188	253	282	149	396	164	29	24
MIN	34	33	29	79	31	89	13	18	31	25	22	22
AC-FT	2,120	1,890	5,170	11,430	7,570	8,740	5,690	3,910	11,160	3,830	1,390	1,440

CAL YR 1971 TOTAL 32,440 MEAN 88.9 MAX 396 MIN 13 AC-FT 64,340

PEAK DISCHARGE (BASE, 1,700 CFS).--No peak above base.

LOCATION.--Lat 32°29'25", long 104°15'08", in N¹/₄SW¹/₄ sec.12, T.21 S., R.26 E., Eddy County, on right bank 220 ft downstream from headgates in Avalon Dam, and 5.0 miles north of Carlsbad.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,156.50 ft above mean sea level (Bureau of Reclamation datum). Prior to March 1951 at site 20 ft upstream at datum 0.9 ft higher.

EXTREMES.--Current year: Maximum daily discharge, 347 cfs Sept. 10; no flow many days.

Period of record: Maximum daily discharge, 526 cfs Sept. 15, 16, 1946; no flow for many days each year.

REMARKS.--Records good. Carlsbad main canal diverts water from Lake Avalon for irrigation of about 25,000 acres of Carlsbad Irrigation District. About 1,600 acres (most of it above gaging station on Pecos River at Carlsbad), is irrigated on the left bank. The remaining acreage (most of which is downstream from Pecos River at Carlsbad gage) is on right bank.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46					0	320	61	111	198	0	157
2	99					0	308	42	98	180	0	180
3	104					0	296	26	107	142	0	161
4	80					0	230	44	100	140	0	147
5	61					0	258	46	72	189	0	144
6	98					0	251	53	49	202	0	202
7	124					0	251	54	64	216	0	272
8	140					0	216	56	81	254	57	302
9	144					0	173	48	98	272	105	316
10	147					0	131	65	98	256	144	347
11	105					0	119	124	94	185	132	330
12	102					0	144	123	75	85	108	292
13	134					0	135	116	90	0	108	290
14	182					0	176	121	134	0	78	266
15	196					0	173	132	184	0	78	237
16	135					0	146	137	184	0	49	205
17	88					0	157	146	182	0	36	200
18	80					0	152	154	168	0	19	146
19	159					0	161	161	159	0	0	98
20	97					0	168	180	131	0	31	111
21	0					70	169	166	147	0	54	111
22	0					180	144	156	182	0	53	116
23	0					251	115	127	207	0	78	32
24	0					290	110	124	178	0	74	0
25	0					282	104	119	209	0	49	0
26	0					258	102	132	185	0	47	0
27	0					264	124	104	135	0	62	0
28	0					260	129	61	194	0	76	20
29	0				-----	302	105	47	239	0	69	42
30	0				-----	298	90	65	207	0	115	72
31	0	-----			-----	310	-----	127	-----	0	127	-----
TOTAL	2,321	0	0	0	0	2,765	5,157	3,117	4,162	2,319	1,749	4,796
MEAN	74.9	0	0	0	0	89.2	172	101	139	74.8	56.4	160
MAX	196	0	0	0	0	310	320	180	239	272	144	347
MIN	0	0	0	0	0	0	90	26	49	0	0	0
AC-FT	4,600	0	0	0	0	5,480	10,230	6,180	8,260	4,600	3,470	9,510
CAL YR 1970	TOTAL 35,979.00		MEAN 98.6	MAX 408	MIN 0	AC-FT 71,360						
WTR YR 1971	TOTAL 26,386.00		MEAN 72.3	MAX 347	MIN 0	AC-FY 52,340						

08403500 Carlsbad main canal at head, near Carlsbad, N. Mex.

LOCATION.--Lat 32°29'25", long 104°15'08", in N½SW¼SW¼ sec.12, T.21 S., R.26 E., Eddy County, on right bank 220 ft downstream from headgates in Avalon Dam and 5.0 miles north of Carlsbad.

PERIOD OF RECORD.--July 1939 to current year (monthly discharge only July 1939 to September 1965). January 1941 to March 1951 published in WSP 1732.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,156.50 ft above mean sea level (Bureau of Reclamation datum). Prior to March 1951 at site 20 ft upstream at datum 0.9 ft higher.

AVERAGE DISCHARGE.--32 calendar years, 110 cfs (79,700 acre-ft per year); 20 calendar years (1952-71), 98.9 cfs (71,650 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 347 cfs Sept. 10; no flow many days.

Period of record: Maximum daily discharge, 526 cfs Sept. 15, 16, 1946; no flow for many days each year.

REMARKS.--Records good. Carlsbad main canal diverts water from Lake Avalon for irrigation of about 25,000 acres of Carlsbad Irrigation District. About 1,600 acres (most of it above gaging station on Pecos River at Carlsbad), is irrigated on the left bank. The remaining acreage (most of which is downstream from Pecos River at Carlsbad gage) is on right bank.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			0	320	61	111	198	0	157	96		
2			0	308	42	98	180	0	180	104		
3			0	296	26	107	142	0	161	78		
4			0	230	44	100	140	0	147	82		
5			0	258	46	72	189	0	144	76		
6			0	251	53	49	202	0	202	88		
7			0	251	54	64	216	0	272	76		
8			0	216	56	81	254	57	302	100		
9			0	173	48	98	272	105	316	107		
10			0	131	65	98	256	144	347	56		
11			0	119	124	94	185	132	330	48		
12			0	144	123	75	85	108	292	64		
13			0	135	116	90	0	108	290	72		
14			0	176	121	134	0	78	266	74		
15			0	173	132	184	0	78	237	82		
16			0	146	137	184	0	49	205	76		
17			0	157	146	182	0	36	200	84		
18			0	152	154	168	0	19	146	129		
19			0	161	161	159	0	0	98	142		
20			C	168	180	131	0	31	111	132		
21			70	169	166	147	0	54	111	100		
22			180	144	156	182	0	53	116	129		
23			251	115	127	207	0	78	32	80		
24			290	110	124	178	0	74	0	0		
25			282	104	119	209	0	49	0	0		
26			258	102	132	185	0	47	0	0		
27			264	124	104	135	0	62	0	0		
28			260	129	61	194	0	76	20	0		
29		-----	302	105	47	239	0	69	42	0		
30		-----	298	90	65	207	0	115	72	0		
31		-----	310	-----	127	-----	0	127	-----	0	-----	
TOTAL	0	0	2,765	5,157	3,117	4,162	2,319	1,749	4,796	2,075	0	0
MEAN	0	0	89.2	172	101	139	74.8	56.4	160	66.9	0	0
MAX	0	0	310	320	180	239	272	144	347	142	0	0
MIN	0	0	0	90	26	49	0	0	0	0	0	0
AC-FT	0	0	5,480	10,230	6,180	8,260	4,600	3,470	9,510	4,120	0	0

CAL YR 1971 TOTAL 26,140 MEAN 71.6 MAX 347 MIN 0 AC-FT 51,850

REVISIONS (WATER YEARS).--WSP 898: 1939.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,880	1,410	2,550	3,290	3,690	3,770	1,350	1,130	1,250	818	1,220	845
2	1,800	1,440	2,550	3,290	3,690	3,770	1,220	1,190	1,190	955	1,410	955
3	1,640	1,540	2,620	3,330	3,690	3,770	1,160	1,190	1,160	1,040	1,440	1,160
4	1,510	1,580	2,620	3,330	3,690	3,770	1,220	1,320	1,100	1,040	1,440	1,190
5	1,510	1,610	2,660	3,370	3,690	3,770	1,250	1,320	1,190	900	1,410	1,160
6	1,380	1,670	2,700	3,370	3,690	3,770	1,350	1,350	1,070	845	1,410	1,100
7	1,220	1,770	2,740	3,410	3,690	3,770	1,320	1,350	1,100	764	1,380	1,040
8	1,010	1,800	2,780	3,410	3,690	3,770	1,280	1,190	1,100	636	1,380	1,070
9	764	1,840	2,810	3,450	3,690	3,770	1,280	1,160	1,100	540	1,250	1,160
10	738	1,880	2,850	3,450	3,690	3,770	1,250	1,040	1,010	540	1,100	1,040
11	928	1,910	2,850	3,530	3,730	3,770	1,160	900	955	636	845	955
12	1,070	1,940	2,850	3,570	3,730	3,770	982	872	928	636	587	1,010
13	1,100	1,980	2,890	3,570	3,730	3,770	900	872	928	636	612	1,100
14	955	2,020	2,930	3,570	3,730	3,770	1,100	900	872	686	636	1,070
15	872	2,050	2,930	3,570	3,730	3,730	1,190	928	845	686	818	900
16	845	2,080	2,970	3,570	3,730	3,730	1,280	928	818	712	900	661
17	818	2,120	2,970	3,610	3,730	3,730	1,160	872	791	738	1,010	636
18	738	2,160	3,010	3,610	3,730	3,690	1,070	872	791	738	955	818
19	686	2,190	3,010	3,610	3,730	3,690	928	928	791	764	900	900
20	636	2,220	3,050	3,650	3,730	3,690	982	928	900	764	1,010	928
21	738	2,260	3,090	3,650	3,730	3,690	1,040	928	982	764	928	955
22	818	2,300	3,130	3,650	3,730	3,410	1,100	928	1,040	764	845	955
23	872	2,330	3,170	3,650	3,730	2,970	1,280	1,010	982	764	712	1,380
24	928	2,360	3,170	3,650	3,730	2,400	1,280	1,100	955	791	845	1,840
25	1,010	2,400	3,210	3,650	3,770	1,840	1,350	1,190	982	791	900	1,880
26	1,040	2,440	3,210	3,650	3,770	1,440	1,280	1,220	1,010	791	955	1,880
27	1,130	2,480	3,210	3,650	3,770	1,440	1,190	1,220	1,160	845	955	1,910
28	1,160	2,510	3,210	3,650	3,770	1,440	1,040	1,280	1,100	845	955	1,940
29	1,220	2,550	3,250	3,650	-----	1,480	982	1,380	872	845	928	1,940
30	1,280	2,550	3,250	3,690	-----	1,410	1,010	1,440	738	1,040	928	1,770
31	1,350	-----	3,290	3,690	-----	1,380	-----	1,410	-----	1,130	872	-----
MAX	1,880	2,550	3,290	3,690	3,770	3,770	1,350	1,440	1,250	1,130	1,440	1,940
MIN	636											

08403800 Lake Avalon near Carlsbad, N. Mex.--Continued

GAGE HEIGHT, IN FEET, AT 800, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.55	15.85	17.50	18.45	18.95	19.05	15.75	15.40	15.60	14.85	15.55	14.90
2	16.45	15.90	17.50	18.45	18.95	19.05	15.55	15.50	15.50	15.10	15.85	15.10
3	16.20	16.05	17.60	18.50	18.95	19.05	15.45	15.50	15.45	15.25	15.90	15.45
4	16.00	16.10	17.60	18.50	18.95	19.05	15.55	15.70	15.35	15.25	15.90	15.50
5	16.00	16.15	17.65	18.55	18.95	19.05	15.60	15.70	15.50	15.00	15.85	15.45
6	15.80	16.25	17.70	18.55	18.95	19.05	15.75	15.75	15.30	14.90	15.85	15.35
7	15.55	16.40	17.75	18.60	18.95	19.05	15.70	15.75	15.35	14.75	15.80	15.25
8	15.20	16.45	17.80	18.60	18.95	19.05	15.65	15.50	15.35	14.50	15.80	15.30
9	14.75	16.50	17.85	18.65	---	19.05	15.65	15.45	15.35	14.30	15.60	15.45
10	14.70	16.55	17.90	18.65	---	19.05	15.60	15.25	15.20	14.30	15.35	15.25
11	15.05	16.60	17.90	18.75	---	19.05	15.45	15.00	15.10	14.50	14.90	15.10
12	15.30	16.65	17.90	18.80	19.00	19.05	15.15	14.95	15.05	14.50	14.40	15.20
13	15.35	16.70	17.95	18.80	19.00	19.05	15.00	14.95	15.05	14.50	14.45	15.35
14	15.10	16.75	18.00	18.80	19.00	19.05	15.35	15.00	14.95	14.60	14.50	15.30
15	14.95	16.80	18.00	18.80	19.00	19.00	15.50	15.05	14.90	14.60	14.85	15.00
16	14.90	16.85	18.05	18.80	19.00	19.00	15.65	15.05	14.85	14.65	15.00	14.55
17	14.85	16.90	18.05	18.85	19.00	19.00	15.45	14.95	14.80	14.70	15.20	14.50
18	14.70	16.95	18.10	18.85	19.00	18.95	15.30	14.95	14.80	14.70	15.10	14.85
19	14.60	17.00	18.10	18.85	19.00	18.95	15.05	15.05	14.80	14.75	15.00	15.00
20	14.50	17.05	18.15	18.90	19.00	18.95	15.15	15.05	15.00	14.75	15.20	15.05
21	14.70	17.10	18.20	18.90	19.00	18.95	15.25	15.05	15.15	14.75	15.05	15.10
22	14.85	17.15	18.25	18.90	19.00	18.60	15.35	15.05	15.25	14.75	14.90	15.10
23	14.95	17.20	18.30	18.90	19.00	18.05	15.65	15.20	15.15	14.75	14.65	15.80
24	15.05	17.25	18.30	18.90	19.00	17.30	15.65	15.35	15.10	14.80	14.90	16.50
25	15.20	17.30	18.35	18.90	19.05	16.50	15.75	15.50	15.15	14.80	15.00	16.55
26	15.25	17.35	18.35	18.90	19.05	15.90	15.65	15.55	15.20	14.80	15.10	16.55
27	15.40	17.40	18.35	18.90	19.05	15.90	15.50	15.55	15.45	14.90	15.10	16.60
28	15.45	17.45	18.35	18.90	19.05	15.90	15.25	15.65	15.35	14.90	15.10	16.65
29	15.55	17.50	18.40	18.90	-----	15.95	15.15	15.80	14.95	14.90	15.05	16.55
30	15.65	17.50	18.40	18.95	-----	15.85	15.20	15.90	14.70	15.25	15.05	16.40
31	15.75	-----	18.45	18.95	-----	15.80	-----	15.85	-----	15.40	14.95	-----
MEAN	15.30	16.79	18.02	18.76		18.23	15.46	15.35	15.16	14.79	15.19	15.49
MAX	16.55	17.50	18.45	18.95		19.05	15.75	15.90	15.60	15.40	15.90	16.65
MIN	14.50	15.85	17.50	18.45		15.80	15.00	14.95	14.70	14.30	14.40	14.50

08403800 Lake Avalon near Carlsbad, N. Mex.

LOCATION.--Lat 32°29'27", long 104°15'05", in NW¼SW¼ sec.12, T.21 S., R.26 E., Eddy County, on headwall at outlet gate of dam on Pecos River, and 5.0 miles north of Carlsbad.

DRAINAGE AREA.--18,070 sq mi, approximately (contributing area).

PERIOD OF RECORD.--January 1939 to September 1965 (monthend contents only). October 1965 to current year. Monthend gage heights January 1919 to December 1938 in files of Pecos River Commission.

GAGE.--Nonrecording gage. Datum of gage is 3,157.0 ft above mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 3,770 acre-ft Feb. 25-Mar. 14 (gage height, 19.05 ft); minimum, 268 acre-ft Oct. 23.
Period of record: Maximum contents, 11,000 acre-ft May 22, 1941 (gage height, 25.0 ft), no storage at times when natural flow was passing through reservoir.

REMARKS.--Lake is formed by Avalon Dam, an earthfill structure. The original Eddy (Avalon) Dam was completed and storage began in 1893. The dam was destroyed by flood of October 1893 (date of reconstruction not available), was destroyed again by flood of Oct. 2, 1904; present dam rebuilt in 1905-6. Capacity, 4,970 acre-ft between gage heights 0.0 (sill of outlet gates) and 20.4 ft (crest of spillway 2). No dead storage. No storage allocated to flood control. Figures given herein represent usable contents and are computed from daily readings at 0800 hours. Water is used by Carlsbad Irrigation District.

COOPERATION.--Capacity table based on data furnished by Carlsbad Irrigation District.

REVISIONS (WATER YEARS).--WSP 898: 1939.

CONTENTS, IN ACRE-FEET, AT 0800, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3,290	3,690	3,770	1,350	1,130	1,250	818	1,220	845	1,640	818	1,580
2	3,290	3,690	3,770	1,220	1,190	1,190	955	1,410	955	1,440	845	1,610
3	3,330	3,690	3,770	1,160	1,190	1,160	1,040	1,440	1,160	1,280	872	1,640
4	3,330	3,690	3,770	1,220	1,320	1,100	1,040	1,440	1,190	1,130	900	1,640
5	3,370	3,690	3,770	1,250	1,320	1,190	900	1,410	1,160	1,010	928	1,640
6	3,370	3,690	3,770	1,350	1,350	1,070	845	1,410	1,100	955	928	1,640
7	3,410	3,690	3,770	1,320	1,350	1,100	764	1,380	1,040	1,010	955	1,670
8	3,410	3,690	3,770	1,280	1,190	1,100	636	1,380	1,070	1,010	1,010	1,700
9	3,450	3,690	3,770	1,280	1,160	1,100	540	1,250	1,160	955	1,040	1,740
10	3,450	3,690	3,770	1,250	1,040	1,010	540	1,100	1,040	955	1,100	1,770
11	3,530	3,730	3,770	1,160	900	955	636	845	955	982	1,100	1,800
12	3,570	3,730	3,770	982	872	928	636	587	1,010	955	1,100	1,800
13	3,570	3,730	3,770	900	872	928	636	612	1,100	872	1,160	1,840
14	3,570	3,730	3,770	1,100	900	872	686	636	1,070	738	1,190	1,880
15	3,570	3,730	3,730	1,190	928	845	686	818	900	612	1,190	1,910
16	3,570	3,730	3,730	1,280	928	818	712	900	661	540	1,280	1,910
17	3,610	3,730	3,730	1,160	872	791	738	1,010	636	587	1,280	1,910
18	3,610	3,730	3,690	1,070	872	791	738	955	818	517	1,320	1,940
19	3,610	3,730	3,690	928	928	791	764	900	900	636	1,320	1,940
20	3,650	3,730	3,690	982	928	900	764	1,010	928	612	1,380	1,940
21	3,650	3,730	3,690	1,040	928	982	764	928	955	636	1,410	1,940
22	3,650	3,730	3,410	1,100	928	1,040	764	845	955	612	1,440	1,940
23	3,650	3,730	2,970	1,280	1,010	982	764	712	1,380	268	1,440	1,980
24	3,650	3,730	2,400	1,280	1,100	955	791	845	1,840	449	1,480	1,980
25	3,650	3,770	1,840	1,350	1,190	982	791	900	1,880	540	1,480	1,980
26	3,650	3,770	1,440	1,280	1,220	1,010	791	955	1,880	564	1,510	1,980
27	3,650	3,770	1,440	1,190	1,220	1,160	845	955	1,910	636	1,510	1,980
28	3,650	3,770	1,440	1,040	1,280	1,100	845	955	1,940	661	1,540	1,980
29	3,650	-----	1,480	982	1,380	872	845	928	1,940	686	1,540	1,980
30	3,690	-----	1,410	1,010	1,440	738	1,040	928	1,770	738	1,580	2,020
31	3,690	-----	1,380	-----	1,410	-----	1,130	872	-----	791	-----	2,020
MAX	3,690	3,770	3,770	1,350	1,440	1,250	1,130	1,440	1,940	1,640	1,580	2,020
MIN	3,290	3,690	1,380	900	872	738	540	587	636	268	818	1,580

CAL YR 1971 MAX 3,770 MIN 268

08403800 Lake Avalon near Carlsbad, N. Mex.--Continued

GAGE HEIGHT, IN FEET, AT 0800, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	18.45	18.95	19.05	15.75	15.40	15.60	14.85	15.55	14.90	16.20	14.85	16.10
2	18.45	18.95	19.05	15.55	15.50	15.50	15.10	15.85	15.10	15.90	14.90	16.15
3	18.50	18.95	19.05	15.45	15.50	15.45	15.25	15.90	15.45	15.65	14.95	16.20
4	18.50	18.95	19.05	15.55	15.70	15.35	15.25	15.90	15.50	15.60	15.00	16.20
5	18.55	18.95	19.05	15.60	15.70	15.50	15.00	15.85	15.45	15.20	15.05	16.20
6	18.55	18.95	19.05	15.75	15.75	15.30	14.90	15.85	15.35	15.10	15.05	16.20
7	18.60	18.95	19.05	15.70	15.75	15.35	14.75	15.80	15.25	15.20	15.10	16.25
8	18.60	18.95	19.05	15.65	15.50	15.35	14.50	15.80	15.30	15.20	15.20	16.30
9	18.65	-	19.05	15.65	15.45	15.35	14.30	15.60	15.45	15.10	15.25	16.35
10	18.65	-	19.05	15.60	15.25	15.20	14.30	15.35	15.25	15.10	15.35	16.40
11	18.75	-	19.05	15.45	15.00	15.10	14.50	14.90	15.10	15.15	15.35	16.45
12	18.80	19.00	19.05	15.15	14.95	15.05	14.50	14.40	15.20	15.10	15.35	16.45
13	18.80	19.00	19.05	15.00	14.95	15.05	14.50	14.45	15.35	14.95	15.45	16.50
14	18.80	19.00	19.05	15.35	15.00	14.95	14.60	14.50	15.30	14.70	15.50	16.55
15	18.80	19.00	19.00	15.50	15.05	14.90	14.60	14.85	15.00	14.45	15.50	16.60
16	18.80	19.00	19.00	15.65	15.05	14.85	14.65	15.00	14.55	14.30	15.65	16.60
17	18.85	19.00	19.00	15.45	14.95	14.80	14.70	15.20	14.50	14.40	15.65	16.60
18	18.85	19.00	18.95	15.30	14.95	14.80	14.70	15.10	14.85	14.25	15.70	16.65
19	18.85	19.00	18.95	15.05	15.05	14.80	14.75	15.00	15.00	14.50	15.70	16.65
20	18.90	19.00	18.95	15.15	15.05	15.00	14.75	15.20	15.05	14.45	15.80	16.65
21	18.90	19.00	18.95	15.25	15.05	15.15	14.75	15.05	15.10	14.50	15.85	16.65
22	18.90	19.00	18.60	15.35	15.05	15.25	14.75	14.90	15.10	14.45	15.90	16.65
23	18.90	19.00	18.05	15.65	15.20	15.15	14.75	14.65	15.80	13.65	15.90	16.70
24	18.90	19.00	17.30	15.65	15.35	15.10	14.80	14.90	16.50	14.10	15.95	16.70
25	18.90	19.05	16.50	15.75	15.50	15.15	14.80	15.00	16.55	14.30	15.95	16.70
26	18.90	19.05	15.90	15.65	15.55	15.20	14.80	15.10	16.55	14.35	16.00	16.70
27	18.90	19.05	15.90	15.50	15.55	15.45	14.90	15.10	16.60	14.50	16.00	16.70
28	18.90	19.05	15.90	15.25	15.65	15.35	14.90	15.10	16.65	14.55	16.05	16.70
29	18.90	-----	15.95	15.15	15.80	14.95	14.90	15.05	16.55	14.60	16.05	16.70
30	18.95	-----	15.85	15.20	15.90	14.70	15.25	15.05	16.40	14.70	16.10	16.75
31	18.95	-----	15.80	-----	15.85	-----	15.40	14.95	-----	14.80	-----	16.75
MEAN	18.76	-	18.23	15.46	15.35	15.16	14.79	15.19	15.49	14.80	15.54	16.51
MAX	18.95	-	19.05	15.75	15.90	15.60	15.40	15.90	16.65	16.20	16.10	16.75
MIN	18.45	-	15.80	15.00	14.95	14.70	14.30	14.40	14.50	13.65	14.85	16.10

08404000 Pecos River below Avalon Dam, N. Mex.

LOCATION.--Lat 32°28'55", long 104°15'47", in SW¼SW¼NE¼ sec.14, T.21 S., R.26 E., Eddy County, on right bank 4,800 ft below Avalon Dam, and 4.5 miles northwest of Carlsbad.

DRAINAGE AREA.--18,080 sq mi, approximately (contributing area).

PERIOD OF RECORD.--January 1906 to March 1907, (published as "at Avalon"), June 1951 to current year.

GAGE.--Water stage recorder. Altitude of gage is 3,130 ft (from topographic map). January 1906 to March 1907 nonrecording gage at site 0.5 mile upstream at different datum.

AVERAGE DISCHARGE.--20 years (1951-71), 34.2 cfs (24,780 acre-ft per year).

EXTREMES.--Current year: No flow during year.

Period of record: Maximum discharge, 55,500 cfs Aug. 23, 1966 (gage height, 26.4 ft, from floodmarks), from rating curve extended above 33,000 cfs on basis of computation of peak flow over Tansill Dam 5.8 miles downstream; no flow most of time. Flood of Oct. 2, 1904, caused in part, by failure of Avalon Dam, probably exceeded 90,000 cfs and is probably greatest flood since 1842. Flood of August 1893 is probably the second highest, and was described as "greatest in 50 years"; it damaged McMillan Dam and washed out the original Avalon Dam.

REMARKS.--Records good. Flow regulated by Alamogordo Reservoir, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800). Diversions and ground-water withdrawals above station for irrigation of about 198,000 acres (1959 determination). Station bypassed by Carlsbad main canal (see sta 08403500).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
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31												
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0
MAX	0	0	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR 1970	TOTAL	1,083.19	MEAN	2.97	MAX	26	MIN	0	AC-FT	2,150		
WTR YR 1971	TOTAL	0.00	MEAN	.00	MAX	.0	MIN	0	AC-FT	0		

08404000 Pecos River below Avalon Dam, N. Mex.

LOCATION.--Lat 32°28'55", long 104°15'47", in SW¼SW¼NE¼ sec.14, T.21 S., R.26 E., Eddy County, on right bank 4,800 ft below Avalon Dam, and 4.5 miles northwest of Carlsbad.

DRAINAGE AREA.--18,080 sq mi, approximately (contributing area).

PERIOD OF RECORD.--January 1906 to March 1907, (published as "at Avalon"), June 1951 to current year.

GAGE.--Water stage recorder. Altitude of gage is 3,130 ft (from topographic map). January 1906 to March 1907 nonrecording gage at site 0.5 mile upstream at different datum.

AVERAGE DISCHARGE.--20 calendar years (1952-71), 34.2 cfs (24,780 acre-ft per year).

EXTREMES.--Current year: No flow during year.

Period of record: Maximum discharge, 55,500 cfs Aug. 23, 1966 (gage height, 26.4 ft, from floodmarks), from rating curve extended above 33,000 cfs on basis of computation of peak flow over Tansill Dam 5.8 miles downstream; no flow most of time.

Flood of Oct. 2, 1904, caused in part, by failure of Avalon Dam, probably exceeded 90,000 cfs and is probably greatest flood since 1842. Flood of August 1893 is probably the second highest, and was described as "greatest in 50 years"; it damaged McMillan Dam and washed out the original Avalon Dam.

REMARKS.--Records good. Flow regulated by Alamogordo Reservoir, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800). Diversions and ground-water withdrawals above station for irrigation of about 198,000 acres (1959 determination). Station bypassed by Carlsbad main canal (see sta 08403500).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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31		-----		-----		-----		-----		-----		
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0
MAX	0	0	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR 1971	TOTAL 0	MEAN 0	MAX 0	MIN 0	AC-FT 0							

08405200 Pecos River below Dark Canyon, at Carlsbad, N. Mex.

LOCATION.--Lat 32°24'37", long 104°12'58", in NE 1/4 NW 1/4 sec. 8, T. 22 S., R. 27 E., Eddy County, on left bank, 700 ft downstream from mouth of Dark Canyon, 0.3 mile downstream from lower Tansill Dam and Bataan recreational area, and 0.8 mile downstream from bridge on U.S. Highway 62-180 in Carlsbad.

DRAINAGE AREA.--18,550 sq mi, approximately (contributing area).

PERIOD OF RECORD.--January 1970 to current year. Records for Aug. 23, 24, 1971, are affected by inflow from Dark Canyon.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,075.19 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,400 cfs Aug. 23 (gage height, 3.36 ft); no flow June 16, 22-25.

Period of record: Maximum discharge, 1,400 cfs Aug. 23, 1971 (gage height, 3.36 ft); no flow June 16, 22-25.

The flood of Aug. 23, 1966, reached a stage of about 22 ft (discharge not determined). (For dates of other historical floods see sta 08404000.)

REMARKS.--Records good. Flow regulated by Alamogordo Reservoir, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and at low stages by power plant above station. Gage is bypassed on left bank by Carlsbad main canal east which irrigates several hundred acres adjacent to and below gage site, and on right bank by Carlsbad main canal south, which with supplemental ground-water withdrawals irrigates about 23,000 acres below. Diversions and ground-water withdrawals above station for irrigation of about 198,000 acres (1959 determination). Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	23	18	18	19	18	13	.48	1.4	.20	3.6	6.2
2	19	25	17	19	18	18	12	.43	10	.24	.43	9.4
3	22	28	18	21	23	17	13	.60	18	.24	.33	9.4
4	23	23	17	16	16	19	13	8.9	19	.20	.33	9.4
5	22	11	17	18	19	22	14	6.8	.20	.20	.94	7.7
6	18	21	16	17	19	13	14	6.9	.06	5.8	1.1	9.4
7	19	21	17	17	21	17	12	8.5	.06	22	1.4	12
8	17	21	17	19	19	29	14	9.4	.06	26	1.7	12
9	16	18	17	19	18	33	13	8.5	.09	22	2.4	11
10	17	19	17	18	21	34	12	10	.16	9.4	4.3	3.8
11	17	18	16	18	19	22	14	3.8	.20	8.5	4.3	6.2
12	16	19	16	18	17	.80	16	5.5	.20	12	4.3	5.5
13	17	19	16	19	19	2.6	14	6.9	.09	13	6.9	5.5
14	17	17	16	19	21	18	12	7.7	.13	9.4	6.9	4.8
15	18	17	40	17	21	17	17	6.9	.06	6.9	4.8	4.8
16	19	21	.80	18	19	17	17	7.7	0	5.5	28	5.5
17	21	21	13	18	21	17	14	5.5	.09	3.3	9.4	6.2
18	23	24	26	19	80	17	14	5.2	.13	2.4	6.9	3.3
19	23	14	9.4	18	28	16	36	.94	.16	2.4	6.2	4.8
20	25	19	18	19	.43	16	64	3.3	.13	2.1	6.2	6.2
21	23	19	19	21	.38	18	33	4.3	.02	2.4	6.2	6.2
22	23	19	19	18	.38	16	36	5.5	0	5.5	6.9	13
23	23	18	17	19	9.3	16	34	5.4	0	6.2	151	21
24	23	21	18	18	19	22	33	.60	0	6.2	62	23
25	25	18	17	19	21	10	28	6.5	0	6.2	8.5	12
26	25	18	17	18	16	17	25	1.1	.02	4.3	8.5	13
27	23	18	17	18	18	17	2.4	2.4	.09	2.8	12	13
28	21	18	17	18	18	18	.53	3.8	.16	2.4	12	13
29	22	18	17	19	-----	16	.53	3.3	.20	2.1	12	12
30	23	19	17	18	-----	16	.48	4.3	.20	23	10	13
31	23	-----	17	18	-----	17	-----	3.3	-----	.48	11	-----
TOTAL	642	585	534.20	569	540.49	546.40	540.94	154.45	50.91	213.36	400.53	282.3
MEAN	20.7	19.5	17.2	18.4	19.3	17.6	18.0	4.98	1.70	6.88	12.9	9.41
MAX	25	28	40	21	80	34	64	10	19	26	151	23
MIN	16	11	.80	16	.38	.80	.48	.43	0	.20	.33	3.3
AC-FT	1,270	1,160	1,060	1,130	1,070	1,080	1,070	306	101	423	794	560

CAL YR 1970 TOTAL 8,565.35 MEAN 23.5 MAX 176 MIN .33 AC-FT 16,990
WTR YR 1971 TOTAL 5,059.58 MEAN 13.9 MAX 151 MIN 0 AC-FT 10,040

08405200 Pecos River below Dark Canyon, at Carlsbad, N. Mex.

LOCATION.--Lat 32°24'37", long 104°12'58", in NE¼SW¼NW¼ sec.8, T.22 S., R.27 E., Eddy County, on left bank, 700 ft downstream from mouth of Dark Canyon, 0.3 mile downstream from lower Tansill Dam and Bataan recreational area, and 0.8 mile downstream from bridge on U.S. Highway 62-180 in Carlsbad.

DRAINAGE AREA.--18,550 sq mi, approximately (contributing area).

PERIOD OF RECORD.--January 1970 to current year. Records for Aug. 23, 24, 1971, are affected by inflow from Dark Canyon.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,075.19 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,400 cfs Aug. 23 (gage height, 3.36 ft); no flow June 16, 22-25.

Period of record: Maximum discharge, 1,400 cfs Aug. 23, 1971 (gage height, 3.36 ft); no flow June 16, 22-25, 1971.

The flood of Aug. 23, 1966, reached a stage of about 22 ft (discharge not determined). (For dates of other historical floods see sta 08404000.)

REMARKS.--Records good. Flow regulated by Alamogordo Reservoir, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and at low stages by power plant above station. Gage is bypassed on left bank by Carlsbad main canal east which irrigates several hundred acres adjacent to and below gage site, and on right bank by Carlsbad main canal south, which with supplemental ground-water withdrawals irrigates about 23,000 acres below. Diversions and ground-water withdrawals above station for irrigation of about 198,000 acres (1959 determination). Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	18	19	18	13	.48	1.4	.20	3.6	6.2	13	14	11
2	19	18	18	12	.43	10	.24	.43	9.4	11	11	12
3	21	23	17	13	.60	18	.24	.33	9.4	9.4	9.4	9.4
4	16	16	19	13	8.9	19	.20	.33	9.4	11	9.4	12
5	18	19	22	14	6.8	.20	.20	.94	7.7	11	10	17
6	17	19	13	14	6.9	.06	5.8	1.1	9.4	11	9.4	12
7	17	21	17	12	8.5	.06	22	1.4	12	11	8.5	10
8	19	19	29	14	9.4	.06	26	1.7	12	12	8.5	12
9	19	18	33	13	8.5	.09	22	2.4	11	14	9.4	11
10	18	21	34	12	10	.16	9.4	4.3	3.8	17	9.4	7.7
11	18	19	22	14	3.8	.20	8.5	4.3	6.2	16	9.4	10
12	18	17	.80	16	5.5	.20	12	4.3	5.5	14	10	9.4
13	19	19	2.6	14	6.9	.09	13	6.9	5.5	13	10	10
14	19	21	18	12	7.7	.13	9.4	6.9	4.8	13	11	13
15	17	21	17	17	6.9	.06	6.9	4.8	4.8	14	13	8.5
16	18	19	17	17	7.7	0	5.5	28	5.5	13	17	12
17	18	21	17	14	5.5	.09	3.3	9.4	6.2	17	14	10
18	19	80	17	14	5.2	.13	2.4	6.9	3.3	13	11	10
19	18	28	16	36	.94	.16	2.4	6.2	4.8	12	11	17
20	19	.43	16	64	3.3	.13	2.1	6.2	6.2	11	12	10
21	21	.38	18	33	4.3	.02	2.4	6.2	6.2	12	11	11
22	18	.38	16	36	5.5	0	5.5	6.9	13	13	12	12
23	19	9.3	16	34	5.4	0	6.2	151	21	11	11	12
24	18	19	22	33	.60	0	6.2	62	23	12	11	13
25	19	21	10	28	6.5	0	6.2	8.5	12	14	11	13
26	18	16	17	25	1.1	.02	4.3	8.5	13	16	8.5	13
27	18	18	17	2.4	2.4	.09	2.8	12	13	10	10	14
28	18	18	18	.53	3.8	.16	2.4	12	13	13	9.4	13
29	19	-----	16	.53	3.3	.20	2.1	12	12	14	11	14
30	18	-----	16	.48	4.3	.20	23	10	13	13	11	13
31	18	-----	17	-----	3.3	-----	.48	11	-----	13	-----	13
TOTAL	569	540.49	546.40	540.94	154.45	50.91	213.36	400.53	282.3	397.4	323.3	365.0
MEAN	18.4	19.3	17.6	18.0	4.98	1.70	6.88	12.9	9.41	12.8	10.8	11.8
MAX	21	80	34	64	10	19	26	151	23	17	17	17
MIN	16	.38	.80	.48	.43	0	.20	.33	3.3	9.4	8.5	7.7
AC-FT	1,130	1,070	1,080	1,070	306	101	423	794	560	788	641	724

CAL YR 1971 TOTAL 4,384.08 MEAN 12.0 MAX 151 MIN 0 AC-FT 8,700

08405500 Black River above Malaga, N. Mex.

LOCATION--Lat 32°13'44", long 104°09'02", in SW 1/4 Sec. 12, T. 24 S., R. 27 E., Eddy County, on right bank 0.6 mile upstream from Black River diversion dam, 4.6 miles west of Malaga, and 7.8 miles upstream from mouth.

DRAINAGE AREA.--343 sq mi.

PERIOD OF RECORD.--March to December 1940, December 1946 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,070 ft (from topographic map). March to December 1940 water-stage recorder and Cippoletti weir at site 0.3 mile downstream at different datum.

AVERAGE DISCHARGE.--24 years (1947-71), 14.5 cfs (10,510 acre-ft per year); 20 calendar years (1951-70), 14.6 cfs (10,580 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,190 cfs Aug. 25 (gage height, 4.06 ft); minimum, 1.7 cfs Apr. 1.

Period of record: Maximum discharge, 74,600 cfs Aug. 23, 1966 (gage height, 21.7 ft, from floodmarks), from rating curve extended above 6,000 cfs on basis of slope-area measurements at gage heights 12.60 and 21.7 ft; minimum, 0.73 cfs June 25, 1969.

The flood of Aug. 23, 1966, exceeded the previous known maximum stage which occurred in 1908 by about one foot (information from local resident). Flood of Sept. 20 or 21, 1941, reached a stage of 19.0 ft; determined in 1947 from well-defined floodmarks (discharge, 33,000 cfs, from rating curve extended above 1,400 cfs on basis of slope-area measurements at gage heights 8.41 and 12.60 ft).

REMARKS.--Records good. Diversions and ground-water withdrawals for irrigation of about 1,000 acres (1959 determination) above station.

REVISIONS (WATER YEARS).--WSP 1632: 1948, 1949-50(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	7.6	5.2	6.0	12	6.2	2.0	7.6	6.6	4.5	44	9.1
2	5.6	7.2	5.2	6.8	12	5.4	5.9	8.7	6.2	4.5	17	6.6
3	6.0	6.8	5.2	6.8	12	4.5	7.2	7.6	5.9	5.4	9.1	6.2
4	6.4	6.4	5.6	6.8	9.9	3.8	7.6	7.2	5.9	5.4	6.9	6.2
5	6.8	6.4	6.0	6.8	9.1	3.3	8.0	6.9	5.9	5.1	6.2	5.9
6	5.2	6.4	6.0	6.8	8.0	2.6	8.3	6.9	5.6	4.8	5.9	6.2
7	4.5	6.4	5.6	6.8	8.0	2.6	8.7	6.9	5.6	4.3	5.6	6.2
8	4.5	6.4	6.0	7.2	9.1	2.6	9.1	7.2	5.6	4.3	5.6	6.2
9	4.2	6.4	6.4	7.6	10	2.6	8.7	7.2	5.6	4.0	5.6	6.9
10	4.5	6.4	5.6	7.6	10	2.4	8.7	7.2	5.4	4.0	6.9	5.9
11	4.9	6.8	4.2	7.6	10	2.4	8.3	7.2	5.1	4.0	7.2	5.4
12	4.5	6.8	3.6	7.6	10	2.4	8.0	7.2	5.4	4.0	5.9	5.4
13	4.9	6.8	3.3	8.4	9.9	2.4	8.0	7.6	5.4	4.0	5.9	5.4
14	4.9	6.8	3.1	11	9.9	2.4	8.0	7.6	5.4	4.0	5.9	5.1
15	4.9	6.8	3.1	13	9.9	2.2	8.7	7.6	5.4	4.0	5.9	5.1
16	6.0	6.8	2.6	13	11	1.8	9.1	7.6	5.4	4.0	6.2	5.1
17	6.0	6.8	2.4	13	11	1.8	9.1	7.2	5.4	3.8	5.9	5.1
18	6.0	8.0	2.2	13	11	1.8	8.7	7.2	5.4	3.8	5.6	5.1
19	6.4	9.3	2.2	13	11	1.8	8.0	6.9	5.1	3.8	5.4	5.4
20	7.6	9.3	2.2	13	11	1.8	8.0	7.2	4.8	3.8	5.4	5.6
21	8.0	9.7	2.4	14	11	1.8	8.0	7.2	5.1	3.5	5.1	5.6
22	7.6	9.7	2.2	13	11	2.8	8.0	7.2	5.1	3.8	5.1	6.9
23	8.0	9.7	2.2	11	11	4.5	8.0	6.9	4.8	42	97	14
24	8.8	9.7	2.2	10	9.5	4.8	8.3	6.9	4.8	22	94	29
25	9.3	8.8	2.4	12	9.1	5.1	8.0	6.6	4.8	6.2	250	19
26	9.3	6.8	2.6	13	8.7	5.1	8.0	6.6	4.5	4.8	34	12
27	8.8	5.6	3.3	13	8.3	4.5	7.6	6.9	4.5	4.5	16	8.3
28	8.8	5.2	4.2	13	7.6	3.3	7.6	6.9	4.5	4.8	27	5.9
29	8.8	5.2	4.9	12	-----	2.6	7.6	6.9	4.5	4.8	30	5.4
30	8.8	5.2	5.6	11	-----	2.4	7.6	6.9	4.5	59	15	4.5
31	8.8	-----	5.6	12	-----	2.0	-----	6.6	-----	11	11	-----
TOTAL	204.4	216.2	123.3	315.8	281.0	95.7	236.8	222.3	158.2	251.9	756.3	228.7
MEAN	6.59	7.21	3.98	10.2	10.0	3.09	7.89	7.17	5.27	8.13	24.4	7.62
MAX	9.3	9.7	6.4	14	12	6.2	9.1	8.7	6.6	59	250	29
MIN	4.2	5.2	2.2	6.0	7.6	1.8	2.0	6.6	4.5	3.5	5.1	4.5
AC-FT	405	429	245	626	557	190	470	441	314	500	1,500	454

CAL YR 1970 TOTAL 3,466.5 MEAN 9.50 MAX 383 MIN 2.2 AC-FT 6,880
 WTR YR 1971 TOTAL 3,090.6 MEAN 8.47 MAX 250 MIN 1.8 AC-FT 6,130

PEAK DISCHARGE (BASE, 450 CFS).--Aug. 23 (2030) 993 cfs (3.79 ft); Aug. 25 (0630) 1,190 cfs (4.06 ft).

08405500 Black River above Malaga, N. Mex.

LOCATION--Lat 32°13'44", long 104°09'02", in SW¼NW¼SW¼ sec.12, T.24 S., R.27 E., Eddy County, on right bank 0.6 mile upstream from Black River diversion dam, 4.6 miles west of Malaga, and 7.8 miles upstream from mouth.

DRAINAGE AREA.--343 sq mi.

PERIOD OF RECORD.--March to December 1940, December 1946 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,070 ft (from topographic map). March to December 1940 water-stage recorder and Cippoletti weir at site 0.3 mile downstream at different datum.

AVERAGE DISCHARGE.--25 calendar years (1947-71), 14.4 cfs (10,430 acre-ft per year); 20 calendar years (1952-71), 14.6 cfs (10,580 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,190 cfs Aug. 25 (gage height, 4.06 ft); minimum, 1.7 cfs Apr. 1.

Period of record: Maximum discharge, 74,600 cfs Aug. 23, 1966 (gage height, 21.7 ft, from floodmarks), from rating curve extended above 6,000 cfs on basis of slope-area measurements at gage heights 12.60 and 21.7 ft; minimum, 0.73 cfs June 25, 1969.

The flood of Aug. 23, 1966, exceeded the previous known maximum stage which occurred in 1908 by about one foot (information from local resident). Flood of Sept. 20 or 21, 1941, reached a stage of 19.0 ft, determined in 1947 from well-defined floodmarks (discharge, 33,000 cfs, from rating curve extended above 1,400 cfs on basis of slope-area measurements at gage heights 8.41 and 12.60 ft).

REMARKS.--Records good. Diversions and ground-water withdrawals for irrigation of about 1,000 acres (1959 determination) above station.

REVISIONS (WATER YEARS).--WSP 1632: 1948, 1949-50(P).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	6.0	12	6.2	2.0	7.6	6.6	4.5	44	9.1	4.3	3.3	5.6
2	6.8	12	5.4	5.9	8.7	6.2	4.5	17	6.6	3.8	3.3	6.6
3	6.8	12	4.5	7.2	7.6	5.9	5.4	9.1	6.2	4.0	3.3	6.9
4	6.8	9.9	3.8	7.6	7.2	5.9	5.4	6.9	6.2	4.5	3.5	7.2
5	6.8	9.1	3.3	8.0	6.9	5.9	5.1	6.2	5.9	4.5	3.5	9.1
6	6.8	8.0	2.6	8.3	6.9	5.6	4.8	5.9	6.2	4.8	3.5	8.7
7	6.8	8.0	2.6	8.7	6.9	5.6	4.3	5.6	6.2	4.8	3.5	8.0
8	7.2	9.1	2.6	9.1	7.2	5.6	4.3	5.6	6.2	4.8	3.5	8.0
9	7.6	10	2.6	8.7	7.2	5.6	4.0	5.6	6.9	6.2	3.8	7.6
10	7.6	10	2.4	8.7	7.2	5.4	4.0	6.9	5.9	5.1	3.8	7.6
11	7.6	10	2.4	8.3	7.2	5.1	4.0	7.2	5.4	4.8	3.8	7.6
12	7.6	10	2.4	8.0	7.2	5.4	4.0	5.9	5.4	4.8	3.8	7.6
13	8.4	9.9	2.4	8.0	7.6	5.4	4.0	5.9	5.4	4.8	3.8	8.0
14	11	9.9	2.4	8.0	7.6	5.4	4.0	5.9	5.1	4.5	3.8	8.0
15	13	9.9	2.2	8.7	7.6	5.4	4.0	5.9	5.1	4.0	3.8	7.6
16	13	11	1.8	9.1	7.6	5.4	4.0	6.2	5.1	4.0	3.8	8.0
17	13	11	1.8	9.1	7.2	5.4	3.8	5.9	5.1	4.0	5.1	8.0
18	13	11	1.8	8.7	7.2	5.4	3.8	5.6	5.1	3.8	3.8	8.0
19	13	11	1.8	8.0	6.9	5.1	3.8	5.4	5.4	3.8	3.8	8.3
20	13	11	1.8	8.0	7.2	4.8	3.8	5.4	5.6	3.8	3.8	8.3
21	14	11	1.8	8.0	7.2	5.1	3.5	5.1	5.6	3.8	3.8	8.0
22	13	11	2.8	8.0	7.2	5.1	3.8	5.1	6.9	3.8	4.0	8.0
23	11	11	4.5	8.0	6.9	4.8	42	97	14	3.8	4.3	8.0
24	10	9.5	4.8	8.3	6.9	4.8	22	94	29	3.8	4.3	8.3
25	12	9.1	5.1	8.0	6.6	4.8	6.2	250	19	3.8	4.5	8.3
26	13	8.7	5.1	8.0	6.6	4.5	4.8	34	12	4.0	4.5	8.7
27	13	8.3	4.5	7.6	6.9	4.5	4.5	16	8.3	3.8	4.5	8.7
28	13	7.6	3.3	7.6	6.9	4.5	4.8	27	5.9	3.8	4.5	8.3
29	12	-----	2.6	7.6	6.9	4.5	4.8	30	5.4	3.8	4.5	8.7
30	11	-----	2.4	7.6	6.9	4.5	59	15	4.5	3.5	4.5	8.7
31	12	-----	2.0	-----	6.6	-----	11	11	-----	3.5	-----	8.3
TOTAL	315.8	281.0	95.7	236.8	222.3	158.2	251.9	756.3	228.7	130.5	117.7	246.7
MEAN	10.2	10.0	3.09	7.89	7.17	5.27	8.13	24.4	7.62	4.21	3.92	7.96
MAX	14	12	6.2	9.1	8.7	6.6	59	250	29	6.2	5.1	9.1
MIN	6.0	7.6	1.8	2.0	6.6	4.5	3.5	5.1	4.5	3.5	3.3	5.6
AC-FT	626	557	190	470	441	314	500	1,500	454	259	233	489

CAL YR 1971 TOTAL 3,041.6 MEAN 8.33 MAX 250 MIN 1.8 AC-FT 6,030

PEAK DISCHARGE (BASE, 450 CFS).--Aug. 23 (2030) 993 cfs (3.79 ft); Aug. 25 (0630) 1,190 cfs (4.06 ft).

08406500 Pecos River near Malaga, N. Mex.

LOCATION.--Lat 32°12'26", long 104°01'22", in SW 1/4 NE 1/4 sec. 19, T.24 S., R.29 E., Eddy County, on right bank 3.1 miles southeast of Malaga, and 4.3 miles downstream from Black River.

DRAINAGE AREA.--19,190 sq mi, approximately (contributing area).

PERIOD OF RECORD.--May 1920 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 2,895.64 ft above mean sea level. May 1, 1920, to Mar. 24, 1949, at datum 3 ft higher.

AVERAGE DISCHARGE.--16 years (1920-36), 274 cfs (198,400 acre-ft per year), prior to completion of Alamogordo Reservoir; 35 years (1936-71) 205 cfs (148,500 acre-ft per year); 20 calendar years (1951-70), 92.3 cfs (66,870 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 725 cfs Aug. 25 (gage height, 6.41 ft); minimum, 8.2 cfs July 19-22.

Period of record: Maximum discharge, 120,000 cfs Aug. 23, 1966 (gage height, 42.1 ft, from floodmarks), from rating curve extended above 36,000 cfs on basis of slope-area measurement at gage height 42.1 ft; minimum, 5.0 cfs Mar. 9, 1965.

The flood of Aug. 23, 1966, exceeded all known floods at this location. A major flood occurred in 1904, discharge not determined. Flood of Aug. 7, 1916, reached a discharge of 70,000 cfs at Carlsbad, 27 miles upstream. Flood in September 1919 reached a stage of 29.4 ft, present datum (discharge, 40,400 cfs).

REMARKS.--Records good. Flow regulated by storage in Alamogordo Reservoir, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and by small diversion dams that divert for power or irrigation. Diversions and ground-water withdrawals above station for irrigation of about 202,000 acres (1959 determination). Harroun canal bypasses gage on left bank and irrigates approximately 1,000 acres adjacent to and below gage. This bypass is not gaged. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1632: 1925, 1932-37.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	37	46	45	26	36	25	18	13	10	25	14
2	31	36	46	48	25	36	22	18	13	10	21	14
3	31	35	46	49	25	34	22	18	13	11	17	14
4	31	35	46	50	24	34	23	17	13	11	16	14
5	35	35	46	50	25	34	26	17	12	10	15	14
6	40	36	46	50	25	34	26	17	12	9.9	15	15
7	35	37	46	50	25	36	21	17	12	9.6	15	16
8	38	36	45	50	24	34	21	17	12	10	15	15
9	39	39	46	50	23	33	21	16	12	9.9	15	15
10	40	40	46	51	24	38	20	17	11	9.7	19	14
11	41	40	46	51	24	45	20	16	11	9.5	16	14
12	42	40	44	51	24	45	19	16	11	9.8	16	15
13	43	41	42	50	25	42	19	17	11	9.8	17	15
14	45	41	42	51	25	33	19	17	11	9.5	18	14
15	49	40	42	55	24	29	20	16	10	9.3	18	14
16	47	41	43	50	23	27	20	15	11	9.2	24	13
17	51	43	54	45	23	28	20	15	11	8.8	21	14
18	49	40	43	45	23	31	19	14	10	8.5	18	14
19	49	41	37	45	23	29	19	14	10	8.5	17	14
20	51	44	44	45	44	27	19	14	10	8.4	16	14
21	45	43	43	43	38	26	20	14	11	8.4	16	14
22	42	40	41	38	29	25	31	14	11	8.5	16	15
23	39	41	44	38	27	25	24	14	10	9.2	17	26
24	39	41	44	38	25	24	20	14	11	19	110	46
25	39	41	44	36	24	30	19	14	11	14	257	23
26	39	41	44	36	25	28	18	14	10	11	86	17
27	38	41	44	34	31	24	17	14	10	9.9	25	16
28	38	41	44	31	36	22	18	13	10	11	18	16
29	37	44	45	29	-----	21	18	15	10	9.9	16	16
30	36	45	45	27	-----	20	18	14	10	24	15	15
31	36	-----	45	26	-----	21	-----	13	-----	23	14	-----
TOTAL	1,247	1,195	1,379	1,357	739	951	624	479	333	340.3	944	490
MEAN	40.2	39.8	44.5	43.8	26.4	30.7	20.8	15.5	11.1	11.0	30.5	16.3
MAX	51	45	54	55	44	45	31	18	13	24	257	46
MIN	31	35	37	26	23	20	17	13	10	8.4	14	13
AC-FT	2,470	2,370	2,740	2,690	1,470	1,890	1,240	950	661	675	1,870	972

CAL YR 1970 TOTAL 15,144.0 MEAN 41.5 MAX 778 MIN 16 AC-FT 30,040
WTR YR 1971 TOTAL 10,078.3 MEAN 27.6 MAX 257 MIN 8.4 AC-FT 19,990

PEAK DISCHARGE (BASE, 1,800 CFS).--No peak above base.

08406500 Pecos River near Malaga, N. Mex.

LOCATION.--Lat 32°12'26", long 104°01'22", in SW¼NW¼NE¼ sec.19, T.24 S., R.29 E., Eddy County, on right bank 3.1 miles southeast of Malaga, and 4.3 miles downstream from Black River.

DRAINAGE AREA.--19,190 sq mi, approximately (contributing area).

PERIOD OF RECORD.--May 1920 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 2,895.64 ft above mean sea level. May 1, 1920, to Mar. 24, 1949, at datum 3 ft higher.

AVERAGE DISCHARGE.--16 calendar years (1921-36), 271 cfs (196,300 acre-ft per year), prior to completion of Alamogordo Reservoir; 35 calendar years (1937-71) 205 cfs (148,500 acre-ft per year); 20 calendar years (1952-71), 88.7 cfs (64,260 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 725 cfs Aug. 25 (gage height, 6.41 ft); minimum, 8.2 cfs July 19-22.

Period of record: Maximum discharge, 120,000 cfs Aug. 23, 1966 (gage height, 42.1 ft, from floodmarks), from rating curve extended above 36,000 cfs on basis of slope-area measurement at gage height 42.1 ft; minimum, 5.0 cfs Mar. 9, 1965.

The flood of Aug. 23, 1966, exceeded all known floods at this location. A major flood occurred in 1904, discharge not determined. Flood of Aug. 7, 1916, reached a discharge of 70,000 cfs at Carlsbad, 27 miles upstream. Flood in September 1919 reached a stage of 29.4 ft, present datum (discharge, 40,400 cfs).

REMARKS.--Records good. Flow regulated by storage in Alamogordo Reservoir, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and by small diversion dams that divert for power or irrigation. Diversions and ground-water withdrawals above station for irrigation of about 202,000 acres (1959 determination). Harroun canal bypasses gage on left bank and irrigates approximately 1,000 acres adjacent to and below gage. This bypass is not gaged. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1632: 1925, 1932-37.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	45	26	36	25	18	13	10	25	14	15	16	20
2	48	25	36	22	18	13	10	21	14	17	17	21
3	49	25	34	22	18	13	11	17	14	16	16	21
4	50	24	34	23	17	13	11	16	14	16	16	22
5	50	25	34	26	17	12	10	15	14	16	16	27
6	50	25	34	26	17	12	9.9	15	15	16	16	25
7	50	25	36	21	17	12	9.6	15	16	16	16	27
8	50	24	34	21	17	12	10	15	15	16	16	32
9	50	23	33	21	16	12	9.9	15	15	17	17	38
10	51	24	38	20	17	11	9.7	19	14	17	17	36
11	51	24	45	20	16	11	9.5	16	14	16	17	35
12	51	24	45	19	16	11	9.8	16	15	16	17	34
13	50	25	42	19	17	11	9.8	17	15	16	17	34
14	51	25	33	19	17	11	9.5	18	14	16	17	34
15	55	24	29	20	16	10	9.3	18	14	17	17	33
16	50	23	27	20	15	11	9.2	24	13	17	18	33
17	45	23	28	20	15	11	8.8	21	14	16	19	33
18	45	23	31	19	14	10	8.5	18	14	16	19	33
19	45	23	29	19	14	10	8.5	17	14	16	19	33
20	45	44	27	19	14	10	8.4	16	14	16	19	33
21	43	38	26	20	14	11	8.4	16	14	22	19	33
22	38	29	25	31	14	11	8.5	16	15	18	19	35
23	38	27	25	24	14	10	9.2	17	26	16	19	37
24	38	25	24	20	14	11	19	110	46	17	19	36
25	36	24	30	19	14	11	14	257	23	17	19	35
26	36	25	28	18	14	10	11	86	17	17	19	36
27	34	31	24	17	14	10	9.9	25	16	16	19	37
28	31	36	22	18	13	10	11	18	16	16	19	37
29	29	-----	21	18	15	10	9.9	16	16	16	19	36
30	27	-----	20	18	14	10	24	15	15	16	19	35
31	26	-----	21	-----	13	-----	23	14	-----	16	-----	33
TOTAL	1,357	739	951	624	479	333	340.3	944	490	511	532	994
MEAN	43.8	26.4	30.7	20.8	15.5	11.1	11.0	30.5	16.3	16.5	17.7	32.1
MAX	55	44	45	31	18	13	24	257	46	22	19	38
MIN	26	23	20	17	13	10	8.4	14	13	15	16	20
AC-FT	2,690	1,470	1,890	1,240	950	661	675	1,870	972	1,010	1,060	1,970

CAL YR 1971 TOTAL 8,294.3 MEAN 22.7 MAX 257 MIN 8.4 AC-FT 16,450

PEAK DISCHARGE (BASE, 1,800 CFS).--No peak above base.

08407000 Pecos River at Pierce Canyon Crossing, near Malaga, N. Mex.

LOCATION.--Lat 32°11'19", long 103°58'43", in SW¼SW¼ sec.27, T.24 S., R.29 E., Eddy County, on right bank 550 ft upstream from Pierce Canyon Crossing, and 6 miles southeast of Malaga.

DRAINAGE AREA.--19,260 sq mi, approximately (contributing area).

PERIOD OF RECORD.--July 1938 to September 1941, August 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,889.18 ft above mean sea level. July 1938 to September 1941 at datum 1.19 ft higher.

AVERAGE DISCHARGE.--23 years, 164 cfs (118,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge not determined; minimum, 2.2 cfs July 20-22.

Period of record: Maximum gage height, 31.6 ft, from floodmarks, Aug. 23, 1966 (discharge not determined); minimum discharge, 0.54 cfs May 30, 1965.

REMARKS.--Records good except those for the period Aug. 16 to Sept. 30, which are poor. Flow regulated by storage in Alamogordo Reservoir, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and by several small diversion dams that divert for power or irrigation. Diversions and ground-water withdrawals above station for irrigation of about 202,000 acres (1959 determination). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 898: 1938(M). WSP 1712: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	38	52	46	29	36	21	9.5	13	7.7	32	14
2	26	38	53	48	29	37	25	9.0	10	8.4	30	11
3	25	37	53	52	28	34	22	8.4	6.2	10	18	11
4	24	35	53	52	24	34	23	6.8	8.9	10	18	10
5	24	31	54	52	24	36	20	5.5	8.7	9.1	16	10
6	37	31	52	51	26	35	25	5.3	9.1	6.3	15	10
7	32	34	52	49	27	37	20	5.5	8.8	6.1	12	11
8	32	37	52	50	25	37	17	5.9	8.8	5.6	8.2	12
9	35	39	52	51	24	35	18	6.0	9.1	5.8	9.2	12
10	42	43	54	52	23	39	14	5.7	8.8	5.7	14	12
11	45	43	54	52	25	49	12	8.9	8.3	5.5	19	10
12	47	43	52	52	24	53	12	10	8.9	8.1	19	10
13	49	44	49	51	26	53	13	8.4	12	4.9	17	11
14	50	45	47	51	26	44	9.7	10	11	6.7	19	10
15	54	43	47	55	25	35	6.6	10	8.0	5.7	27	9.8
16	56	44	45	54	24	30	6.4	8.6	6.6	3.9	40	9.4
17	57	48	55	46	22	28	11	7.6	4.9	3.6	61	9.8
18	59	45	54	44	23	31	11	7.7	5.0	3.9	30	9.8
19	56	44	42	45	20	33	13	7.1	4.9	3.8	22	11
20	59	46	42	46	30	30	17	7.5	5.2	2.7	18	13
21	55	50	51	45	50	29	14	9.2	5.1	2.6	16	16
22	49	44	45	40	33	27	23	10	4.9	2.5	14	19
23	43	44	45	36	26	27	26	9.1	4.6	3.3	14	50
24	43	45	47	38	23	24	16	8.9	5.1	8.2	51	72
25	42	45	46	38	21	17	13	8.9	8.5	16	200	57
26	47	45	47	37	20	28	9.6	11	8.9	6.1	99	32
27	43	45	48	36	24	20	7.6	9.6	9.3	5.0	45	23
28	41	45	46	34	34	18	7.6	9.7	7.1	17	30	21
29	40	49	45	31	-----	20	8.0	11	6.9	6.9	21	19
30	39	51	46	30	-----	17	12	12	6.8	29	18	19
31	39	-----	46	30	-----	14	-----	12	-----	41	12	-----
TOTAL	1,316	1,271	1,526	1,395	735	987	453.5	264.8	233.4	261.1	964.4	544.8
MEAN	42.5	42.4	49.2	45.0	26.3	31.8	15.1	8.54	7.78	8.42	31.1	18.2
MAX	59	51	55	55	50	53	26	12	13	41	200	72
MIN	24	31	42	30	20	14	6.4	5.3	4.6	2.5	8.2	9.4
AC-FT	2,610	2,520	3,030	2,770	1,460	1,960	900	525	463	518	1,910	1,080

CAL YR 1970 TOTAL 14,840.5 MEAN 40.7 MAX 541 MIN 5.7 AC-FT 29,440
 WTR YR 1971 TOTAL 9,952.0 MEAN 27.3 MAX 200 MIN 2.5 AC-FT 19,740

08407000 Pecos River at Pierce Canyon Crossing, near Malaga, N. Mex.

LOCATION.--Lat 32°11'19", long 103°58'43", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.27, T.24 S., R.29 E., Eddy County, on right bank 550 ft upstream from Pierce Canyon Crossing, and 6 miles southeast of Malaga.

DRAINAGE AREA.--19,260 sq mi, approximately (contributing area).

PERIOD OF RECORD.--July 1938 to September 1941, August 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,889.18 ft above mean sea level. July 1938 to September 1941 at datum 1.19 ft higher.

AVERAGE DISCHARGE.--22 calendar years (1939, 1940, 1952-71), 94.4 cfs (68,390 acre-ft per year); 20 calendar years (1952-71), 90.1 cfs (65,280 acre-ft per year).

EXTREMES.--Current year: Maximum discharge not determined; minimum, 2.2 cfs July 20-22.

Period of record: Maximum gage height, 31.6 ft, from floodmarks, Aug. 23, 1966 (discharge not determined); minimum discharge, 0.54 cfs May 30, 1965.

REMARKS.--Records good except those for the period Aug. 16 to Sept. 30, which are poor. Flow regulated by storage in Alamogordo Reservoir, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and by several small diversion dams that divert for power or irrigation. Diversions and ground-water withdrawals above station for irrigation of about 202,000 acres (1959 determination). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 898: 1938(M). WSP 1712: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	46	29	36	21	9.5	13	7.7	32	14	20	20	23
2	48	29	37	25	9.0	10	8.4	30	11	17	19	25
3	52	28	34	22	8.4	6.2	10	18	11	21	18	26
4	53	24	34	23	6.8	8.9	10	18	10	20	18	26
5	52	24	36	20	5.5	8.7	9.1	16	10	19	19	34
6	51	26	35	25	5.3	9.1	6.3	15	10	19	19	33
7	49	27	37	20	5.5	8.8	6.1	12	11	19	19	30
8	50	25	37	17	5.9	8.8	5.6	8.2	12	19	19	36
9	51	24	35	18	6.0	9.1	5.8	9.2	12	25	19	43
10	52	23	39	14	5.7	8.8	5.7	14	12	20	18	40
11	52	25	49	12	8.9	8.3	5.5	19	10	18	18	39
12	52	24	53	12	10	8.9	8.1	19	10	17	18	39
13	51	26	53	13	8.4	12	4.9	17	11	16	18	40
14	51	26	44	9.7	10	11	6.7	19	10	16	18	40
15	55	25	35	6.6	10	8.0	5.7	27	9.8	16	18	36
16	54	24	30	6.4	8.6	6.6	3.9	40	9.4	18	20	37
17	46	22	28	11	7.6	4.9	3.6	61	9.8	18	20	37
18	44	23	31	11	7.7	5.0	3.9	30	9.8	16	21	37
19	45	20	33	13	7.1	4.9	3.8	22	11	16	22	36
20	46	30	30	17	7.5	5.2	2.7	18	13	18	22	34
21	45	50	29	14	9.2	5.1	2.6	16	16	22	21	34
22	40	33	27	23	10	4.9	2.5	14	19	23	22	37
23	36	26	27	26	9.1	4.6	3.3	14	50	20	21	38
24	38	23	24	16	8.9	5.1	8.2	51	72	19	21	37
25	38	21	17	13	8.9	8.5	16	200	57	22	22	36
26	37	20	28	9.6	11	8.9	6.1	99	32	23	22	38
27	36	24	20	7.6	9.6	9.3	5.0	45	23	21	22	40
28	34	34	18	7.6	9.7	7.1	17	30	21	19	21	40
29	31	-----	20	8.0	11	6.9	6.9	21	19	19	21	40
30	30	-----	17	12	12	6.8	29	18	19	20	22	37
31	30	-----	14	-----	12	-----	41	12	-----	18	-----	36
TOTAL	1,395	735	987	453.5	264.8	233.4	261.1	964.4	544.8	594	598	1,104
MEAN	45.0	26.3	31.8	15.1	8.54	7.78	8.42	31.1	18.2	19.2	19.9	35.6
MAX	55	50	53	26	12	13	41	200	72	25	22	43
MIN	30	20	14	6.4	5.3	4.6	2.5	8.2	9.4	16	18	23
AC-FT	2,770	1,460	1,960	900	525	463	518	1,910	1,080	1,180	1,190	2,190

CAL YR 1971 TOTAL 8,135.0 MEAN 22.3 MAX 200 MIN 2.5 AC-FT 16,140

08407500 Pecos River at Red Bluff, N. Mex.

LOCATION.--Lat 32°04'30", long 104°02'21", in SW¼NE¼ sec.1, T.26 S., R.28 E., Eddy County, on right bank at Red Bluff, 0.2 mile downstream from Red Bluff Draw, 1.6 miles northwest of the El Paso Natural Gas (Pecos River) compressor station, 5.2 miles north of the New Mexico-Texas state line, and 5.6 miles upstream from Delaware River.

DRAINAGE AREA.--19,540 sq mi, approximately (contributing area).

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

GAGE.--Water-stage recorder. Datum of gage is 2,850.05 ft above mean sea level.

AVERAGE DISCHARGE.--34 years, 196 cfs (142,000 acre-ft per year); 20 calendar years (1951-70), 97.5 cfs (70,640 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,810 cfs Aug. 16 (gage height, 8.13 ft); minimum, 0.85 cfs June 25, 26.

Period of record: Maximum discharge, 111,000 cfs Aug. 23, 1966 (gage height, 33.32 ft), from rating curve extended above 30,000 cfs on basis of slope-area measurement of peak flow; minimum, 0.19 cfs Aug. 1, 1966.

The flood of Aug. 23, 1966, exceeded all known floods at this location. Flood in October 1904 reached a stage of 28.0 ft, from information by Panhandle and Santa Fe Railway Co. (For dates of other historical floods see sta 08405000, 08406500.)

REMARKS.--Records good. Flow regulated by storage in Alamogordo Reservoir, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and by several small diversion dams that divert for power or irrigation. Diversions and ground-water withdrawals above station for irrigation of about 202,000 acres (1959 determination). Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	37	50	48	30	36	14	15	9.1	3.0	126	11
2	29	37	51	49	28	39	22	12	11	3.3	53	10
3	28	37	51	52	28	39	24	9.7	6.9	4.7	21	10
4	28	35	51	52	27	36	22	8.2	4.1	6.9	12	9.1
5	27	34	51	53	24	36	23	6.4	3.8	8.2	11	8.6
6	32	32	50	54	26	38	20	4.7	5.0	7.3	9.7	8.6
7	41	32	50	52	27	37	24	4.7	5.0	5.3	8.2	8.6
8	34	35	50	52	26	40	19	4.7	5.0	3.3	6.9	9.7
9	35	35	50	52	24	38	17	4.7	5.0	3.3	4.4	11
10	42	39	51	53	24	36	19	4.7	5.0	3.3	7.3	12
11	48	43	52	54	24	43	15	4.3	4.7	3.6	7.7	10
12	48	42	52	54	25	51	12	6.9	4.7	3.8	13	9.1
13	50	44	50	53	25	51	13	9.7	4.7	6.1	17	9.1
14	51	42	47	52	26	50	12	8.2	7.3	5.0	42	9.7
15	52	43	48	53	25	40	11	10	7.3	5.0	18	9.7
16	59	42	48	56	24	34	7.7	11	5.0	5.7	923	8.2
17	58	45	49	52	24	31	6.4	8.6	3.6	4.1	113	7.7
18	59	46	59	48	23	31	10	7.3	3.3	2.4	77	9.1
19	55	44	50	47	24	33	9.1	6.4	22	1.8	30	9.1
20	55	44	41	47	23	33	12	6.0	4.4	1.8	22	9.1
21	55	48	48	47	41	30	15	6.0	1.8	2.0	19	11
22	49	47	48	45	41	30	11	7.7	1.5	2.2	17	111
23	39	42	46	39	31	28	27	9.1	1.2	3.3	18	289
24	40	43	47	38	27	27	25	8.2	1.1	11	25	106
25	40	44	48	40	23	25	18	7.7	.96	9.5	112	67
26	41	44	48	39	23	21	15	7.7	1.2	27	261	42
27	43	45	48	38	21	28	12	11	3.8	64	92	30
28	39	45	48	36	27	21	9.7	8.6	5.7	45	45	24
29	39	45	47	34	-----	20	9.7	8.2	4.7	18	28	22
30	38	49	48	31	-----	20	9.7	7.7	3.3	125	20	21
31	37	-----	48	31	-----	16	-----	9.7	-----	54	17	-----
TOTAL	1,319	1,240	1,525	1,451	741	1,038	464.3	244.8	152.16	448.9	2,176.2	912.4
MEAN	42.5	41.3	49.2	46.8	26.5	33.5	15.5	7.90	5.07	14.5	70.2	30.4
MAX	59	49	59	56	41	51	27	15	22	125	923	289
MIN	27	32	41	31	21	16	6.4	4.3	.96	1.8	4.4	7.7
AC-FT	2,620	2,460	3,020	2,880	1,470	2,060	921	486	302	890	4,320	1,810

CAL YR 1970 TOTAL 15,189.50 MEAN 41.6 MAX 467 MIN 5.6 AC-FT 30,130
 NTR YR 1971 TOTAL 11,712.76 MEAN 32.1 MAX 923 MIN .96 AC-FT 23,230

PEAK DISCHARGE (BASE, 1,800 CFS).--Aug. 16 (0400) 2,810 cfs (8.13 ft).

08407500 Pecos River at Red Bluff, N. Mex.

LOCATION.--Lat 32°04'30", long 104°02'21", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.1, T.26 S., R.28 E., Eddy County, on right bank at Red Bluff, 0.2 mile downstream from Red Bluff Draw, 1.6 miles northwest of the El Paso Natural Gas (Pecos River) compressor station, 5.2 miles north of the New Mexico-Texas state line, and 5.6 miles upstream from Delaware River.

DRAINAGE AREA.--19,540 sq mi, approximately (contributing area).

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

GAGE.--Water-stage recorder. Datum of gage is 2,850.05 ft above mean sea level.

AVERAGE DISCHARGE.--34 calendar years, 194 cfs (140,600 acre-ft per year); 20 calendar years (1952-71), 93.9 cfs (68,030 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,810 cfs Aug. 16 (gage height, 8.13 ft); minimum, 0.85 cfs June 25, 26.

Period of record: Maximum discharge, 111,000 cfs Aug. 23, 1966 (gage height, 33.32 ft), from rating curve extended above 30,000 cfs on basis of slope-area measurement of peak flow; minimum, 0.19 cfs Aug. 1, 1966.

The flood of Aug. 23, 1966, exceeded all known floods at this location. Flood in October 1904 reached a stage of 28.0 ft, from information by Panhandle and Santa Fe Railway Co. (For dates of other historical floods see sta 08405000, 08406500.)

REMARKS.--Records good. Flow regulated by storage in Alamogordo Reservoir, Lake McMillan, and Lake Avalon (see sta 08384000, 08400500, 08403800), and by several small diversion dams that divert for power or irrigation. Diversions and ground-water withdrawals above station for irrigation of about 202,000 acres (1959 determination). Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	48	30	36	14	15	9.1	3.0	126	11	20	18	21
2	49	28	39	22	12	11	3.3	53	10	20	19	24
3	52	28	39	24	9.7	6.9	4.7	21	10	20	18	24
4	52	27	36	22	8.2	4.1	6.9	12	9.1	21	18	26
5	53	24	36	23	6.4	3.8	8.2	11	8.6	21	18	32
6	54	26	38	20	4.7	5.0	7.3	9.7	8.6	20	17	31
7	52	27	37	24	4.7	5.0	5.3	8.2	8.6	21	17	30
8	52	26	40	19	4.7	5.0	3.3	6.9	9.7	21	16	29
9	52	24	38	17	4.7	5.0	3.3	4.4	11	54	16	34
10	53	24	36	19	4.7	5.0	3.3	7.3	12	21	16	37
11	54	24	43	15	4.3	4.7	3.6	7.7	10	31	16	35
12	54	25	51	12	6.9	4.7	3.8	13	9.1	23	16	35
13	53	25	51	13	9.7	4.7	6.1	17	9.1	20	17	35
14	52	26	50	12	8.2	7.3	5.0	42	9.7	20	16	35
15	53	25	40	11	10	7.3	5.0	18	9.7	20	17	35
16	56	24	34	7.7	11	5.0	5.7	923	8.2	20	17	33
17	52	24	31	6.4	8.6	3.6	4.1	113	7.7	20	19	33
18	48	23	31	10	7.3	3.3	2.4	77	9.1	20	20	34
19	47	24	33	9.1	6.4	22	1.8	30	9.1	20	20	34
20	47	23	33	12	6.0	4.4	1.8	22	9.1	20	21	33
21	47	41	30	15	6.0	1.8	2.0	19	11	20	21	33
22	45	41	30	11	7.7	1.5	2.2	17	111	24	20	34
23	39	31	28	27	9.1	1.2	3.3	18	289	26	20	36
24	38	27	27	25	8.2	1.1	11	25	106	23	20	37
25	40	23	25	18	7.7	.96	9.5	112	67	21	20	36
26	39	23	21	15	7.7	1.2	27	261	42	23	21	38
27	38	21	28	12	11	3.8	64	92	30	22	20	39
28	36	27	21	9.7	8.6	5.7	45	45	24	20	20	40
29	34	-----	20	9.7	8.2	4.7	18	28	22	20	19	40
30	31	-----	20	9.7	7.7	3.3	125	20	21	19	21	39
31	31	-----	16	-----	9.7	-----	54	17	-----	19	-----	38
TOTAL	1,451	741	1,038	464.3	244.8	152.16	448.9	2,176.2	912.4	690	554	1,040
MEAN	46.8	26.5	33.5	15.5	7.90	5.07	14.5	70.2	30.4	22.3	18.5	33.5
MAX	56	41	51	27	15	22	125	923	289	54	21	40
MIN	31	21	16	6.4	4.3	.96	1.8	4.4	7.7	19	16	21
AC-FT	2,880	1,470	2,060	921	486	302	890	4,320	1,810	1,370	1,100	2,060

CAL YR 1971 TOTAL 9,912.76 MEAN 27.2 MAX 923 MIN .96 AC-FT 19,660

PEAK DISCHARGE (BASE, 1,800 CFS).--Aug. 16 (0400) 2,810 cfs (8.13 ft).

08408500 Delaware River near Red Bluff, N. Mex.

LOCATION.--Lat 32°01'23", long 104°03'15", in NE¼SW¼SE¼ sec.23, T.26 S., R.28 E., Eddy County, near center of channel on downstream side of pier of bridge on U. S. Highway 285, 2.1 miles northwest of the New Mexico-Texas state line, 3.6 miles southwest of Red Bluff, 3.7 miles upstream from mouth, and 14 miles south of Malaga.

DRAINAGE AREA.--689 sq mi.

PERIOD OF RECORD.--April 1912 to September 1913, May 1914 to June 1915, October 1937 to current year. Published as "near Malaga" 1912-13, and as "near Angeles, Tex." 1914-15.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,900.66 ft above mean sea level. Prior to May 1914, at site 3 miles upstream at different datum. May 1914 to June 1915 at site 2.5 miles downstream at different datum.

AVERAGE DISCHARGE.--34 years (1937-71), 14.5 cfs (10,510 acre-ft per year); 20 calendar years (1951-70), 15.9 cfs (11,520 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,150 cfs Aug. 1 (gage height, 7.32 ft); no flow many days.

Period of record: Maximum discharge, 81,400 cfs Oct. 2, 1955 (gage height, 27.0 ft, from floodmark), from rating curve extended above 1,500 cfs on basis of slope-area measurements at gage heights 8.65, 12.84, 18.00, and 27.0 ft; no flow many days most years.

Maximum stage known since at least 1911 is that of Oct. 2, 1955. Flood of June 27, 1938, reached a stage of 18.00 ft, from floodmark.

REMARKS.--Records poor. One small upstream diversion.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	3.8	4.0	4.1	4.1	3.8	3.2	2.1	.43	0	1,320	3.3
2	4.1	3.9	3.9	4.1	4.1	3.8	3.2	2.1	.36	0	103	7.6
3	4.0	3.9	4.0	4.3	4.1	3.9	3.2	2.1	.32	0	75	14
4	4.0	3.9	3.9	4.3	3.9	4.0	3.2	1.8	.32	0	60	5.9
5	4.1	3.9	3.9	4.3	3.9	3.7	3.3	1.5	.30	0	52	3.8
6	3.6	4.0	3.9	3.8	3.9	3.6	3.4	1.3	.26	0	36	3.3
7	3.1	4.1	3.9	3.7	3.9	3.5	3.4	1.2	.18	0	19	3.0
8	2.7	4.1	3.9	4.1	3.9	3.7	3.4	1.3	.13	0	8.9	2.2
9	2.7	4.0	3.9	4.4	4.0	3.7	3.4	.83	.09	0	6.7	.39
10	2.9	4.0	3.9	4.4	4.1	3.7	3.3	.62	.05	0	5.2	.15
11	3.1	3.9	4.0	4.4	4.1	3.7	3.1	.83	0	0	98	.05
12	3.2	4.0	4.0	4.4	4.0	3.6	2.8	.62	0	0	24	0
13	3.2	4.0	4.0	4.3	4.0	3.6	2.9	.55	0	0	16	.08
14	3.2	4.0	4.0	4.3	4.0	3.5	2.8	.74	0	0	9.9	.05
15	3.3	4.0	4.1	4.1	4.0	3.4	5.0	.62	0	0	14	.05
16	4.6	4.0	4.1	4.1	4.0	3.4	3.4	.62	0	0	355	.05
17	4.9	4.1	4.1	4.1	4.0	3.4	3.2	.84	0	0	82	.05
18	4.9	4.1	4.1	4.1	4.0	3.4	3.1	.55	0	0	49	1.3
19	4.6	4.0	4.1	4.1	4.0	3.4	2.8	.38	0	0	28	5.9
20	4.4	4.0	4.0	4.1	4.0	3.4	2.8	.43	0	0	16	4.1
21	4.2	4.0	4.0	4.3	4.0	3.4	2.7	.58	0	0	8.4	3.3
22	3.9	4.0	4.0	4.1	4.0	3.4	2.7	.49	0	1.2	7.1	.62
23	3.6	4.0	4.1	4.1	4.0	3.4	2.7	.34	0	0	8.4	166
24	3.5	4.0	4.1	4.0	4.1	3.3	2.7	.36	0	0	49	146
25	3.4	4.0	4.0	4.0	4.2	3.3	2.7	.34	0	0	20	40
26	3.3	4.1	4.0	4.0	4.1	3.3	2.5	.50	0	0	8.4	12
27	3.3	4.0	4.0	4.0	4.0	3.3	2.4	.80	0	0	6.7	7.1
28	3.3	4.0	4.1	4.1	3.9	3.3	2.3	.55	0	0	5.2	5.5
29	3.4	4.0	4.1	4.1	-----	3.2	2.2	.59	0	0	4.5	4.8
30	3.7	4.0	4.1	4.3	-----	3.2	2.0	.60	0	5.6	4.1	4.5
31	3.8	-----	4.1	4.3	-----	3.2	-----	.58	-----	29	3.8	-----
TOTAL	114.4	119.8	124.3	128.8	112.3	108.5	89.8	26.76	2.44	35.8	2,503.3	506.47
MEAN	3.69	3.99	4.01	4.15	4.01	3.50	2.99	.86	.081	1.15	80.8	16.9
MAX	4.9	4.1	4.1	4.4	4.2	4.0	5.0	2.1	.43	29	1,320	166
MIN	2.7	3.8	3.9	3.7	3.9	3.2	2.0	.34	0	0	3.8	0
AC-FT	227	238	247	255	223	215	178	53	4.8	71	4,970	1,000

CAL YR 1970 TOTAL 2,282.31 MEAN 6.25 MAX 550 MIN 0 AC-FT 4,530
WTR YR 1971 TOTAL 3,872.67 MEAN 10.6 MAX 1,320 MIN 0 AC-FT 7,680

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8- 1	0345	7.32	5,150	8-16	0300	6.53	4,040

08408500 Delaware River near Red Bluff, N. Mex.

LOCATION.--Lat 32°01'23", long 104°03'15", in NE¼SW¼SE¼ sec.23, T.26 S., R.28 E., Eddy County, near center of channel on downstream side of pier of bridge on U. S. Highway 285, 2.1 miles northwest of the New Mexico-Texas state line, 3.6 miles southwest of Red Bluff, 3.7 miles upstream from mouth, and 14 miles south of Malaga.

DRAINAGE AREA.--689 sq mi.

PERIOD OF RECORD.--April 1912 to September 1913, May 1914 to June 1915, October 1937 to current year. Published as "near Malaga" 1912-13, and as "near Angeles, Tex." 1914-15.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,900.66 ft above mean sea level. Prior to May 1914, at site 3 miles upstream at different datum. May 1914 to June 1915 at site 2.5 miles downstream at different datum.

AVERAGE DISCHARGE.--34 calendar years (1938-71), 14.5 cfs (10,510 acre-ft per year); 20 calendar years (1952-71), 16.4 cfs (11,880 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,150 cfs Aug. 1 (gage height, 7.32 ft); no flow many days.

Period of record: Maximum discharge, 81,400 cfs Oct. 2, 1955 (gage height, 27.0 ft, from floodmark), from rating curve extended above 1,500 cfs on basis of slope-area measurements at gage heights 8.65, 12.84, 18.00, and 27.0 ft; no flow many days most years.

Maximum stage known since at least 1911 is that of Oct. 2, 1955. Flood of June 27, 1938, reached a stage of 18.00 ft, from floodmark.

REMARKS.--Records poor. One small upstream diversion.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	4.1	4.1	3.8	3.2	2.1	.43	0	1,320	3.3	4.5	2.5	3.0
2	4.1	4.1	3.8	3.2	2.1	.36	0	103	7.6	4.1	2.5	3.0
3	4.3	4.1	3.9	3.2	2.1	.32	0	75	14	3.8	2.5	3.0
4	4.3	3.9	4.0	3.2	1.8	.32	0	60	5.9	4.1	2.5	3.1
5	4.3	3.9	3.7	3.3	1.5	.30	0	52	3.8	4.1	2.9	3.5
6	3.8	3.9	3.6	3.4	1.3	.26	0	36	3.3	5.2	2.9	3.5
7	3.7	3.9	3.5	3.4	1.2	.18	0	19	3.0	4.1	2.9	3.1
8	4.1	3.9	3.7	3.4	1.3	.13	0	8.9	2.2	4.1	2.9	3.3
9	4.4	4.0	3.7	3.4	.83	.09	0	6.7	.39	129	2.9	3.3
10	4.4	4.1	3.7	3.3	.62	.05	0	5.2	.15	3.3	2.9	3.2
11	4.4	4.1	3.7	3.1	.83	0	0	98	.05	2.9	2.9	3.2
12	4.4	4.0	3.6	2.8	.62	0	0	24	0	2.7	2.9	3.2
13	4.3	4.0	3.6	2.9	.55	0	0	16	.08	3.8	2.9	3.3
14	4.3	4.0	3.5	2.8	.74	0	0	9.9	.05	14	3.0	3.2
15	4.1	4.0	3.4	5.0	.62	0	0	14	.05	4.1	3.0	3.2
16	4.1	4.0	3.4	3.4	.62	0	0	355	.05	3.0	3.0	3.1
17	4.1	4.0	3.4	3.2	.84	0	0	82	.05	2.7	3.0	3.2
18	4.1	4.0	3.4	3.1	.55	0	0	49	1.3	2.4	3.0	3.3
19	4.1	4.0	3.4	2.8	.38	0	0	28	5.9	2.4	3.0	3.3
20	4.1	4.0	3.4	2.8	.43	0	0	16	4.1	2.4	3.0	3.2
21	4.3	4.0	3.4	2.7	.58	0	0	8.4	3.3	2.4	3.0	3.3
22	4.1	4.0	3.4	2.7	.49	0	1.2	7.1	62	2.4	3.0	3.3
23	4.1	4.0	3.4	2.7	.34	0	0	8.4	166	2.4	3.0	3.3
24	4.0	4.1	3.3	2.7	.36	0	0	49	146	2.4	3.0	3.0
25	4.0	4.2	3.3	2.7	.34	0	0	20	40	2.7	3.0	3.0
26	4.0	4.1	3.3	2.5	.50	0	0	8.4	12	2.7	3.0	3.0
27	4.0	4.0	3.3	2.4	.80	0	0	6.7	7.1	2.7	3.0	3.0
28	4.1	3.9	3.3	2.3	.55	0	0	5.2	5.5	2.4	3.0	3.0
29	4.1	-----	3.2	2.2	.59	0	0	4.5	4.8	2.4	3.0	3.0
30	4.3	-----	3.2	2.0	.60	0	5.6	4.1	4.5	2.4	3.0	3.0
31	4.3	-----	3.2	-----	.58	-----	29	3.8	-----	2.4	-----	3.0
TOTAL	128.8	112.3	108.5	89.8	26.76	2.44	35.8	2,503.3	506.47	234.0	87.1	98.1
MEAN	4.15	4.01	3.50	2.99	.86	.081	1.15	80.8	16.9	7.55	2.90	3.16
MAX	4.4	4.2	4.0	5.0	2.1	.43	29	1,320	166	129	3.0	3.5
MIN	3.7	3.9	3.2	2.0	.34	0	0	3.8	0	2.4	2.5	3.0
AC-FT	255	223	215	178	53	4.8	71	4,970	1,000	464	173	195

CAL YR 1971 TOTAL 3,933.37 MEAN 10.8 MAX 1,320 MIN 0 AC-FT 7,800

PEAK DISCHARGE (BASE, 1,700 CFS).--Aug. 1 (0345) 5,150 cfs (7.32 ft); Aug. 16 (0300) 4,040 cfs (6.53 ft).

08410000 Red Bluff Reservoir near Orla, Tex.

LOCATION.--Lat 31°54'06", Long 103°54'42", Reeves County, at right end of Red Bluff Dam on Pecos River, 3 miles upstream from Salt (Screwbean) Draw, and 4.5 miles north of Orla.

DRAINAGE AREA.--20,720 sq mi, approximately (contributing area).

PERIOD OF RECORD.--February 1937 to current year. Monthly contents only for some periods, published in WSP 1312.

GAGE.--Nonrecording gage read at irregular intervals. Datum of gage is 0.30 ft below mean sea level.

EXTREMES.--Current year: Maximum contents observed, 65,500 acre-ft Feb. 5 (gage height, 2,808.5 ft); minimum observed, 31,100 acre-ft July 29 (gage height, 2,796.4 ft).

Period of record: Maximum contents observed, 352,000 acre-ft Sept. 27, 28, 1941 (gage height, 2,846.2 ft, observed on nonrecording gage at service spillway, affected by variable drawdown due to flow through tainter gates); minimum observed, 11,080 acre-ft May 13, 1948 (gage height, 2,781.4 ft).

REMARKS.--Reservoir is formed by a rock-faced earthfill dam 9,200 ft long. Dam completed and storage began in September 1936. The concrete service spillway is equipped with 12 tainter gates 25 ft wide by 15 ft high. The emergency spillway, located on the right bank, is 790 ft long. Water is used for power development and irrigation from Mentone to Grandfalls. Inflow partly regulated by major reservoirs above station include Alamogordo Reservoir, Lake McMillan, and Lake Avalon, with a total combined capacity of 154,400 acre-ft. Also several small diversion dams divert water for power and irrigation. Contents computed from intermittent gage readings. Figures given herein represent total contents. Data regarding dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Crest of emergency spillway.....	2,845.0	340,000
Top of tainter gates (top of conservation storage).....	2,842.0	310,000
Crest of service spillway.....	2,827.0	166,500
Bottom of two 7.0- by 9.0-foot conduits.....	2,764.0	3,000

COOPERATION.--Gage-height records and capacity curve furnished by Red Bluff Water Power and Control District. Capacity curve based on Geological Survey topographic map, survey of 1925.

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

2,796.0	30,300	2,804.0	50,000
2,798.0	34,400	2,806.0	56,500
2,800.0	39,000	2,808.0	63,500
2,802.0	44,000	2,809.0	67,500

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58,250	60,000	61,050	63,150	65,100	65,100	65,100	56,150	43,000	38,520	33,980	41,000
2	58,600	60,000	61,400	63,150	65,100	65,100	64,300	55,800	42,750	38,280	36,160	40,750
3	58,600	60,000	61,400	63,150	65,100	65,100	63,150	55,100	42,500	38,280	36,380	40,750
4	58,600	60,000	61,400	63,500	65,100	65,100	62,800	54,400	42,000	38,040	36,600	40,500
5	58,600	60,000	61,400	63,500	65,500	65,100	62,450	53,700	41,750	38,040	36,600	40,250
6	58,600	60,000	61,400	63,500	65,100	65,100	62,100	52,700	41,500	37,800	36,600	40,250
7	58,600	60,000	61,400	63,500	65,100	65,100	62,100	52,100	41,000	37,800	36,840	40,000
8	58,600	60,000	61,750	63,500	65,100	65,100	61,750	51,800	40,750	37,560	36,840	39,750
9	58,600	60,000	61,750	63,900	65,100	65,100	61,400	51,500	40,500	37,080	36,840	39,500
10	58,600	60,000	61,750	63,900	65,100	65,100	61,050	50,600	40,250	36,840	36,840	39,250
11	58,600	60,000	61,750	63,900	65,100	65,100	60,700	50,000	40,000	36,380	36,840	38,760
12	58,600	60,350	62,100	63,900	65,100	65,100	60,700	49,400	40,000	36,160	37,080	38,520
13	58,600	60,350	62,100	63,900	65,100	65,100	60,350	48,800	40,000	35,720	37,080	38,280
14	58,600	60,350	62,100	64,300	65,100	65,100	60,000	48,200	40,000	35,500	37,080	38,040
15	58,600	60,350	62,100	64,300	65,100	65,100	59,650	47,600	39,750	35,060	37,320	37,800
16	58,600	60,350	62,100	64,300	65,100	65,100	59,300	47,000	39,750	34,620	38,280	37,560
17	58,950	60,350	62,100	64,300	65,100	65,100	59,300	46,400	39,750	34,400	40,500	37,320
18	59,300	60,350	62,100	64,700	65,100	65,100	58,600	46,100	39,500	33,980	41,000	37,080
19	59,300	60,700	62,100	64,700	65,100	65,100	58,250	45,800	39,750	33,770	41,250	37,080
20	59,300	60,700	62,450	64,700	65,100	65,100	57,900	45,800	39,750	33,350	41,250	36,840
21	59,300	60,700	62,450	64,700	65,100	65,100	57,550	45,800	39,500	32,930	41,250	36,600
22	59,650	60,700	62,450	65,100	65,100	65,100	57,550	45,500	39,500	32,720	41,250	36,380
23	59,650	60,700	62,450	65,100	65,100	65,100	57,200	45,500	39,500	32,510	41,250	39,500
24	59,650	60,700	62,800	65,100	65,100	65,100	57,200	45,200	39,250	32,300	41,250	41,000
25	59,650	60,700	62,800	65,100	65,100	65,100	56,850	45,200	39,250	31,900	41,500	41,750
26	59,650	60,700	62,800	65,100	65,100	65,100	56,850	44,900	39,250	31,700	41,500	42,000
27	59,650	60,700	62,800	65,100	65,100	65,100	56,850	44,600	39,000	31,500	42,000	42,000
28	59,650	61,050	62,800	65,100	65,100	65,100	56,500	44,300	39,000	31,300	42,250	42,000
29	59,650	61,050	62,800	65,100	-----	65,100	56,500	44,000	38,760	31,100	42,250	42,000
30	59,650	61,050	63,150	65,100	-----	65,100	56,150	43,750	38,520	31,700	42,250	41,750
31	60,000	-----	63,150	65,100	-----	65,100	-----	43,500	-----	31,900	41,500	-----
(†)	2,807.0	2,807.3	2,807.9	2,808.4	2,808.4	2,808.4	2,805.9	2,801.9	2,799.8	2,796.8	2,801.0	2,801.1
(*)	+1,750	+1,050	+2,100	+1,950	0	0	-8,950	-12,650	-4,980	-6,620	+9,600	+250
MAX	60,000	61,050	63,150	65,100	65,500	65,100	65,100	56,150	43,000	38,520	42,250	42,000
MIN	58,250	60,000	61,050	63,150	65,100	65,100	56,150	43,500	38,520	31,100	33,980	36,380

CAL YR 1970..... † -36,350

WTR YR 1971..... * -16,500

MAX 105,600

MAX 65,500

MIN 58,250

MIN 31,100

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

* Change in contents, in acre-feet.

08410000 Red Bluff Reservoir near Orla, Tex.

LOCATION.--Lat 31°54'06", long 103°54'42", Reeves County, at right end of Red Bluff Dam on Pecos River, 3 miles upstream from Salt (Screwbean) Draw, and 4.5 miles north of Orla.

DRAINAGE AREA.--20,720 sq mi, approximately (contributing area).

PERIOD OF RECORD.--February 1937 to current year. Monthly contents only for some periods, published in WSP 1312.

GAGE.--Nonrecording gage read at irregular intervals. Datum of gage is 0.30 ft below mean sea level.

EXTREMES (at 0800).--Current year: Maximim contents observed, 65,500 acre-ft Feb. 5 (gage height, 2,808.5 ft); minimum observed, 31,100 acre-ft July 29 (gage height, 2,796.4 ft).

Period of record: Maximum contents observed, 352,000 acre-ft Sept. 27, 28, 1941 (gage height, 2,846.2 ft, observed on nonrecording gage at service spillway, affected by variable drawdown due to flow through tainter gates); minimum observed, 11,080 acre-ft May 13, 1948 (gage height, 2,781.4 ft).

REMARKS.--Reservoir is formed by a rock-faced earthfill dam 9,200 ft long. Dam completed and storage began in September 1936. The concrete service spillway is equipped with 12 tainter gates 25 ft wide by 15 ft high. The emergency spillway, located on the right bank, is 790 ft long. Water is used for power development and irrigation from Mentone to Grandfalls. Inflow partly regulated by major reservoirs above station include Alamogordo Reservoir, Lake McMillan, and Lake Avalon, with a total combined capacity of 154,400 acre-ft. Also several small diversion dams divert water for power and irrigation. Contents computed from intermittent gage readings. Figures given herein represent total contents.

CONTENTS, IN ACRE-FEET, AT 0800, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	6 3150	6 3100	6 3100	6 3100	5 6150	4 3000	3 4520	3 5930	4 1000	4 1750	4 2000	4 2250
2	6 3150	6 3100	6 3100	6 4300	5 3800	4 2750	3 4280	3 5150	4 0750	4 1750	4 2000	4 2250
3	6 3150	6 3100	6 3100	6 3150	5 3100	4 2500	3 4280	3 5350	4 0750	4 1500	4 2000	4 2250
4	6 3500	6 3100	6 3100	6 2600	5 4400	4 2000	3 3040	3 6600	4 0500	4 1500	4 2000	4 2250
5	6 3500	6 3500	6 3100	6 2450	5 3700	4 1750	3 4040	3 6600	4 0200	4 1250	4 2000	4 2500
6	6 3500	6 3100	6 3100	6 2100	5 2700	4 1500	3 7800	3 6600	4 0250	4 1250	4 2000	4 2500
7	6 3500	6 3100	6 3100	6 2100	5 2100	4 1000	3 7800	3 6840	4 0000	4 1000	4 2000	4 2500
8	6 3500	6 3100	6 3100	6 1750	5 1800	4 0750	3 7560	3 6840	3 9750	4 1000	4 1750	4 2500
9	6 3900	6 3100	6 3100	5 1400	5 1500	4 0500	3 4050	3 6840	3 9500	4 0750	4 2000	4 2500
10	6 3900	6 3100	6 3100	5 1050	5 0600	4 0250	3 6840	3 6840	3 9250	4 1750	4 2000	4 2500
11	6 3900	6 3100	6 3100	5 0700	5 0000	4 0000	3 6380	3 6840	3 7550	4 1750	4 2000	4 2750
12	6 3900	6 3100	6 3100	5 0700	4 9400	4 0000	3 6150	3 7080	3 4520	4 1750	4 2000	4 2750
13	6 3900	6 3100	6 3100	5 0350	4 3800	4 0000	3 5720	3 7080	3 3280	4 1750	4 2000	4 2750
14	6 4300	6 3100	6 3100	6 0000	4 3200	4 0000	3 5500	3 7080	3 3040	4 1750	4 2000	4 2750
15	6 4300	6 3100	6 3100	5 9650	4 7600	3 9750	3 5050	3 7320	3 7800	4 2000	4 2000	4 2750
16	6 4300	6 3100	6 3100	5 9300	4 7000	3 9750	3 4620	3 4280	3 7550	4 2000	4 2000	4 3000
17	6 4300	6 3100	6 3100	5 9300	4 6400	3 9750	3 4400	4 0500	3 7320	4 2000	4 2000	4 3000
18	6 4700	6 3100	6 3100	5 3600	4 6100	3 9500	3 3980	4 1000	3 7050	4 2000	4 2000	4 3000
19	6 4700	6 3100	6 3100	5 3250	4 5800	3 9750	3 3770	4 1250	3 7050	4 2000	4 2000	4 3000
20	6 4700	6 3100	6 3100	5 7900	4 5800	3 9750	3 3350	4 1250	3 6840	4 1750	4 2000	4 3000
21	6 4700	6 3100	6 3100	5 7550	4 5800	3 9500	3 2950	4 1250	3 6600	4 1750	4 2000	4 3250
22	6 3100	6 3100	6 3100	5 7550	4 5500	3 9500	3 2720	4 1250	3 6380	4 1750	4 2000	4 3250
23	6 3100	6 3100	6 3100	5 7200	4 5500	3 9500	3 2510	4 1250	3 9500	4 1750	4 2000	4 3250
24	6 3100	6 3100	6 3100	5 7200	4 5200	3 9250	3 2300	4 1250	4 1000	4 1750	4 2000	4 3250
25	6 3100	6 3100	6 3100	5 6850	4 5200	3 9250	3 1900	4 1500	4 1750	4 1750	4 2000	4 3500
26	6 3100	6 3100	6 3100	5 6850	4 4900	3 9250	3 1700	4 1500	4 2000	4 1750	4 2250	4 3500
27	6 3100	6 3100	6 3100	5 6850	4 4600	3 9000	3 1500	4 2000	4 2000	4 1750	4 2250	4 3500
28	6 3100	6 3100	6 3100	5 6500	4 4300	3 9000	3 1300	4 2250	4 2000	4 1750	4 2250	4 3500
29	6 3100	-----	6 3100	5 6500	4 4000	3 8760	3 1100	4 2250	4 2000	4 1750	4 2250	4 3750
30	6 3100	-----	6 3100	5 6150	4 3750	3 8520	3 1700	4 2250	4 1750	4 1750	4 2250	4 3750
31	6 3100	-----	6 3100	-----	4 3500	-----	3 1500	4 1500	-----	4 2000	-----	4 3750
MAX	65,100	65,500	65,100	65,100	56,150	43,000	38,520	42,250	42,000	42,000	42,250	43,750
MIN	63,150	65,100	65,100	56,150	43,500	38,520	31,100	33,980	36,380	40,750	41,750	42,250
(+)	2,808.4	2,808.4	2,808.4	2,805.9	2,801.9	2,799.8	2,796.8	2,801.0	2,801.1	2,801.2	2,801.3	2,801.9
(#)	+1,950	0	0	-8,950	-12,650	-4,980	-6,620	+9,600	+250	+250	+250	+1,500

CAL YR 1971..... # -19,400 MAX 65,500 MIN 31,100

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

Change in contents, in acre-feet.

RIO GRANDE BASIN

08412500 Pecos River near Orla, Tex.

LOCATION.--Lat 31°52'21", long 103°49'52", Reeves County, on right bank at bridge on Farm Road 652, 5.5 miles downstream from Salt (Screwbean) Draw, 5.9 miles northeast of Orla, and 8.5 miles downstream from Red Bluff Reservoir.

DRAINAGE AREA.--21,210 sq mi, approximately (contributing area).

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

GAGE.--Water-stage recorder. Datum of gage is 2,730.86 ft above mean sea level. Prior to Nov. 16, 1969, at site 6.9 miles downstream at datum 12.81 ft lower.

AVERAGE DISCHARGE.--34 years, 192 cfs (139,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,560 cfs Aug. 2 (gage height, 18.40 ft); minimum, 7.7 cfs Mar. 18.
Period of Record: Maximum discharge, 23,700 cfs Sept. 29, 1941 (gage height, 20.74 ft, site and datum then in use); no flow at times in 1946 and 1965.

REMARKS.--Records good. Flow largely regulated by Red Bluff Reservoir (station 08410000) and reservoirs above Carlsbad, N. Mex. Occasional runoff from draws between dam and station. Many diversions above Red Bluff Reservoir for irrigation. Water-quality records for the current year are published in Part 2 of this report. For Texas.

REVISIONS (WATER YEARS).--WSP 928: 1937.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	12	13	13	12	23	74	82	134	11	1,900	106
2	22	12	13	13	23	15	480	300	135	87	2,660	86
3	20	12	13	13	21	12	432	273	154	31	401	88
4	18	12	12	13	22	12	98	273	196	29	58	96
5	18	12	12	13	21	12	72	273	138	28	38	86
6	16	12	13	13	21	9.1	72	273	138	29	33	86
7	16	16	13	13	21	9.1	119	273	140	32	31	87
8	14	23	12	13	21	10	120	273	140	107	29	87
9	14	17	12	13	21	10	119	282	116	130	28	88
10	14	17	13	12	22	9.8	119	282	29	135	31	88
11	14	16	13	12	22	9.8	119	282	27	137	32	89
12	14	15	13	12	22	9.8	119	282	23	138	25	91
13	14	14	13	12	22	9.8	117	282	13	140	24	93
14	14	14	13	12	22	9.8	114	282	12	140	28	95
15	14	14	14	11	22	8.6	114	282	12	140	42	96
16	14	14	13	11	22	8.6	114	291	12	141	83	98
17	16	14	13	9.8	22	8.6	114	223	11	141	557	102
18	16	14	13	9.1	24	8.2	116	26	12	142	234	117
19	16	14	14	9.1	22	9.1	117	23	28	144	41	120
20	14	14	14	9.1	22	9.1	114	24	17	145	26	113
21	14	13	14	9.1	22	9.8	112	25	16	147	22	112
22	14	13	14	9.8	22	10	48	25	12	151	19	112
23	13	12	14	11	22	11	41	24	11	159	17	555
24	12	12	14	10	22	12	41	23	9.8	151	17	1,020
25	12	12	14	10	22	12	41	25	9.8	154	17	442
26	11	13	14	9.8	23	12	41	127	9.8	155	18	75
27	12	13	13	9.8	22	12	38	137	10	156	17	55
28	12	13	13	9.8	23	12	20	133	10	158	16	45
29	12	13	14	9.8	-----	11	19	133	10	159	15	44
30	12	14	13	9.8	-----	11	19	133	11	449	52	92
31	12	-----	13	9.8	-----	11	-----	133	-----	245	414	-----
TOTAL	462	416	409	344.8	605	337.2	3,283	5,499	1,596.4	4,111	6,925	4,464
MEAN	14.9	13.9	13.2	11.1	21.6	10.9	109	177	53.2	133	223	149
MAX	28	23	14	13	24	23	480	300	196	449	2,660	1,020
MIN	11	12	12	9.1	12	8.2	19	23	9.8	11	15	44
AC-FT	916	825	811	684	1,200	669	6,510	10,910	3,170	8,150	13,740	8,850

CAL YR 1970 TOTAL 32,952.6 MEAN 90.3 MAX 1,760 MIN 9.1 AC-FT 65,360
WTR YR 1971 TOTAL 28,452.4 MEAN 78.0 MAX 2,660 MIN 8.2 AC-FT 56,440

08412500 Pecos River near Orla, Tex.

LOCATION.--Lat 31°51'21", long 103°49'52", Reeves County, on right bank at bridge on Farm Road 652, 5.5 miles downstream from Salt (Screwbean) Draw, 5.9 miles northeast of Orla, and 8.5 miles downstream from Red Bluff Reservoir.

DRAINAGE AREA.--21,210 sq mi, approximately (contributing area).

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

GAGE.--Water-stage recorder. Datum of gage is 2,730.86 ft above mean sea level. Prior to Nov. 6, 1969, at site 6.9 miles downstream at datum 12.81 ft lower.

AVERAGE DISCHARGE.--34 calendar years, 191 cfs (138,400 acre-ft per year), 20 calendar years (1952-71), 88.2 cfs (63,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,560 cfs Aug. 2 (gage height, 18.40 ft); minimum, 7.7 cfs Mar. 18.

Period of record: Maximum discharge 23,700 cfs Sept. 29, 1941 (gage height, 20.74 ft, site and datum then in use); no flow at times in 1946 and 1965.

REMARKS.--Records good. Flow largely regulated by Red Bluff Reservoir (see sta 08410000) and reservoirs above Carlsbad, N. Mex. Occasional runoff from draws between dam and station. Many diversions above Red Bluff Reservoir for irrigation. Water quality records for the current year are published in Part 2 of report for Texas.

DISCHARGE, IN CFS, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	13	12	23	74	82	134	11	1,900	106	93	25	24
2	13	23	15	480	300	135	87	2,660	86	95	25	21
3	13	21	12	432	273	154	31	401	88	96	25	21
4	13	22	12	98	273	196	29	38	96	98	25	20
5	13	21	12	72	273	138	28	38	86	114	25	20
6	13	21	9.1	72	273	138	29	33	86	107	25	19
7	13	21	9.1	119	273	140	32	31	87	106	25	19
8	13	21	10	120	273	140	107	29	87	107	25	19
9	13	21	10	119	282	116	130	28	88	161	26	20
10	12	22	9.8	119	282	29	135	31	88	758	27	19
11	12	22	9.8	119	282	27	137	32	89	214	27	19
12	12	22	9.8	119	282	23	138	25	91	73	27	19
13	12	22	9.8	117	282	13	140	24	93	53	27	18
14	12	22	9.8	114	282	12	140	28	95	42	26	18
15	11	22	8.6	114	282	12	140	42	96	37	25	18
16	11	22	8.6	114	291	12	141	83	98	34	25	18
17	9.8	22	8.6	114	223	11	141	557	102	31	25	18
18	9.1	24	8.2	116	26	12	142	234	117	27	24	17
19	9.1	22	9.1	117	23	28	144	41	120	26	24	17
20	9.1	22	9.1	114	24	17	145	26	113	26	25	18
21	9.1	22	9.8	112	25	16	147	22	112	25	24	19
22	9.8	22	10	48	25	12	151	19	112	23	24	18
23	11	22	11	41	24	11	159	17	555	24	23	17
24	10	22	12	41	23	9.8	151	17	1,020	24	23	17
25	10	22	12	41	25	9.8	154	17	442	25	22	17
26	9.8	23	12	41	127	9.8	155	18	75	27	21	17
27	9.8	22	12	38	137	10	156	17	55	27	21	17
28	9.8	23	12	20	133	10	158	16	45	27	20	17
29	9.8	11	19	19	133	10	159	15	44	25	20	17
30	9.8	11	19	19	133	11	449	52	92	25	21	17
31	9.8	-----	11		133		245	414	-----	25		17
TOTAL	344.8	605	337.2	3,283	5,499	15,964	4,111	6,445	4,464	2,575	727	572
MEAN	11.1	21.6	10.9	109	177	53.2	133	223	149	83.1	24.2	18.5
MAX	13	24	23	480	300	196	449	2,660	1,020	758	27	24
MIN	9.1	12	8.2	19	23	9.8	11	15	44	23	20	17
AC-FT	684	1,200	669	6,510	10,910	3,170	8,150	13,740	8,850	5,110	1,440	1,130

CAL YR 1971 TOTAL 31,039.4 MEAN 85.0 MAX 2,660 MIN 8.2 AC-FT 61,570

MIMBRES RIVER BASIN

08476300 Mimbres River at McKnight damsite, near Mimbres, N. Mex.

LOCATION.--Lat 32°56'14", long 108°00'55", in SW¼SE¼ sec.6, T.16 S., R.11 W., Grant County, on right bank 0.3 mile upstream from Mimbres Ranger station, 0.4 mile downstream from Cottonwood Canyon, and 8 miles northwest of Mimbres.

DRAINAGE AREA.--97.3 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 6,236.73 ft above mean sea level.

AVERAGE DISCHARGE.--7 years (1964-71), 4.52 cfs (3,270 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,060 cfs July 31 (gage height, 4.60 ft); no flow most of year.

Period of record: Maximum discharge, 2,060 cfs July 31, 1971 (gage height, 4.60 ft), from rating curve extended above 220 cfs on basis of slope-area measurements at gage heights 3.34 ft and 4.60 ft; no flow most of the time many years.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	.01	17
2										.48	0	21
3										0	0	3.1
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	.02	0
12										0	0	0
13										0	0	0
14										0	0	0
15										0	.40	0
16										0	0	0
17										0	.18	0
18										0	6.6	13
19										0	.69	11
20										0	0	.46
21										0	0	.06
22										0	0	0
23										.25	0	.23
24										0	0	0
25										0	42	0
26										0	9.5	0
27										0	.18	.01
28										0	.04	.01
29										0	17	.03
30										0	8.8	.02
31										45	9.6	-----
TOTAL	0	0	0	0	0	0	0	0	0	45.73	95.02	65.92
MEAN	0	0	0	0	0	0	0	0	0	1.48	3.07	2.20
MAX	0	0	0	0	0	0	0	0	0	45	42	21
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	91	188	131

CAL YR 1970 TOTAL 11.58 MEAN .032 MAX 4.5 MIN 0 AC-FT 23
 WTR YR 1971 TOTAL 206.67 MEAN .57 MAX 45 MIN 0 AC-FT 410

PEAK DISCHARGE (BASE, 250 CFS).--July 31 (1900) 2,060 cfs (4.60 ft); Aug. 25 (1700) 375 cfs (3.36 ft).

08476300 Mimbres River at McKnight damsite, near Mimbres, N. Mex.

LOCATION.--Lat 32°56'14", long 108°00'55", in SW¼SE¼ sec.6, T.16 S., R.11 W., Grant County, on right bank 0.3 mile upstream from Mimbres Ranger station, 0.4 mile downstream from Cottonwood Canyon, and 8 miles northwest of Mimbres.

DRAINAGE AREA.--97.3 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 6,236.73 ft above mean sea level.

AVERAGE DISCHARGE.--8 calendar years (1964-71), 4.37 cfs (3,170 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,060 cfs July 31 (gage height, 4.60 ft); no flow most of year.

Period of record: Maximum discharge, 2,060 cfs July 31, 1971 (gage height, 4.60 ft), from rating curve extended above 220 cfs on basis of slope-area measurements at gage heights 3.34 ft and 4.60 ft; no flow most of the time many years.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0	.01	17	0	6.0	3.3
2							.48	0	21	0	5.0	2.8
3							0	0	3.1	0	4.0	2.6
4							0	0	0	0	4.0	2.6
5							0	0	0	0	4.0	2.4
6							0	0	0	0	3.0	2.4
7							0	0	0	0	3.0	2.4
8							0	0	0	0	3.0	2.2
9							0	0	0	0	3.0	1.8
10							0	0	0	0	2.8	1.7
11							0	.02	0	0	3.1	1.6
12							0	0	0	0	3.1	1.5
13							0	0	0	0	3.1	1.5
14							0	0	0	0	3.3	1.4
15							0	.40	0	0	3.9	1.2
16							0	0	0	0	4.2	1.0
17							0	.18	0	0	3.9	.90
18							0	6.6	13	0	3.9	.80
19							0	.69	11	0	3.7	.80
20							0	0	.46	0	3.7	.60
21							0	0	.06	0	3.7	.40
22							0	0	0	0	3.7	.15
23							.25	0	.23	0	3.5	.09
24							0	0	0	0	3.5	.02
25							0	42	0	281	3.3	.01
26							0	9.5	0	165	3.1	0
27							0	.18	.01	58	3.1	6.8
28							0	.04	.01	25	3.1	9.9
29		-----					0	17	.03	23	3.1	13
30		-----					0	8.8	.02	16	3.1	9.0
31		-----		-----		-----	45	9.6	-----	11	-----	8.1
TOTAL	0	0	0	0	0	0	45.73	95.02	65.92	579	106.9	82.97
MEAN	0	0	0	0	0	0	1.48	3.07	2.20	18.7	3.56	2.68
MAX	0	0	0	0	0	0	45	42	21	281	6.0	13
MIN	0	0	0	0	0	0	0	0	0	0	2.8	0
AC-FT	0	0	0	0	0	0	91	188	131	1,150	212	165

CAL YR 1971 TOTAL 975.54 MEAN 2.67 MAX 281 MIN 0 AC-FT 1,930

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-31	1900	4.60	2,060	10-25	1530	3.50	530
8-25	1700	3.36	375				

08477000 Mimbres River near Mimbres, N. Mex.

LOCATION.--Lat 32°52'28", long 107°59'05", in SE¼NW¼ sec.33, T.16 S., R.11 W., Grant County, on left bank 0.7 mile downstream from Bear Canyon, and 1.5 miles northwest of Mimbres.

DRAINAGE AREA.--152 sq mi.

PERIOD OF RECORD.--June 1921 to September 1930 (fragmentary), October 1930 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Concrete control since Mar. 26, 1938. Datum of gage is 5,972 ft above mean sea level. Prior to Sept. 12, 1923, at site 10 ft downstream at datum 0.3 ft higher. Sept. 12, 1923, to Jan. 17, 1934, at datum of 0.1 ft lower.

AVERAGE DISCHARGE.--41 years, 10.2 cfs (7,390 acre-ft per year); 20 calendar years (1951-70), 9.68 cfs (7,010 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 970 cfs July 31 (gage height, 6.20 ft); minimum, 1.6 cfs July 9.

Period of record: Maximum discharge determined, 1,560 cfs Aug. 2, 1952 (gage height, 6.22 ft), from rating curve extended above 230 cfs; minimum, 0.7 cfs Aug. 10, 1951.

REMARKS.--Records good. Some regulation by Bear Canyon Reservoir 1.3 miles upstream (capacity, 700 acre-ft). Diversions for irrigation of about 300 acres above station.

REVISIONS (WATER YEARS).--WSP 1282: Drainage area. WSP 1512: 1931, 1933(M), 1935(M), 1937(M), 1938, 1939-40(M), 1941, 1942-43(M), 1944, 1945(M), 1946, 1947(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.8	3.1	2.4	2.4	2.4	1.9	2.0	2.2	1.9	7.9	22
2	2.7	2.6	3.0	2.4	2.6	2.4	2.0	2.0	2.1	2.0	5.4	20
3	2.6	2.6	3.0	2.4	2.5	2.4	2.0	2.0	2.1	2.0	4.8	7.3
4	2.5	2.7	3.0	3.2	2.4	2.4	2.0	2.1	2.1	1.7	4.3	4.4
5	2.5	2.6	3.3	4.4	2.4	2.4	2.1	2.1	2.1	1.7	3.8	3.8
6	2.5	2.6	3.2	4.4	2.4	2.4	2.1	2.1	2.0	1.8	2.6	3.1
7	2.5	2.7	3.0	4.4	2.5	2.4	2.1	2.0	2.0	1.7	2.3	2.8
8	2.5	2.8	3.0	4.4	2.5	2.4	2.2	2.0	1.9	1.7	2.4	2.8
9	2.5	2.7	2.9	4.4	2.1	2.4	2.2	1.9	1.9	1.7	3.0	2.6
10	2.5	2.7	2.9	4.2	2.0	2.3	2.3	1.8	1.8	1.8	5.5	2.4
11	2.5	2.7	2.9	4.2	2.0	2.3	2.3	1.8	1.9	1.9	6.1	2.3
12	2.5	2.7	2.8	4.1	2.0	2.3	2.3	1.9	1.8	2.0	4.9	2.2
13	2.6	2.8	2.8	4.1	2.1	2.3	2.3	1.8	1.9	1.9	3.7	2.2
14	2.6	2.8	2.8	4.2	2.1	2.3	2.2	1.9	1.8	1.9	3.8	2.2
15	2.7	2.8	2.9	4.2	2.1	2.3	2.2	1.9	1.9	1.8	4.2	2.2
16	2.6	3.0	2.9	4.7	2.2	2.2	2.3	1.9	1.9	1.8	3.8	2.2
17	2.6	3.2	2.8	5.2	2.2	2.2	2.3	2.0	1.9	1.8	3.8	2.3
18	2.5	3.3	2.9	5.2	2.2	2.2	2.2	2.1	1.9	1.7	8.7	6.2
19	2.6	3.1	3.2	5.3	2.3	2.2	2.3	2.2	1.9	1.7	4.7	8.1
20	2.5	3.2	3.3	5.3	2.4	2.2	2.4	2.2	1.9	1.7	4.6	3.8
21	2.5	3.2	3.3	5.3	2.5	2.1	2.5	2.2	1.9	1.8	4.3	2.8
22	2.5	3.2	2.8	5.3	2.7	2.1	2.4	2.2	1.9	1.8	3.1	4.8
23	2.6	3.1	2.6	5.2	3.0	2.1	2.3	2.2	1.9	1.9	2.5	6.1
24	2.7	3.1	2.5	5.1	2.7	2.1	2.2	2.4	2.0	1.9	2.8	6.3
25	2.7	3.1	2.4	5.1	2.6	2.1	2.2	2.6	1.9	1.9	15	6.2
26	2.7	3.0	2.3	5.1	2.6	2.0	2.2	2.7	1.9	2.0	12	6.2
27	2.8	3.0	2.2	4.8	2.6	2.0	2.2	2.9	1.8	2.0	11	6.1
28	2.8	3.0	2.2	4.5	2.5	2.0	2.1	2.6	1.9	2.0	16	5.9
29	2.8	3.0	2.2	3.5	-----	2.0	2.1	2.3	1.9	2.5	22	5.6
30	2.9	3.1	2.3	3.1	-----	2.0	2.1	2.2	1.9	2.5	22	5.4
31	2.9	-----	2.3	2.5	-----	2.0	-----	2.2	-----	18	26	-----
TOTAL	80.9	87.2	86.8	132.6	66.6	68.9	66.0	66.2	58.0	74.5	227.0	160.3
MEAN	2.61	2.91	2.80	4.28	2.38	2.22	2.20	2.14	1.93	2.40	7.32	5.34
MAX	2.9	3.3	3.3	5.3	3.0	2.4	2.5	2.9	2.2	1.8	26	22
MIN	2.5	2.6	2.2	2.4	2.0	2.0	1.9	1.8	1.8	1.7	2.3	2.2
AC-FT	160	173	172	263	132	137	131	131	115	148	450	318

CAL YR 1970 TOTAL 1,157.5 MEAN 3.17 MAX 19 MIN 1.8 AC-FT 2,300
WTR YR 1971 TOTAL 1,175.0 MEAN 3.22 MAX 26 MIN 1.7 AC-FT 2,330

PEAK DISCHARGE (BASE, 290 CFS).--July 31 (2230) 970 cfs (6.20 ft).

08477000 Mimbres River near Mimbres, N. Mex.

LOCATION.--Lat 32°52'28", long 107°59'05", in SE 1/4 sec. 33, T.16 S., R.11 W., Grant County, on left bank 0.7 mile downstream from Bear Canyon, and 1.5 miles northwest of Mimbres.

DRAINAGE AREA.--152 sq mi.

PERIOD OF RECORD.--June 1921 to September 1930 (fragmentary), October 1930 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Concrete control since Mar. 26, 1938. Datum of gage is 5,972 ft above mean sea level. Prior to Sept. 12, 1923, at site 10 ft downstream at datum 0.3 ft higher. Sept. 12, 1923, to Jan. 17, 1934, at datum of 0.1 ft lower.

AVERAGE DISCHARGE.--41 calendar years, 10.3 cfs (7,460 acre-ft per year); 20 calendar years (1952-71), 9.89 cfs (7,170 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 970 cfs July 31 (gage height, 6.20 ft); minimum, 1.6 cfs July 9.

Period of record: Maximum discharge determined, 1,560 cfs Aug. 2, 1952 (gage height, 6.22 ft), from rating curve extended above 230 cfs; minimum, 0.7 cfs Aug. 10, 1951.

REMARKS.--Records good. Some regulation by Bear Canyon Reservoir 1.3 miles upstream (capacity, 700 acre-ft). Diversions for irrigation of about 300 acres above station.

REVISIONS (WATER YEARS).--WSP 1282: Drainage area. WSP 1512: 1931, 1933(M), 1935(M), 1937(M), 1938, 1939-40(M), 1941, 1942-43(M), 1944, 1945(M), 1946, 1947(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

CAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.4	2.4	2.4	1.9	2.0	2.2	1.9	7.9	22	5.8	18	14
2	2.4	2.6	2.4	2.0	2.0	2.1	2.0	5.4	20	6.5	15	13
3	2.4	2.5	2.4	2.0	2.0	2.1	2.0	4.8	7.3	6.8	12	13
4	3.2	2.4	2.4	2.0	2.1	2.1	1.7	4.3	4.4	6.7	11	13
5	4.4	2.4	2.4	2.1	2.1	2.1	1.7	3.8	3.8	6.3	11	12
6	4.4	2.4	2.4	2.1	2.1	2.0	1.8	2.6	3.1	5.5	11	12
7	4.4	2.5	2.4	2.1	2.0	2.0	1.7	2.3	2.8	6.4	11	12
8	4.4	2.5	2.4	2.2	2.0	1.9	1.7	2.4	2.8	6.7	11	12
9	4.4	2.1	2.4	2.2	1.9	1.9	1.7	3.0	2.6	5.8	11	12
10	4.2	2.0	2.3	2.3	1.8	1.8	1.8	5.5	2.4	3.9	10	12
11	4.2	2.0	2.3	2.3	1.8	1.9	1.9	6.1	2.3	3.0	11	12
12	4.1	2.0	2.3	2.3	1.9	1.8	2.0	4.9	2.2	3.2	11	11
13	4.1	2.1	2.3	2.3	1.8	1.9	1.9	3.7	2.2	3.2	11	11
14	4.2	2.1	2.3	2.2	1.9	1.8	1.9	3.8	2.2	3.2	11	12
15	4.2	2.1	2.3	2.2	1.9	1.9	1.8	4.2	2.2	3.2	12	11
16	4.7	2.2	2.2	2.3	1.9	1.9	1.8	3.8	2.2	3.1	14	11
17	5.2	2.2	2.2	2.3	2.0	1.9	1.8	3.8	2.3	3.2	14	11
18	5.2	2.2	2.2	2.2	2.1	1.9	1.7	8.7	6.2	3.2	15	11
19	5.3	2.3	2.2	2.3	2.2	1.9	1.7	4.7	8.1	3.2	13	11
20	5.3	2.4	2.2	2.4	2.2	1.9	1.7	4.6	3.8	3.3	13	11
21	5.3	2.5	2.1	2.5	2.2	1.9	1.8	4.3	2.8	3.3	13	11
22	5.3	2.7	2.1	2.4	2.2	1.9	1.8	3.1	4.8	3.5	13	11
23	5.2	3.0	2.1	2.3	2.2	1.9	1.9	2.5	6.1	4.1	12	11
24	5.1	2.7	2.1	2.2	2.4	2.0	1.9	2.8	6.3	6.2	12	11
25	5.1	2.6	2.1	2.2	2.6	1.9	1.9	15	6.2	328	12	11
26	5.1	2.6	2.0	2.2	2.7	1.9	2.0	12	6.2	237	12	11
27	4.8	2.6	2.0	2.2	2.9	1.8	2.0	11	6.1	102	13	13
28	4.5	2.5	2.0	2.1	2.6	1.9	2.0	16	5.9	36	12	17
29	3.5	-----	2.0	2.1	2.3	1.9	2.5	22	5.6	40	12	23
30	3.1	-----	2.0	2.1	2.2	1.9	2.5	22	5.4	34	12	21
31	2.5	-----	2.0	-----	2.2	-----	18	26	-----	23	-----	21
TOTAL	132.6	66.6	68.9	66.0	66.2	58.0	74.5	227.0	160.3	909.3	369	398
MEAN	4.28	2.38	2.22	2.20	2.14	1.93	2.40	7.32	5.34	29.3	12.3	12.8
MAX	5.3	3.0	2.4	2.5	2.9	2.2	18	26	22	328	18	23
MIN	2.4	2.0	2.0	1.9	1.8	1.8	1.7	2.3	2.2	3.0	10	11
AC-FT	263	132	137	131	131	115	148	450	318	1,800	732	789

CAL YR 1971 TOTAL 2,596.4 MEAN 7.11 MAX 328 MIN 1.7 AC-FT 5,150

WTR YR 1971 TOTAL 1,175.0 MEAN 3.22 MAX 26 MIN 1.7 AC-FT 2,330

PEAK DISCHARGE (BASE, 290 CFS).--July 31 (2230) 970 cfs (6.20 ft); Oct. 25 (1130) 498 cfs (5.01 ft).

08481500 Rio Tularosa near Bent, N. Mex.

LOCATION.--Lat 33°08'41", long 105°53'50", in SE 1/4 sec. 32, T.13 S., R.11 E., Lincoln County, on right bank 50 ft downstream from bridge on U. S. Highway 70, 2.6 miles west of Bent, and 8.5 miles northeast of Tularosa.

DRAINAGE AREA.--120 sq mi, approximately.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,450 ft (from topographic map).

AVERAGE DISCHARGE.--23 years (1948-71), 9.39 cfs (6,800 acre-ft per year); 20 calendar years (1951-70), 9.12 cfs (6,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge about 1,400 cfs Aug. 29 (gage height 3.60 ft, from highwater marks); minimum, 1.2 cfs June 29, July 12, 13.

Period of record: Maximum discharge, 4,280 cfs June 18, 1965 (gage height, 5.02 ft), from rating curve extended above 160 cfs on basis of slope-area measurement of peak flow; no flow May 14, 1955, result of unusual regulation.

A major flood probably occurred Sept. 3, 1938, when a peak of 9,640 cfs was computed for station near Tularosa. Another high peak may have occurred July 2, 1914.

REMARKS.--Records poor. Diversion for irrigation of about 1,000 acres (1959 determination) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1312: 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.0	5.0	9.1	9.1	7.7	7.6	9.0	4.7	7.0	6.0	7.6
2	11	8.5	5.0	9.2	9.8	9.2	7.4	7.0	8.3	8.7	5.5	7.3
3	29	8.8	5.0	7.4	10	9.4	7.1	6.4	7.7	8.1	6.0	7.3
4	8.2	8.2	5.0	5.7	11	10	5.7	6.6	7.0	7.9	9.0	6.4
5	7.8	8.4	5.0	5.5	10	8.7	5.3	12	7.7	8.1	10	6.2
6	7.5	8.5	4.4	5.5	10	8.2	5.1	11	7.5	6.6	11	7.3
7	7.0	8.8	4.4	8.0	10	7.5	7.4	11	6.1	5.3	11	7.3
8	7.2	9.6	4.4	10	9.8	8.4	8.7	10	5.5	6.7	10	7.3
9	7.2	9.1	7.1	10	8.9	9.8	9.0	9.6	7.1	5.5	8.0	8.2
10	6.9	7.5	8.5	10	8.3	9.5	7.1	8.8	7.7	5.7	7.0	8.2
11	6.5	9.2	8.2	10	9.0	9.6	6.1	8.5	6.7	4.2	7.0	8.2
12	6.6	9.6	7.3	11	10	8.5	6.2	8.3	7.2	3.3	9.0	8.2
13	6.5	9.1	7.3	7.7	10	9.1	6.1	7.8	6.9	3.3	30	7.3
14	7.3	9.1	6.1	7.3	9.6	8.0	6.5	6.6	6.2	5.9	11	7.3
15	6.9	7.0	6.8	7.3	6.6	7.3	7.8	7.2	5.5	7.1	10	8.0
16	9.0	9.1	8.2	7.1	6.5	6.9	7.0	6.4	9.3	7.5	9.0	7.9
17	7.9	8.3	8.2	7.0	7.8	7.9	7.8	4.4	9.3	6.5	8.0	8.1
18	7.3	7.9	7.7	8.0	11	7.3	7.1	4.6	9.6	5.9	9.0	9.3
19	8.2	6.6	7.3	8.1	9.7	6.6	9.2	8.0	9.6	4.9	10	10
20	8.5	7.3	6.5	8.2	11	6.5	8.8	7.0	10	4.5	10	9.7
21	8.2	6.6	6.4	8.7	11	5.9	9.1	7.4	9.4	5.6	10	9.3
22	7.4	6.5	6.5	8.6	9.9	7.0	9.1	7.8	8.9	6.5	9.5	10
23	6.9	6.5	8.3	8.7	10	6.2	9.1	8.7	7.2	17	9.0	13
24	7.0	6.1	9.1	8.8	9.7	9.1	8.8	8.9	8.4	12	8.5	8.3
25	7.3	6.2	9.1	8.2	10	8.7	9.8	6.8	7.8	30	8.0	7.8
26	7.3	5.7	9.0	8.3	9.7	8.6	9.0	5.8	9.8	12	15	7.0
27	6.9	5.7	5.9	9.2	9.3	8.6	10	6.6	6.0	10	20	7.4
28	7.2	5.8	8.1	9.1	8.9	8.4	8.9	6.2	6.1	8.0	12	6.6
29	7.8	5.9	8.2	9.1	-----	7.8	10	6.7	4.7	7.0	40	6.6
30	8.3	5.7	8.1	9.2	-----	8.6	9.3	5.5	7.2	6.5	8.2	9.5
31	9.1	-----	8.2	9.3	-----	8.0	-----	4.9	-----	6.0	7.0	-----
TOTAL	260.9	230.3	214.3	259.3	266.6	253.0	236.1	235.5	225.1	243.3	343.7	242.6
MEAN	8.42	7.68	6.91	8.36	9.52	8.16	7.87	7.60	7.50	7.85	11.1	8.09
MAX	29	9.6	9.1	11	11	10	10	12	10	30	40	13
MIN	6.5	5.7	4.4	5.5	6.5	5.9	5.1	4.4	4.7	3.3	5.5	6.2
AC-FT	518	457	425	514	529	502	468	467	446	483	682	481

CAL YR 1970 TOTAL 2,995.1 MEAN 8.21 MAX 47 MIN 2.1 AC-FT 5,940
WTR YR 1971 TOTAL 3,010.7 MEAN 8.25 MAX 40 MIN 3.3 AC-FT 5,970

PEAK DISCHARGE (BASE, 125 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-3	2000	3.23	624	8-13	1730	-	about 450
7-23	2230	2.85	195	8-29	unknown	-	about 1,400
7-25	1600	-	about 650				

NOTE.--No gage-height record July 24 to Aug. 29

08481500 Rio Tularosa near Bent, N. Mex.

LOCATION.--Lat 33°08'41", long 105°53'50", in SE¼ sec.32, T.13 S., R.11 E., Lincoln County, on right bank 50 ft downstream from bridge on U. S. Highway 70, 2.6 miles west of Bent, and 8.5 miles northeast of Tularosa.

DRAINAGE AREA.--120 sq mi, approximately.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,450 ft (from topographic map).

AVERAGE DISCHARGE.--24 calendar years, 9.48 cfs (6,870 acre-ft per year); 20 calendar years (1952-71), 9.01 cfs (6,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge about 1,400 cfs Aug. 29 (gage height 3.60 ft, from highwater marks); minimum, 1.2 cfs June 29, July 12, 13.

Period of record: Maximum discharge, 4,280 cfs June 18, 1965 (gage height, 5.02 ft), from rating curve extended above 160 cfs on basis of slope-area measurement of peak flow; no flow May 14, 1955, result of unusual regulation.

A major flood probably occurred Sept. 3, 1938, when a peak of 9,640 cfs was computed for station near Tularosa. Another high peak may have occurred July 2, 1914.

REMARKS.--Records poor. Diversion for irrigation of about 1,000 acres (1959 determination) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1312: 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	9.1	9.1	7.7	7.6	9.0	4.7	7.0	6.0	7.6	8.0	12	9.6
2	9.2	9.8	9.2	7.4	7.0	8.3	8.7	5.5	7.3	7.7	12	9.5
3	7.4	10	9.4	7.1	6.4	7.7	8.1	6.0	7.3	7.8	12	10
4	5.7	11	10	5.7	6.6	7.0	7.9	9.0	6.4	8.2	12	11
5	5.5	10	8.7	5.3	12	7.7	8.1	10	6.2	8.2	12	11
6	5.5	10	8.2	5.1	11	7.5	6.6	11	7.3	7.5	13	12
7	8.0	10	7.5	7.4	11	6.1	5.3	11	7.3	7.8	14	12
8	10	9.8	8.4	8.7	10	5.5	6.7	10	7.3	8.5	14	10
9	10	8.9	9.8	9.0	9.6	7.1	5.5	8.0	8.2	7.9	14	8.6
10	10	8.3	9.5	7.1	8.8	7.7	5.7	7.0	8.2	7.7	14	8.1
11	10	9.0	9.6	6.1	8.5	6.7	4.2	7.0	8.2	7.5	13	8.5
12	11	10	8.5	6.2	8.3	7.2	3.3	9.0	8.2	7.6	14	8.5
13	7.7	10	9.1	6.1	7.8	6.9	3.3	30	7.3	8.1	13	8.2
14	7.3	9.6	8.0	6.5	6.6	6.2	5.9	11	7.3	7.4	14	8.1
15	7.3	6.6	7.3	7.8	7.2	5.5	7.1	10	8.0	7.4	14	8.2
16	7.1	6.5	6.9	7.0	6.4	9.3	7.5	9.0	7.9	8.1	7.3	7.9
17	7.0	7.8	7.9	7.8	4.4	9.3	6.5	8.0	8.1	9.2	7.2	7.4
18	8.0	11	7.3	7.1	4.6	9.6	5.9	9.0	9.3	10	6.2	8.2
19	8.1	9.7	6.6	9.2	8.0	9.6	4.9	10	10	11	5.8	7.0
20	8.2	11	6.5	8.8	7.0	10	4.5	10	9.7	9.2	6.5	8.4
21	8.7	11	5.9	9.1	7.4	9.4	5.6	10	9.3	9.1	6.5	9.7
22	8.6	9.9	7.0	9.1	7.8	8.9	6.5	9.5	10	9.1	7.3	9.5
23	8.7	10	6.2	9.1	8.7	7.2	17	9.0	13	9.0	7.4	9.2
24	8.8	9.7	9.1	8.8	8.9	8.4	12	8.5	8.3	8.6	7.4	9.3
25	8.2	10	8.7	9.8	6.8	7.8	30	8.0	7.8	16	8.3	8.9
26	8.3	9.7	8.6	9.0	5.8	9.8	12	15	7.0	12	8.3	8.4
27	9.2	9.3	8.6	10	6.6	6.0	10	20	7.4	9.7	8.7	8.4
28	9.1	8.9	8.4	8.9	6.2	6.1	8.0	12	6.6	9.3	8.3	8.9
29	9.1	-----	7.8	10	6.7	4.7	7.0	40	6.6	9.9	8.9	11
30	9.2	-----	8.6	9.3	5.5	7.2	6.5	8.2	9.5	11	8.5	8.0
31	9.3	-----	8.0	-----	4.9	-----	6.0	7.0	-----	12	-----	7.0
TOTAL	259.3	266.6	253.0	236.1	235.5	225.1	243.3	343.7	242.6	280.5	309.6	280.5
MEAN	8.36	9.52	8.16	7.87	7.60	7.50	7.85	11.1	8.09	9.05	10.3	9.05
MAX	11	11	10	10	12	10	30	40	13	16	14	12
MIN	5.5	6.5	5.9	5.1	4.4	4.7	3.3	5.5	6.2	7.4	5.8	7.0
AC-FT	514	529	502	468	467	446	483	682	481	556	614	556

CAL YR 1971 TOTAL 3,175.8 MEAN 8.70 MAX 40 MIN 3.3 AC-FT 6,300

PEAK DISCHARGE (BASE, 125 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-23	2230	2.85	195	8-13	1730	-	about 450
7-25	1600	-	about 650	8-29	unknown	-	about 1,400

NOTE.--No gage-height record July 24 to Aug. 29.

TULAROSA VALLEY

08486250 Tularosa Valley Tributary near White Sands, N. Mex.

LOCATION.--Lat 32°24'11", long 106°28'46", in SW¼SW¼ sec.7, T.22 S., R.5 E., Dona Ana County, on right upstream wingwall of culvert 1.2 miles north of entrance gate to White Sands Missile Range on paved road 2.6 miles south of U. S. Highway 70.

DRAINAGE AREA.--17.2 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,230 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, .094 cfs (68 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 154 cfs July 2 (gage height, 3.27 ft); no flow for most of time.

Period of record: Maximum discharge, 1,460 cfs Aug. 31, 1969 (gage height, 5.85 ft) from rating curve extended on basis of slope-area measurements at gage heights 4.34, 5.64 and 5.85 ft; no flow for most of time.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									0	0		
2									0	2.3		
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									0	0		
20									0	0		
21									0	0		
22									0	0		
23									0	0		
24									0	0		
25									0	.65		
26									0	0		
27									0	0		
28									0	0		
29									0	0		
30									.08	0		
31									0	0		
TOTAL	0	0	0	0	0	0	0	0	.08	2.95	0	0
MEAN	0	0	0	0	0	0	0	0	.003	.095	0	0
MAX	0	0	0	0	0	0	0	0	.08	2.3	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	.2	5.9	0	0

CAL YR 1970 TOTAL 5.91 MEAN .016 MAX 4.5 MIN 0 AC-FT 12
WTR YR 1971 TOTAL 3.03 MEAN .0080 MAX 2.3 MIN 0 AC-FT 6.0

PEAK DISCHARGE (BASE, 50 CFS).--July 2 (0700) 154 cfs (3.27 ft).

08486250 Tularosa Valley Tributary near White Sands, N. Mex.

LOCATION.--Lat 32°24'11", long 106°28'46", in SW¼SW¼ sec.7, T.22 S., R.5 E., Dona Ana County, on right upstream wingwall of culvert 1.2 miles north of entrance gate to White Sands Missile Range on paved road 2.6 miles south of U. S. Highway 70.

DRAINAGE AREA.--17.2 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,230 ft (from topographic map).

AVERAGE DISCHARGE.--6 calendar years, .094 cfs (68 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 154 cfs July 2 (gage height, 3.27 ft); no flow for most of time.

Period of record: Maximum discharge, 1,460 cfs Aug. 31, 1969 (gage height, 5.85 ft) from rating curve extended on basis of slope-area measurements at gage heights 4.34, 5.64 and 5.85 ft; no flow for most of time.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	0			0		0
2						0	2.3			0		0
3						0	0			0		0
4						0	0			0		.06
5						0	0			0		0
6						0	0			0		0
7						0	0			0		0
8						0	0			0		0
9						0	0			0		0
10						0	0			0		0
11						0	0			0		0
12						0	0			0		0
13						0	0			0		0
14						0	0			0		0
15						0	0			0		0
16						0	0			0		0
17						0	0			0		0
18						0	0			0		0
19						0	0			0		0
20						0	0			0		0
21						0	0			0		0
22						0	0			0		0
23						0	0			0		0
24						0	0			0		0
25						0	.65			.21		0
26						0	0			0		0
27						0	0			0		0
28						0	0			0		0
29		-----				0	0			0		0
30		-----				.08	0			0		0
31		-----		-----		-----	0		-----	0	-----	0
TOTAL	0	0	0	0	0	.08	2.95	0	0	.21	0	.06
MEAN	0	0	0	0	0	.003	.095	0	0	.007	0	.002
MAX	0	0	0	0	0	.08	2.3	0	0	.21	0	.06
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	.2	5.9	0	0	.4	0	.1

CAL YR 1971 TOTAL 3.30 MEAN .0090 MAX 2.3 MIN 0 AC-FT 6.6

PEAK DISCHARGE (BASE, 50 CFS).--July 2 (0700) 154 cfs (3.27 ft).

08486260 Tularosa Valley tributary at White Sands, N. Mex.

LOCATION.--Lat 32°22'05", long 106°28'44", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.25, T.22 S., R.4 E., Dona Ana County, on left upstream wingwall of culvert 2,000 ft south of Raritan Avenue in White Sands.

DRAINAGE AREA.--21.0 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,230 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 0.080 cfs (58 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 162 cfs July 2 (gage height, 3.81 ft); no flow for most of time.

Period of record: Maximum discharge, 909 cfs Aug. 31, 1969 (gage height, 5.45 ft, from rating curve extended above 50 cfs on basis of slope-area measurements at gage heights 5.24 ft (5.7, outside), 4.04 ft (4.7, outside), and 5.45 ft; no flow for most of time.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0		
2										6.0		
3										0		
4										0		
5										0		
6										0		
7										0		
8										0		
9										0		
10										0		
11										0		
12										0		
13										0		
14										0		
15										0		
16										0		
17										0		
18										0		
19										0		
20										0		
21										0		
22										0		
23										0		
24										0		
25										0		
26										0		
27										0		
28										0		
29										0		
30										0		
31										0		
TOTAL	0	0	0	0	0	0	0	0	0	6.0	0	0
MEAN	0	0	0	0	0	0	0	0	0	.19	0	0
MAX	0	0	0	0	0	0	0	0	0	6.0	0	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	12	0	0

CAL YR 1970 TOTAL 30.18 MEAN .083 MAX 15 MIN 0 AC-FT 60
WTR YR 1971 TOTAL 6.00 MEAN .016 MAX 6.0 MIN 0 AC-FT 12

PEAK DISCHARGE (BASE, 350 CFS).--No peak above base.

08486260 Tularosa Valley tributary at White Sands, N. Mex.

LOCATION.--Lat 32°22'05", long 106°28'44", in SE 1/4 sec. 25, T.22 S., R.4 E., Dona Ana County, on left upstream wingwall of culvert 2,000 ft south of Raritan Avenue in White Sands.

DRAINAGE AREA.--21.0 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,230 ft (from topographic map).

AVERAGE DISCHARGE.--6 calendar years, 0.078 cfs (57 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 162 cfs July 2 (gage height, 3.81 ft); no flow for most of time.

Period of record: Maximum discharge, 909 cfs Aug. 31, 1969 (gage height, 5.45 ft, from rating curve extended above 50 cfs on basis of slope-area measurements at gage heights 5.24 ft (5.7, outside), 4.04 ft (4.7, outside), and 5.45 ft; no flow for most of time.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							0			0		
2							6.0			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							0			0		
20							0			0		
21							0			0		
22							0			0		
23							0			0		
24							0			0		
25							0			.01		
26							0			0		
27							0			0		
28							0			0		
29		-----					0			0		
30		-----					0			0		
31		-----		-----		-----	0		-----	0	-----	
TOTAL	0	0	0	0	0	0	6.0	0	0	.01	0	0
MEAN	0	0	0	0	0	0	.19	0	0	.0003	0	0
MAX	0	0	0	0	0	0	6.0	0	0	.01	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	12	0	0	.02	0	0

CAL YR 1971 TOTAL 6.01 MEAN .017 MAX 6.0 MIN 0 AC-FT 12

PEAK DISCHARGE (BASE, 350 CFS).--No peak above base.

SAN JUAN RIVER BASIN

09346400 San Juan River near Carracas, Colo.

LOCATION.--Lat 37°00'49", long 107°18'42", (revised) in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, on right bank just upstream from flow line of Navajo Reservoir, 3 miles northwest of Carracas, 7.2 miles upstream from Piedra River, and at mile 178.8.

DRAINAGE AREA.--1,230 sq mi. approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,090 ft (from river-profile map).

AVERAGE DISCHARGE.--10 years, 605 cfs (438,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,220 cfs Sept. 30 (gage height, 4.35 ft); minimum, 92 cfs Sept. 28.

Period of record: Maximum discharge, 9,730 cfs Sept. 6, 1970 (gage height, 8.34 ft), from rating curve extended above 5,700 cfs on basis of slope-area measurement of peak flow; minimum, about 5 cfs Dec. 10, 1961, result of freezeup.

Other major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 11,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	346	290	201	130	170	108	883	471	860	436	147	254
2	334	281	161	130	180	108	788	602	819	452	123	223
3	306	263	167	130	170	106	777	721	819	439	110	214
4	286	245	162	128	150	115	708	770	881	380	128	218
5	286	243	151	110	140	120	662	716	885	336	171	197
6	293	239	158	100	130	115	639	689	941	302	176	176
7	287	237	160	105	120	106	659	652	1,080	312	160	156
8	317	268	170	110	120	110	604	672	1,160	300	200	211
9	315	246	158	115	130	120	576	648	1,070	266	144	206
10	298	217	158	122	140	120	615	625	1,090	249	134	158
11	300	233	140	128	140	120	663	621	1,010	241	129	145
12	294	231	131	128	135	130	760	666	992	219	119	138
13	305	239	120	128	142	140	762	752	968	187	160	129
14	291	233	120	128	152	225	778	818	958	170	158	120
15	298	203	145	120	160	228	790	854	961	164	134	109
16	335	186	150	120	165	207	755	929	1,010	164	139	106
17	298	203	112	124	170	259	708	1,040	1,020	185	161	103
18	313	202	163	128	155	270	674	1,000	1,040	172	134	103
19	286	198	142	130	150	221	655	898	1,010	186	131	111
20	285	182	129	140	148	221	626	822	964	193	421	106
21	281	169	150	150	138	330	575	785	902	182	269	100
22	310	187	140	140	120	400	586	822	861	245	290	99
23	349	195	130	130	149	506	543	811	823	242	301	96
24	319	182	150	130	173	638	554	780	759	252	196	101
25	312	186	130	130	166	602	562	789	723	215	208	110
26	317	205	130	134	158	620	578	852	692	190	226	109
27	293	238	138	140	118	804	530	1,010	648	185	285	105
28	290	222	142	150	118	1,060	501	1,160	582	169	401	98
29	255	224	150	160	-----	1,070	480	1,190	508	141	320	108
30	251	227	138	170	-----	1,080	470	1,120	456	135	275	1,190
31	294	-----	130	180	-----	1,030	-----	966	-----	131	264	-----
TOTAL	9,344	6,674	4,526	4,068	4,107	11,289	19,461	25,251	26,492	7,440	6,214	5,299
MEAN	301	222	146	131	147	364	649	815	883	240	200	177
MAX	349	290	201	180	180	1,080	883	1,190	1,160	452	421	1,190
MIN	251	169	112	100	118	106	470	471	456	131	110	96
AC-FT	18,530	13,240	8,980	8,070	8,150	22,390	38,600	50,090	52,550	14,760	12,330	10,510

CAL YR 1970 TOTAL 211,948 MEAN 581 MAX 6,450 MIN 92 AC-FT 420,400

WTR YR 1971 TOTAL 130,165 MEAN 357 MAX 1,190 MIN 96 AC-FT 258,200

PEAK DISCHARGE (BASE 2,500 CFS).--No peak above base.

SAN JUAN RIVER BASIN

09346400 San Juan River near Carracas, Colo.

LOCATION.--Lat 37°00'49", long 107°18'42", (revised) in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, on right bank just upstream from flow line of Navajo Reservoir, 3 miles northwest of Carracas, 7.2 miles upstream from Piedra River, and at mile 178.8.

DRAINAGE AREA.--1,230 sq mi. approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,090 ft (from river-profile map).

AVERAGE DISCHARGE.--10 calendar years, 605 cfs (438,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,220 cfs Sept. 30 (gage height, 4.35 ft); minimum, 92 cfs Sept. 28.
 Period of record: Maximum discharge, 9,730 cfs Sept. 6, 1970 (gage height, 8.34 ft), from rating curve extended above 5,700 cfs on basis of slope-area measurement of peak flow; minimum, about 5 cfs Dec. 10, 1961, result of freezeup.
 Other major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 11,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	130	170	108	883	471	860	436	147	254	1,220	309	162
2	130	180	108	788	602	819	452	123	223	562	267	189
3	130	170	106	777	721	819	439	110	214	376	255	187
4	128	150	115	708	770	881	380	128	218	330	260	168
5	110	140	120	662	716	885	336	171	197	303	266	137
6	100	130	115	639	689	941	302	176	176	292	262	160
7	105	120	106	659	652	1,080	312	160	156	280	251	150
8	110	120	110	604	672	1,160	300	200	211	268	257	140
9	115	130	120	576	648	1,070	266	144	206	259	246	130
10	122	140	120	615	625	1,090	249	134	158	247	221	140
11	128	140	120	663	621	1,010	241	129	145	234	218	140
12	128	135	130	760	666	992	219	119	138	231	223	150
13	128	142	140	762	752	968	187	160	129	221	234	150
14	128	152	225	778	818	958	170	158	120	214	227	150
15	120	160	228	790	854	961	164	134	109	208	225	160
16	120	165	207	755	929	1,010	164	139	106	206	240	150
17	124	170	259	708	1,040	1,020	185	161	103	324	217	125
18	128	155	270	674	1,000	1,040	172	134	103	387	210	125
19	130	150	221	655	898	1,010	186	131	111	284	190	150
20	140	148	221	626	822	964	193	421	106	272	176	130
21	150	138	330	575	785	902	182	269	100	295	228	125
22	140	120	400	586	822	861	245	290	99	285	242	150
23	130	149	506	543	811	823	242	301	96	258	210	190
24	130	173	638	554	780	759	252	196	101	244	210	190
25	130	166	602	562	789	723	215	208	110	380	193	190
26	134	158	620	578	852	692	190	226	109	410	196	210
27	140	118	804	530	1,010	648	185	285	105	375	193	290
28	150	118	1,060	501	1,160	582	169	401	98	342	193	250
29	160	-----	1,070	480	1,190	508	141	320	108	308	182	230
30	170	-----	1,080	470	1,120	456	135	275	1,190	305	169	220
31	180	-----	1,030	-----	966	-----	131	264	-----	282	-----	180
TOTAL	4,068	4,107	11,289	19,461	25,251	26,492	7,440	6,214	5,299	10,202	6,770	5,218
MEAN	131	147	364	649	815	883	240	200	177	329	226	168
MAX	180	180	1,080	883	1,190	1,160	452	421	1,190	1,220	309	290
MIN	100	118	106	470	471	456	131	110	96	206	169	125
AC-FT	8,070	8,150	22,390	38,600	50,090	52,550	14,760	12,330	10,510	20,240	13,430	10,350

CAL YR 1971 TOTAL 131,811 MEAN 361 MAX 1,220 MIN 96 AC-FT 261,400

PEAK DISCHARGE (BASE, 2,500 CFS).--No peak above base.

09349800 Piedra River near Arboles, Colo.

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, on left bank 3 miles downstream from Ignacio Creek, 5.2 miles northeast of Arboles Post Office, and 8 miles upstream from mouth.

DRAINAGE AREA.--629 sq mi.

PERIOD OF RECORD.--August 1962 to current year. Gage operated 1895-1899, 1910-1927 at a site 7.5 miles downstream at altitude 6,000 ft. Low flow records probably not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 6,147.52 ft above mean sea level (from Colorado State Highway Department bench mark).

AVERAGE DISCHARGE.--9 years, 317 cfs (230,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 982 cfs March 24 (gage height, 2.73 ft); minimum, 56 cfs Sept. 28, 29.

Period of record: Maximum discharge, 8,370 cfs Sept. 6, 1970 (gage height, 6.38 ft recorded, 7.55 ft from floodmarks) from rating curve extended above 3,100 cfs on basis of slope-area measurement of peak flow; minimum, 11 cfs Dec. 9, 1963, Oct. 1, 1966. Other major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 2,800 acres above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	129	76	84	99	76	615	323	538	259	85	185
2	206	121	82	85	110	76	544	353	556	252	76	165
3	199	118	83	88	114	82	520	413	556	231	73	159
4	188	117	87	78	104	82	490	475	599	193	72	157
5	196	114	88	72	94	84	460	463	598	171	78	141
6	195	115	84	66	92	80	450	433	647	154	92	125
7	190	114	78	70	88	83	465	430	743	198	136	111
8	200	123	79	71	83	82	455	459	768	207	112	119
9	185	113	88	70	85	82	435	461	722	176	97	110
10	176	113	96	76	91	83	460	435	739	156	85	101
11	176	116	84	78	90	86	490	432	640	140	82	94
12	162	113	86	84	90	93	556	469	620	128	81	84
13	157	115	78	84	92	115	604	513	580	115	80	81
14	154	111	74	78	94	115	604	563	600	105	78	81
15	149	98	92	78	97	97	612	606	634	97	83	78
16	152	97	86	79	98	92	584	660	668	95	90	73
17	157	101	84	78	105	110	569	747	681	90	94	69
18	148	97	90	83	108	113	531	692	675	82	103	67
19	145	102	80	88	103	100	497	589	663	84	103	63
20	143	100	84	100	104	106	465	526	654	91	120	61
21	138	85	84	96	86	142	425	497	617	106	190	61
22	141	93	90	90	80	215	397	513	609	159	238	61
23	133	102	85	88	74	351	377	483	589	155	185	61
24	149	97	85	84	80	642	368	445	541	155	141	62
25	150	97	75	83	76	605	359	457	496	141	143	61
26	151	108	80	83	76	594	369	497	459	121	144	60
27	145	106	90	84	70	755	341	598	410	116	154	58
28	133	106	90	88	68	782	342	764	363	100	247	57
29	128	106	84	90	-----	694	325	784	313	88	241	61
30	132	105	84	94	-----	679	318	680	276	86	208	245
31	130	-----	84	95	-----	716	-----	592	-----	92	210	-----
TOTAL	5,024	3,232	2,610	2,565	2,551	8,012	14,027	16,352	17,554	4,343	3,921	2,911
MEAN	162	108	84.2	82.7	91.1	258	468	527	585	140	126	97.0
MAX	216	129	96	100	114	782	615	784	768	259	247	245
MIN	128	85	74	66	68	76	318	323	276	82	72	57
AC-FT	9,970	6,410	5,180	5,090	5,060	15,890	27,820	32,430	34,820	8,610	7,780	5,770

CAL YR 1970 TOTAL 116,205 MEAN 318 MAX 5,360 MIN 59 AC-FT 230,500

WTR YR 1971 TOTAL 83,102 MEAN 228 MAX 784 MIN 57 AC-FT 164,800

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

09349800 Piedra River near Arboles, Colo.

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, on left bank 3 miles downstream from Ignacio Creek, 5.2 miles northeast of Arboles Post Office, and 8 miles upstream from mouth.

DRAINAGE AREA.--629 sq mi.

PERIOD OF RECORD.--August 1962 to current year. Gage operated 1895-1899, 1910-1927 at a site 7.5 miles downstream at altitude 6,000 ft. Low flow records probably not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 6,147.52 ft above mean sea level (from Colorado State Highway Department bench mark).

AVERAGE DISCHARGE.--9 calendar years, 319 cfs (231,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 982 cfs March 24 (gage height, 2.73 ft); minimum, 56 cfs Sept. 28, 29.
 Period of record: Maximum discharge, 8,370 cfs Sept. 6, 1970 (gage height, 6.38 ft recorded, 7.55 ft from floodmarks) from rating curve extended above 3,100 cfs on basis of slope-area measurement of peak flow; minimum, 11 cfs Dec. 9, 1963, Oct. 1, 1966.
 Other major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 2,800 acres above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	84	99	76	615	323	538	259	85	185	458	211	116
2	85	110	76	544	353	556	252	76	165	315	190	128
3	88	114	82	520	413	556	231	73	159	208	182	132
4	78	104	82	490	475	599	193	72	157	177	181	123
5	72	94	84	460	463	598	171	78	141	158	193	100
6	66	92	80	450	433	647	154	92	125	151	188	120
7	70	88	83	465	430	743	198	136	111	148	182	115
8	71	83	82	455	459	768	207	112	119	145	182	100
9	70	85	82	435	461	722	176	97	110	143	170	115
10	76	91	83	460	435	739	156	85	101	137	162	115
11	78	90	86	490	432	640	140	82	94	135	163	100
12	84	90	93	556	469	620	128	81	84	131	166	110
13	84	92	115	604	513	580	115	80	81	128	173	110
14	78	94	115	604	563	600	105	78	81	122	163	110
15	78	97	97	612	606	634	97	83	78	116	174	120
16	79	98	92	584	660	668	95	90	73	119	176	110
17	78	105	110	569	747	681	90	94	69	252	155	90
18	83	108	113	531	692	675	82	103	67	285	160	92
19	88	103	100	497	589	663	84	103	63	204	141	110
20	100	104	106	465	526	654	91	120	61	200	133	96
21	96	86	142	425	497	617	106	190	61	214	142	90
22	90	80	215	397	513	609	159	238	61	213	147	110
23	88	74	351	377	483	589	155	185	61	210	142	140
24	84	80	642	368	445	541	155	141	62	215	125	140
25	83	76	605	359	457	496	141	143	61	344	128	140
26	83	76	594	369	497	459	121	144	60	385	131	160
27	84	70	755	341	598	410	116	154	58	294	130	210
28	88	68	782	342	764	363	100	247	57	257	129	180
29	90	-----	694	325	784	313	88	241	61	240	128	170
30	94	-----	679	318	680	276	86	208	245	210	119	160
31	95	-----	716	-----	592	-----	92	210	-----	187	-----	135
TOTAL	2,565	2,551	8,012	14,027	16,352	17,554	4,343	3,921	2,911	6,501	4,766	3,847
MEAN	82.7	91.1	258	468	527	585	140	126	97.0	210	159	124
MAX	100	114	782	615	784	768	259	247	245	458	211	210
MIN	66	68	76	318	323	276	82	72	57	116	119	90
AC-FT	5,090	5,060	15,890	27,820	32,430	34,820	8,610	7,780	5,770	12,890	9,450	7,630

CAL YR 1971 TOTAL 87,350 MEAN 239 MAX 784 MIN 57 AC-FT 173,300

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

09354500 Los Pinos River at La Boca, Colo.

LOCATION.--Lat 37°00'37", long 107°35'49", in S½ sec.15, T.32 N., R.7 W., La Plata County, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mile upstream from Spring Creek, and 13 miles upstream from mouth.

DRAINAGE AREA.--510 sq mi, approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Datum of gage is 6,143.58 ft above mean sea level.

AVERAGE DISCHARGE.--21 years, 190 cfs (137,700 acre-ft per year); 20 calendar years (1951-70), 194 cfs (140,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,040 cfs Aug. 22 (gage height, 5.43 ft); minimum 28 cfs Feb. 27, result of freezeup. Period of record: Maximum discharge, 6,400 cfs July 27, 1957 (gage height, 8.95 ft) from rating curve extended above 5,100 cfs; minimum determined, 13 cfs Apr. 23, 1951 (may have been lower during periods of freezeup). A major flood occurred Oct. 5, 1911 at this location.

REMARKS.--Records good except those for January, which are poor. Flow regulated by Vallecito Reservoir 24 miles upstream since April 1941, (see sta 09353000). Diversions for irrigation of about 33,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	479	152	145	100	120	77	84	70	120	145	176	170
2	479	144	125	100	130	64	77	59	119	159	160	150
3	461	141	127	100	140	70	69	52	119	161	147	161
4	469	141	130	100	122	75	66	68	119	149	153	149
5	448	142	128	95	107	59	63	95	148	153	155	146
6	387	134	129	90	100	49	60	123	124	163	157	152
7	350	136	130	85	96	52	59	151	134	313	199	146
8	351	149	139	80	92	56	57	236	125	252	168	164
9	346	142	141	84	93	59	54	139	131	221	170	145
10	340	139	148	86	89	63	51	113	127	204	170	141
11	340	137	139	90	114	69	51	104	133	190	164	130
12	342	137	134	90	117	69	30	115	127	165	154	122
13	339	136	129	90	109	82	29	86	139	152	152	107
14	344	137	132	92	116	73	41	136	156	146	144	107
15	365	135	135	94	116	59	41	157	127	141	146	96
16	374	133	130	95	110	56	42	159	118	144	145	100
17	431	133	137	95	107	60	35	126	123	144	132	105
18	390	132	143	100	90	60	41	117	126	142	131	110
19	373	130	132	110	72	53	54	132	129	148	137	115
20	369	129	144	125	74	46	73	122	129	165	166	121
21	409	129	141	120	64	50	68	109	131	181	198	126
22	484	129	143	110	53	71	46	112	125	190	249	121
23	475	129	136	108	59	71	46	131	138	222	215	123
24	415	138	138	105	55	74	50	145	132	215	171	123
25	406	137	120	100	58	77	52	148	127	199	173	123
26	441	162	120	100	54	77	56	110	123	238	237	118
27	473	171	120	104	46	83	77	99	127	166	208	117
28	452	153	110	108	50	101	75	103	137	148	234	114
29	337	149	110	110	-----	99	69	118	140	146	194	177
30	187	150	110	115	-----	95	65	146	146	154	185	465
31	161	-----	110	115	-----	95	-----	139	-----	161	190	-----
TOTAL	12,017	4,206	4,055	3,096	2,553	2,144	1,681	3,720	3,899	5,477	5,380	4,244
MEAN	388	140	131	99.9	91.2	69.2	56.0	120	130	177	174	141
MAX	484	171	148	125	140	101	84	236	156	313	249	465
MIN	161	129	110	80	46	46	29	52	118	141	131	96
AC-FT	23,840	8,340	8,040	6,140	5,060	4,250	3,330	7,380	7,730	10,860	10,670	8,420

CAL YR 1970 TOTAL 74,373 MEAN 204 MAX 1,640 MIN 33 AC-FT 147,500
WTR YR 1971 TOTAL 52,472 MEAN 144 MAX 484 MIN 29 AC-FT 104,100

09354500 Los Pinos River at La Boca, Colo.

LOCATION.--Lat 37°00'37", long 107°35'49", in S½ sec.15, T.32 N., R.7 W., La Plata County, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mile upstream from Spring Creek, and 13 miles upstream from mouth.

DRAINAGE AREA.--510 sq mi, approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Datum of gage is 6,143.58 ft above mean sea level.

AVERAGE DISCHARGE.--21 calendar years, 191 cfs (138,400 acre-ft per year); 20 calendar years (1952-71), 198 cfs (143,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,040 cfs Aug. 22 (gage height, 5.43 ft); minimum 28 cfs Feb. 27, result of freezeup.

Period of record: Maximum discharge, 6,400 cfs July 27, 1957 (gage height, 8.95 ft) from rating curve extended above 5,100 cfs; minimum determined, 13 cfs Apr. 23, 1951 (may have been lower during periods of freezeup).

A major flood occurred Oct. 5, 1911 at this location.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated by Vallecito Reservoir 24 miles upstream since April 1941, (see sta 09353000). Diversions for irrigation of about 33,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	100	120	77	84	70	120	145	176	170	312	66	185
2	100	130	64	77	59	119	159	160	150	195	61	190
3	100	140	70	69	52	119	161	147	161	157	58	192
4	100	122	75	66	68	119	149	153	149	149	57	186
5	95	107	59	63	95	148	153	155	146	145	54	177
6	90	100	49	60	123	124	163	157	152	135	52	181
7	85	96	52	59	151	134	313	199	146	149	51	189
8	80	92	56	57	236	125	252	168	164	150	50	192
9	84	93	59	54	139	131	221	170	145	138	49	185
10	86	89	63	51	113	127	204	170	141	136	49	181
11	90	114	69	51	104	133	190	164	130	134	50	186
12	90	117	69	30	115	127	165	154	122	126	50	176
13	90	109	82	29	86	139	152	152	107	115	56	187
14	92	116	73	41	136	156	146	144	107	107	60	182
15	94	116	59	41	157	127	141	146	96	111	74	187
16	95	110	56	42	159	118	144	145	100	120	106	181
17	95	107	60	35	126	123	144	132	105	199	90	180
18	100	90	60	41	117	126	142	131	110	211	72	180
19	110	72	53	54	132	129	148	137	115	145	58	181
20	125	74	46	73	122	129	165	166	121	123	72	182
21	120	64	50	68	109	131	181	198	126	100	81	188
22	110	53	71	46	112	125	190	249	121	83	86	192
23	108	59	71	46	131	138	222	215	123	78	106	203
24	105	55	74	50	145	132	215	171	123	80	153	220
25	100	58	77	52	148	127	199	173	123	163	167	235
26	100	54	77	56	110	123	238	237	118	216	169	344
27	104	46	83	77	99	127	166	208	117	132	170	577
28	108	50	101	75	103	137	148	234	114	89	170	365
29	110	-----	99	69	118	140	146	194	177	82	171	267
30	115	-----	95	65	146	146	154	185	465	81	172	225
31	115	-----	95	-----	139	-----	161	190	-----	69	-----	207
TOTAL	3,096	2,553	2,144	1,681	3,720	3,899	5,477	5,380	4,244	4,230	2,680	6,703
MEAN	99.9	91.2	69.2	56.0	120	130	177	174	141	136	89.3	216
MAX	125	140	101	84	236	156	313	249	465	312	172	577
MIN	80	46	46	29	52	118	141	131	96	69	49	176
AC-FT	6,140	5,060	4,250	3,330	7,380	7,730	10,860	10,670	8,420	8,390	5,320	13,300

CAL YR 1971 TOTAL 45,807 MEAN 125 MAX 577 MIN 29 AC-FY 90,860

09355000 Spring Creek at La Boca, Colo.

LOCATION.--Lat 37°00'46", long 107°35'42", in S½ sec.15, T.32 N., R.7 W., La Plata County, on right bank in an excavated channel, 0.2 mile upstream from mouth, and 0.2 mile east of La Boca.

DRAINAGE AREA.--58 sq mi, approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Altitude of gage is 6,160 ft (from topographic map).

AVERAGE DISCHARGE.--21 years, 28.8 cfs (20,870 acre-ft per year); 20 calendar years (1951-70), 28.7 cfs (20,790 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,630 cfs Aug. 22 (gage height, 4.15 ft); minimum 1.0 cfs March 8.

Period of record: Maximum discharge, 1,980 cfs Sept. 6, 1970 (gage height, 4.62 ft), from rating curve extended above 160 cfs on basis of field estimate of peak flow; maximum gage height, 5.98 ft Mar. 9, 1960 (backwater from ice); minimum discharge, 0.6 cfs Nov. 27, 1959.

REMARKS.--Records good except those for winter periods, which are poor. Part of flow is return waste from irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	5.8	6.9	3.6	6.0	2.8	2.4	33	58	56	57	61
2	49	5.5	6.2	3.5	6.6	3.0	2.6	32	58	68	63	58
3	44	5.3	6.4	3.4	7.0	3.2	2.8	32	54	71	58	61
4	46	5.7	6.2	3.2	6.0	3.2	2.9	34	56	69	54	57
5	43	5.7	6.0	3.0	5.2	3.2	2.9	40	62	73	61	59
6	41	5.3	6.1	2.8	4.9	3.2	3.1	42	58	77	60	60
7	40	6.0	6.2	2.3	4.7	3.2	3.4	65	60	118	79	56
8	43	9.0	6.3	2.0	4.5	3.0	3.4	80	59	89	70	69
9	44	6.4	6.5	2.1	4.6	3.8	3.6	37	63	77	69	53
10	43	5.3	6.8	2.2	4.5	4.3	3.9	30	56	78	66	53
11	40	5.3	6.3	2.3	5.0	4.3	4.1	35	57	75	68	51
12	40	5.3	5.4	2.5	5.0	4.4	4.0	38	55	77	66	46
13	36	5.3	5.4	2.8	4.9	5.0	24	23	57	65	71	47
14	33	5.3	5.4	3.1	5.0	4.5	6.6	37	55	57	63	47
15	37	6.0	5.2	3.5	5.2	3.2	6.3	47	48	54	65	54
16	38	6.4	5.0	4.0	5.2	3.2	8.6	41	60	49	65	58
17	52	6.8	4.7	4.5	5.3	3.4	8.2	46	58	45	67	60
18	42	6.6	4.4	4.5	5.4	3.4	11	48	57	47	59	64
19	43	6.5	4.7	4.8	5.3	2.8	19	57	59	52	64	63
20	44	7.8	4.9	4.9	4.5	2.8	13	56	61	73	107	66
21	44	7.2	4.9	4.9	4.0	2.9	10	50	62	71	125	63
22	31	8.8	4.8	4.9	3.7	2.8	23	52	56	83	291	59
23	31	7.0	4.6	5.0	3.0	3.2	25	68	58	92	172	62
24	19	6.9	4.6	5.0	2.7	3.8	21	66	60	99	76	59
25	17	6.7	4.1	5.0	2.5	3.6	17	62	55	86	77	56
26	19	7.0	4.1	5.0	2.5	3.0	21	55	52	89	87	54
27	12	7.0	4.0	5.3	2.6	2.9	29	49	48	61	76	52
28	7.6	7.2	4.0	5.4	2.7	2.8	30	45	50	54	72	55
29	7.0	6.9	3.9	5.6	-----	2.6	35	50	53	47	63	83
30	6.1	6.8	3.8	5.8	-----	2.4	30	63	55	46	63	185
31	5.9	-----	3.7	5.6	-----	2.5	-----	64	-----	48	69	-----
TOTAL	1,040.6	192.8	161.5	122.5	128.5	102.4	376.8	1,477	1,700	2,146	2,503	1,871
MEAN	33.6	6.43	5.21	3.95	4.59	3.30	12.6	47.6	56.7	69.2	80.7	62.4
MAX	52	9.0	6.9	5.8	7.0	5.0	35	80	63	118	291	185
MIN	5.9	5.3	3.7	2.0	2.5	2.4	2.4	23	48	45	54	46
AC-FT	2,060	382	320	243	255	203	747	2,930	3,370	4,260	4,960	3,710

CAL YR 1970 TOTAL 12,385.4 MEAN 33.9 MAX 778 MIN 1.9 AC-FT 24,570
 WTR YR 1971 TOTAL 11,822.1 MEAN 32.4 MAX 291 MIN 2.0 AC-FT 23,450

PEAK DISCHARGE (BASE, 180 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-22	2230	4.15	1,630	9-30	0700	2.37	374
8-26	1930	2.15	358				

09355000 Spring Creek at La Boca, Colo.

LOCATION.--Lat 37°00'46", long 107°35'42", in S½ sec.15, T.32 N., R.7 W., La Plata County, on right bank in an excavated channel, 0.2 mile upstream from mouth, and 0.2 mile east of La Boca.

DRAINAGE AREA.--58 sq mi, approximately.

PERIOD OF RECORD.--October.1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Altitude of gage is 6,160 ft (from topographic map).

AVERAGE DISCHARGE.--21 calendar years, 28.9 cfs (20,940 acre-ft per year); 20 calendar years (1952-71), 29.4 cfs (21,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,630 cfs Aug. 22 (gage height, 4.15 ft); minimum 0.7 cfs Dec. 5.

Period of record: Maximum discharge, 1,980 cfs Sept. 6, 1970 (gage height, 4.62 ft), from rating curve extended above 160 cfs on basis of field estimate of peak flow; maximum gage height, 5.98 ft Mar. 9, 1960 (backwater from ice); minimum discharge, 0.6 cfs Nov. 27, 1959.

REMARKS.--Records good except those for winter periods, which are poor. Part of flow is return waste from irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.6	6.0	2.8	2.4	33	58	56	57	61	147	7.6	3.0
2	3.5	6.6	3.0	2.6	32	58	68	63	58	82	7.0	2.8
3	3.4	7.0	3.2	2.8	32	54	71	58	61	64	6.8	2.6
4	3.2	6.0	3.2	2.9	34	56	69	54	57	61	6.8	2.4
5	3.0	5.2	3.2	2.9	40	62	73	61	59	59	6.8	2.4
6	2.8	4.9	3.2	3.1	42	58	77	60	60	56	6.6	2.4
7	2.3	4.7	3.2	3.4	65	60	118	79	56	47	6.6	2.5
8	2.0	4.5	3.0	3.4	80	59	89	70	69	45	6.3	2.5
9	2.1	4.6	3.8	3.6	37	63	77	69	53	40	6.2	2.6
10	2.2	4.5	4.3	3.9	30	56	78	66	53	38	5.9	2.6
11	2.3	5.0	4.3	4.1	35	57	75	68	51	38	5.2	1.8
12	2.5	5.0	4.4	4.0	38	55	77	66	46	40	5.1	2.3
13	2.8	4.9	5.0	24	23	57	65	71	47	41	6.1	2.6
14	3.1	5.0	4.5	6.6	37	55	57	63	47	36	6.1	3.0
15	3.5	5.2	3.2	6.3	47	48	54	65	54	30	11	3.4
16	4.0	5.2	3.2	8.6	41	60	49	65	58	13	26	3.8
17	4.5	5.3	3.4	8.2	46	58	45	67	60	24	13	3.8
18	4.5	5.4	3.4	11	48	57	47	59	64	28	8.5	3.0
19	4.8	5.3	2.8	19	57	59	52	64	63	10	7.5	3.5
20	4.9	4.5	2.8	13	56	61	73	107	66	8.8	6.9	3.5
21	4.9	4.0	2.9	10	50	62	71	125	63	7.8	6.0	4.3
22	4.9	3.7	2.8	23	52	56	83	291	59	7.5	5.7	4.2
23	5.0	3.0	3.2	25	68	58	92	172	62	7.2	5.2	4.4
24	5.0	2.7	3.8	21	66	60	99	76	59	8.0	4.6	4.5
25	5.0	2.5	3.6	17	62	55	86	77	56	27	4.0	4.8
26	5.0	2.5	3.0	21	55	52	89	87	54	82	3.8	5.2
27	5.3	2.6	2.9	29	49	48	61	76	52	17	3.1	8.0
28	5.4	2.7	2.8	30	45	50	54	72	55	9.8	3.2	3.5
29	5.6	-----	2.6	35	50	53	47	63	83	12	2.8	3.4
30	5.8	-----	2.4	30	63	55	46	63	185	11	2.6	3.3
31	5.6	-----	2.5	-----	64	-----	48	69	-----	8.4	-----	3.2
TOTAL	122.5	128.5	102.4	376.8	1,477	1,700	2,146	2,503	1,871	1,105.5	203.0	105.3
MEAN	3.95	4.59	3.30	12.6	47.6	56.7	69.2	80.7	62.4	35.7	6.77	3.40
MAX	5.8	7.0	5.0	35	80	63	118	291	185	147	26	8.0
MIN	2.0	2.5	2.4	2.4	23	48	45	54	46	7.2	2.6	1.8
AC-FT	243	255	203	747	2,930	3,370	4,260	4,960	3,710	2,190	403	209

CAL YR 1971 TOTAL 11,841.0 MEAN 32.4 MAX 291 MIN 1.8 AC-FT 23,490

PEAK DISCHARGE (BASE, 180 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-22	2230	4.15	1,630	9-30	0700	2.37	374
8-26	1930	2.15	358				

09355100 Navajo Reservoir near Archuleta, N. Mex.

LOCATION.--Lat 36°48'28", long 107°36'31", in SW¼SE¼ sec.18, T.30 N., R.7 W., San Juan County, in gage shaft of outlet works structure near right abutment of Navajo Dam on San Juan River, 5.5 miles east of Archuleta, 33 miles east of Farmington, and at mile 145.0.

DRAINAGE AREA.--3,230 sq mi, approximately.

PERIOD OF RECORD.--June 1962 to current year. Prior to October 1968 dead storage included.

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

EXTREMES.--Current year: Maximum daily contents, 1,260,000 acre-ft Oct. 1 (elevation, 6,053.22 ft); minimum daily, 813,900 acre-ft Mar. 21, 22 (elevation, 6,009.24 ft).

Period of record: Maximum daily contents, 1,266,000 acre-ft Sept. 21, 22, 23, 24, 1970 (elevation, 6,053.77 ft); minimum daily after June 1964 (initial filling period), 234,300 acre-ft Mar. 10, 11, 1965 (elevation, 5,906.36 ft).

REMARKS.--Reservoir is formed by earth-rock-fill dam, completed in June 1963; storage began June 27, 1962. Capacity, 1,708,600 acre-ft between elevations 5,720 ft (upstream toe of dam) and 6,085 ft (crest of spillway). Usable capacity 1,696,000 acre-ft above elevation 5,774.9 ft (minimum operating level). Dead storage below elevation 5,774.9 ft is 12,600 acre-ft. Figures given herein are usable contents. Reservoir is used for irrigation storage, river regulation, desilting, flood control, and recreation.

COOPERATION.--Records furnished by Bureau of Reclamation.

CONTENTS, IN THOUSANDS OF ACRE-Feet, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,260	1,209	1,138	1,046	933.8	847.6	833.8	869.5	927.2	987.3	990.6	998.1
2	1,258	1,207	1,136	1,043	930.3	843.2	835.4	870.6	928.9	988.0	990.3	998.2
3	1,256	1,204	1,133	1,040	927.2	838.8	836.6	872.0	930.6	988.7	990.2	998.2
4	1,254	1,202	1,130	1,037	923.6	834.5	837.9	873.5	932.6	988.9	989.8	998.1
5	1,253	1,200	1,127	1,034	919.0	830.1	839.2	875.0	934.8	989.2	989.6	998.1
6	1,251	1,197	1,125	1,030	914.7	826.1	840.3	876.9	937.0	989.6	989.4	997.9
7	1,249	1,195	1,122	1,026	910.8	822.0	841.3	878.9	939.5	990.4	989.6	998.1
8	1,248	1,194	1,119	1,023	906.8	818.9	842.4	880.7	942.5	991.2	989.8	998.1
9	1,246	1,193	1,117	1,019	902.7	818.1	843.3	881.8	945.2	991.3	989.6	997.8
10	1,245	1,191	1,114	1,016	898.7	817.9	844.3	883.3	948.8	991.4	989.6	997.5
11	1,243	1,188	1,112	1,013	894.7	817.6	845.3	884.6	951.0	991.6	989.3	997.1
12	1,241	1,185	1,109	1,010	892.6	817.7	846.8	886.0	953.2	991.5	989.0	996.7
13	1,240	1,183	1,107	1,007	892.6	817.7	848.5	887.6	955.1	991.4	988.9	996.2
14	1,238	1,181	1,104	1,004	892.7	817.7	850.3	889.5	957.3	991.2	988.6	995.7
15	1,236	1,178	1,101	1,000	892.7	817.5	851.9	891.8	959.8	990.8	988.3	995.2
16	1,235	1,175	1,098	996.9	893.2	816.9	853.5	893.9	962.3	990.6	988.3	994.6
17	1,234	1,173	1,094	993.2	893.7	816.4	855.0	896.3	964.7	990.3	988.3	993.8
18	1,232	1,170	1,091	989.6	893.2	816.2	856.6	899.0	967.3	990.2	988.0	993.2
19	1,230	1,168	1,088	985.9	890.4	815.3	858.0	900.9	969.8	989.8	988.9	992.6
20	1,229	1,165	1,085	981.7	886.4	814.5	859.5	902.7	972.3	990.0	990.4	992.3
21	1,227	1,162	1,082	977.9	882.3	813.9	860.7	904.1	974.6	990.2	991.4	991.6
22	1,226	1,160	1,079	974.0	878.3	813.9	861.8	905.6	976.6	990.8	992.2	991.3
23	1,226	1,158	1,076	970.0	873.6	814.7	862.8	907.3	978.5	991.4	993.3	990.6
24	1,224	1,155	1,072	965.9	869.4	816.2	863.6	908.6	980.1	991.8	993.9	990.3
25	1,223	1,152	1,069	961.8	865.0	817.7	864.5	910.2	981.6	991.9	994.2	989.8
26	1,221	1,150	1,066	957.9	860.6	819.0	865.4	912.2	983.0	992.2	995.1	989.2
27	1,219	1,148	1,062	953.6	856.2	821.4	866.1	914.0	984.0	992.2	995.3	988.8
28	1,218	1,146	1,059	949.6	852.0	824.5	866.9	917.0	985.0	991.8	996.2	988.4
29	1,216	1,144	1,056	945.5	-----	827.3	867.8	920.3	985.8	991.4	997.1	988.7
30	1,214	1,141	1,053	941.5	-----	829.8	868.7	923.2	986.5	991.2	997.5	993.2
31	1,211	-----	1,049	937.6	-----	831.8	-----	925.2	-----	990.9	997.9	-----
MAX	1,260	1,209	1,138	1,046	933.8	847.6	868.7	925.2	986.5	992.2	997.9	998.2
MIN	1,211	1,141	1,049	937.6	852.0	813.9	833.8	869.5	927.2	987.3	988.0	988.4
(+)	6,049.12	6,042.90	6,034.95	6,022.95	6,013.60	6,011.30	6,015.48	6,021.63	6,028.03	6,028.48	6,029.19	6,028.70
(#)	-50.0	-70.0	-92.0	-111.4	-85.6	-20.2	+36.9	+56.5	+61.3	+4.4	+7.0	-4.7

CAL YR 1970: # +6.0

WTR YR 1971: # -267.8

(+) Elevations, in feet, at end of month.

(#) Change in contents, in thousands of acre feet.

09355100 Navajo Reservoir near Archuleta, N. Mex.

LOCATION.--Lat 36°48'28", Long 107°36'31", in SW¼SE¼ sec.18, T.30 N., R.7 W., San Juan County, in gage shaft of outlet works structure near right abutment of Navajo Dam on San Juan River, 5.5 miles east of Archuleta, 33 miles east of Farmington, and at mile 145.0.

DRAINAGE AREA.--3,230 sq mi, approximately.

PERIOD OF RECORD.--June 1962 to current year. Prior to October 1968 dead storage included.

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

EXTREMES.--Current year: Maximum daily contents, 1,046,000 acre-ft Jan. 1 (elevation, 6,033.96 ft); minimum daily, 813,900 acre-ft Mar. 21, 22 (elevation, 6,009.24 ft).

Period of record: Maximum daily contents, 1,266,000 acre-ft Sept. 21, 22, 23, 24, 1970 (elevation, 6,053.77 ft); minimum daily after June 1964 (initial filling period), 234,300 acre-ft Mar. 10, 11, 1965 (elevation, 5,906.36 ft).

REMARKS.--Reservoir is formed by earth-rock-fill dam, completed in June 1963; storage began June 27, 1962. Capacity, 1,708,600 acre-ft between elevations 5,720 ft (upstream toe of dam) and 6,085 ft (crest of spillway). Usable capacity 1,696,000 acre-ft above elevation 5,774.9 ft (minimum operating level). Dead storage below elevation 5,774.9 ft is 12,600 acre-ft. Figures given herein are usable contents. Reservoir is used for irrigation storage, river regulation, desilting, flood control, and recreation.

COOPERATION.--Records furnished by Bureau of Reclamation.

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1,046.00	933.80	847.60	833.80	869.50	927.20	987.30	990.60	998.10	997.70	1,012.00	1,020.00
2	1,043.00	930.30	843.20	835.40	870.60	928.90	988.00	990.30	998.20	998.90	1,013.00	1,020.00
3	1,040.00	927.20	838.80	836.60	872.00	930.60	988.70	990.20	998.20	999.50	1,013.00	1,021.00
4	1,037.00	923.60	834.50	837.90	873.50	932.60	988.90	989.80	998.10	1,000.00	1,013.00	1,021.00
5	1,034.00	919.00	830.10	839.20	875.00	934.80	989.20	989.60	998.10	1,000.00	1,013.00	1,021.00
6	1,030.00	914.70	826.10	840.30	876.90	937.00	989.60	989.40	997.90	1,000.00	1,014.00	1,021.00
7	1,026.00	910.80	822.00	841.30	878.90	939.50	990.40	989.60	998.10	1,001.00	1,014.00	1,022.00
8	1,023.00	906.80	818.90	842.40	880.70	942.50	991.20	989.80	998.10	1,001.00	1,014.00	1,022.00
9	1,019.00	902.70	818.10	843.30	881.80	945.20	991.30	989.60	997.80	1,001.00	1,014.00	1,022.00
10	1,016.00	898.70	817.90	844.30	883.30	948.80	991.40	989.60	997.50	1,001.00	1,014.00	1,022.00
11	1,013.00	894.70	817.60	845.30	884.60	951.00	991.60	989.30	997.10	1,001.00	1,014.00	1,022.00
12	1,010.00	892.60	817.70	846.80	886.00	953.20	991.50	989.00	996.70	1,001.00	1,015.00	1,023.00
13	1,007.00	892.60	817.70	848.50	887.60	955.10	991.40	988.90	996.20	1,001.00	1,015.00	1,022.00
14	1,004.00	892.70	817.70	850.30	889.50	957.30	991.20	988.60	995.70	1,001.00	1,015.00	1,021.00
15	1,000.00	892.70	817.50	851.90	891.80	959.80	990.80	988.30	995.20	1,001.00	1,016.00	1,019.00
16	996.90	893.20	816.90	853.50	893.90	962.30	990.60	988.30	994.60	1,001.00	1,016.00	1,017.00
17	993.20	893.70	816.40	855.00	896.30	964.70	990.30	988.30	993.80	1,001.00	1,017.00	1,015.00
18	989.60	893.20	816.20	856.60	899.00	967.30	990.20	988.00	993.20	1,002.00	1,017.00	1,012.00
19	985.90	890.40	815.30	858.00	900.90	969.80	989.80	988.90	992.60	1,003.00	1,017.00	1,010.00
20	981.70	886.40	814.50	859.50	902.70	972.30	990.00	990.40	992.30	1,004.00	1,017.00	1,008.00
21	977.90	882.30	813.90	860.70	904.10	974.60	990.20	991.40	991.60	1,005.00	1,017.00	1,006.00
22	974.00	878.30	813.90	861.80	905.60	976.60	990.80	992.20	991.30	1,005.00	1,018.00	1,004.00
23	970.00	873.60	814.70	862.80	907.30	978.50	991.40	993.30	990.60	1,005.00	1,018.00	1,001.00
24	965.90	869.40	816.20	863.60	908.60	980.10	991.80	993.90	990.30	1,006.00	1,018.00	1,001.00
25	961.80	865.00	817.70	864.50	910.20	981.60	991.90	994.20	989.80	1,007.00	1,018.00	999.10
26	957.90	860.60	819.00	865.40	912.20	983.00	992.20	995.10	989.20	1,009.00	1,018.00	998.40
27	953.60	856.20	821.40	866.10	914.00	984.00	992.20	995.30	988.80	1,010.00	1,019.00	998.20
28	949.60	852.00	824.50	866.90	917.00	985.00	991.80	996.20	988.40	1,011.00	1,019.00	997.50
29	945.50	-----	827.30	867.80	920.30	985.80	991.40	997.10	988.70	1,011.00	1,019.00	995.60
30	941.50	-----	829.80	868.70	923.20	986.50	991.20	997.50	993.20	1,012.00	1,020.00	993.60
31	937.60	-----	831.80	-----	925.20	-----	990.90	997.90	-----	1,012.00	-----	991.30
MAX	1,046.00	933.80	847.60	868.70	925.20	986.50	992.20	997.90	998.20	1,012.00	1,020.00	1,023.00
MIN	937.60	852.00	813.90	833.80	869.50	927.20	987.30	988.00	988.40	997.70	1,012.00	991.30
(+)	6,022.95	6,013.60	6,011.30	6,015.48	6,021.63	6,028.03	6,028.48	6,029.19	6,028.70	6,030.62	6,031.38	6,028.51
(#)	-111.4	-85.6	-20.2	+36.9	+56.5	+61.3	+4.4	+7.0	-4.7	+18.8	+8.0	-28.7

CAL YR 1971: # -58.0

(+) Elevations, in feet, at end of month.

(#) Change in contents, in thousands of acre feet.

LOCATION.--Lat 36°48'05", long 107°41'51", in N $\frac{1}{2}$ sec. 20, T.30 N., R.8 W., San Juan County, on left bank 0.5 mile upstream from Gobernador Canyon, 0.8 mile northeast of Archuleta, 7.2 miles downstream from Navajo Dam, and at mile 136.8.

PERIOD OF RECORD.--December 1954 to current year.

AVERAGE DISCHARGE.--16 years, 1,123 cfs (813,600 acre-ft per year).

Period of record: Maximum discharge, 18,900 cfs July 27, 1957 (gage height, 11.00 ft, site and datum then in use); minimum determined, 8 cfs Feb. 28, 1963.

REVISIONS (WATER YEARS).--The annual runoff for the 1958 water year as published in table 2, WSP 1733, is 455,000 acre-ft. The correct value is 1,455,000 acre-ft.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,820	1,800	1,750	2,060	2,600	2,700	540	420	510	492	492	498
2	1,840	1,780	1,750	2,050	2,600	2,700	540	420	498	492	492	492
3	1,820	1,780	1,720	2,060	2,640	2,700	546	462	492	498	492	486
4	1,820	1,780	1,780	2,060	2,640	2,700	534	510	486	498	498	486
5	1,800	1,780	1,780	2,040	2,640	2,630	516	498	480	498	498	486
6	1,810	1,780	1,780	2,000	2,640	2,700	516	498	480	498	498	486
7	1,800	1,780	1,760	2,040	2,660	2,700	516	498	486	498	504	486
8	1,800	1,300	1,760	2,040	2,680	1,970	510	498	510	492	504	480
9	1,800	1,350	1,760	2,050	2,700	576	510	498	498	510	504	498
10	1,800	1,750	1,750	2,050	2,700	594	510	498	492	504	492	498
11	1,810	1,750	1,750	2,050	2,700	576	510	498	486	504	498	498
12	1,820	1,750	1,750	1,990	1,960	576	504	498	486	504	498	504
13	1,820	1,750	1,750	2,050	516	582	510	486	486	504	492	504
14	1,820	1,750	1,740	2,040	498	576	489	510	486	498	492	504
15	1,820	1,750	1,930	2,120	498	576	516	510	492	498	492	504
16	1,820	1,750	2,050	2,240	498	576	516	510	492	498	492	504
17	1,810	1,750	2,050	2,260	492	582	510	510	492	498	492	504
18	1,800	1,750	2,050	2,260	785	642	510	510	492	498	498	504
19	1,800	1,760	2,020	2,320	1,860	700	510	510	492	498	539	504
20	1,800	1,760	2,060	2,480	2,680	724	498	510	492	498	504	510
21	1,800	1,760	2,020	2,620	2,700	740	492	516	492	504	504	510
22	1,810	1,760	2,020	2,620	2,700	600	492	516	492	516	504	510
23	1,780	1,760	2,020	2,620	2,700	498	492	516	492	504	492	510
24	1,780	1,760	2,020	2,620	2,700	540	492	510	492	504	492	510
25	1,800	1,720	2,020	2,620	2,700	528	498	492	492	504	492	510
26	1,800	1,750	2,040	2,620	2,700	516	492	510	492	504	492	510
27	1,800	1,750	2,040	2,600	2,700	522	492	510	492	504	492	510
28	1,800	1,750	2,050	2,620	2,700	522	438	510	492	498	498	510
29	1,800	1,750	2,050	2,600	-----	528	438	510	492	498	498	516
30	1,800	1,750	2,050	2,600	-----	528	420	510	492	498	498	528
31	1,800	-----	2,060	2,600	-----	528	-----	510	-----	504	498	-----
TOTAL	56,000	51,910	59,130	71,000	60,587	34,130	15,057	15,462	14,748	15,516	15,431	15,060
MEAN	1,806	1,730	1,907	2,290	2,164	1,101	502	499	492	501	498	502
MAX	1,840	1,800	2,060	2,620	2,700	2,700	546	516	510	516	539	528
MIN	1,780	1,300	1									

CAL YR 1970	TOTAL 411,666	MEAN 1,128	MAX 2,060	MIN 370	AC-FT 816,500
WTR YR 1971	TOTAL 424,031	MEAN 1,162	MAX 2,700	MIN 420	AC-FT 841,100

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2,060	2,600	2,700	540	420	510	492	492	498	510	310	298
2	2,050	2,600	2,700	540	420	498	492	492	492	510	310	298
3	2,060	2,640	2,700	546	462	492	498	492	486	510	306	298
4	2,060	2,640	2,700	534	510	486	498	498	486	510	310	298
5	2,040	2,640	2,630	516	498	480	498	498	486	483	310	298
6	2,000	2,640	2,700	516	498	480	498	498	486	486	310	298
7	2,040	2,660	2,700	516	498	486	498	504	486	486	310	302
8	2,040	2,680	1,970	510	498	510	492	504	480	486	310	302
9	2,050	2,700	576	510	498	498	510	504	498	486	314	302
10	2,050	2,700	594	510	498	492	504	492	498	486	310	302
11	2,050	2,700	576	510	498	486	504	498	498	492	310	302
12	1,990	1,960	576	504	498	486	504	498	504	498	310	302
13	2,050	516	582	510	486	486	504	492	504	498	306	515
14	2,040	498	576	489	510	486	498	492	504	498	306	1,240
15	2,120	498	576	516	510	492	498	492	504	480	310	1,520
16	2,240	498	576	516	510	492	498	492	504	354	310	1,600
17	2,260	492	582	510	510	492	498	492	504	314	302	1,640
18	2,260	785	642	510	510	492	498	498	504	314	302	1,640
19	2,320	1,860	700	510	510	492	498	539	504	314	302	1,640
20	2,480	2,680	724	498	510	492	498	504	510	314	302	1,640
21	2,620	2,700	740	492	516	492	504	504	510	314	302	1,640
22	2,620	2,700	600	492	516	492	516	504	510	314	302	1,640
23	2,620	2,700	498	492	516	492	504	492	510	310	302	1,640
24	2,620	2,700	540	492	510	492	504	492	510	310	298	1,640
25	2,620	2,700	528	498	492	492	504	492	510	310	298	1,640
26	2,620	2,700	516	492	510	492	504	492	510	314	298	1,640
27	2,600	2,700	522	492	510	492	504	492	510	310	302	1,640
28	2,620	2,700	522	438	510	492	498	498	510	310	302	1,640
29	2,600	-----	528	438	510	492	498	498	516	310	302	1,640
30	2,600	-----	528	420	510	492	498	498	528	310	302	1,640
31	2,600	-----	528	-----	510	-----	504	498	-----	310	-----	1,640
TOTAL	71,000	60,587	34,130	15,057	15,462	14,748	15,516	15,431	15,060	12,451	9,168	33,075
MEAN	2,290	2,164	1,101	502	499	492	501	498	502	402	306	1,067
MAX	2,620	2,700	2,700	546	516	510	516	539	528	510	314	1,640
MIN	1,990	492	498	420	420	480	492	492	480	310	298	298
AC-FT	140,800	120,200	67,700	29,870	30,670	29,250	30,780	30,610	29,870	24,700	18,180	65,600
CAL YR 1971 TOTAL 311,685 MEAN 854 MAX 2,700 MIN 298 AC-FT 618,200												

09363500 Animas River near Cedar Hill, N. Mex.

LOCATION.--Lat 37°02'17", long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, Colorado, on right bank 0.8 mile downstream from Florida River, 2.5 miles upstream from Colorado-New Mexico state line, and 8.5 miles north of Cedar Hill.

DRAINAGE AREA.--1,090 sq mi, approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 5,960 ft (from topographic map). Prior to Sept. 14, 1937, at datum between 1.52 and 1.36 ft higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft higher.

AVERAGE DISCHARGE.--38 years, 886 cfs (641,900 acre-ft per year); 20 calendar years (1951-70), 832 cfs (602,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,300 cfs June 22 (gage height, 6.65 ft); minimum, 198 cfs Dec. 1.

Period of record: Maximum discharge, 13,100 cfs June 19, 1949 (gage height, 11.45 ft); minimum, 63 cfs Jan. 21, 1935.

A flood in October 1911 exceeded all other known floods at this location.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 20,000 acres above station. During water years 1944-49, Twin Rocks Canal diverted above station for irrigation below. Slight regulation by Lemon Dam about 30 miles upstream on Florida River since November 1963 (capacity, 40,100 acre-ft). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1563: 1940 and 1946 (monthly figures only).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	655	446	365	320	345	268	856	578	1,480	1,460	440	690
2	732	434	345	320	380	270	776	634	1,600	1,420	410	590
3	614	434	355	350	370	270	739	768	1,690	1,420	380	566
4	584	424	360	325	345	274	725	952	1,720	1,320	370	554
5	590	429	350	290	312	290	704	1,000	1,770	1,260	370	566
6	614	429	335	270	322	266	697	920	2,000	1,210	410	548
7	614	434	326	250	310	258	739	880	2,480	1,300	450	500
8	634	452	345	235	282	262	776	952	2,480	1,250	420	512
9	602	434	350	260	286	270	732	992	2,380	1,170	380	548
10	602	429	370	270	286	274	753	952	2,370	1,090	380	524
11	614	434	360	290	304	270	816	1,040	2,060	1,010	380	452
12	602	418	322	295	308	270	888	1,220	2,060	960	370	424
13	608	434	290	300	294	282	1,040	1,440	1,890	920	370	402
14	627	424	282	290	308	286	1,130	1,740	1,880	872	350	360
15	614	390	322	280	304	274	1,170	1,800	2,320	840	335	335
16	614	380	335	280	312	266	1,150	1,820	2,650	824	330	326
17	648	407	322	270	317	266	1,150	1,960	2,670	768	380	340
18	578	412	320	290	322	274	1,150	1,830	2,780	739	385	326
19	566	402	305	320	312	262	1,060	1,500	2,730	718	402	345
20	554	402	340	330	317	262	952	1,280	2,780	856	524	304
21	572	390	320	340	308	282	864	1,220	2,740	848	620	288
22	590	380	320	360	270	304	792	1,260	2,910	760	641	282
23	608	390	340	340	282	335	746	1,220	2,800	720	548	270
24	572	390	340	305	278	385	704	1,130	2,680	700	476	278
25	542	380	290	290	286	424	690	1,190	2,660	680	506	266
26	536	407	280	285	270	440	683	1,330	2,540	630	614	250
27	506	412	310	300	267	542	669	1,690	2,380	600	753	235
28	470	390	345	315	266	704	634	2,300	2,110	570	1,020	231
29	458	380	340	326	-----	760	608	2,370	1,890	540	832	258
30	452	375	320	312	-----	800	578	2,060	1,700	500	753	566
31	452	-----	320	335	-----	888	-----	1,660	-----	470	725	-----
TOTAL	18,024	12,342	10,224	9,343	8,563	11,278	24,971	41,688	68,200	28,425	15,324	12,136
MEAN	581	411	330	301	306	364	832	1,345	2,273	917	494	405
MAX	732	452	370	360	380	888	1,170	2,370	2,910	1,460	1,020	690
MIN	452	375	280	235	266	258	578	578	1,480	470	330	231
AC-FT	35,750	24,480	20,280	18,530	16,980	22,370	49,530	82,690	135,300	56,380	30,400	24,070
CAL YR 1970	TOTAL 328,739	MEAN 901	MAX 8,220	MIN 190	AC-FT 652,100							
WTR YR 1971	TOTAL 260,518	MEAN 714	MAX 2,910	MIN 231	AC-FT 516,700							

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

09363500 Animas River near Cedar Hill, N. Mex.

LOCATION.--Lat 37°02'17", long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, Colorado, on right bank 0.8 mile downstream from Florida River, 2.5 miles upstream from Colorado-New Mexico state line, and 8.5 miles north of Cedar Hill.

DRAINAGE AREA.--1,090 sq mi, approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 5,960 ft (from topographic map). Prior to Sept. 14, 1937, at datum between 1.52 and 1.36 ft higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft higher.

AVERAGE DISCHARGE.--38 calendar years, 887 cfs (642,600 acre-ft per year); 20 calendar years (1952-71), 842 cfs (610,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,300 cfs June 22 (gage height, 6.65 ft); minimum, 208 cfs Feb. 27.

Period of record: Maximum discharge, 13,100 cfs June 19, 1949 (gage height, 11.45 ft); minimum, 63 cfs Jan. 21, 1935.

A flood in October 1911 exceeded all other known floods at this location.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 20,000 acres above station. During water years 1944-49, Twin Rocks Canal diverted above station for irrigation below. Slight regulation by Lemon Dam about 30 miles upstream on Florida River since November 1963 (capacity, 40,100 acre-ft). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1563: 1940 and 1946 (monthly figures only).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	320	345	268	856	578	1,480	1,460	440	690	572	500	360
2	320	380	270	776	634	1,600	1,420	410	590	554	500	340
3	350	370	270	739	768	1,690	1,420	380	566	470	470	300
4	325	345	274	725	952	1,720	1,320	370	554	429	470	290
5	290	312	290	704	1,000	1,770	1,260	370	566	407	476	300
6	270	322	266	697	920	2,000	1,210	410	548	380	464	290
7	250	310	258	739	880	2,480	1,300	450	500	390	446	300
8	235	282	262	776	952	2,480	1,250	420	512	385	418	310
9	260	286	270	732	992	2,380	1,170	380	548	375	424	320
10	270	286	274	753	952	2,370	1,090	380	524	375	407	300
11	290	304	270	816	1,040	2,060	1,010	380	452	360	402	290
12	295	308	270	888	1,220	2,060	960	370	424	350	402	310
13	300	294	282	1,040	1,440	1,890	920	370	402	345	402	320
14	290	308	286	1,130	1,740	1,880	872	350	360	340	385	310
15	280	304	274	1,170	1,800	2,320	840	335	335	335	412	250
16	280	312	266	1,150	1,820	2,650	824	330	326	340	524	290
17	270	317	266	1,150	1,960	2,670	768	380	340	530	429	320
18	290	322	274	1,150	1,830	2,780	739	385	326	578	407	290
19	320	312	262	1,060	1,500	2,730	718	402	345	470	385	280
20	330	317	262	952	1,280	2,780	856	524	304	440	355	310
21	340	308	282	864	1,220	2,740	848	620	288	452	370	270
22	360	270	304	792	1,260	2,910	760	641	282	470	375	280
23	340	282	335	746	1,220	2,800	720	548	270	446	390	280
24	305	278	385	704	1,130	2,680	700	476	278	452	380	320
25	290	286	424	690	1,190	2,660	680	506	266	572	390	322
26	285	270	440	683	1,330	2,540	630	614	250	627	370	446
27	300	267	542	669	1,690	2,380	600	753	235	590	385	572
28	315	266	704	634	2,300	2,110	570	1,020	231	548	375	396
29	326	-----	760	608	2,370	1,890	540	832	258	566	355	340
30	312	-----	800	578	2,060	1,700	500	753	566	524	360	312
31	335	-----	888	-----	1,660	-----	470	725	-----	482	-----	294
TOTAL	9,343	8,563	11,278	24,971	41,688	68,200	28,425	15,324	12,136	14,154	12,428	9,912
MEAN	301	306	364	832	1,345	2,273	917	494	405	457	414	320
MAX	360	380	888	1,170	2,370	2,910	1,460	1,020	690	627	524	572
MIN	235	266	258	578	578	1,480	470	330	231	335	355	250
AC-FT	18,530	16,980	22,370	49,530	82,690	135,300	56,380	30,400	24,070	28,070	24,650	19,660

CAL YR 1971 TOTAL 256,422 MEAN 703 MAX 2,910 MIN 231 AC-FT 508,600

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

09364500 Animas River at Farmington, N. Mex.

LOCATION.--Lat 36°43'12", long 108°12'08", in SE¼ sec.16, T.29 N., R.13 W., San Juan County, on left bank at bridge on former State Highway 17, 0.6 mile downstream from bridge on State Highway 17, and 1.3 miles upstream from mouth.

DRAINAGE AREA.--1,360 sq mi, approximately.

PERIOD OF RECORD.--June 1904 to October 1905 (published as "near Farmington"). September 1912 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 5,278 ft (from bridge-profile plans). Prior to Nov. 1, 1905, non-recording gage at old bridge 0.3 mile upstream at different datum. Sept. 17, 1912, to Oct. 4, 1938, water-stage recorder at site 0.6 mile downstream at lower datums (datum lowered 2.0 ft Aug. 15, 1927, and raised 0.2 ft Dec. 16, 1929).

AVERAGE DISCHARGE.--60 years, 922 cfs (668,000 acre-ft per year). 20 calendar years (1951-70), 745 cfs (539,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,360 cfs June 22 (gage height, 5.35 ft); minimum, 50 cfs Sept. 28.

Period of record: Maximum discharge, about 25,000 cfs June 29, 1927 (gage height, 8.5 ft, site and datum then in use), from rating curve extended about 10,000 cfs; minimum, 1.4 cfs Sept. 4, 1956.

Maximum flood known occurred Oct. 6, 1911, when a stage of about 16.5 ft was reached (present site and datum). Flood of Sept. 6, 1909, reached a stage of 11.1 ft, 1904-5 site and datum (discharge, about 19,000 cfs).

REMARKS.--Records fair. Diversions for irrigation of about 30,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1243: 1931. WSP 1313: 1913.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	456	408	356	416	288	810	300	1,310	1,430	760	560
2	584	440	408	360	416	288	696	294	1,440	1,260	530	488
3	528	448	386	390	416	276	640	365	1,550	1,310	351	432
4	520	424	408	360	393	294	592	688	1,710	1,250	282	386
5	456	448	393	330	365	312	528	963	1,710	1,140	270	386
6	520	464	386	320	351	306	472	882	1,820	1,080	255	424
7	528	448	365	305	344	288	496	837	2,220	1,130	420	393
8	536	488	372	300	330	288	608	900	2,440	1,180	370	600
9	504	464	379	315	330	294	568	940	2,350	1,060	320	432
10	480	448	393	335	337	300	512	920	2,270	945	265	432
11	512	464	400	350	337	300	632	1,000	2,090	864	270	416
12	496	464	365	360	344	294	704	1,140	1,970	774	250	365
13	496	448	330	365	358	300	1,040	1,400	1,880	729	230	312
14	488	456	318	375	358	312	1,040	1,640	1,740	688	240	260
15	552	440	344	351	358	306	1,040	1,800	2,030	632	280	205
16	544	416	358	330	365	294	1,090	1,800	2,440	616	255	230
17	616	408	373	324	358	288	1,020	1,740	2,610	544	240	156
18	592	448	408	318	365	300	1,110	1,790	2,580	488	250	130
19	576	440	393	337	358	300	1,060	1,570	2,650	480	290	138
20	568	424	372	344	358	294	954	1,310	2,730	558	530	152
21	568	408	400	358	365	288	855	1,200	2,750	800	520	138
22	616	416	408	386	324	324	720	1,180	2,980	780	600	143
23	680	408	408	365	312	340	624	1,220	2,980	860	830	125
24	640	424	386	324	312	350	576	1,100	2,770	840	380	125
25	616	424	358	294	344	360	536	972	2,770	780	490	125
26	616	456	324	294	330	379	472	1,180	2,650	700	440	105
27	616	480	379	337	312	386	496	1,370	2,410	620	624	82
28	560	424	393	337	300	616	416	1,820	2,140	540	670	71
29	520	408	372	337	-----	720	400	2,020	1,900	500	600	113
30	520	408	350	330	-----	712	324	1,790	1,670	460	608	471
31	488	-----	330	393	-----	783	-----	1,490	-----	680	624	-----
TOTAL	17,136	13,192	11,667	10,580	9,856	11,180	21,031	37,621	66,560	25,718	13,044	8,395
MEAN	553	440	376	341	352	361	701	1,214	2,219	830	421	280
MAX	680	488	408	393	416	783	1,110	2,020	2,980	1,430	830	600
MIN	456	408	318	294	300	276	324	294	1,310	460	230	71
AC-FT	33,990	26,170	23,140	20,990	19,550	22,180	41,710	74,620	132,000	51,010	25,870	16,650

CAL YR 1970 TOTAL 292,591 MEAN 802 MAX 7,690 MIN 156 AC-FT 580,400
WTR YR 1971 TOTAL 245,980 MEAN 674 MAX 2,980 MIN 71 AC-FT 487,900

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

09364500 Animas River at Farmington, N. Mex.

LOCATION.--Lat 36°43'12", long 108°12'08", in SE¼ sec.16, T.29 N., R.13 W., San Juan County, on left bank at bridge on former State Highway 17, 0.6 mile downstream from bridge on State Highway 17, and 1.3 miles upstream from mouth.

DRAINAGE AREA.--1,360 sq mi, approximately.

PERIOD OF RECORD.--June 1904 to October 1905 (published as "near Farmington"). September 1912 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 5,278 ft (from bridge-profile plans). Prior to Nov. 1, 1905, non-recording gage at old bridge 0.3 mile upstream at different datum. Sept. 17, 1912, to Oct. 4, 1938, water-stage recorder at site 0.6 mile downstream at lower datums (datum lowered 2.0 ft Aug. 15, 1927, and raised 0.2 ft Dec. 16, 1929).

AVERAGE DISCHARGE.--59 calendar years, 912 cfs (660,700 acre-ft per year). 20 calendar years (1952-71), 757 cfs (548,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,360 cfs June 22 (gage height, 5.35 ft); minimum, 50 cfs Sept. 28.

Period of record: Maximum discharge, about 25,000 cfs June 29, 1927 (gage height, 8.5 ft, site and datum then in use), from rating curve extended about 10,000 cfs; minimum, 1.4 cfs Sept. 4, 1956.

Maximum flood known occurred Oct. 6, 1911, when a stage of about 16.5 ft was reached (present site and datum). Flood of Sept. 6, 1909, reached a stage of 11.1 ft, 1904-5 site and datum (discharge, about 19,000 cfs).

REMARKS.--Records fair. Diversions for irrigation of about 30,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1243: 1931. WSP 1313: 1913.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	356	416	288	810	300	1,310	1,430	760	560	520	440	360
2	360	416	288	696	294	1,440	1,260	530	488	512	472	350
3	390	416	276	640	365	1,550	1,310	351	432	464	432	340
4	360	393	294	592	688	1,710	1,250	282	386	400	424	330
5	330	365	312	528	963	1,710	1,140	270	386	393	424	320
6	320	351	306	472	882	1,820	1,080	255	424	365	424	300
7	305	344	288	496	837	2,220	1,130	420	393	351	416	320
8	300	330	288	608	900	2,440	1,180	370	600	358	408	340
9	315	330	294	568	940	2,350	1,060	320	432	358	393	350
10	335	337	300	512	920	2,270	945	265	432	351	393	340
11	350	337	300	632	1,000	2,090	864	270	416	330	379	320
12	360	344	294	704	1,140	1,970	774	250	365	300	372	290
13	365	358	300	1,040	1,400	1,880	729	230	312	306	386	270
14	375	358	312	1,040	1,640	1,740	688	240	260	300	372	250
15	351	358	306	1,040	1,800	2,030	632	280	205	288	386	290
16	330	365	294	1,090	1,800	2,440	616	255	230	288	496	320
17	324	358	288	1,020	1,740	2,610	544	240	156	379	456	290
18	318	365	300	1,110	1,790	2,580	488	250	130	616	416	300
19	337	358	300	1,060	1,570	2,650	480	290	138	496	408	320
20	344	358	294	954	1,310	2,730	558	530	152	440	386	260
21	358	365	288	855	1,200	2,750	800	520	138	432	386	250
22	386	324	324	720	1,180	2,980	780	600	143	440	393	300
23	365	312	340	624	1,220	2,980	860	830	125	432	393	390
24	324	312	350	576	1,100	2,770	840	380	125	408	386	410
25	294	344	360	536	972	2,770	780	490	125	496	386	432
26	294	330	379	472	1,180	2,650	700	440	105	592	379	560
27	337	312	386	496	1,370	2,410	620	624	82	584	372	715
28	337	300	616	416	1,820	2,140	540	670	71	520	379	624
29	337	-----	720	400	2,020	1,900	500	600	113	496	372	472
30	330	-----	712	324	1,790	1,670	460	608	471	520	365	416
31	393	-----	783	-----	1,490	-----	680	624	-----	432	-----	372
TOTAL	10,580	9,856	11,180	21,031	37,621	66,560	25,718	13,044	8,395	13,167	12,094	11,201
MEAN	341	352	361	701	1,214	2,219	830	421	280	425	403	361
MAX	393	416	783	1,110	2,020	2,980	1,430	830	600	616	496	715
MIN	294	300	276	324	294	1,310	460	230	71	288	365	250
AC-FT	20,990	19,550	22,180	41,710	74,620	132,000	51,010	25,870	16,650	26,120	23,990	22,220

CAL YR 1971 TOTAL 240,447 MEAN 659 MAX 2,980 MIN 71 AC-FT 476,900

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

SAN JUAN RIVER BASIN

09365000 San Juan River at Farmington, N. Mex.

LOCATION.--Lat 36°43'22", long 108°13'30", in SE¼ sec.17, T.29 N., R.13 W., San Juan County, on left bank 360 ft downstream from highway bridge, 4,000 ft downstream from Animas River, 1 mile west of Farmington, and at mile 97.4.

DRAINAGE AREA.--7,240 sq mi, approximately.

PERIOD OF RECORD.--June to December 1904, January 1905 to September 1906 (gage heights and discharge measurements only) September 1912 to current year. Monthly discharge only for some periods, published in WSP 1313. Discharge records for January to December 1905, published in WSP 175 are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 5,230.37 ft above mean sea level. See WSP 1313 or 1733 for history of changes prior to Nov. 19, 1933.

AVERAGE DISCHARGE.--59 years (1912-71), 2,425 cfs (1,757,000 acre-ft per year), unadjusted; 20 calendar years (1951-70), 1,809 cfs (1,311,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,780 cfs Aug. 27 (gage height, 5.39 ft); minimum, 268 cfs Aug. 17. Period of record: Maximum discharge, about 68,000 cfs June 29, 1927 (gage height, 10.2 ft, site and datum then in use), from rating curve extended above 37,000 cfs; minimum, 14 cfs Aug. 22, 1939. Maximum flood known occurred Oct. 6, 1911. Flood of Sept. 6, 1909, reached a stage of about 12.3 ft, site and datum in use May to September 1906.

REMARKS.--Records good. Since June 1962 flow is partly controlled by operation of Navajo Reservoir 50 miles upstream. (See station 09355100.) Diversions above station for irrigation of about 86,000 acres, 4,000 of which is irrigated by Farmers Mutual ditch which diverts from Animas River and bypasses this station; ditch flow not included in record. At times this ditch may be supplied partly or entirely by diversion from San Juan River below this station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1119: Drainage area. WSP 1243: 1938. WSP 1313: 1905, 1914. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,180	2,110	2,180	2,550	2,970	3,000	1,350	520	1,690	1,640	967	1,020
2	2,140	2,030	2,190	2,540	2,990	3,040	1,240	533	1,770	1,450	710	926
3	2,130	2,030	2,130	2,570	3,000	3,050	1,160	613	1,910	1,520	630	852
4	2,110	2,020	2,230	2,500	2,960	3,070	1,100	912	2,030	1,440	530	779
5	2,210	2,070	2,190	2,350	2,930	3,050	1,030	1,230	2,030	1,340	510	774
6	2,150	2,070	2,260	2,330	2,950	3,080	981	1,160	2,150	1,280	480	771
7	2,190	2,040	2,240	2,280	2,920	3,090	945	1,150	2,540	1,400	740	678
8	2,120	2,010	2,190	2,270	2,890	3,100	998	1,170	2,800	1,450	670	1,360
9	2,110	1,340	2,190	2,270	2,940	1,180	953	1,260	2,680	1,320	580	821
10	2,170	2,040	2,320	2,310	2,950	865	871	1,180	2,620	1,220	490	800
11	2,190	2,170	2,290	2,360	2,950	843	939	1,160	2,440	1,120	470	803
12	2,170	2,200	2,290	2,350	2,970	856	973	1,380	2,190	1,040	430	797
13	2,210	2,150	2,230	2,310	1,160	875	1,170	1,580	2,220	972	400	764
14	2,230	2,110	2,210	2,320	907	972	1,300	1,950	1,970	917	400	683
15	2,300	2,080	2,290	2,320	894	996	1,380	2,120	2,280	860	500	635
16	2,290	2,090	2,430	2,460	914	980	1,490	2,080	2,710	843	400	592
17	2,340	2,080	2,510	2,450	937	955	1,370	2,170	2,810	786	390	540
18	2,270	2,110	2,640	2,450	990	985	1,440	2,270	2,840	759	440	523
19	2,260	2,150	2,560	2,480	1,610	1,060	1,410	2,000	2,860	765	500	538
20	2,180	2,140	2,580	2,680	2,220	1,130	1,320	1,580	2,810	800	1,510	540
21	2,250	2,100	2,570	2,800	3,050	1,130	1,170	1,370	2,840	1,110	1,440	541
22	2,340	2,160	2,590	2,840	3,060	1,180	1,060	1,390	2,930	960	1,370	537
23	2,370	2,150	2,540	2,810	3,010	857	981	1,500	2,940	1,080	2,080	516
24	2,390	2,190	2,540	2,780	3,010	961	954	1,330	2,780	1,130	1,030	509
25	2,430	2,180	2,510	2,780	3,020	1,020	899	1,210	2,780	1,050	1,410	499
26	2,400	2,190	2,500	2,820	3,030	995	867	1,380	2,690	924	1,280	486
27	2,320	2,210	2,530	2,850	3,010	969	891	1,610	2,530	860	1,940	468
28	2,230	2,190	2,550	2,860	3,000	1,080	828	2,260	2,300	740	1,770	487
29	2,310	2,160	2,540	2,870	-----	1,240	731	2,660	2,030	670	1,760	620
30	2,210	2,190	2,550	2,920	-----	1,230	630	2,500	1,860	610	1,300	1,820
31	2,190	-----	2,540	2,940	-----	1,290	-----	2,050	-----	923	1,150	-----
TOTAL	69,390	62,760	74,110	79,420	69,242	48,129	32,431	47,278	73,030	32,979	28,277	21,679
MEAN	2,238	2,092	2,391	2,562	2,473	1,553	1,081	1,525	2,434	1,064	912	723
MAX	2,430	2,210	2,640	2,940	3,060	3,100	1,490	2,660	2,940	1,640	2,080	1,820
MIN	2,110	1,340	2,130	2,270	894	843	630	520	1,690	610	390	468
AC-FT	137,600	124,500	147,000	157,500	137,300	95,460	64,330	93,780	144,900	65,410	56,090	43,000

CAL YR 1970 TOTAL 709,169 MEAN 1,943 MAX 9,140 MIN 396 AC-FT 1,407,000
WTR YR 1971 TOTAL 638,725 MEAN 1,750 MAX 3,100 MIN 390 AC-FT 1,267,000

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-22	2245	4.56	5,730	8-27	0015	5.39	7,780

09365000 San Juan River at Farmington, N. Mex.

LOCATION.--Lat 36°43'22", long 108°13'30", in SE¼ sec.17, T.29 N., R.13 W., San Juan County, on left bank 360 ft downstream from highway bridge, 4,000 ft downstream from Animas River, 1 mile west of Farmington, and at mile 97.4.

DRAINAGE AREA.--7,240 sq mi, approximately.

PERIOD OF RECORD.--June to December 1904, January 1905 to September 1906 (gage heights and discharge measurements only) September 1912 to current year. Monthly discharge only for some periods, published in WSP 1313. Discharge records for January to December 1905, published in WSP 175 are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 5,230.37 ft above mean sea level. See WSP 1313 or 1733 for history of changes prior to Nov. 19, 1933.

AVERAGE DISCHARGE.--59 calendar years (1913-71), 2,426 cfs (1,758,000 acre-ft per year), unadjusted; 20 calendar years (1952-71), 1,834 cfs (1,329,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,780 cfs Aug. 27 (gage height, 5.39 ft); minimum, 268 cfs Aug. 17.

Period of record: Maximum discharge, about 68,000 cfs June 29, 1927 (gage height, 10.2 ft, site and datum then in use), from rating curve extended above 37,000 cfs; minimum, 14 cfs Aug. 22, 1939.

Maximum flood known occurred Oct. 6, 1911. Flood of Sept. 6, 1909, reached a stage of about 12.3 ft, site and datum in use May to September 1906.

REMARKS.--Records good. Since June 1962 flow is partly controlled by operation of Navajo Reservoir 50 miles upstream. (See station 09355100.) Diversions above station for irrigation of about 86,000 acres, 4,000 of which is irrigated by Farmers Mutual ditch which diverts from Animas River and bypasses this station; ditch flow not included in record. At times this ditch may be supplied partly or entirely by diversion from San Juan River below this station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1119: Drainage area. WSP 1243: 1938. WSP 1313: 1905, 1914. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2,550	2,970	3,000	1,350	520	1,690	1,640	967	1,020	2,220	820	635
2	2,540	2,990	3,040	1,240	533	1,770	1,450	710	926	1,440	815	627
3	2,570	3,000	3,050	1,160	613	1,910	1,520	630	852	1,090	770	628
4	2,500	2,960	3,070	1,100	912	2,030	1,440	530	779	959	748	627
5	2,350	2,930	3,050	1,030	1,230	2,030	1,340	510	774	952	764	583
6	2,330	2,950	3,080	981	1,160	2,150	1,280	480	771	876	748	538
7	2,280	2,920	3,090	945	1,150	2,540	1,400	740	678	879	724	581
8	2,270	2,890	3,100	998	1,170	2,800	1,450	670	1,360	888	717	643
9	2,270	2,940	1,180	953	1,260	2,680	1,320	580	821	855	680	618
10	2,310	2,950	865	871	1,180	2,620	1,220	490	800	853	682	560
11	2,360	2,950	843	939	1,160	2,440	1,120	470	803	806	660	555
12	2,350	2,970	856	973	1,380	2,190	1,040	430	797	804	660	597
13	2,310	1,160	875	1,170	1,580	2,220	972	400	764	811	656	692
14	2,320	907	972	1,300	1,950	1,970	917	400	683	797	627	1,340
15	2,320	894	996	1,380	2,120	2,280	860	500	635	795	676	1,790
16	2,460	914	980	1,490	2,080	2,710	843	400	592	729	850	1,940
17	2,450	937	955	1,370	2,170	2,810	786	390	540	714	726	1,880
18	2,450	990	985	1,440	2,270	2,840	759	440	523	1,010	661	1,900
19	2,480	1,610	1,060	1,410	2,000	2,860	765	500	538	849	653	1,950
20	2,680	2,220	1,130	1,320	1,580	2,810	800	1,510	540	761	623	1,820
21	2,800	3,050	1,130	1,170	1,370	2,840	1,110	1,440	541	752	634	1,810
22	2,840	3,060	1,180	1,060	1,390	2,930	960	1,370	537	756	659	1,830
23	2,810	3,010	857	981	1,500	2,940	1,080	2,080	516	767	647	1,990
24	2,780	3,010	961	954	1,330	2,780	1,130	1,030	509	745	634	2,060
25	2,780	3,020	1,020	899	1,210	2,780	1,050	1,410	499	870	645	2,050
26	2,820	3,030	995	867	1,380	2,690	924	1,280	486	1,040	636	2,150
27	2,850	3,010	969	891	1,610	2,530	860	1,940	468	1,000	626	2,340
28	2,860	3,000	1,080	828	2,260	2,300	740	1,770	487	923	643	2,350
29	2,870	-----	1,240	731	2,660	2,030	670	1,760	620	956	643	2,230
30	2,920	-----	1,230	630	2,500	1,860	610	1,300	1,820	941	643	2,200
31	2,940	-----	1,290	-----	2,050	-----	923	1,150	-----	833	-----	2,040
TOTAL	79,420	69,242	48,129	32,431	47,278	73,030	32,979	28,277	21,679	28,671	20,670	43,554
MEAN	2,562	2,473	1,553	1,081	1,525	2,434	1,064	912	723	925	689	1,405
MAX	2,940	3,060	3,100	1,490	2,660	2,940	1,640	2,080	1,820	2,220	850	2,350
MIN	2,270	894	843	630	520	1,690	610	390	468	714	623	538
AC-FT	157,500	137,300	95,460	64,330	93,780	144,900	65,410	56,090	43,000	56,870	41,000	86,390

CAL YR 1971 TOTAL 525,360 MEAN 1,439 MAX 3,100 MIN 390 AC-FT 1,042,000

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-22	2245	4.56	5,730	8-27	0015	5.39	7,780

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'59", long 108°11'17", in NW¼SE¼ sec.10, T.32 N., R.13 W., La Plata County, Colorado, on right bank at Colorado-New Mexico State line, 0.2 mile downstream from Ponds Arroyo, and 4.8 miles north of La Plata, N. Mex.

DRAINAGE AREA.--331 sq mi.

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 5,975.15 ft above mean sea level. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

AVERAGE DISCHARGE.--51 years, 32.9 cfs (23,840 acre-ft per year), 20 calendar years (1951-70), 27.0 cfs (19,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 840 cfs Aug. 18 (gage height, 4.45 ft, from floodmarks); minimum daily, 1.4 cfs Aug. 3.

Period of record: Maximum discharge, 4,750 cfs Aug. 24, 1927 (gage height, 11.36 ft, present datum), from rating curve extended above 750 cfs on basis of slope-area measurement of peak flow; no flow at times in many years.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 15,000 acres, mostly above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1313: 1934(M), 1936(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	11	9.2	16	19	25	42	6.8	35	20	2.0	11
2	9.8	10	8.6	17	22	28	42	7.2	38	23	1.5	9.8
3	8.0	10	7.6	15	20	30	37	28	39	24	1.4	8.6
4	9.2	9.2	8.0	10	16	30	28	46	41	20	2.0	8.0
5	9.8	8.0	8.6	8.0	20	30	31	46	34	15	2.5	8.6
6	8.6	7.6	8.6	6.0	15	27	34	55	47	15	2.5	8.0
7	8.6	8.6	7.6	5.5	13	25	40	51	71	25	3.2	14
8	9.8	12	7.2	7.0	20	21	37	45	71	23	2.5	9.0
9	9.2	11	8.6	8.0	27	18	27	69	69	13	1.8	6.4
10	9.8	9.8	10	9.5	25	15	29	34	64	9.2	2.8	5.6
11	10	9.2	8.6	11	26	12	34	24	52	7.6	2.8	4.8
12	9.8	9.2	9.0	12	22	13	30	26	55	7.2	2.8	4.4
13	10	9.8	9.5	12	24	15	38	35	55	7.2	2.2	4.0
14	10	9.8	9.5	10	23	18	45	39	52	4.8	2.2	3.5
15	10	9.2	9.2	9.5	23	13	44	38	58	4.4	2.0	3.0
16	11	8.6	9.0	11	23	11	40	53	56	5.6	2.2	3.0
17	16	8.0	9.5	15	23	10	31	59	60	5.6	9.6	2.8
18	13	8.0	9.8	17	22	10	39	48	67	5.2	117	3.5
19	12	8.6	9.0	20	20	11	43	44	58	4.8	21	4.0
20	10	8.6	10	25	22	12	34	35	45	5.2	15	4.8
21	12	8.6	9.8	30	19	10	29	41	47	4.8	63	4.8
22	15	8.0	11	22	15	9.8	24	48	46	3.0	27	4.4
23	20	8.0	9.5	21	17	10	23	48	43	3.0	26	4.8
24	16	8.0	10	20	20	9.8	18	41	43	8.6	54	4.8
25	17	8.0	11	19	24	9.8	14	26	40	5.2	28	4.4
26	17	9.8	13	18	24	9.2	13	24	43	2.8	16	4.4
27	16	12	16	18	22	10	13	48	41	2.8	56	4.4
28	15	10	16	18	26	21	12	69	35	2.0	12	4.4
29	14	9.2	15	17	-----	43	12	71	28	1.5	13	7.9
30	13	9.8	16	18	-----	44	9.8	64	23	2.0	59	16
31	13	-----	16	18	-----	53	-----	44	-----	2.0	31	-----
TOTAL	374.6	277.6	320.4	463.5	592	603.6	892.8	1,313.0	1,456	282.5	584.0	187.1
MEAN	12.1	9.25	10.3	15.0	21.1	19.5	29.8	42.4	48.5	9.11	18.8	6.24
MAX	20	12	16	30	27	53	45	71	71	25	117	16
MIN	8.0	7.6	7.2	5.5	13	9.2	9.8	6.8	23	1.5	1.4	2.8
AC-FT	743	551	636	919	1,170	1,200	1,770	2,600	2,890	560	1,160	371

CAL YR 1970 TOTAL 7,754.1 MEAN 21.2 MAX 512 MIN 1.4 AC-FT 15,380
WTR YR 1971 TOTAL 7,347.1 MEAN 20.1 MAX 117 MIN 1.4 AC-FT 14,570

LOCATION.--Lat 36°44'23", long 108°14'51", in SW¼ sec.7, T.29 N., R.13 W., San Juan County, on right bank 1,300 ft upstream from bridge on U. S. Highway 550, 1,800 ft upstream from mouth, and 2.5 miles northwest of Farmington.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,215 ft (from river-profile map).

AVERAGE DISCHARGE.--33 years, 23.2 cfs (16,810 acre-ft per year); 20 calendar years (1951-70), 17.0 cfs (12,320 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 688 cfs Aug. 27 (gage height, 4.30 ft), from rating curve extended above 450 cfs on basis of slope-area measurement at gage height 5.93 ft; no flow at times.
Period of record: Maximum gage height, 6.03 ft Sept. 10, 1939 (discharge not determined); no flow for long period in some years.
Major floods occurred Sept. 5 or 6, 1909, and Oct. 5 or 6, 1911.

REMARKS.--Records fair except those for December to February, which are poor. Diversions for irrigation of about 24,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1243: 1944-45. WSP 1313: 1943-44 (M), 1946-50 (M). WSP 1733: 1951 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	11	7.5	10	23	23	.90	1.8	.90	.10	.10	20
2	6.6	11	7.5	10	25	30	1.2	1.6	.80	.10	.10	4.5
3	7.2	11	7.5	9.0	25	30	1.4	1.8	.50	.10	.10	3.1
4	7.2	11	6.0	8.0	22	44	1.4	1.3	.50	.10	.10	2.0
5	6.9	10	6.6	7.0	23	41	1.4	1.0	.50	.10	.10	1.8
6	5.4	10	6.9	7.0	23	26	1.8	1.0	.30	.40	.10	2.0
7	3.5	11	7.5	8.0	20	26	1.8	1.3	.30	.40	.10	6.4
8	2.4	10	7.5	8.5	18	26	1.9	1.3	.30	.20	.10	48
9	1.6	9.9	6.9	9.0	24	21	1.9	1.2	.30	.20	.10	2.3
10	1.4	8.7	12	9.0	28	18	1.9	1.0	.20	.20	.10	1.4
11	.70	8.7	12	9.5	33	18	1.8	1.0	.10	.10	.10	1.2
12	.40	8.7	11	9.5	28	18	1.6	1.0	.10	.10	.20	1.2
13	.50	7.9	11	9.5	19	15	1.4	1.0	.30	.10	.10	.70
14	.50	7.5	12	9.5	19	11	1.6	.90	.80	.10	.10	.40
15	.60	6.0	15	9.5	19	11	1.6	1.2	.80	.10	.10	.20
16	.90	6.9	13	11	19	9.5	2.0	1.2	1.0	.10	.10	0
17	.80	7.5	13	15	19	7.9	2.4	1.0	.90	.10	.10	0
18	1.0	7.5	15	20	16	7.2	2.5	1.2	.50	.92	.10	0
19	.90	7.2	13	24	15	7.2	2.5	1.8	.30	.10	28	0
20	.80	4.8	16	28	15	6.3	2.9	1.8	.20	.10	70	0
21	.90	5.1	16	33	18	5.1	2.5	2.0	.10	.10	171	0
22	2.4	5.1	15	38	15	4.5	2.4	2.2	.10	.10	94	0
23	7.2	4.5	14	38	17	3.7	2.4	1.9	.10	.10	105	.10
24	6.6	4.8	11	31	23	1.8	2.2	1.6	.10	.10	120	0
25	5.4	5.1	11	27	38	1.3	2.0	1.3	.10	.10	140	0
26	4.8	6.6	12	27	30	1.6	2.4	1.3	.10	.10	80	0
27	5.1	7.5	16	27	24	1.6	2.7	1.2	.10	.10	191	0
28	5.7	7.5	13	24	26	1.4	2.2	1.3	.10	.10	18	0
29	7.5	8.7	12	22	-----	1.4	2.2	1.3	.10	.10	15	0
30	10	8.7	11	21	-----	1.3	2.5	1.3	.10	.10	10	0
31	10	-----	10	22	-----	1.3	-----	1.2	-----	.10	126	-----
TOTAL	121.20	239.9	347.9	541.0	624	421.1	59.40	42.00	10.60	4.82	1,169.90	95.00
MEAN	3.91	8.00	11.2	17.5	22.3	13.6	1.98	1.35	.35	.16	37.7	3.17
MAX	10	11	16	38	38	44	2.9	2.2	1.0	.92	191	48
MIN	.40	4.5	6.0	7.0	15	1.3	.90	.90	.10	.10	.10	0
AC-FT	240	476	690	1,070	1,240	835	118	83	21	9.6	2,320	188
CAL YR 1970	TOTAL	4,507.70	MEAN	12.3	MAX	917	MIN	.10	AC-FT	8,940		
WTR YR 1971	TOTAL	3,676.82	MEAN	10.1	MAX	191	MIN	0	AC-FT	7,290		

09367500 La Plata River near Farmington, N. Mex.

LOCATION.--Lat 36°44'23", long 108°14'51", in SW¼ sec.7, T.29 N., R.13 W., San Juan County, on right bank 1,300 ft upstream from bridge on U. S. Highway 550, 1,800 ft upstream from mouth, and 2.5 miles northwest of Farmington.

DRAINAGE AREA.--583 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,215 ft (from river-profile map).

AVERAGE DISCHARGE.--33 calendar years, 23.2 cfs (16,810 acre-ft per year); 20 calendar years (1952-71), 17.4 cfs (12,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 688 cfs Aug. 27 (gage height, 4.30 ft), from rating curve extended above 450 cfs on basis of slope-area measurement at gage height 5.93 ft; no flow at times.

Period of record: Maximum gage height, 6.03 ft Sept. 10, 1939 (discharge not determined); no flow for long period in some years. Major floods occurred Sept. 5 or 6, 1909, and Oct. 5 or 6, 1911.

REMARKS.--Records fair except those for December to February, which are poor. Diversions for irrigation of about 24,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1243: 1944-45. WSP 1313: 1943-44(M), 1946-50(M). WSP 1733: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	10	23	23	.90	1.8	.90	.10	.10	20	13	5.4	4.3
2	10	25	30	1.2	1.6	.80	.10	.10	4.5	44	4.5	3.7
3	9.0	25	30	1.4	1.8	.50	.10	.10	3.1	12	3.3	4.5
4	8.0	22	44	1.4	1.3	.50	.10	.10	2.0	5.1	2.7	4.8
5	7.0	23	41	1.4	1.0	.50	.10	.10	1.8	2.5	2.5	4.8
6	7.0	23	26	1.8	1.0	.30	.40	.10	2.0	1.4	2.2	5.1
7	8.0	20	26	1.8	1.3	.30	.40	.10	6.4	1.4	2.2	6.0
8	8.5	18	26	1.9	1.3	.30	.20	.10	48	1.2	2.4	7.2
9	9.0	24	21	1.9	1.2	.30	.20	.10	2.0	.70	1.9	6.3
10	9.0	28	18	1.9	1.0	.20	.20	.10	1.4	.80	1.8	7.2
11	9.5	33	18	1.8	1.0	.10	.10	.10	1.2	.80	1.4	6.6
12	9.5	28	18	1.6	1.0	.10	.10	.20	1.2	.80	1.4	5.4
13	9.5	19	15	1.4	1.0	.30	.10	.10	.70	1.0	1.6	6.9
14	9.5	19	11	1.6	.90	.80	.10	.10	.40	1.8	1.3	7.9
15	9.5	19	11	1.6	1.2	.80	.10	.10	.20	1.8	3.5	6.6
16	11	19	9.5	2.0	1.2	1.0	.10	.10	0	2.4	39	5.4
17	15	19	7.9	2.4	1.0	.90	.10	.10	0	4.5	9.9	4.8
18	20	16	7.2	2.5	1.2	.50	.92	.10	0	10	6.9	7.2
19	24	15	7.2	2.5	1.8	.30	.10	28	0	5.7	5.4	11
20	28	15	6.3	2.9	1.8	.20	.10	70	0	3.3	5.4	18
21	33	18	5.1	2.5	2.0	.10	.10	171	0	2.7	4.1	18
22	38	15	4.5	2.4	2.2	.10	.10	94	0	2.0	3.5	19
23	38	17	3.7	2.4	1.9	.10	.10	105	.10	2.4	3.5	20
24	31	23	1.8	2.2	1.6	.10	.10	120	0	2.4	3.9	21
25	27	38	1.3	2.0	1.3	.10	.10	140	0	18	3.5	22
26	27	30	1.6	2.4	1.3	.10	.10	80	0	29	2.9	28
27	27	24	1.6	2.7	1.2	.10	.10	191	0	15	2.7	36
28	24	26	1.4	2.2	1.3	.10	.10	18	0	10	3.1	30
29	22	-----	1.4	2.2	1.3	.10	.10	15	0	8.3	3.1	25
30	21	-----	1.3	2.5	1.3	.10	.10	10	0	6.9	3.9	21
31	22	-----	1.3	-----	1.2	-----	.10	126	-----	6.3	-----	19
TOTAL	541.0	624	421.1	59.40	42.00	10.60	4.82	1,169.90	95.00	217.20	138.9	392.7
MEAN	17.5	22.3	13.6	1.98	1.35	.35	.16	37.7	3.17	7.01	4.63	12.7
MAX	38	38	44	2.9	2.2	1.0	.92	191	48	44	39	36
MIN	7.0	15	1.3	.90	.90	.10	.10	.10	0	.70	1.3	3.7
AC-FT	1,070	1,240	835	118	83	21	9.6	2,320	188	431	276	779

CAL YR 1971 TOTAL 3,716.62 MEAN 10.2 MAX 191 MIN 0 AC-FT 7,370

09368000 San Juan River at Shiprock, N. Mex.

LOCATION.--Lat 36°47'32", long 108°43'54", in NW, sec. 27, (revised) T.30 N., R.18 W., San Juan County, on left bank 3 miles west of Shiprock, 6 miles downstream from Chaco River, and at mile 61.0.

DRAINAGE AREA.--12,900 sq mi, approximately.

PERIOD OF RECORD.--January to October 1911, February 1927 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,848.68 ft above mean sea level (river-profile survey). Prior to Apr. 6, 1922, non-recording gage and Apr. 7, 1922, to Oct. 25, 1933, water-stage recorder, at site 3 miles upstream at different datum.

Oct. 26, 1933, to Sept. 30, 1936, water-stage recorder at present site at datum 3.31 ft higher and Oct. 1, 1936, to Sept. 30, 1952, at datum 1.77 ft higher. Supplementary water-stage recorders at nearby sites, same datum, used at times.

AVERAGE DISCHARGE.--45 years (1926-71), 2,225 cfs (1,612,000 acre-ft per year), unadjusted; 20 calendar years (1951-70), 1,824 cfs (1,321,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,380 cfs Aug. 27 (gage height, 5.65 ft); minimum, 278 cfs Aug. 18.

1927-71: Maximum discharge, about 80,000 cfs Aug. 11, 1929 (gage height, 5.7 ft, site and datum then in use); minimum daily, 8 cfs Aug. 25, 26, 1939.

Maximum flood known occurred Oct. 6, 1911, and reached a stage of 22 ft, site and datum then in use.

REMARKS.--Records good. Since 1962 flow partly regulated by Navajo Reservoir (see sta 09355100). Diversions for irrigation of about 118,000 acres above station. Ungaged canals bypass station on both right and left bank, though some of bypass flow is returned to river below gage. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1243: 1931, 1934-38, 1951. WSP 1313: 1911, 1933. Revised figures of discharge, in cubic feet per second, for the water year 1970, superseding those published in State report for 1970 (only the revised figures will be used in next WSP, with no mention of revisions), are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge
April 28, 1970	732	May 2, 1970	525	May 6, 1970	862
29	807	3	448	7	1,080
30	651	4	418	Aug. 12, 1970	412
May 1, 1970	560	5	430	18	789

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
April	21,150	1,120	422	705	41,950
May	72,413	4,460	418	2,336	143,600
August	21,630	1,840	239	698	42,900
Water year 1970	688,895	--	--	--	--

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,210	2,190	2,210	2,290	3,220	2,950	1,280	351	1,600	1,520	960	1,090
2	2,040	2,190	2,230	2,330	3,250	2,900	1,240	321	1,450	1,260	779	1,080
3	2,000	2,150	2,270	2,470	3,300	2,920	1,160	335	1,520	1,240	490	905
4	2,140	2,110	2,210	2,370	3,180	3,080	1,070	409	1,600	1,210	427	724
5	2,190	2,090	2,270	1,850	3,300	3,100	1,050	788	1,640	1,170	362	679
6	2,100	2,250	2,230	1,920	3,120	2,900	960	960	1,620	1,160	354	672
7	2,020	2,210	2,290	1,940	3,120	2,920	923	950	1,850	1,180	391	644
8	2,020	2,170	2,350	2,060	3,020	3,020	896	1,000	2,390	1,290	560	732
9	1,980	1,670	2,350	2,430	3,020	2,020	905	950	2,470	1,320	524	812
10	2,020	1,940	2,410	2,140	3,020	1,050	780	930	2,330	1,310	436	724
11	1,980	2,150	2,330	2,150	3,120	900	732	1,000	2,330	1,340	383	658
12	2,030	2,150	2,350	2,250	3,150	920	748	1,090	1,910	960	362	630
13	2,060	2,120	2,270	2,370	2,090	940	804	1,320	2,090	828	350	616
14	2,060	2,090	2,210	2,370	1,020	1,000	1,000	1,620	1,800	756	321	588
15	2,250	2,100	2,290	2,370	923	1,000	1,070	1,970	1,840	716	314	530
16	2,170	2,040	2,470	2,510	942	980	1,170	1,880	2,350	623	350	480
17	2,370	2,060	2,510	2,610	960	980	1,140	1,800	2,800	588	297	465
18	2,310	2,090	2,510	2,670	942	990	1,130	1,970	2,800	560	293	422
19	2,250	2,120	2,290	2,670	1,260	1,070	1,180	1,780	2,900	581	458	441
20	2,250	2,100	2,230	2,710	2,510	1,120	1,160	1,540	2,710	560	1,310	422
21	2,290	2,140	2,250	2,850	2,820	1,200	1,080	1,240	2,730	1,080	2,240	400
22	2,410	2,090	2,270	3,100	2,570	1,170	869	1,090	2,630	1,160	1,730	400
23	2,670	2,190	2,250	3,120	2,650	1,030	780	1,160	2,980	1,000	3,300	409
24	2,650	2,250	2,210	3,020	2,730	860	658	1,200	2,750	960	2,170	370
25	2,430	2,290	2,140	2,950	2,900	905	567	980	2,670	860	2,000	375
26	2,510	2,120	2,140	2,950	3,080	914	560	980	2,690	804	1,610	370
27	2,390	2,190	2,190	3,080	2,980	887	602	1,180	2,470	740	2,700	370
28	2,430	2,230	2,270	3,050	2,950	896	574	1,660	2,290	650	2,040	347
29	2,350	2,290	2,290	3,050	-----	1,060	485	2,410	1,940	580	1,910	383
30	2,350	2,250	2,310	3,080	-----	1,170	422	2,590	1,700	560	1,580	2,750
31	2,250	-----	2,270	3,100	-----	1,260	-----	2,080	-----	540	1,420	-----
TOTAL	69,180	64,030	70,870	79,830	71,147	48,112	26,995	39,534	66,850	29,106	32,421	19,488
MEAN	2,232	2,134	2,286	2,575	2,541	1,552	900	1,275	2,228	939	1,046	650
MAX	2,670	2,290	2,510	3,120	3,300	3,100	1,280	2,590	2,980	1,520	3,300	2,750
MIN	1,980	1,670	2,140	1,850	923	860	422	321	1,450	540	293	347
AC-FT	137,200	127,000	140,600	158,300	141,100	95,430	53,540	78,420	132,600	57,730	64,310	38,650

CAL YR 1970 TOTAL 679,908 MEAN 1,863 MAX 11,300 MIN 239 AC-FT 1,349,000
WTR YR 1971 TOTAL 617,563 MEAN 1,692 MAX 3,300 MIN 293 AC-FT 1,225,000

PEAK DISCHARGE (BASE, 6,000 CFS).--Aug. 23 (1500) 6,140 cfs (5.60 ft); Aug. 27 (0615) 6,380 cfs (5.65 ft).

09368000 San Juan River at Shiprock, N. Mex.

LOCATION.--Lat 36°47'32", long 108°43'54", in NW¼ sec.27, (revised) T.30 N., R.18 W., San Juan County, on left bank 3 miles west of Shiprock, 6 miles downstream from Chaco River, and at mile 61.0.

DRAINAGE AREA.--12,900 sq mi, approximately.

PERIOD OF RECORD.--January to October 1911, February 1927 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,848.68 ft above mean sea level (river-profile survey). Prior to Apr. 6, 1922, non-recording gage and Apr. 7, 1922, to Oct. 25, 1933, water-stage recorder, at site 3 miles upstream at different datum. Oct. 26, 1933, to Sept. 30, 1936, water-stage recorder at present site at datum 3.31 ft higher and Oct. 1, 1936, to Sept. 30, 1952, at datum 1.77 ft higher. Supplementary water-stage recorders at nearby sites, same datum, used at times.

AVERAGE DISCHARGE.--45 calendar years (1926-71), 2,226 cfs (1,613,000 acre-ft per year), unadjusted; 20 calendar years (1952-71), 1,848 cfs (1,339,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,500 cfs Oct. 1 (gage height, 5.65 ft); minimum, 278 cfs Aug. 18. 1927-71: Maximum discharge, about 80,000 cfs Aug. 11, 1929 (gage height, 5.7 ft, site and datum then in use); minimum daily, 8 cfs Aug. 25, 26, 1939. Maximum flood known occurred Oct. 6, 1911, and reached a stage of 22 ft, site and datum then in use.

REMARKS.--Records good. Since 1962 flow partly regulated by Navajo Reservoir (see sta 09355100). Diversions for irrigation of about 118,000 acres above station. Ungaged canals bypass station on both right and left bank, though some of bypass flow is returned to river below gage. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1243: 1931, 1934-38, 1951. WSP 1313: 1911, 1933.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2,290	3,220	2,950	1,280	351	1,600	1,520	960	1,090	3,620	780	896
2	2,330	3,250	2,900	1,240	321	1,450	1,260	779	1,080	2,040	772	896
3	2,470	3,300	2,920	1,160	335	1,520	1,240	490	905	1,600	764	1,090
4	2,370	3,180	3,080	1,070	409	1,600	1,210	427	724	1,200	724	941
5	1,850	3,300	3,100	1,050	788	1,640	1,170	362	679	960	724	878
6	1,920	3,120	2,900	960	960	1,620	1,160	354	672	887	716	896
7	1,940	3,120	2,920	923	950	1,850	1,180	391	644	860	686	932
8	2,060	3,020	3,020	896	1,000	2,390	1,290	560	732	844	658	1,000
9	2,430	3,020	2,020	905	950	2,470	1,320	524	812	836	623	990
10	2,140	3,020	1,050	780	930	2,330	1,310	436	724	780	595	950
11	2,150	3,120	900	732	1,000	2,330	1,340	383	658	748	574	941
12	2,250	3,150	920	748	1,090	1,910	960	362	630	708	581	941
13	2,370	2,090	940	804	1,320	2,090	828	350	616	708	595	980
14	2,370	1,020	1,000	1,000	1,620	1,800	756	321	588	732	602	1,210
15	2,370	923	1,000	1,070	1,970	1,840	716	314	530	748	644	1,820
16	2,510	942	980	1,170	1,880	2,350	623	350	480	756	844	2,030
17	2,610	960	980	1,140	1,800	2,800	588	297	465	804	836	2,040
18	2,670	942	990	1,130	1,970	2,800	560	293	422	869	820	1,960
19	2,670	1,260	1,070	1,180	1,780	2,900	581	458	441	860	764	1,940
20	2,710	2,510	1,120	1,160	1,540	2,710	560	1,310	422	836	740	1,960
21	2,850	2,820	1,200	1,080	1,240	2,730	1,080	2,240	400	764	764	1,850
22	3,100	2,570	1,170	869	1,090	2,630	1,160	1,730	400	772	796	1,820
23	3,120	2,650	1,030	780	1,160	2,980	1,000	3,300	409	764	828	2,020
24	3,020	2,730	860	658	1,200	2,750	960	2,170	370	764	804	2,120
25	2,950	2,900	905	567	980	2,670	860	2,000	375	836	828	2,090
26	2,950	3,080	914	560	980	2,690	804	1,610	370	1,070	860	2,090
27	3,080	2,980	887	602	1,180	2,470	740	2,700	370	1,080	836	2,230
28	3,050	2,950	896	574	1,660	2,290	650	2,040	347	932	844	2,270
29	3,050	-----	1,060	485	2,410	1,940	580	1,910	383	852	869	2,250
30	3,080	-----	1,170	422	2,590	1,700	560	1,580	2,750	860	860	2,100
31	3,100	-----	1,260	-----	2,080	-----	540	1,420	-----	812	-----	2,020
TOTAL	79,830	71,147	48,112	26,995	39,534	66,850	29,106	32,421	19,488	30,902	22,331	48,151
MEAN	2,575	2,541	1,552	900	1,275	2,228	939	1,046	650	997	744	1,553
MAX	3,120	3,300	3,100	1,280	2,590	2,980	1,520	3,300	2,750	3,620	869	2,270
MIN	1,850	923	860	422	321	1,450	540	293	347	708	574	878
AC-FT	158,300	141,100	95,430	53,540	78,420	132,600	57,730	64,310	38,650	61,290	44,290	95,510

CAL YR 1971 TOTAL 514,867 MEAN 1,411 MAX 3,620 MIN 293 AC-FT 1,021,000

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-23	1500	5.60	6,140	10-1	0100	5.65	6,500
8-27	0615	5.65	6,380				

09379500 San Juan River near Bluff, Utah

LOCATION.--Lat 37°08'49", long 109°51'51", in SE 1/4 of NW 1/4 sec. 7, T. 42 S., R. 19 E., San Juan County, on left bank 1,600 ft downstream from Gypsum Creek, 1,800 ft upstream from highway bridge, 20 miles southwest of Bluff, at mile 113.5.

DRAINAGE AREA.--23,000 sq mi, approximately.

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,048 ft (from levels of Topographic Division, USGS). Prior to Mar. 16, 1927, chain gages at sites about 1,700 ft downstream at different datums.

AVERAGE DISCHARGE.--57 years, 2,598 cfs (1,882,000 acre-ft per year), unadjusted; 20 calendar years (1951-70), 1,934 cfs (1,401,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,310 cfs Aug. 22 (gage height, 11.55 ft); minimum, 400 cfs Aug. 20. 1914-17, 1927-71: Maximum discharge, 70,000 cfs Sept. 10, 1927 (gage height, 32.0 ft) from rating curve extended above 31,000 cfs and slope-area measurement at gage height 26.62 ft; no flow July 3-13, 1934, Aug. 24-27, 29, 1939. Flood of Oct. 6, 1911, which is greatest known at Shiprock, N. Mex., probably exceeded that of Sept. 10, 1927 at this station but stage was not accurately determined.

REMARKS.--Records good. Diversions for irrigation of approximately 200,000 acres above station. No diversion between station and mouth of river. Flow regulated by Navajo Reservoir since June 28, 1962 (see sta. 09355100). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS):--WSP 1213: 1940. WSP 1313: 1917, 1929. WSP 1343: 1945.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,240	2,290	2,370	2,500	3,110	2,920	1,320	723	2,140	1,890	529	1,980
2	2,250	2,290	2,370	2,530	3,120	2,870	1,360	652	1,750	1,770	476	1,470
3	2,240	2,290	2,360	2,530	3,190	2,860	1,430	598	1,540	1,740	944	1,170
4	2,250	2,300	2,310	2,560	3,210	2,890	1,340	550	1,600	1,430	771	1,490
5	2,210	2,260	2,330	2,460	3,160	2,900	1,250	560	1,660	1,420	602	981
6	2,240	2,280	2,320	2,250	3,080	2,980	1,250	652	1,670	1,340	510	955
7	2,210	2,370	2,310	2,180	3,100	2,820	1,180	1,120	1,690	1,240	505	796
8	2,230	2,440	2,300	2,150	3,090	2,910	1,170	1,200	1,810	1,230	1,000	811
9	2,270	2,430	2,320	2,200	3,030	2,910	1,110	1,460	2,320	1,270	784	2,060
10	2,300	1,800	2,370	2,260	3,100	2,150	1,130	1,580	2,380	1,290	795	1,600
11	2,250	2,140	2,370	2,390	3,140	1,100	1,060	1,500	2,340	1,230	739	1,200
12	2,280	2,320	2,390	2,500	3,120	1,080	967	1,410	2,270	1,070	664	922
13	2,260	2,330	2,300	2,470	3,110	1,100	929	1,370	1,970	995	579	810
14	2,280	2,300	2,230	2,460	2,130	1,100	954	1,610	1,820	909	574	770
15	2,270	2,310	2,260	2,500	1,110	1,090	1,080	1,820	1,620	812	512	704
16	2,400	2,300	2,280	2,480	1,040	1,100	1,300	2,040	1,530	756	447	639
17	2,350	2,300	2,510	2,600	967	1,010	1,310	2,000	1,880	707	433	579
18	2,410	2,300	2,560	2,630	1,010	1,050	1,410	2,030	2,140	654	477	528
19	2,390	2,290	2,630	2,650	1,010	1,000	1,250	2,140	2,090	655	436	537
20	2,360	2,280	2,590	2,790	1,100	1,030	1,340	1,960	2,460	658	537	504
21	2,300	2,220	2,540	3,050	2,870	1,120	1,360	1,710	2,440	797	4,220	554
22	2,260	2,210	2,630	3,140	3,110	1,150	1,350	1,390	2,670	1,490	5,370	520
23	2,490	2,200	2,610	3,140	2,980	1,170	1,300	1,180	2,750	1,070	2,940	498
24	2,560	2,230	2,520	3,100	2,910	1,150	1,160	1,210	2,620	1,170	5,260	510
25	2,360	2,300	2,500	3,040	2,980	998	1,060	1,360	2,450	900	4,000	520
26	2,300	2,340	2,460	3,020	2,980	988	930	1,270	2,300	949	3,680	504
27	2,310	2,420	2,430	3,010	2,960	1,040	873	1,060	2,150	889	3,390	483
28	2,300	2,500	2,480	3,060	2,910	1,050	857	1,150	2,100	837	4,620	520
29	2,300	2,410	2,560	3,080	-----	999	878	1,490	2,000	739	2,570	638
30	2,280	2,380	2,560	3,060	-----	1,120	836	2,220	1,950	697	2,670	704
31	2,300	-----	2,510	3,050	-----	1,290	-----	2,440	-----	592	3,320	-----
TOTAL	71,450	68,830	75,280	82,840	72,627	50,945	34,744	43,455	62,110	33,196	54,354	25,957
MEAN	2,305	2,294	2,428	2,672	2,594	1,643	1,158	1,402	2,070	1,071	1,753	865
MAX	2,560	2,500	2,630	3,140	3,210	2,980	1,430	2,440	2,750	1,890	5,370	2,060
MIN	2,210	1,800	2,230	2,150	967	988	836	550	1,530	592	433	483
AC-FT	141,700	136,500	149,300	164,300	144,100	101,000	68,910	86,190	123,200	65,840	107,800	51,490

CAL YR 1970 TOTAL 767,835 MEAN 2,104 MAX 34,700 MIN 520 AC-FT 1,523,000
WTR YR 1971 TOTAL 675,788 MEAN 1,851 MAX 5,370 MIN 433 AC-FT 1,340,000

PEAK DISCHARGE (BASE, 8,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-21	1800	10.92	10,940	8-24	0800	9.50	8,490
8-22	1800	11.55	12,310				

09379500 San Juan River near Bluff, Utah

LOCATION.--Lat 37°08'49", long 109°51'51", in SE¼NE¼NW¼ sec.7, T.42 S., R.19 E., San Juan County, on left bank 1,600 ft downstream from Gypsum Creek, 1,800 ft upstream from highway bridge, 20 miles southwest of Bluff, at mile 113.5.

DRAINAGE AREA.--23,000 sq mi, approximately.

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,048 ft (from levels of Topographic Division, USGS). Prior to Mar. 16, 1927, chain gages at sites about 1,700 ft downstream at different datums.

AVERAGE DISCHARGE.--57 calendar years, 2,596 cfs (1,881,000 acre-ft per year), unadjusted; 20 calendar years (1952-71), 1,968 cfs (1,426,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,310 cfs Aug. 22 (gage height, 11.55 ft); minimum, 400 cfs Aug. 20.

1914-17, 1927-71: Maximum discharge, 70,000 cfs Sept. 10, 1927 (gage height, 32.0 ft) from rating curve extended above 31,000 cfs and slope-area measurement at gage height 26.62 ft; no flow July 3-13, 1934, Aug. 24-27, 29, 1939.

Flood of Oct. 6, 1911, which is greatest known at Shiprock, N. Mex., probably exceeded that of Sept. 10, 1927 at this station but stage was not accurately determined.

REMARKS.--Records good. Diversions for irrigation of approximately 200,000 acres above station. No diversion between station and mouth of river. Flow regulated by Navajo Reservoir since June 28, 1962 (see sta 09355100). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1213: 1940. WSP 1313: 1917, 1929. WSP 1343: 1945.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2,500	3,110	2,920	1,320	723	2,140	1,890	529	1,980	6,130	791	958
2	2,530	3,120	2,870	1,360	652	1,750	1,770	476	1,470	4,820	808	957
3	2,530	3,190	2,860	1,430	598	1,540	1,740	944	1,170	3,040	976	992
4	2,560	3,210	2,890	1,340	550	1,600	1,430	771	1,490	1,700	1,000	1,030
5	2,460	3,160	2,900	1,250	560	1,660	1,420	602	981	1,400	985	981
6	2,250	3,080	2,980	1,250	652	1,670	1,340	510	955	1,180	976	958
7	2,180	3,100	2,820	1,180	1,120	1,690	1,240	505	796	1,080	959	932
8	2,150	3,090	2,910	1,170	1,200	1,810	1,230	1,000	811	1,040	935	944
9	2,200	3,030	2,910	1,110	1,460	2,320	1,270	784	2,060	1,020	910	988
10	2,260	3,100	2,150	1,130	1,580	2,380	1,290	795	1,600	1,050	905	939
11	2,390	3,140	1,100	1,060	1,500	2,340	1,230	739	1,200	975	852	1,020
12	2,500	3,120	1,080	967	1,410	2,270	1,070	664	922	932	864	939
13	2,470	3,110	1,100	929	1,370	1,970	995	579	810	761	887	819
14	2,460	2,130	1,100	954	1,610	1,820	909	574	770	793	864	796
15	2,500	1,110	1,090	1,080	1,820	1,620	812	512	704	851	1,010	889
16	2,480	1,040	1,100	1,300	2,040	1,530	756	447	639	1,090	1,340	1,940
17	2,600	967	1,010	1,310	2,000	1,880	707	433	579	2,830	1,460	2,100
18	2,630	1,010	1,050	1,410	2,030	2,140	654	477	528	4,500	1,300	2,130
19	2,650	1,010	1,000	1,250	2,140	2,090	655	436	537	2,690	1,190	2,020
20	2,790	1,100	1,030	1,340	1,960	2,460	658	537	504	1,370	1,080	2,250
21	3,050	2,870	1,120	1,360	1,710	2,440	797	4,220	554	652	997	2,210
22	3,140	3,110	1,150	1,350	1,390	2,670	1,490	5,370	520	646	944	2,240
23	3,140	2,980	1,170	1,300	1,180	2,750	1,070	2,940	498	908	956	2,440
24	3,100	2,910	1,150	1,160	1,210	2,620	1,170	5,260	510	754	975	2,980
25	3,040	2,980	998	1,060	1,360	2,450	900	4,000	520	903	967	3,130
26	3,020	2,980	988	930	1,270	2,300	949	3,680	504	2,960	945	3,390
27	3,010	2,960	1,040	873	1,060	2,150	889	3,390	483	1,670	962	3,850
28	3,060	2,910	1,050	857	1,150	2,100	837	4,620	520	820	969	3,500
29	3,080	-----	999	878	1,490	2,000	739	2,570	638	803	940	3,500
30	3,060	-----	1,120	836	2,220	1,950	697	2,670	704	785	966	3,000
31	3,050	-----	1,290	-----	2,440	-----	592	3,320	-----	728	-----	3,000
TOTAL	82,840	72,627	50,945	34,744	43,455	62,110	33,196	54,354	25,957	50,891	29,713	57,822
MEAN	2,672	2,594	1,643	1,158	1,402	2,070	1,071	1,753	865	1,642	990	1,865
MAX	3,140	3,210	2,980	1,430	2,440	2,750	1,890	5,370	2,060	6,130	1,460	3,850
MIN	2,150	967	988	836	550	1,530	592	433	483	646	791	796
AC-FT	164,300	144,100	101,000	68,910	86,190	123,200	65,840	107,800	51,490	110,000	58,940	114,700

CAL YR 1971 TOTAL 598,654 MEAN 1,640 MAX 6,130 MIN 433 AC-FT 1,187,000

PEAK DISCHARGE (BASE, 8,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-21	1800	10.92	10,940	8-24	0800	9.50	8,490
8-22	1800	11.55	12,310				

LOCATION.--Lat 35°16'57", long 108°33'10", in N1/4 sec. 8, T.12 N., R.16 W., McKinley County, on Zuni Indian Reservation, at mouth of Nutria Canyon, 0.9 mile upstream from Nutria Diversion Dam, 1.3 miles northeast of Upper Nutria, and 10.4 miles northwest of Ramah.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,000 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 94 cfs Sept. 30 (gage height, 2.97 ft); minimum discharge, .02 cfs at times.
Period of record: Maximum discharge, 365 cfs Aug. 17, 1970 (gage height 4.25 ft) from rating curve extended above 10 cfs on basis of slope-area measurement of peak flow; no flow Oct. 1-20, 1969.

REMARKS. -- Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.12	.09	.09	.08	.08	.10	.10	.08	.07	.02	.35
2	.08	.12	.09	.09	.08	.08	.10	.10	.08	.07	.02	.35
3	.09	.11	.09	.10	.08	.08	.12	.10	.08	.05	.02	.35
4	.21	.11	.09	.10	.08	.09	.10	.10	.08	.09	.02	.35
5	.10	.10	.08	.10	.08	.09	.10	.10	.08	.08	.03	1.1
6	.10	.10	.09	.10	.08	.08	.10	.10	.08	.09	.02	.15
7	.10	.10	.09	.10	.08	.09	.10	.08	.08	.06	.03	.09
8	.10	.10	.09	.10	.08	.09	.10	.10	.08	.05	.04	.06
9	.10	.20	.09	.08	.08	.09	.10	.11	.08	.05	.02	.05
10	.10	.15	.09	.06	.08	5.4	.10	.09	.09	.05	.02	.05
11	.10	.28	.09	.07	.08	6.5	.10	.09	.10	.05	.02	.35
12	.10	.29	.08	.08	.08	2.7	.10	.09	.10	.05	.02	.35
13	.10	.26	.08	.09	.08	1.6	.10	.10	.10	.05	.02	.35
14	.10	.25	.09	.08	.08	.93	.10	.10	.09	.05	.02	.35
15	.10	.10	.12	.07	.08	.88	.10	.10	.09	.04	.04	.35
16	.10	.11	.13	.07	.08	.40	.11	.10	.08	.05	.05	.35
17	.10	.11	.12	.08	.09	.33	.10	.10	.08	.06	.05	2.0
18	.10	.11	.10	.08	.09	.27	.10	.10	.09	.04	.05	.15
19	.10	.10	.10	.09	.09	.18	.10	.10	.08	.02	.05	.38
20	.10	.10	.10	.09	.09	.18	.12	.10	.08	.03	.06	.35
21	.10	.10	.10	.14	.09	.19	.11	.10	.08	.03	.05	.35
22	.10	.10	.10	.11	.08	.18	.20	.10	.08	.04	.05	.35
23	.10	.10	.10	.09	.08	.22	.25	.10	.08	.04	.05	.35
24	.10	.10	.10	.08	.09	.26	.23	.11	.08	.03	.05	.35
25	.10	.10	.10	.08	.09	.26	.25	.12	.07	.02	.05	.35
26	.11	.11	.09	.08	.09	.24	.25	.09	.07	.02	.05	.35
27	.10	.10	.09	.08	.09	.25	.25	.08	.07	.02	.05	.35
28	.10	.10	.09	.08	.09	.23	.17	.08	.05	.02	.05	.35
29	.10	.10	.09	.08	-----	.19	.10	.08	.05	.02	.05	5.2
30	.11	.10	.09	.08	-----	.14	.10	.08	.05	.02	.05	27
31	.11	-----	.09	.08	-----	.13	-----	.08	-----	.02	.05	-----
TOTAL	3.19	3.93	2.94	2.70	2.34	22.43	3.96	2.98	2.38	1.38	1.17	36.88
MEAN	.10	.13	.095	.087	.084	.72	.13	.096	.079	.045	.038	1.23
MAX	.21	.29	.13	.14	.09	6.5	.25	.12	.10	.09	.06	.27
MIN	.08	.10	.08	.06	.08	.08	.10	.08	.05	.02	.02	.05
AC-FT	6.3	7.8	5.8	5.4	4.6	44	7.9	5.9	4.7	2.7	2.3	73
CAL YR 1970	TOTAL	160.88	MEAN	.44	MAX	22	MIN	.05	AC-FT	319		
WTR YR 1971	TOTAL	86.28	MEAN	.24	MAX	27	MIN	.02	AC-FT	171		

09386900 Rio Nutria near Ramah, N. Mex.

LOCATION.--Lat 35°16'57", long 108°33'10", in NW¼SW¼ sec.8, T.12 N., R.16 W., McKinley County, on Zuni Indian Reservation, at mouth of Nutria Canyon, 0.9 mile upstream from Nutria Diversion Dam, 1.3 miles northeast of Upper Nutria, and 10.4 miles northwest of Ramah.

DRAINAGE AREA.--71.4 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,000 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 94 cfs Sept. 30 (gage height, 2.97 ft); minimum discharge, .02 cfs at times.

Period of record: Maximum discharge, 365 cfs Aug. 17, 1970 (gage height 4.25 ft) from rating curve extended above 10 cfs on basis of slope-area measurement of peak flow; no flow Oct. 1-20, 1969.

REMARKS.--Records good.

DISCHARGE, IN CURIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.09	.08	.08	.10	.10	.08	.07	.02	.05	2.4	.10	.14
2	.09	.08	.08	.10	.10	.08	.07	.02	.05	.79	.10	.19
3	.10	.08	.08	.12	.10	.08	.05	.02	.05	.20	.10	.26
4	.10	.08	.09	.12	.10	.08	.09	.02	.05	.10	.10	.25
5	.10	.08	.09	.10	.10	.08	.08	.03	1.1	.08	.10	.18
6	.10	.08	.08	.10	.10	.08	.09	.02	.15	.08	.08	.15
7	.10	.08	.09	.10	.08	.08	.06	.03	.09	.08	.09	.18
8	.10	.08	.09	.10	.10	.08	.05	.04	.06	.08	.09	.20
9	.08	.08	.09	.10	.11	.08	.05	.02	.05	.08	.09	.22
10	.06	.08	5.4	.10	.09	.09	.05	.02	.05	.08	.09	.24
11	.07	.08	6.5	.10	.09	.10	.05	.02	.05	.08	.09	.21
12	.08	.08	2.7	.10	.09	.10	.05	.02	.05	.08	.10	.16
13	.09	.08	1.6	.10	.10	.10	.05	.02	.05	.08	.10	.17
14	.08	.08	.93	.10	.10	.09	.05	.02	.05	.08	.10	.21
15	.07	.08	.88	.10	.10	.09	.04	.04	.05	.08	.10	.20
16	.07	.08	.40	.11	.10	.08	.05	.05	.05	.08	.10	.20
17	.08	.09	.33	.10	.10	.08	.06	.05	2.0	.11	.16	.15
18	.08	.09	.27	.10	.10	.09	.04	.05	.15	.16	.13	.18
19	.09	.09	.18	.10	.10	.08	.02	.05	.08	.08	.11	.22
20	.09	.09	.18	.12	.10	.08	.03	.06	.05	.08	.11	.21
21	.14	.09	.19	.11	.10	.08	.03	.05	.05	.08	.11	.17
22	.11	.08	.18	.20	.10	.08	.04	.05	.05	.08	.11	.17
23	.09	.08	.22	.25	.10	.08	.04	.05	.05	.08	.11	12
24	.08	.09	.26	.23	.11	.08	.03	.05	.05	.09	.11	11
25	.08	.09	.26	.25	.12	.07	.02	.05	.05	.14	.11	6.7
26	.08	.09	.24	.25	.09	.07	.02	.05	.05	2.5	.10	20
27	.08	.09	.25	.25	.08	.07	.02	.05	.05	1.6	.11	12
28	.08	.09	.23	.17	.08	.05	.02	.05	.05	.71	.11	3.3
29	.08	-----	.19	.10	.08	.05	.02	.05	5.2	.30	.12	2.1
30	.08	-----	.14	.10	.08	.05	.02	.05	27	.12	.12	.82
31	.08	-----	.13	-----	.08	-----	.02	.05	-----	.10	-----	.59
TOTAL	2.70	2.34	22.43	3.96	2.98	2.38	1.38	1.17	36.88	10.68	3.15	72.77
MEAN	.087	.084	.72	.13	.096	.079	.045	.038	1.23	.34	.11	2.35
MAX	.14	.09	6.5	.25	.12	.10	.09	.06	.27	2.5	.16	.20
MIN	.06	.08	.08	.10	.08	.05	.02	.02	.05	.08	.08	.14
AC-FT	5.4	4.6	44	7.9	5.9	4.7	2.7	2.3	73	21	6.3	144

CAL YR 1971 TOTAL 162.82 MEAN .45 MAX 27 MIN .02 AC-FT 323

09386950 Zuni River above Zuni Reservoir, N. Mex.

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

DRAINAGE AREA.--810 sq mi, approximately.

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

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

EXTREMES.--Water year 1970: Maximum discharge, 1,400 cfs Aug. 3 (gage height, 5.52ft); no flow for many days.
Water year 1971: Maximum discharge, 972 cfs Sept. 30 (gage height, 5.16 ft); no flow for many days.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.45	.82	.13	.45	.82	2.3	1.3		0	0	.02
2	.08	.41	.70	.04	.35	1.1	1.2	1.2		0	0	.02
3	.08	.38	1.4	.06	.94	2.5	1.2	1.0		0	129	.01
4	.08	.38	1.6	.45	1.2	1.4	.88	.88		0	17	.01
5	.08	.45	2.2	.35	1.9	1.3	.94	.82		0	2.3	.01
6	.08	.50	1.1	.23	1.2	1.5	1.2	.82		0	.50	12
7	.08	.60	1.3	.03	1.1	1.0	1.2	.35		0	16	1.2
8	.08	.55	.88	.19	1.2	.76	1.1	.25		0	16	.41
9	.08	.76	.70	.35	.88	.76	1.0	.27		0	1.8	.08
10	.08	1.2	2.3	.41	1.0	.82	1.1	.23		0	.41	.03
11	.08	1.5	.76	.55	1.1	1.3	.94	.19		0	.03	.02
12	.08	1.1	.82	1.0	1.1	1.2	.82	.17		0	.01	1.4
13	.07	.94	1.3	1.6	.94	.70	.88	.15		0	.01	.70
14	.06	.88	1.2	1.6	1.2	.70	.82	.15		0	.01	.29
15	.07	.82	1.1	1.3	1.5	.65	.65	.13		0	.01	.08
16	.07	3.8	1.2	1.2	1.2	.60	.82	.11		0	5.0	.04
17	.08	6.1	1.5	1.6	.82	.55	1.4	.09		0	.76	.03
18	.08	1.3	1.5	2.3	.82	.88	3.6	.08		0	9.6	.03
19	.08	.65	1.8	2.2	.55	.82	3.4	.08		0	3.8	.02
20	.04	.94	1.5	1.9	.45	1.1	2.2	.08		0	.45	.02
21	2.7	1.3	1.5	2.0	.50	.88	1.5	.01		0	.13	.02
22	19	1.2	1.8	2.0	.88	.94	1.1	0		104	.07	.02
23	8.7	1.2	1.5	1.9	1.2	.60	1.0	0		6.1	2.4	.01
24	1.4	1.0	1.5	2.3	2.2	.55	1.0	0		.41	2.2	.01
25	.76	.94	1.4	2.4	1.5	.50	1.0	0		.08	.32	.01
26	.65	.94	1.5	1.8	.94	.38	.94	0		.02	.08	.01
27	.65	.94	1.4	1.6	.88	.76	.82	0		.01	.06	.01
28	.55	.65	.70	1.4	.82	.94	1.2	0		0	.04	.01
29	.50	.60	.88	.25	-----	.94	1.4	0		0	.03	.01
30	.41	.76	1.4	.21	-----	1.0	1.3	0		0	.03	.01
31	.45	-----	.60	.70	-----	1.8	-----	0	-----	0	.02	-----
TOTAL	37.28	33.24	39.86	34.05	28.82	29.75	38.91	8.36	0	110.62	208.07	16.54
MEAN	1.20	1.11	1.29	1.10	1.03	.96	1.30	.27	0	3.57	6.71	.55
MAX	19	6.1	2.3	2.4	2.2	2.5	3.6	1.3	0	104	129	12
MIN	.04	.38	.60	.03	.35	.38	.65	0	0	0	0	.01
AC-FT	74	66	79	68	57	59	77	17	0	219	413	33

WTR YR 1970 TOTAL 585.50 MEAN 1.60 MAX 129 MIN 0 AC-FT 1,160

09386950 Zuni River above Zuni Reservoir, N. Mex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01		0	0	2.5	.04	.23	.23			0	5.0
2	.01		0	0	2.5	.21	.32	.07			0	2.0
3	2.3		0	0	.32	.76	.60	.01			0	1.0
4	10		0	0	.32	1.5	.60	0			0	.80
5	1.2		0	0	.70	1.2	.06	0			.31	.50
6	.08		0	0	.82	.65	.01	0			.01	.40
7	.02		0	0	.55	.65	0	0			.93	1.0
8	.02		0	0	.45	.76	0	0			.27	.80
9	.01		0	0	.45	.70	0	0			.10	.40
10	.01		0	0	.50	.60	0	0			.03	.40
11	.01		0	0	.60	.60	0	0			0	.40
12	.01		0	0	.50	.65	0	0			1.8	.40
13	.01		0	0	.50	.60	0	0			.41	1.5
14	.01		0	0	.50	.88	0	0			39	1.0
15	.01		0	0	.50	.65	0	0			10	.80
16	.01		0	0	.55	.55	12	0			1.2	.50
17	.01		0	0	.45	.55	51	0			.41	10
18	.01		0	0	.76	.45	50	0			.32	5.0
19	.01		0	0	1.0	.35	49	0			7.9	2.0
20	.01		.03	0	1.0	.65	26	0			19	1.0
21	.01		0	0	.94	.65	14	0			2.8	.90
22	.01		0	0	.41	.60	13	0			1.3	1.5
23	.01		0	0	.50	.65	11	0			25	.60
24	.01		0	.10	.82	.70	6.7	0			83	2.0
25	0		0	.20	.70	.70	3.4	0			96	1.0
26	0		.01	.20	.55	.88	1.5	0			105	.80
27	0		.01	.50	.29	.76	.65	0			179	.60
28	0		.01	.50	.23	.88	.50	0			90	.50
29	0		.25	1.0	-----	.82	.65	0			54	85
30	0		.08	1.5	-----	.65	.29	0			10	261
31	0	-----	0	2.0	-----	.27	-----	0	-----		2.1	-----
TOTAL	13.80	0	.39	6.00	19.91	20.56	241.51	.31	0	0	729.89	388.80
MEAN	.45	0	.013	.19	.71	.66	8.05	.010	0	0	23.5	13.0
MAX	10	0	.25	2.0	2.5	1.5	51	.23	0	0	179	261
MIN	0	0	0	0	.23	.04	0	0	0	0	0	.40
AC-FT	27	0	.8	12	39	41	479	.6	0	0	1,450	771
CAL YR 1970	TOTAL	489.31	MEAN	1.34	MAX	129	MIN	0	AC-FT	971		
WTR YR 1971	TOTAL	1,421.17	MEAN	3.89	MAX	261	MIN	0	AC-FT	2,820		

09386950 Zuni River above Zuni Reservoir, N. Mex.

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

DRAINAGE AREA.--810 sq mi, approximately.

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

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

EXTREMES.--Current year: Maximum discharge, 972 cfs Sept. 30 (gage height, 5.16 ft); from rating curve extended as explained below; no flow for many days.

Period of record: Maximum discharge; 1,400 cfs Aug. 3, 1970 (gage height, 5.52 ft) from rating curve extended above 10 cfs on basis of slope-area measurements at gage heights 4.05, 3.94 and 5.16 ft; no flow for many days.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	2.5	.04	.23	.23			0	5.0	30	.76	1.3
2	0	2.5	.21	.32	.07			0	2.0	10	.65	1.2
3	0	.32	.76	.60	.01			0	1.0	5.0	.50	1.2
4	0	.32	1.5	.60	0			0	.80	2.0	.70	.76
5	0	.70	1.2	.06	0			.31	.50	1.0	.76	.50
6	0	.82	.65	.01	0			.01	.40	.80	.76	.55
7	0	.55	.65	0	0			.93	1.0	.60	.70	.88
8	0	.45	.76	0	0			.27	.80	.50	.70	1.3
9	0	.45	.70	0	0			.10	.40	.50	.65	.70
10	0	.50	.60	0	0			.03	.40	.50	.65	.50
11	0	.60	.60	0	0			0	.40	.45	.65	.45
12	0	.50	.65	0	0			1.8	.40	.45	.76	.40
13	0	.50	.60	0	0			.41	1.5	.41	.76	.40
14	0	.50	.88	0	0			39	1.0	.50	.60	.30
15	0	.50	.65	0	0			10	.80	.45	1.2	.20
16	0	.55	.55	12	0			1.2	.50	.45	1.6	.20
17	0	.45	.55	51	0			.41	10	.88	1.2	.10
18	0	.76	.45	50	0			.32	5.0	3.4	.94	.20
19	0	1.0	.35	49	0			7.9	2.0	1.9	.55	.30
20	0	1.0	.65	26	0			19	1.0	.94	.65	.40
21	0	.94	.65	14	0			2.8	.90	.76	1.0	.40
22	0	.41	.60	13	0			1.3	1.5	.70	1.3	.80
23	0	.50	.65	11	0			25	.60	.70	.76	1.3
24	.10	.82	.70	6.7	0			83	2.0	.82	.70	3.0
25	.20	.70	.70	3.4	0			96	1.0	3.4	.55	4.3
26	.20	.55	.88	1.5	0			105	.80	4.5	.60	7.5
27	.50	.29	.76	.65	0			179	.60	2.3	.60	7.5
28	.50	.23	.88	.50	0			90	.50	1.2	.60	2.7
29	1.0	-----	.82	.65	0			54	.85	.76	1.1	3.4
30	1.5	-----	.65	.29	0			10	261	.65	.88	.50
31	2.0	-----	.27	-----	0	-----		2.1	-----	.70	-----	.70
TOTAL	6.00	19.91	20.56	241.51	.31	0	0	729.89	388.80	77.22	23.83	43.94
MEAN	.19	.71	.66	8.05	.010	0	0	23.5	13.0	2.49	.79	1.42
MAX	2.0	2.5	1.5	51	.23	0	0	179	261	30	1.6	7.5
MIN	0	.23	.04	0	0	0	0	0	.40	.41	.50	.10
AC-FT	12	39	41	479	.6	0	0	1,450	771	153	47	87

CAL YR 1971 TOTAL 1,551.97 MEAN 4.25 MAX 261 MIN 0 AC-FT 3,080

09430150 Sapillo Creek below Lake Roberts, near Silver City, N. Mex.

LOCATION.--Lat 33°01'56", long 108°10'06", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.34, T.14 S., R.13 W., Grant County, on right bank 1,100 ft downstream from Lake Roberts Dam, about 1 mile upstream from former mining town of Meerschaum and 18 miles north of Silver City.

DRAINAGE AREA.--78 sq mi.

PERIOD OF RECORD.--May 1964 to September 1971 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,990 ft (from topographic map). Prior to May 21, 1966 at site 300 ft downstream at different datums.

AVERAGE DISCHARGE.--7 years, 4.74 cfs (3,430 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 451 cfs Aug. 13 (gage height, 3.51 ft); no flow on many days.

Period of record: Maximum discharge, 1,210 cfs Sept. 23, 1964 (gage height, 5.58 ft), from rating curve extended above 166 cfs on basis of slope-area measurement of peak flow; no flow for many days.

REMARKS.--Records good. Flow regulated by Lake Roberts. The dam is earthfill with a concrete spillway. The reservoir capacity is 1,870 acre-ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.5	1.6	1.3	.84	.51	.24	.36	0	0	8.5	6.5
2	2.7	2.5	1.4	1.3	.80	.54	.24	.34	0	0	2.0	3.7
3	2.7	2.5	1.1	2.2	.75	.53	.24	.34	0	0	2.4	2.5
4	2.6	2.5	1.2	2.1	.73	.54	.25	.32	0	0	1.5	1.9
5	2.6	2.5	.94	2.1	.70	.49	.29	.27	0	0	.96	2.0
6	2.4	2.5	.83	2.1	.67	.51	.30	.27	0	0	.56	1.9
7	2.0	2.5	1.4	2.1	.66	.49	.27	.27	0	0	.41	1.6
8	1.7	2.6	1.6	2.1	.62	.49	.25	.29	0	0	.31	1.4
9	1.7	2.6	1.5	2.1	.62	.50	.23	.27	0	0	1.2	1.7
10	1.8	2.6	1.5	2.1	.61	.50	.23	.29	0	0	13	2.2
11	1.8	2.5	1.5	1.8	.59	.50	.29	.31	0	0	5.3	1.8
12	1.9	2.4	1.4	1.5	.58	.51	.26	.34	0	0	2.7	1.5
13	2.0	2.3	1.4	1.3	.59	.50	.28	.34	0	0	72	1.4
14	2.1	2.2	1.6	1.2	.57	.44	.27	.34	0	0	21	1.4
15	2.2	2.1	2.0	1.1	.49	.45	.28	.34	0	0	6.9	1.4
16	2.4	2.1	1.8	1.1	.49	.46	.29	.34	0	0	3.0	1.4
17	2.6	2.1	1.6	1.1	.48	.44	1.8	.31	0	0	4.5	1.8
18	2.6	2.1	1.5	1.1	.61	.40	.33	.22	0	0	43	6.9
19	2.6	2.0	1.5	1.1	.61	.42	.51	0	.03	0	12	20
20	2.5	2.0	1.4	1.1	.63	.43	.52	0	.03	0	4.9	10
21	2.5	2.0	1.5	1.1	.60	.39	.46	0	.02	0	2.3	6.7
22	2.5	1.9	1.4	1.1	.53	.38	.37	0	.05	0	6.7	3.8
23	2.5	1.9	1.4	1.0	.47	.38	.35	0	.03	0	2.1	3.3
24	2.6	1.8	1.3	.97	.55	.35	.33	0	.02	0	1.3	3.6
25	2.6	1.8	1.3	.90	.62	.33	.31	0	.01	0	37	2.9
26	2.5	1.7	1.3	.89	.57	.33	.29	0	0	0	24	2.4
27	2.5	1.7	1.7	.86	.55	.29	.37	0	0	0	27	2.3
28	2.4	1.7	1.8	.84	.50	.25	.56	0	0	3.6	30	2.3
29	2.4	1.7	1.6	.83	-----	.28	.39	0	0	2.1	20	2.4
30	2.4	1.6	1.5	.81	-----	.30	.39	0	0	1.1	29	4.0
31	2.5	-----	1.3	.85	-----	.27	-----	0	-----	8.5	16	-----
TOTAL	73.1	64.9	44.87	42.05	17.03	13.20	11.19	5.56	.19	15.3	401.54	106.7
MEAN	2.36	2.16	1.45	1.36	.61	.43	.37	.18	.006	.49	13.0	3.56
MAX	2.8	2.6	2.0	2.2	.84	.54	1.8	.36	.05	8.5	72	20
MIN	1.7	1.6	.83	.81	.47	.25	.23	0	0	0	.31	1.4
AC-FT	145	129	89	83	34	26	22	11	.4	30	796	212
CAL YR 1970	TOTAL	743.65	MEAN	2.04	MAX	40	MIN	.73	AC-FT	1,480		
WTR YR 1971	TOTAL	795.63	MEAN	2.18	MAX	72	MIN	0	AC-FT	1,580		

09430500 Gila River near Gila, N. Mex.

LOCATION.--Lat 33°03'40", long 108°32'12", in NE 1/4 sec. 30, T.14 S., R.16 W., Grant County, on left bank at Hooker damsite, 1.6 miles upstream from Mogollon Creek, and 7 miles northeast of Gila.

DRAINAGE AREA.--1,864 sq mi.

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 above mean sea level (river-profile survey). Prior to Dec. 31, 1928, at site 5 miles upstream at different datum. Dec. 31, 1928, to Jan. 7, 1942, at site 200 ft upstream at same datum.

AVERAGE DISCHARGE.--44 years (1927-71), 126 cfs (91,290 acre-ft per year); 20 calendar years (1951-70), 122 cfs (88,390 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,010 cfs Aug. 14 (gage height, 4.49 ft); minimum, 14 cfs July 15.

Period of record: Maximum discharge, 25,400 cfs Sept. 29, 1941 (gage height, 17.2 ft, from floodmark), from rating curve extended above 3,900 cfs on basis of velocity-area studies; minimum, 14 cfs 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 above station.

REVISIONS (WATER YEARS).--WSP 1283: Drainage area. WSP 1313: 1944(M), 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	53	54	55	57	56	50	46	32	18	62	172
2	45	53	54	56	57	56	50	45	32	20	59	141
3	74	53	54	59	57	56	50	43	31	29	47	145
4	91	53	54	55	57	56	50	42	30	28	41	149
5	77	53	54	49	57	56	48	42	29	25	39	120
6	75	54	55	48	57	55	48	42	28	25	41	98
7	72	54	55	47	57	55	48	42	28	25	56	85
8	65	53	55	52	57	55	48	42	27	23	61	75
9	62	53	55	53	56	55	47	42	26	22	48	80
10	61	53	55	52	56	55	46	41	26	21	47	75
11	59	54	55	50	56	55	45	41	25	21	53	69
12	57	54	55	49	56	56	46	43	25	20	61	62
13	56	53	55	50	56	56	46	46	24	18	129	57
14	55	53	55	52	56	55	45	45	24	18	268	55
15	54	53	59	56	56	55	47	42	23	16	104	51
16	55	53	57	57	56	55	49	41	23	15	98	49
17	57	53	56	57	56	55	49	38	25	16	91	49
18	57	54	56	57	60	54	53	37	25	16	185	60
19	56	54	56	57	60	54	56	37	24	16	152	78
20	56	54	56	58	60	54	56	36	22	16	107	89
21	55	55	57	59	60	54	55	36	23	18	115	75
22	54	54	57	59	60	54	54	35	22	23	122	64
23	54	54	57	59	59	53	53	34	22	24	89	59
24	54	54	55	59	57	53	51	34	23	28	80	57
25	54	54	55	59	57	51	50	34	25	28	132	57
26	54	54	55	59	57	51	48	33	24	25	200	54
27	51	54	60	57	57	50	48	32	23	25	163	51
28	53	54	61	57	56	50	48	30	21	28	218	49
29	54	54	60	57	-----	50	47	30	21	28	195	46
30	54	54	59	57	-----	51	46	30	19	28	194	51
31	54	-----	56	57	-----	51	-----	31	-----	28	184	-----
TOTAL	1,814	1,608	1,737	1,708	1,603	1,672	1,477	1,192	752	691	3,441	2,322
MEAN	58.5	53.6	56.0	55.1	57.3	53.9	49.2	38.5	25.1	22.3	111	77.4
MAX	91	55	61	59	60	56	56	46	32	29	268	172
MIN	39	53	54	47	56	50	45	30	19	15	39	46
AC-FT	3,600	3,190	3,450	3,390	3,180	3,320	2,930	2,360	1,490	1,370	6,830	4,610

CAL YR 1970 TOTAL 25,633 MEAN 70.2 MAX 266 MIN 24 AC-FT 50,840
WTR YR 1971 TOTAL 20,017 MEAN 54.8 MAX 268 MIN 15 AC-FT 39,700

PEAK DISCHARGE (BASE, 600 CFS).--Aug. 14 (0030) 1,010 CFS (4.49 FT).

09430500 Gila River near Gila, N. Mex.

LOCATION.--Lat 33°03'40", long 108°32'12", in NE¼ sec.30, T.14 S., R.16 W., Grant County, on left bank at Hooker damsite, 1.6 miles upstream from Mogollon Creek, and 7 miles northeast of Gila.

DRAINAGE AREA.--1,864 sq mi.

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 above mean sea level (river-profile survey). Prior to Dec. 31, 1928, at site 5 miles upstream at different datum. Dec. 31, 1928, to Jan. 7, 1942, at site 200 ft upstream at same datum.

AVERAGE DISCHARGE.--44 calendar years (1927-71), 126 cfs (91,290 acre-ft per year); 20 calendar years (1952-71), 125 cfs (90,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,130 cfs Oct. 25 (gage height, 9.46 ft); minimum, 14 cfs July 15.

Period of record: Maximum discharge, 25,400 cfs Sept. 29, 1941 (gage height, 17.2 ft, from floodmark), from rating curve extended above 3,900 cfs on basis of velocity-area studies; minimum, 14 cfs July 15, 1971.

Other major floods occurred in November 1905, December 1906, and January 1916.

REMARKS.--Records good, except those for November and December which are poor. Diversions for irrigation of about 500 acres above station.

REVISIONS (WATER YEARS).--WSP 1283: Drainage area. WSP 1313: 1944(M), 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	55	57	56	50	46	32	18	62	172	55	410	110
2	56	57	56	50	45	32	20	59	141	53	350	114
3	59	57	56	50	43	31	29	47	145	50	305	113
4	56	57	56	50	42	30	28	41	149	51	250	112
5	49	57	56	48	42	29	25	39	120	53	220	112
6	48	57	55	48	42	28	25	41	98	51	200	111
7	47	57	55	48	42	28	25	56	85	53	190	111
8	52	57	55	48	42	27	23	61	75	74	185	110
9	53	56	55	47	42	26	22	48	80	89	170	110
10	52	56	55	46	41	26	21	47	75	74	160	109
11	50	56	55	45	41	25	21	53	69	71	150	109
12	49	56	56	46	43	25	20	61	62	68	135	108
13	50	56	56	46	46	24	18	129	57	65	130	108
14	52	56	55	45	45	24	18	268	55	62	130	106
15	56	56	55	47	42	23	16	104	51	61	130	105
16	57	56	55	49	41	23	15	98	49	64	125	104
17	57	56	55	49	38	25	16	91	49	75	125	102
18	57	60	54	53	37	25	16	185	60	93	130	91
19	57	60	54	56	37	24	16	152	78	130	130	91
20	58	60	54	56	36	22	16	107	89	174	125	96
21	59	60	54	55	36	23	18	115	75	182	120	88
22	59	60	54	54	35	22	23	122	64	177	115	84
23	59	59	53	53	34	22	24	89	59	165	110	85
24	59	57	53	51	34	23	28	80	57	163	105	84
25	59	57	51	50	34	25	28	132	57	3,450	105	85
26	59	57	51	48	33	24	25	200	54	4,700	105	97
27	57	57	50	48	32	23	25	163	51	2,210	105	444
28	57	56	50	48	30	21	28	218	49	1,240	100	822
29	57	-----	50	47	30	21	28	195	46	812	100	850
30	57	-----	51	46	30	19	28	194	51	592	100	750
31	57	-----	51	-----	31	-----	28	184	-----	448	-----	600
TOTAL	1,708	1,603	1,672	1,477	1,192	752	691	3,441	2,322	15,605	4,815	6,121
MEAN	55.1	57.3	53.9	49.2	38.5	25.1	22.3	111	77.4	503	161	197
MAX	59	60	56	56	46	32	29	268	172	4,700	410	850
MIN	47	56	50	45	30	19	15	39	46	50	100	84
AC-FT	3,390	3,180	3,320	2,930	2,360	1,490	1,370	6,830	4,610	30,950	9,550	12,140

CAL YR 1971 TOTAL 41,399 MEAN 113 MAX 4,700 MIN 15 AC-FT 82,110

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-14	0030	4.49	1,010	12-29	1300	4.43	900
10-25	2230	9.46	9,130				

09430600 Mogollon Creek near Cliff, N. Mex.

(Hydrologic bench-mark station)

LOCATION.--Lat 33°10'00", long 108°38'57", in SE¼ sec.13, T.13 S., R.18 W., Grant County, 12 miles upstream from mouth, 14.2 miles north of Cliff.

DRAINAGE AREA.--69 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,440 ft (from topographic map).

EXTREMES.--Maximum discharge during year, 944 cfs Aug. 21 (gage height, 5.22 ft); no flow at times.

Period of record: Maximum discharge, 10,800 cfs Aug. 12, 1967 (gage height, 13.7 ft, from floodmarks), from rating curve extended above 220 cfs on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	1.2	1.1	1.0	1.4	1.5	.85	.68		0	10	1.8
2	2.9	1.1	1.1	1.0	1.4	1.5	.80	.58		0	4.4	1.9
3	11	1.0	1.1	1.0	1.4	2.5	.80	.59		0	2.4	1.6
4	10	1.1	1.2	1.0	1.2	1.5	.80	.61		0	1.5	1.4
5	11	1.1	1.2	1.0	1.4	1.6	.70	.61		0	1.4	1.2
6	6.5	1.1	1.2	1.0	1.4	1.5	.70	.58		0	1.3	1.1
7	4.4	1.1	1.2	1.0	1.3	1.5	.65	.58		0	3.2	1.0
8	3.1	1.1	1.2	1.0	1.3	1.5	.65	.58		0	7.4	.93
9	2.9	1.0	1.2	1.0	1.3	1.5	.64	.55		0	6.4	1.1
10	2.7	1.0	1.2	1.0	1.2	1.4	.64	.51		0	10	.86
11	2.3	1.0	1.1	1.0	1.4	1.5	.64	.05		0	16	.70
12	2.0	1.1	1.1	1.0	1.4	1.4	.64	.56		0	10	.60
13	1.8	1.1	1.1	1.1	1.3	1.4	.61	.58		0	9.8	.50
14	1.6	1.1	1.1	1.1	1.3	1.4	.64	.54		0	12	.49
15	1.5	1.1	1.2	1.1	1.3	1.4	.65	.32		0	13	.52
16	1.8	1.2	1.2	1.1	1.3	1.5	.71	.03		0	10	.35
17	2.1	1.1	1.2	1.1	1.3	1.3	.65	0		0	9.6	.59
18	1.8	1.0	1.2	1.1	1.7	1.3	1.2	.08		0	8.2	1.8
19	1.7	1.0	1.2	1.1	1.6	1.3	1.7	.09		0	9.5	1.6
20	1.6	1.0	1.2	1.1	1.6	1.2	1.1	.04		0	9.5	1.6
21	1.4	1.1	1.0	1.1	1.6	1.2	1.6	0		0	69	1.6
22	1.4	1.1	1.0	1.2	1.6	1.2	1.8	0		0	33	1.5
23	1.4	1.1	1.0	1.2	1.7	1.2	1.5	0		0	13	1.7
24	1.3	1.0	1.0	1.3	1.8	1.2	.51	0		0	7.8	2.0
25	1.3	1.0	1.0	1.3	1.6	1.0	1.2	0		0	6.5	1.6
26	1.3	1.0	1.0	1.4	1.6	1.0	1.2	0		0	5.0	1.4
27	1.3	1.0	1.0	1.5	1.5	1.0	.80	0		0	4.0	1.3
28	1.3	1.1	1.0	1.4	1.4	1.0	.58	0		0	3.3	1.2
29	1.4	1.1	1.0	1.4	-----	1.0	1.0	0		0	3.0	1.2
30	1.4	1.1	1.0	1.4	-----	.95	1.0	0		1.4	2.7	5.5
31	1.3	-----	1.0	1.4	-----	.90	-----	0	-----	14	2.1	-----
TOTAL	88.47	32.1	34.3	35.4	40.3	41.35	26.96	8.16	0	15.4	305.0	40.64
MEAN	2.85	1.07	1.11	1.14	1.44	1.33	.90	.26	0	.50	9.84	1.35
MAX	11	1.2	1.2	1.5	1.8	2.5	1.8	.68	0	14	69	5.5
MIN	.97	1.0	1.0	1.0	1.2	.90	.51	0	0	0	1.3	.35
AC-FT	175	64	68	70	80	82	53	16	0	31	605	81

CAL YR 1970 TOTAL 3,846.82 MEAN 10.5 MAX 82 MIN 0 AC-FT 7,630

WTR YR 1971 TOTAL 668.08 MEAN 1.83 MAX 69 MIN 0 AC-FT 1,330

PEAK DISCHARGE (BASE, 100 CFS).--Aug. 21 (1500) 944 CFS (5.22 FT).

09430600 Mogollon Creek near Cliff, N. Mex.

(Hydrologic bench-mark station)

LOCATION.--Lat 33°10'00", long 108°38'57", in SE¼ sec.13, T.13 S., R.18 W., Grant County, 12 miles upstream from mouth, 14.2 miles north of Cliff.

DRAINAGE AREA.--69 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,440 ft (from topographic map).

EXTREMES.--Maximum discharge during year, 1,720 cfs Oct. 25 (gage height, 6.28 ft); no flow at times.

Period of record: Maximum discharge, 10,800 cfs Aug. 12, 1967 (gage height, 13.7 ft, from floodmarks), from rating curve extended above 220 cfs on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.0	1.4	1.5	.85	.68		0	10	1.8	4.4	28	8.6
2	1.0	1.4	1.5	.80	.58		0	4.4	1.9	3.9	24	15
3	1.0	1.4	2.5	.80	.59		0	2.4	1.6	3.1	21	15
4	1.0	1.2	1.5	.80	.61		0	1.5	1.4	2.9	20	14
5	1.0	1.4	1.6	.70	.61		0	1.4	1.2	2.6	20	12
6	1.0	1.4	1.5	.70	.58		0	1.3	1.1	2.4	20	12
7	1.0	1.3	1.5	.65	.58		0	3.2	1.0	3.2	20	13
8	1.0	1.3	1.5	.65	.58		0	7.4	.93	77	19	12
9	1.0	1.3	1.5	.64	.55		0	6.4	1.1	35	19	11
10	1.0	1.2	1.4	.64	.51		0	10	.86	18	19	11
11	1.0	1.4	1.5	.64	.05		0	16	.70	13	19	11
12	1.0	1.4	1.4	.64	.56		0	10	.60	9.9	19	10
13	1.1	1.3	1.4	.61	.58		0	9.8	.50	8.0	19	10
14	1.1	1.3	1.4	.64	.54		0	12	.49	7.1	19	11
15	1.1	1.3	1.4	.65	.32		0	13	.52	6.2	19	11
16	1.1	1.3	1.5	.71	.03		0	10	.35	7.2	14	12
17	1.1	1.3	1.3	.65	0		0	9.6	.59	116	11	14
18	1.1	1.7	1.3	1.2	.08		0	8.2	1.8	116	10	11
19	1.1	1.6	1.3	1.7	.09		0	9.5	1.6	84	9.2	9.8
20	1.1	1.6	1.2	1.1	.04		0	9.5	1.6	79	9.1	9.4
21	1.1	1.6	1.2	1.6	0		0	69	1.6	59	8.8	9.7
22	1.2	1.6	1.2	1.8	0		0	33	1.5	48	8.5	10
23	1.2	1.7	1.2	1.5	0		0	13	1.7	37	8.1	18
24	1.3	1.8	1.2	.51	0		0	7.8	2.0	54	8.0	45
25	1.3	1.6	1.0	1.2	0		0	6.5	1.6	1,080	7.7	63
26	1.4	1.6	1.0	1.2	0		0	5.0	1.4	379	7.4	102
27	1.5	1.5	1.0	.80	0		0	4.0	1.3	181	7.2	236
28	1.4	1.4	1.0	.58	0		0	3.3	1.2	99	7.1	123
29	1.4	-----	1.0	1.0	0		0	3.0	1.2	67	7.1	101
30	1.4	-----	.95	1.0	0		1.4	2.7	5.5	49	7.6	77
31	1.4	-----	.90	-----	0	-----	14	2.1	-----	36	-----	66
TOTAL	35.4	40.3	41.35	26.96	8.16	0	15.4	305.0	40.64	2,687.9	435.8	1,083.5
MEAN	1.14	1.44	1.33	.90	.26	0	.50	9.84	1.35	86.7	14.5	35.0
MAX	1.5	1.8	2.5	1.8	.68	0	14	69	5.5	1,080	28	236
MIN	1.0	1.2	.90	.51	0	0	0	1.3	.35	2.4	7.1	8.6
AC-FT	70	80	82	53	16	0	31	605	81	5,330	864	2,150

CAL YR 1971 TOTAL 4,720.41 MEAN 12.9 MAX 1,080 MIN 0 AC-FT 9,360

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-21	1500	5.22	944	10-25	0415	6.28	1,720
10-8	0715	3.22	158	12-27	0015	3.81	344
10-17	1815	3.46	227				

09431500 Gila River near Redrock, N. Mex.

LOCATION.--Lat 32°43'37", long 108°40'30", in W $\frac{1}{2}$ sec.23, T.18 S., R.18 W., Grant County, on left bank 0.2 mile downstream from Copper Canyon, 0.2 mile upstream from lower end of box canyon, 4.7 miles northeast of Redrock, and 14 miles downstream from Mangas Creek.

DRAINAGE AREA.--2,829 sq mi.

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 (planetable survey). Prior to Dec. 31, 1907, nonrecording gage at site 13.5 miles upstream at different datum. May 14, 1908, to July 16, 1909, nonrecording gage at site 0.2 mile downstream at different datum.

AVERAGE DISCHARGE.--55 years (1905-06, 1908-10, 1912-55, 1962-71), 191 cfs (138,400 acre-ft per year)

EXTREMES.--Current year: Maximum discharge, 4,600 cfs Aug. 22 (gage height, 14.47 ft); minimum, about 3.5 cfs July 21.
Period of record: Maximum discharge, 40,000 cfs Sept. 29, 1941 (gage height, 31 ft, from floodmark), computed on basis of known peak flow for station below Blue Creek; minimum, 2.2 cfs Aug. 5, 1947.

REMARKS.--Records fair. Diversions for irrigation of about 5,000 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	49	72	83	71	37	38	32	22	10	103	185
2	41	56	70	74	67	43	38	47	21	30	64	170
3	130	49	69	80	64	49	54	38	18	97	77	150
4	56	49	70	80	59	39	43	25	14	35	77	135
5	91	48	65	64	64	41	31	22	13	19	50	125
6	79	43	59	54	59	39	42	28	15	16	39	105
7	64	48	61	54	70	42	41	30	12	13	29	100
8	49	46	60	60	66	40	41	32	12	12	25	92
9	50	48	57	66	59	35	42	35	12	13	39	105
10	51	53	59	60	56	31	44	29	10	12	74	112
11	45	53	63	60	57	42	44	26	10	16	64	90
12	50	51	72	60	52	36	41	29	11	14	115	70
13	51	53	77	60	54	30	38	28	12	7.2	336	64
14	56	55	78	62	50	34	36	34	16	6.3	408	60
15	46	59	79	65	52	41	45	28	11	7.2	115	56
16	45	54	79	67	50	44	46	28	9.1	6.0	142	120
17	42	55	79	68	44	43	35	23	14	5.2	111	611
18	51	59	76	68	44	45	47	30	9.5	4.9	76	222
19	54	73	73	74	50	40	44	25	7.2	4.6	148	77
20	55	72	68	69	53	44	39	23	6.9	4.3	101	48
21	53	77	79	70	58	46	45	22	9.1	4.1	125	42
22	47	73	80	68	48	43	41	25	16	5.2	645	37
23	47	67	76	66	42	39	40	24	18	6.9	105	50
24	46	74	72	66	43	38	45	24	9.9	63	105	76
25	37	77	77	54	47	42	48	22	14	32	99	49
26	36	74	77	54	49	40	39	22	12	20	140	42
27	32	71	80	54	41	40	40	24	14	28	105	37
28	35	65	83	58	37	38	37	22	12	49	103	34
29	43	65	80	65	-----	38	37	22	10	17	192	35
30	39	68	79	64	-----	39	35	22	9.9	31	135	56
31	39	-----	81	66	-----	42	-----	22	-----	172	180	-----
TOTAL	1,588	1,784	2,250	2,013	1,506	1,240	1,236	843	380.6	760.9	4,127	3,155
MEAN	51.2	59.5	72.6	64.9	53.8	40.0	41.2	27.2	12.7	24.5	133	105
MAX	130	77	83	83	71	49	54	47	22	172	645	611
MIN	28	43	57	54	37	30	31	22	6.9	4.1	25	34
AC-FT	3,150	3,540	4,460	3,990	2,990	2,460	2,450	1,670	755	1,510	8,190	6,260

CAL YR 1970 TOTAL 27,108.0 MEAN 74.3 MAX 302 MIN 12 AC-FT 53,770
WTR YR 1971 TOTAL 20,883.5 MEAN 57.2 MAX 645 MIN 4.1 AC-FT 41,420

PEAK DISCHARGE (BASE, 3,000 CFS).--Aug. 22 (0015) 4,600 CFS (14.47 FT).

09431500 Gila River near Redrock, N. Mex.

LOCATION.--Lat 32°43'37", long 108°40'30", in W¹/₂ sec.23, T.18 S., R.18 W., Grant County, on left bank 0.2 mile downstream from Copper Canyon, 0.2 mile upstream from lower end of box canyon, 4.7 miles northeast of Redrock, and 14 miles downstream from Mangas Creek.

DRAINAGE AREA.--2,829 sq mi.

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 (planetable survey). Prior to Dec. 31, 1907, nonrecording gage at site 13.5 miles upstream at different datum. May 14, 1908, to July 16, 1909, nonrecording gage at site 0.2 mile downstream at different datum.

AVERAGE DISCHARGE.--54 calendar years (1905-06, 1908-10, 1912-54, 1962-71), 192 cfs (139,100 acre-ft per year)

EXTREMES.--Current year: Maximum discharge, 7,640 cfs Oct. 26 (gage height, 16.33 ft); minimum, about 3.5 cfs July 21.

Period of record: Maximum discharge, 40,000 cfs Sept. 29, 1941 (gage height, 31 ft, from floodmark), computed on basis of known peak flow for station below Blue Creek; minimum, 2.2 cfs Aug. 5, 1947.

REMARKS.--Records fair. Diversions for irrigation of about 5,000 acres 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, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83	71	37	38	32	22	10	103	185	41	525	125
2	74	67	43	38	47	21	30	64	170	37	456	138
3	80	64	49	54	38	18	97	77	150	32	408	135
4	80	59	39	43	25	14	35	77	135	30	360	135
5	64	64	41	31	22	13	19	50	125	28	297	129
6	54	59	39	42	28	15	16	39	105	26	270	129
7	54	70	42	41	30	12	13	29	100	21	243	127
8	60	66	40	41	32	12	12	25	92	560	219	125
9	66	59	35	42	35	12	13	39	105	148	205	121
10	60	56	31	44	29	10	12	74	112	99	198	121
11	60	57	42	44	26	10	16	64	90	83	192	121
12	60	52	36	41	29	11	14	115	70	78	192	121
13	60	54	30	38	28	12	7.2	336	64	71	188	115
14	62	50	34	36	34	16	6.3	408	60	62	185	117
15	65	52	41	45	28	11	7.2	115	56	62	178	115
16	67	50	44	46	28	9.1	6.0	142	120	58	168	111
17	68	44	43	35	23	14	5.2	111	611	65	178	105
18	68	44	45	47	30	9.5	4.9	76	222	152	182	105
19	74	50	40	44	25	7.2	4.6	148	77	160	175	103
20	69	53	44	39	23	6.9	4.3	101	48	168	170	103
21	70	58	46	45	22	9.1	4.1	125	42	180	165	105
22	68	48	43	41	25	16	5.2	645	37	168	158	99
23	66	42	39	40	24	18	6.9	105	50	155	148	95
24	66	43	38	45	24	9.9	63	105	76	158	142	99
25	54	47	42	48	22	14	32	99	49	2,330	138	101
26	54	49	40	39	22	12	20	140	42	5,670	142	101
27	54	41	40	40	24	14	28	105	37	2,870	145	205
28	58	37	38	37	22	12	49	103	34	1,490	142	696
29	65	-----	38	37	22	10	17	192	35	1,140	135	726
30	64	-----	39	35	22	9.9	31	135	56	834	125	708
31	66	-----	42	-----	22	-----	172	180	-----	625	-----	530
TOTAL	2,013	1,506	1,240	1,236	843	380.6	760.9	4,127	3,155	17,601	6,429	5,866
MEAN	64.9	53.8	40.0	41.2	27.2	12.7	24.5	133	105	568	214	189
MAX	83	71	49	54	47	22	172	645	611	5,670	525	726
MIN	54	37	30	31	22	6.9	4.1	25	34	21	125	95
AC-FT	3,990	2,990	2,460	2,450	1,670	755	1,510	8,190	6,260	34,910	12,750	11,640

CAL YR 1971 TOTAL 45,157.5 MEAN 124 MAX 5,670 MIN 4.1 AC-FT 89,570

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-22	0015	14.47	4,600	10-26	0800	16.33	7,640

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 miles downstream from Blue Creek, 10 miles east of Virden, and 16 miles upstream from New Mexico-Arizona State line.

DRAINAGE AREA.--3,203 sq mi, 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 miles 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 (from river-profile map). May 11, 1914, to Sept. 30, 1915, at site 6 miles downstream, 1,000 ft upstream from intake of Sunset Canal. June 1 to July 7, 1931, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--44 years (1927-71), 166 cfs (120,300 acre-ft per year); median of yearly mean discharges, 130 cfs (94,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,730 cfs Sept. 18 (gage height, 11.48 ft); minimum, 3.1 cfs July 17 (gage height, 2.68 ft).

Period of record: Maximum discharge, 41,700 cfs Sept. 29, 1941 (gage height, 25.78 ft); minimum, 1 cfs July 14, 1934.

REMARKS.--Records good. Station is above all Duncan Valley diversions. Diversions for irrigation of about 6,200 acres above station.

REVISIONS (WATER YEARS).--WSP 1283: Drainage area. WSP 1313: 1929, 1931-32(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	44	74	85	76	46	34	28	20	4.2	71	193
2	46	51	72	80	71	48	31	34	20	21	44	150
3	90	50	70	80	74	56	40	38	17	83	30	121
4	61	47	73	86	75	53	42	32	16	21	70	131
5	84	49	69	81	68	52	34	25	12	16	40	121
6	74	47	65	71	65	47	34	28	10	15	30	109
7	64	48	63	70	71	52	34	29	9.5	10	20	97
8	61	49	65	60	73	49	34	29	8.1	10	20	87
9	68	45	60	66	57	47	36	33	7.6	10	51	94
10	59	52	59	83	59	41	37	30	6.8	8.0	60	114
11	47	51	60	79	58	45	39	30	6.5	5.0	60	74
12	50	50	68	80	57	50	39	30	6.0	5.0	30	65
13	53	48	72	74	61	40	36	29	5.6	5.0	322	61
14	54	53	77	67	58	39	32	32	5.3	3.7	327	54
15	51	56	76	71	58	42	36	32	5.1	3.5	154	50
16	47	53	76	77	58	43	42	31	5.1	3.5	135	50
17	40	53	75	73	54	43	38	20	4.8	3.7	124	339
18	37	53	72	67	55	43	39	25	4.6	4.0	118	754
19	40	64	72	76	57	44	47	29	4.4	4.0	141	285
20	51	67	69	74	61	43	42	25	4.2	4.4	124	65
21	49	69	72	73	65	47	43	23	4.8	4.2	109	54
22	42	70	80	74	61	49	44	24	4.4	4.6	686	58
23	43	64	76	74	54	46	43	23	5.3	6.5	155	143
24	45	69	72	82	49	43	41	23	7.0	28	117	78
25	37	74	76	78	55	44	43	20	5.3	28	129	51
26	36	73	79	73	57	43	41	20	6.8	22	187	46
27	32	70	85	68	54	43	35	20	5.3	12	182	47
28	32	65	84	76	51	42	36	22	4.8	72	205	42
29	41	65	84	70	-----	38	33	20	4.2	24	233	39
30	40	67	82	70	-----	39	26	20	4.2	15	157	44
31	38	-----	83	72	-----	40	-----	20	-----	174	203	-----
TOTAL	1,540	1,716	2,260	2,310	1,712	1,397	1,131	824	230.7	630.3	4,334	3,616
MEAN	49.7	57.2	72.9	74.5	61.1	45.1	37.7	26.6	7.69	20.3	140	121
MAX	90	74	85	86	76	56	47	38	20	174	686	754
MIN	28	44	59	60	49	38	26	20	4.2	3.5	20	39
AC-FT	3,050	3,400	4,480	4,580	3,400	2,770	2,240	1,630	458	1,250	8,600	7,170
CAL YR 1970	TOTAL 26,563.9 MEAN 72.8 MAX 442 MIN 6.8 AC-FT 52,690											
WTR YR 1971	TOTAL 21,701.0 MEAN 59.5 MAX 754 MIN 3.5 AC-FT 43,040											

PEAK DISCHARGE (BASE, 1,900 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-22	0330	9.95	2,520	9-18	2100	11.48	3,730

09442653 Trout Creek near Luna, N. Mex.

LOCATION.--Lat 33°53'24", long 109°00'38", in NE¼NW¼ sec.10, T.5 S., R.21 W., Catron County, on left bank 0.9 mile downstream from Romero Creek, and 5.9 miles northwest of Luna.

DRAINAGE AREA.--27.1 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 8,050 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 92 cfs Feb. 18 (gage height 3.62 ft); no flow for many days.

Period of record: Maximum discharge, 605 cfs Sept. 11, 1969 (gage height 5.50 ft) from rating curve extended above 15 cfs on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records fair except those for winter months, which are poor. Flow is slightly regulated by unnamed reservoir 3 miles upstream on Romero Creek.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.15	.11	.02	.07	.08	.10	.03			0	1.2
2	.52	.15	.09	.02	.07	.08	.10	.03			0	1.0
3	2.2	.15	.09	.03	.05	.08	.09	0			0	.52
4	2.2	.15	.07	.02	.03	.15	.09	0			0	.23
5	.70	.17	.07	.02	.07	.23	.09	0			0	.15
6	.37	.17	.05	.01	.07	.20	.09	0			0	.11
7	.23	.18	.07	.01	.05	.22	.10	0			0	.07
8	.28	.19	.07	.02	.03	.22	.11	0			0	.34
9	.48	.15	.05	.02	.03	.24	.11	0			0	.57
10	.29	.15	.07	.01	.03	.21	.10	0			0	.19
11	.21	.15	.03	0	.05	.21	.09	0			0	.11
12	.17	.15	.02	0	.05	.22	.07	0			0	.05
13	.16	.15	.02	.05	.07	.24	.05	0			0	.03
14	.15	.15	.02	.07	.07	.23	.05	0			0	.02
15	.16	.15	.02	.03	.10	.20	.11	0			0	.02
16	1.0	.13	.03	.02	.13	.17	.15	0			0	.02
17	.65	.15	.03	.07	.14	.17	.07	0			0	.02
18	.42	.13	.05	.13	12	.17	.09	0			0	.01
19	.29	.13	.03	.17	.16	.14	.13	0			0	.03
20	.23	.13	.03	.19	.16	.13	.13	0			.02	.03
21	.21	.13	.03	.21	.15	.15	.11	0			.13	.03
22	.20	.13	.03	.17	.12	.16	.11	0			2.8	.03
23	.19	.12	.03	.11	.10	.16	.09	0			3.6	.09
24	.18	.13	.03	.05	.17	.17	.07	0			.52	.09
25	.15	.11	.02	.03	.29	.16	.05	0			.46	.05
26	.15	.11	.03	.03	.40	.15	.05	0			.34	.03
27	.15	.13	.05	.03	.16	.15	.03	0			.19	.02
28	.13	.13	.05	.03	.13	.16	.03	0			.23	.02
29	.13	.15	.03	.03	-----	.14	.03	0			.29	.13
30	.13	.15	.02	.03	-----	.12	.03	0			.17	1.6
31	.15	-----	.02	.05	-----	.12	-----	0	-----		.15	-----
TOTAL	12.61	4.32	1.36	1.68	14.95	5.23	2.52	.06	0	0	8.90	6.81
MEAN	.41	.14	.044	.054	.53	.17	.084	.002	0	0	.29	.23
MAX	2.2	.19	.11	.21	12	.24	.15	.03	0	0	3.6	1.6
MIN	.13	.11	.02	0	.03	.08	.03	0	0	0	0	.01
AC-FT	25	8.6	2.7	3.3	30	10	5.0	.1	0	0	18	14

CAL YR 1970 TOTAL 569.65 MEAN 1.56 MAX 17 MIN 0 AC-FT 1,130
 WTR YR 1971 TOTAL 58.44 MEAN .16 MAX 12 MIN 0 AC-FT 116

PEAK DISCHARGE (BASE, 30 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
2-18	1030	3.62	92	8-22	2000	3.12	31

09442653 Trout Creek near Luna, N. Mex.

LOCATION.--Lat 33°53'24", long 109°00'38", in NE 1/4 sec. 10, T.5 S., R.21 W., Catron County, on left bank 0.9 mile downstream from Romero Creek, and 5.9 miles northwest of Luna.

DRAINAGE AREA.--27.1 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 8,050 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 203 cfs Dec. 29 (gage height 4.06 ft); no flow for many days.

Period of record: Maximum discharge, 605 cfs Sept. 11, 1969 (gage height 5.50 ft) from rating curve extended above 15 cfs on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records fair except those for winter months, which are poor. Flow is slightly regulated by unnamed reservoir 3 miles upstream on Romero Creek.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.02	.07	.08	.10	.03			0	1.2	5.6	3.7	1.7
2	.02	.07	.08	.10	.03			0	1.0	1.5	2.8	2.0
3	.03	.05	.08	.09	0			0	.52	.92	2.4	2.2
4	.02	.03	.15	.09	0			3	.23	.70	2.3	2.2
5	.02	.07	.23	.09	0			0	.15	.64	2.2	1.7
6	.01	.07	.20	.09	0			0	.11	.59	1.8	1.7
7	.01	.05	.22	.10	0			0	.07	.59	1.6	2.0
8	.02	.03	.22	.11	0			0	.34	.70	1.5	1.7
9	.02	.03	.24	.11	0			0	.57	.64	1.2	1.7
10	.01	.03	.21	.10	0			0	.19	.54	1.2	2.0
11	0	.05	.21	.09	0			0	.11	.49	1.2	2.6
12	0	.05	.22	.07	0			0	.05	.49	1.1	2.4
13	.05	.07	.24	.05	0			0	.03	.44	1.1	2.3
14	.07	.07	.23	.05	0			0	.02	.44	.99	2.8
15	.03	.10	.20	.11	0			0	.02	.44	1.2	3.9
16	.02	.13	.17	.15	0			0	.02	.54	2.3	4.2
17	.07	.14	.17	.07	0			0	.02	1.6	2.2	3.9
18	.13	12	.17	.09	0			0	.01	2.0	2.0	4.5
19	.17	.16	.14	.13	0			0	.03	2.4	1.8	4.2
20	.19	.16	.13	.13	0			.02	.03	3.0	2.0	4.2
21	.21	.15	.15	.11	0			.13	.03	2.8	2.3	4.2
22	.17	.12	.16	.11	0			2.8	.03	2.3	2.2	4.2
23	.11	.10	.16	.09	0			3.6	.09	1.8	1.8	3.9
24	.05	.17	.17	.07	0			.52	.09	2.0	2.2	3.9
25	.03	.29	.16	.05	0			.46	.05	71	2.2	4.5
26	.03	.40	.15	.05	0			.34	.03	32	2.2	12
27	.03	.16	.15	.03	0			.19	.02	14	2.3	51
28	.03	.13	.16	.03	0			.23	.02	8.6	3.7	106
29	.03	-----	.14	.03	0			.29	.13	6.5	2.3	90
30	.03	-----	.12	.03	0			.17	1.6	4.2	2.0	26
31	.05	-----	.12	-----	0	-----		.15	-----	4.8	-----	78
TOTAL	1.68	14.95	5.23	2.52	.06	0	0	8.90	6.81	174.26	59.79	437.6
MEAN	.054	.53	.17	.084	.002	0	0	.29	.23	5.62	1.99	14.1
MAX	.21	12	.24	.15	.03	0	0	3.6	1.6	71	3.7	106
MIN	0	.03	.08	.03	0	0	0	0	.01	.44	.99	1.7
AC-FT	3.3	30	10	5.0	.1	0	0	18	14	346	119	868

CAL YR 1971 TOTAL 711.80 MEAN 1.95 MAX 106 MIN 0 AC-FT 1,410

PEAK DISCHARGE (BASE, 30 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
2-18	1030	3.62	92	10-25	0530	3.78	138
8-22	2000	3.12	31	12-29	0730	4.06	203

09442680 San Francisco River near Reserve, N. Mex.

LOCATION.--Lat 33°44'24", long 108°46'22", in SW 1/4 sec. 35, T.6 S., R.19 W., Catron County, on left bank 500 ft upstream from Rainbow Bridge Canyon, and 2 miles northwest of Reserve.

DRAINAGE AREA.--350 sq mi, approximately.

PERIOD OF RECORD.--March 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,830 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 21.2 cfs (15,360 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 186 cfs Oct. 3 (gage height, 1.57 ft); minimum, 1.3 cfs July 14-18.

Period of record: Maximum discharge, 1,320 cfs July 31, 1967 (gage height, 3.73 ft in gage well, 4.4 ft from outside floodmarks), from rating curve extended above 460 cfs on basis of slope-area measurement of peak flow; minimum, 1.0 cfs Mar. 16, 1959.

Maximum stage known, about 15 ft, as determined in 1962 from old floodmarks. Major floods of Nov. 26, 1905 and Dec. 3, 1906, exceeded 20,000 cfs at Alma (downstream). See WSP 1313.

REMARKS.--Records good except those for summer months, which are poor. Possible minor regulation by Luna Lake, 27 miles upstream. Diversions for irrigation of about 500 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	6.6	5.0	6.9	4.7	5.0	3.5	3.1	2.4	1.8	3.2	72
2	9.4	6.5	5.8	6.9	4.6	4.7	3.7	3.0	2.5	3.5	2.2	50
3	43	6.7	6.0	5.6	4.4	4.5	3.8	3.0	2.5	1.6	4.2	34
4	21	6.7	6.4	4.9	4.2	4.5	3.8	3.0	2.4	1.6	2.2	21
5	11	6.8	6.0	4.0	5.3	4.7	3.8	3.4	2.3	1.6	2.9	15
6	7.6	6.7	5.9	3.5	5.2	4.9	3.8	3.4	2.2	1.6	2.9	10
7	6.1	6.7	6.7	3.5	3.9	5.3	3.8	3.4	2.1	1.4	5.0	10
8	6.6	6.4	6.3	3.5	5.2	5.4	3.7	3.4	2.2	1.4	3.8	30
9	7.7	6.1	6.5	4.0	5.8	4.9	3.7	3.2	2.3	1.4	2.4	18
10	7.2	5.9	6.2	4.7	5.8	4.8	3.6	3.2	2.4	1.4	2.4	10
11	7.2	6.0	4.9	5.7	6.1	4.9	3.7	3.2	2.4	1.6	2.9	5.0
12	7.2	6.0	5.1	6.7	5.8	4.6	3.7	3.2	2.2	2.5	6.0	3.0
13	7.2	6.1	5.5	7.6	5.9	4.0	3.4	3.3	2.0	1.4	4.3	3.0
14	6.9	6.0	7.3	6.6	5.9	4.0	3.4	3.2	1.6	1.3	3.1	3.0
15	7.0	5.4	6.9	5.6	5.9	4.0	3.8	3.2	1.6	1.3	3.1	3.0
16	11	5.8	5.8	6.5	6.2	4.0	3.7	2.8	1.6	1.5	3.5	25
17	8.2	6.3	6.8	8.3	5.8	4.0	3.5	2.7	1.6	1.5	10	8.0
18	8.0	6.1	7.7	7.8	5.5	3.9	3.9	2.7	1.6	1.5	5.0	35
19	7.6	6.1	5.6	7.1	5.3	4.0	3.9	2.7	1.6	1.5	5.5	15
20	7.2	5.7	6.7	7.5	6.0	4.3	3.6	2.8	1.8	1.6	6.0	5.0
21	7.2	6.1	6.1	7.7	5.4	4.1	3.5	2.8	2.0	2.1	25	5.0
22	7.2	5.7	6.7	7.4	4.9	4.0	3.5	2.8	2.0	1.6	18	4.6
23	7.2	6.1	3.3	6.7	4.6	3.8	3.7	2.9	2.0	1.6	13	4.3
24	7.2	5.9	3.8	5.9	4.7	3.7	3.7	2.9	1.8	1.6	13	4.0
25	7.1	5.9	7.0	6.1	4.8	3.8	3.6	2.8	1.8	1.4	16	3.7
26	6.7	6.1	9.7	6.3	5.0	3.8	3.3	2.7	1.6	2.0	17	3.4
27	6.5	6.0	9.0	6.3	5.2	3.4	3.2	2.5	1.6	2.0	22	3.2
28	6.4	5.8	7.6	6.3	5.2	3.4	3.2	2.4	1.6	2.0	28	3.0
29	6.6	5.8	6.0	5.9	-----	3.5	3.2	2.5	1.6	2.0	31	3.0
30	6.7	6.1	5.9	4.7	-----	3.7	3.1	2.5	1.6	2.7	39	40
31	6.8	-----	6.3	5.1	-----	3.7	-----	2.4	-----	3.8	28	-----
TOTAL	278.5	184.1	194.5	185.3	147.3	131.3	107.8	91.1	58.9	55.8	330.6	449.2
MEAN	8.98	6.14	6.27	5.98	5.26	4.24	3.59	2.94	1.96	1.80	10.7	15.0
MAX	43	6.8	9.7	8.3	6.2	5.4	3.9	3.4	2.5	3.8	39	72
MIN	5.8	5.4	3.3	3.5	3.9	3.4	3.1	2.4	1.6	1.3	2.2	3.0
AC-FT	552	365	386	368	292	260	214	181	117	111	656	891

CAL YR 1970 TOTAL 2,683.8 MEAN 7.35 MAX 43 MIN 2.3 AC-FT 5,320
 WTR YR 1971 TOTAL 2,214.4 MEAN 6.07 MAX 72 MIN 1.3 AC-FT 4,390

PEAK DISCHARGE (BASE, 450 CFS).--No peak above base.

09442680 San Francisco River near Reserve, N. Mex.

LOCATION.--Lat 33°44'24", long 108°46'22", in SW¼NE¼ sec.35, T.6 S., R.19 W., Catron County, on left bank 500 ft upstream from Rainbow Bridge Canyon, and 2 miles northwest of Reserve.

DRAINAGE AREA.--350 sq mi, approximately.

PERIOD OF RECORD.--March 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,830 ft (from topographic map).

AVERAGE DISCHARGE.--12 calendar years, 21.9 cfs (15,870 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,090 cfs Oct. 25 (gage height, 3.34 ft); minimum, 1.3 cfs July 14-18.

Period of record: Maximum discharge, 1,320 cfs July 31, 1967 (gage height, 3.73 ft in gage well, 4.4 ft from outside flood-marks), from rating curve extended above 460 cfs on basis of slope-area measurement of peak flow; minimum, 1.0 cfs Mar. 16, 1959.

Maximum stage known, about 15 ft, as determined in 1962 from old floodmarks. Major floods of Nov. 26, 1905 and Dec. 3, 1906, exceeded 20,000 cfs at Alma (downstream). See WSP 1313.

REMARKS.--Records good except those for summer months and October, which are poor. Possible minor regulation by Luna Lake, 27 miles upstream. Diversions for irrigation of about 500 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	6.9	4.7	5.0	3.5	3.1	2.4	1.8	3.2	72	300	23	12
2	6.9	4.6	4.7	3.7	3.0	2.5	3.5	2.2	50	40	18	13
3	5.6	4.4	4.5	3.8	3.0	2.5	1.6	4.2	34	14	16	14
4	4.9	4.2	4.5	3.8	3.0	2.4	1.6	2.2	21	6.5	14	13
5	4.0	5.3	4.7	3.8	3.4	2.3	1.6	2.9	15	3.0	12	12
6	3.5	5.2	4.9	3.8	3.4	2.2	1.6	2.9	10	3.0	11	10
7	3.5	3.9	5.3	3.8	3.4	2.1	1.4	5.0	10	3.5	10	12
8	3.5	5.2	5.4	3.7	3.4	2.2	1.4	3.8	30	10	9.8	12
9	4.0	5.8	4.9	3.7	3.2	2.3	1.4	2.4	18	4.0	8.8	12
10	4.7	5.8	4.8	3.6	3.2	2.4	1.4	2.4	10	3.8	8.5	8.7
11	5.7	6.1	4.9	3.7	3.2	2.4	1.6	2.9	5.0	3.5	8.3	8.7
12	6.7	5.8	4.6	3.7	3.2	2.2	2.5	6.0	3.0	3.2	8.2	8.2
13	7.6	5.9	4.0	3.4	3.3	2.0	1.4	4.3	3.0	3.0	7.3	8.7
14	6.6	5.9	4.0	3.4	3.2	1.6	1.3	3.1	3.0	3.0	7.2	10
15	5.6	5.9	4.0	3.8	3.2	1.6	1.3	3.1	3.0	3.0	12	10
16	6.5	6.2	4.0	3.7	2.8	1.6	1.5	3.5	25	8.0	13	7.1
17	8.3	5.8	4.0	3.5	2.7	1.6	1.5	10	8.0	25	14	7.0
18	7.8	5.5	3.9	3.9	2.7	1.6	1.5	5.0	35	70	16	7.2
19	7.1	5.3	4.0	3.9	2.7	1.6	1.5	5.5	15	45	14	9.3
20	7.5	6.0	4.3	3.6	2.8	1.8	1.6	6.0	5.0	30	13	9.5
21	7.7	5.4	4.1	3.5	2.8	2.0	2.1	25	5.0	20	14	9.0
22	7.4	4.9	4.0	3.5	2.8	2.0	1.6	18	4.6	14	14	11
23	6.7	4.6	3.8	3.7	2.9	2.0	1.6	13	4.3	10	13	14
24	5.9	4.7	3.7	3.7	2.9	1.8	1.6	13	4.0	60	12	17
25	6.1	4.8	3.8	3.6	2.8	1.8	1.4	16	3.7	900	12	24
26	6.3	5.0	3.8	3.3	2.7	1.6	2.0	17	3.4	400	11	146
27	6.3	5.2	3.4	3.2	2.5	1.6	2.0	22	3.2	140	12	335
28	6.3	5.2	3.4	3.2	2.4	1.6	2.0	28	3.0	50	11	277
29	5.9	-----	3.5	3.2	2.5	1.6	2.0	31	3.0	40	12	247
30	4.7	-----	3.7	3.1	2.5	1.6	2.7	39	40	34	11	157
31	5.1	-----	3.7	-----	2.4	-----	3.8	28	-----	28	-----	95
TOTAL	185.3	147.3	131.3	107.8	91.1	58.9	55.8	330.6	449.2	2,277.5	366.1	1,536.4
MEAN	5.98	5.26	4.24	3.59	2.94	1.96	1.80	10.7	15.0	73.5	12.2	49.6
MAX	8.3	6.2	5.4	3.9	3.4	2.5	3.8	39	72	900	23	335
MIN	3.5	3.9	3.4	3.1	2.4	1.6	1.3	2.2	3.0	3.0	7.2	7.0
AC-FT	368	292	260	214	181	117	111	656	891	4,520	726	3,050

CAL YR 1971 TOTAL 5,737.3 MEAN 15.7 MAX 900 MIN 1.3 AC-FT 11,380

PEAK DISCHARGE (BASE, 450 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-25	Unknown	3.34	1,090	12-27	0030	2.33	492

09442692 Tularosa River above Aragon, N. Mex.

LOCATION.--Lat 33°53'29", long 108°30'54", in NW¼ sec.9, T.5 S., R.16 W., Catron County, on right bank 0.4 mile upstream from first diversion, 1.4 miles northeast of Aragon, and 8 miles upstream from Apache Creek.

DRAINAGE AREA.--94 sq mi.

PERIOD OF RECORD.--July 1966 to current year. 1955 to 1965 at site 0.6 mile upstream (drainage area, 89 sq mi), annual maximum only.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,750 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 3.18 cfs (2,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 392 cfs Sept. 1 (gage height, 3.13 ft); minimum, 2.0 cfs Apr. 13.

Period of record: Maximum discharge, 392 cfs Sept. 1, 1971 (gage height, 3.13 ft), from rating curve extended above 10 cfs on basis of slope-area measurement of peak flow; minimum, 1.1 cfs (revised) July 22, 1969.

REMARKS.--Records excellent, except for winter period which are good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.9	2.9	3.0	3.1	2.9	2.6	2.7	2.9	2.9	2.9	17
2	3.0	2.9	2.9	3.0	3.0	2.9	2.7	2.7	2.9	3.0	2.9	3.0
3	3.0	2.9	3.0	3.0	3.1	2.9	2.7	2.7	2.9	3.0	3.0	3.0
4	2.9	2.9	2.9	3.0	3.0	2.9	2.7	2.7	2.9	2.9	3.8	3.0
5	2.9	2.9	2.9	3.0	3.0	2.9	2.7	2.7	2.9	3.0	3.0	3.0
6	2.8	2.9	2.9	3.0	3.0	2.9	2.7	2.7	2.9	3.0	3.0	2.9
7	2.8	2.9	2.9	3.0	3.0	2.9	2.7	2.8	2.9	3.0	3.0	2.9
8	2.8	2.9	2.9	3.2	2.9	2.9	2.7	2.9	2.9	3.0	3.1	2.9
9	2.8	2.8	2.9	3.3	3.0	2.9	2.7	2.9	2.9	2.9	3.1	2.9
10	2.8	2.8	2.9	3.4	2.9	2.9	2.7	2.9	2.9	2.9	3.0	2.9
11	2.8	2.9	2.9	3.4	2.9	2.8	2.7	2.9	2.9	2.9	3.0	2.9
12	2.8	2.9	2.9	3.6	2.9	2.8	2.7	2.9	2.9	2.9	3.0	2.9
13	2.8	2.8	2.9	3.4	2.9	2.8	2.6	3.0	2.9	2.9	3.0	2.9
14	2.8	2.9	3.0	3.4	2.9	2.8	2.7	3.0	2.9	2.8	3.0	2.9
15	3.0	2.9	3.0	3.4	2.9	2.7	2.8	2.9	2.9	2.7	3.0	2.8
16	2.9	2.9	2.9	3.4	2.9	2.7	2.8	2.9	2.9	2.8	3.0	2.8
17	2.9	2.9	2.9	3.3	2.9	2.7	2.8	2.9	2.9	2.8	3.0	2.9
18	2.9	2.9	2.9	3.3	2.9	2.7	2.8	2.9	2.9	2.8	3.0	4.0
19	2.8	2.9	2.9	3.2	2.9	2.7	2.8	2.9	2.9	2.9	3.0	2.9
20	2.8	2.9	2.9	3.2	2.9	2.7	2.7	2.9	2.9	2.9	3.0	2.9
21	2.8	2.9	2.9	3.1	2.9	2.7	2.7	2.9	2.9	3.6	3.0	2.9
22	2.8	2.9	2.9	3.1	2.9	2.7	2.7	2.9	2.9	2.8	4.7	2.9
23	2.8	2.9	2.9	3.1	2.9	2.7	2.7	2.9	2.9	2.8	11	3.2
24	2.8	3.0	3.0	3.1	2.9	2.7	2.7	2.9	2.9	2.8	3.2	2.8
25	2.8	3.0	3.0	3.1	2.9	2.7	2.7	2.9	2.9	2.7	3.0	2.8
26	2.8	2.9	3.0	3.1	2.9	2.7	2.7	2.9	2.9	2.8	3.0	2.8
27	2.8	3.0	3.0	3.1	2.9	2.7	2.6	2.9	2.9	2.8	3.0	2.8
28	2.8	3.0	3.0	3.1	2.9	2.7	2.6	2.9	2.9	2.8	3.1	2.8
29	2.8	2.9	2.9	3.1	-----	2.6	2.6	2.9	2.9	2.9	3.0	3.6
30	2.8	3.0	2.9	3.1	-----	2.7	2.6	2.9	2.9	3.0	3.0	3.0
31	2.8	-----	2.9	3.1	-----	2.7	-----	2.9	-----	3.0	2.9	-----
TOTAL	87.9	87.2	90.7	98.6	82.2	86.0	80.9	88.8	87.0	90.0	103.7	103.0
MEAN	2.84	2.91	2.93	3.18	2.94	2.77	2.70	2.86	2.90	2.90	3.35	3.43
MAX	3.0	3.0	3.0	3.6	3.1	2.9	2.8	3.0	2.9	3.6	11	17
MIN	2.8	2.8	2.9	3.0	2.9	2.6	2.6	2.7	2.9	2.7	2.9	2.8
AC-FT	174	173	180	196	163	171	160	176	173	179	206	204

CAL YR 1970 TOTAL 1,033.2 MEAN 2.83 MAX 3.1 MIN 2.5 AC-FT 2,050
WTR YR 1971 TOTAL 1,086.0 MEAN 2.98 MAX 17 MIN 2.6 AC-FT 2,150

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-23	1800	2.84	284	9-18	1430	1.63	24
9-1	1630	3.13	392				

09442692 Tularosa River above Aragon, N. Mex.

LOCATION.--Lat 33°53'29", long 108°30'54". in NW¼ sec.9, T.5 S., R.16 W., Catron County, on right bank 0.4 mile upstream from first diversion, 1.4 miles northeast of Aragon, and 8 miles upstream from Apache Creek.

DRAINAGE AREA.--94 sq mi.

PERIOD OF RECORD.--July 1966 to current year. 1955 to 1965 at site 0.6 mile upstream (drainage area, 89 sq mi), annual maximum only.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,750 ft (from topographic map).

AVERAGE DISCHARGE.--5 calendar years, 3.30 cfs (2,390 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 392 cfs Sept. 1 (gage height, 3.13 ft); minimum, 2.0 cfs Apr. 13.

Period of record: Maximum discharge, 392 cfs Sept. 1, 1971 (gage height, 3.13 ft), from rating curve extended above 10 cfs on basis of slope-area measurement of peak flow; minimum, 1.1 cfs (revised) July 22, 1969.

REMARKS.--Records excellent, except for winter period which are good.

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.0	3.1	2.9	2.6	2.7	2.9	2.9	2.9	17	9.0	2.8	2.9
2	3.0	3.0	2.9	2.7	2.7	2.9	3.0	2.9	3.0	2.9	2.9	2.9
3	3.0	3.1	2.9	2.7	2.7	2.9	3.0	3.0	3.0	2.9	2.9	2.9
4	3.0	3.0	2.9	2.7	2.7	2.9	2.9	3.8	3.0	2.9	2.9	2.9
5	3.0	3.0	2.9	2.7	2.7	2.9	3.0	3.0	3.0	2.9	2.9	2.8
6	3.0	3.0	2.9	2.7	2.7	2.9	3.0	3.0	2.9	2.9	2.9	2.8
7	3.0	3.0	2.9	2.7	2.8	2.9	3.0	3.0	2.9	2.9	2.9	2.9
8	3.2	2.9	2.9	2.7	2.9	2.9	3.0	3.1	2.9	2.8	2.9	2.9
9	3.3	3.0	2.9	2.7	2.9	2.9	2.9	3.1	2.9	2.8	2.9	2.9
10	3.4	2.9	2.9	2.7	2.9	2.9	2.9	3.0	2.9	2.7	2.8	2.7
11	3.4	2.9	2.8	2.7	2.9	2.9	2.9	3.0	2.9	2.8	2.8	2.7
12	3.6	2.9	2.8	2.7	2.9	2.9	2.9	3.0	2.9	2.8	2.8	2.7
13	3.4	2.9	2.8	2.6	3.0	2.9	2.9	3.0	2.9	2.8	2.8	2.8
14	3.4	2.9	2.8	2.7	3.0	2.9	2.8	3.0	2.9	2.8	2.8	2.8
15	3.4	2.9	2.7	2.8	2.9	2.9	2.7	3.0	2.8	2.8	3.0	2.7
16	3.4	2.9	2.7	2.8	2.9	2.9	2.8	3.0	2.8	2.9	3.0	2.7
17	3.3	2.9	2.7	2.8	2.9	2.9	2.8	3.0	2.9	3.2	3.0	2.7
18	3.3	2.9	2.7	2.8	2.9	2.9	2.8	3.0	4.0	3.0	3.0	2.7
19	3.2	2.9	2.7	2.8	2.9	2.9	2.9	3.0	2.9	2.9	2.9	2.8
20	3.2	2.9	2.7	2.7	2.9	2.9	2.9	3.0	2.9	2.9	2.9	2.8
21	3.1	2.9	2.7	2.7	2.9	2.9	3.6	3.0	2.9	3.0	2.9	2.8
22	3.1	2.9	2.7	2.7	2.9	2.9	2.8	4.7	2.9	3.0	2.9	2.8
23	3.1	2.9	2.7	2.7	2.9	2.9	2.8	11	3.2	3.0	2.9	3.0
24	3.1	2.9	2.7	2.7	2.9	2.9	2.8	3.2	2.8	3.2	2.9	2.9
25	3.1	2.9	2.7	2.7	2.9	2.9	2.7	3.0	2.8	84	2.8	3.2
26	3.1	2.9	2.7	2.7	2.9	2.9	2.8	3.0	2.8	32	2.8	35
27	3.1	2.9	2.7	2.6	2.9	2.9	2.8	3.0	2.8	6.3	2.8	46
28	3.1	2.9	2.7	2.6	2.9	2.9	2.8	3.1	2.8	3.3	2.8	9.8
29	3.1	-----	2.6	2.6	2.9	2.9	2.9	3.0	3.6	2.9	2.8	7.1
30	3.1	-----	2.7	2.6	2.9	2.9	3.0	3.0	3.0	2.8	2.8	4.3
31	3.1	-----	2.7	-----	2.9	-----	3.0	2.9	-----	2.8	-----	3.8
TOTAL	98.6	82.2	86.0	80.9	88.8	87.0	90.0	103.7	103.0	209.9	86.2	176.7
MEAN	3.18	2.94	2.77	2.70	2.86	2.90	2.90	3.35	3.43	6.77	2.87	5.70
MAX	3.6	3.1	2.9	2.8	3.0	2.9	3.6	11	17	84	3.0	46
MIN	3.0	2.9	2.6	2.6	2.7	2.9	2.7	2.9	2.8	2.7	2.8	2.7
AC-FT	196	163	171	160	176	173	179	206	204	416	171	350

CAL YR 1971 TOTAL 1,293.0 MEAN 3.54 MAX 84 MIN 2.6 AC-FT 2,560

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-23	1800	2.84	284	10-1	0200	2.01	67
9-1	1630	3.13	392	10-25	0200	2.38	138
9-18	1430	1.63	24	12-26	1930	2.56	179

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 miles downstream from Alma, 4 miles northwest of Glenwood, and 6 miles upstream from Whitewater Creek.

DRAINAGE AREA.--1,546 sq mi.

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 above mean sea level. Prior to Aug. 11, 1912, nonrecording gages at various sites, within 500 ft of each other, 0.8 mile upstream, at different datums. Aug. 11, 1912, to Feb. 2, 1914, nonrecording gage at approximately present site and datum.

AVERAGE DISCHARGE.--7 years, (1964-71), 55.9 cfs (40,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,060 cfs Aug. 6 (gage height, 4.70 ft); no flow many days.

Period of record: Maximum discharge observed 25,000 cfs Nov. 26, 1905 (gage height, 14 ft, estimated, by observer, at site and datum then in use); no flow at times.

Major floods probably occurred Jan. 19 and Oct. 14, 1916, when discharges of 90,000 cfs (or greater) were computed at Clifton, Ariz.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	5.4	12	9.7	6.6					0	0	299
2	5.0	5.4	9.8	11	5.4					0	2.6	179
3	22	5.4	4.2	11	4.1					0	36	73
4	210	5.8	4.2	7.0	3.7					0	82	27
5	14	5.8	3.8	5.0	4.5					0	23	16
6	6.6	5.8	3.4	3.5	5.4					0	164	9.4
7	5.0	6.2	3.0	2.5	6.2					0	62	6.6
8	3.8	6.6	3.4	2.5	6.2					0	9.9	62
9	3.8	6.6	2.3	2.5	5.0					0	159	159
10	3.8	7.0	1.4	3.0	6.6					0	488	17
11	3.4	7.5	.20	3.3	5.8					0	145	10
12	3.0	8.1	0	4.6	5.8					0	77	7.3
13	3.0	8.1	0	6.2	3.4					0	238	5.8
14	2.3	9.2	0	7.3	0					0	15	3.1
15	2.0	9.2	7.5	7.2	0					0	6.1	2.3
16	2.6	9.2	8.6	6.9	0					0	2.0	1.2
17	4.2	9.2	8.1	8.1	0					0	1.5	172
18	4.6	10	8.6	11	0					0	119	30
19	5.0	11	9.8	9.8	0					0	7.6	249
20	4.6	11	9.2	9.2	0					0	3.9	7.9
21	4.2	11	9.5	8.6	0					4.0	4.4	7.8
22	4.6	11	9.7	7.5	0					1.9	108	7.3
23	4.6	11	11	7.5	0					0	14	6.7
24	4.6	12	9.2	7.5	0					0	16	5.8
25	4.6	11	7.3	7.5	0					0	17	5.2
26	4.6	11	9.7	7.0	0					0	16	5.0
27	4.6	11	11	7.5	0					0	26	4.5
28	5.0	11	12	7.5	0					0	66	4.0
29	5.0	11	11	7.5	-----					0	82	62
30	5.4	11	10	7.0	-----					40	48	188
31	5.4	-----	9.1	6.6	-----		-----		-----	19	199	-----
TOTAL	363.3	263.5	209.00	213.0	68.7	0	0	0	0	64.9	2,238.0	1,632.9
MEAN	11.7	8.78	6.74	6.87	2.45	0	0	0	0	2.09	72.2	54.4
MAX	210	12	12	11	6.6	0	0	0	0	40	488	299
MIN	2.0	5.4	0	2.5	0	0	0	0	0	0	0	1.2
AC-FT	721	523	415	422	136	0	0	0	0	129	4,440	3,240

CAL YR 1970 TOTAL 3,531.31 MEAN 9.67 MAX 210 MIN 0 AC-FT 7,000
WTR YR 1971 TOTAL 5,053.30 MEAN 13.8 MAX 488 MIN 0 AC-FT 10,020

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-4	1645	3.23	1,390	8-18	1715	2.87	1,210
8-6	2000	4.70	3,060	9-8	2315	2.76	1,080
8-10	1930	3.01	1,350	9-19	0415	2.92	1,200
8-13	0030	3.20	1,510				

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 miles downstream from Alma, 4 miles northwest of Glenwood, and 6 miles upstream from Whitewater Creek.

DRAINAGE AREA.--1,546 sq mi.

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 above mean sea level. Prior to Aug. 11, 1912, nonrecording gages at various sites, within 500 ft of each other, 0.8 mile upstream, at different datums. Aug. 11, 1912, to Feb. 2, 1914, nonrecording gage at approximately present site and datum.

AVERAGE DISCHARGE.--7 calendar years, (1964-71), 61.8 cfs (44,770 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,830 cfs Oct. 25 (gage height, 6.36 ft); no flow many days.

Period of record: Maximum discharge observed 25,000 cfs Nov. 26, 1905 (gage height, 14 ft, estimated, by observer, at site and datum then in use); no flow at times.

Major floods probably occurred Jan. 19 and Oct. 14, 1916, when discharges of 90,000 cfs (or greater) were computed at Clifton, Ariz.

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

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	9.7	6.6					0	0	299	1,260	62	12
2	11	5.4					0	2.6	179	183	41	18
3	11	4.1					0	36	73	30	29	18
4	7.0	3.7					0	82	27	18	20	18
5	5.0	4.5					0	23	16	12	17	17
6	3.5	5.4					0	164	9.4	8.0	14	16
7	2.5	6.2					0	62	6.6	6.0	11	16
8	2.5	6.2					0	9.9	62	30	9.3	19
9	2.5	5.0					0	159	159	25	7.3	19
10	3.0	6.6					0	488	17	11	6.3	16
11	3.3	5.8					0	145	10	5.8	5.5	14
12	4.6	5.8					0	77	7.3	3.0	5.0	12
13	6.2	3.4					0	238	5.8	1.4	4.6	12
14	7.3	0					0	15	3.1	0	4.0	14
15	7.2	0					0	6.1	2.3	0	7.8	14
16	6.9	0					0	2.0	1.2	17	13	8.6
17	8.1	0					0	1.5	172	217	17	5.0
18	11	0					0	119	30	255	17	3.8
19	9.8	0					0	7.6	249	126	18	7.0
20	9.2	0					0	3.9	7.9	69	15	15
21	8.6	0					4.0	4.4	7.8	57	13	13
22	7.5	0					1.9	108	7.3	43	12	12
23	7.5	0					0	14	6.7	30	12	16
24	7.5	0					0	16	5.8	199	11	27
25	7.5	0					0	17	5.2	4,000	11	52
26	7.0	0					0	16	5.0	2,100	9.8	280
27	7.5	0					0	26	4.5	1,100	10	1,720
28	7.5	0					0	66	4.0	500	10	760
29	7.5	-----					0	82	62	240	11	515
30	7.0	-----					40	48	188	141	12	369
31	6.6	-----					19	199	-----	94	-----	276
TOTAL	213.0	68.7	0	0	0	0	64.9	2,238.0	1,632.9	10,781.2	435.6	4,314.4
MEAN	6.87	2.45	0	0	0	0	2.09	72.2	54.4	348	14.5	139
MAX	11	6.6	0	0	0	0	40	488	299	4,000	62	1,720
MIN	2.5	0	0	0	0	0	0	0	1.2	0	4.0	3.8
AC-FT	422	136	0	0	0	0	129	4,440	3,240	21,380	864	8,560

CAL YR 1971 TOTAL 19,748.7 MEAN 54.1 MAX 4,000 MIN 0 AC-FT 39,170

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
8-6	2000	4.70	3,060	9-19	0415	2.92	1,200
8-10	1930	3.01	1,350	10-1	0500	4.84	3,140
8-13	0030	3.20	1,510	10-25	1345	6.36	4,830
8-18	1715	2.87	1,210	12-27	0630	4.93	3,090
9-8	2315	2.76	1,080				

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 mile upstream from hot springs, 5 miles south of Glenwood, 6 miles downstream from Whitewater Creek, and at mile 64.6.

DRAINAGE AREA.--1,653 sq mi.

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 above mean sea level; prior to Feb. 15, 1934, at site 4.5 miles upstream at datum 98.82 ft higher.

AVERAGE DISCHARGE.--44 years, 65.1 cfs (47,160 acre-ft per year); 20 calendar years (1951-70), 64.2 cfs (46,510 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,450 cfs July 30 (gage height, 6.50 ft); minimum, 2.7 cfs Sept. 16.

Period of record: Maximum discharge, 8,200 cfs Dec. 30, 1965 (gage height, 11.00 ft), from rating curve extended above 2,800 cfs on basis of slope-area measurement at gage height 10.74 ft; minimum, 1.5 cfs Aug. 6, 1961.

Major floods probably occurred Jan. 19 and Oct. 14, 1916 when discharges of 90,000 cfs (or greater) were computed for station at Clifton, Ariz. On Nov. 26, 1905, a peak of 25,000 cfs was measured (by float-area method) at station at Alma (about 12 miles upstream, drainage area, 1,560 sq mi); a similar measurement of 21,000 cfs was made at the Alma station for peak of Dec. 3, 1906.

REMARKS.--Records good. Diversions for irrigation of about 2,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	15	18	30	21	21	16	14	11	17	21	336
2	24	18	18	32	20	20	16	13	13	33	23	222
3	83	20	18	33	16	22	17	12	10	57	72	146
4	65	23	19	26	15	22	14	17	8.6	20	135	57
5	63	22	19	22	16	20	17	23	7.5	12	64	37
6	27	23	19	16	18	23	17	19	6.6	9.9	97	26
7	22	24	18	16	20	24	17	16	8.2	8.8	117	17
8	18	24	18	16	21	22	16	17	8.1	6.0	19	16
9	19	25	18	17	21	13	18	14	9.5	13	32	203
10	18	24	18	19	21	24	16	15	11	13	253	33
11	16	24	18	21	22	23	11	14	12	11	146	15
12	15	22	18	23	22	25	15	14	8.6	15	53	6.6
13	14	23	16	27	23	24	11	16	8.4	21	274	5.4
14	14	25	14	31	22	24	11	14	9.0	17	41	4.6
15	14	23	14	30	22	20	13	12	6.9	13	21	4.0
16	15	21	16	30	19	18	10	12	9.7	10	21	2.8
17	16	19	18	29	18	17	17	14	10	10	27	214
18	17	25	19	30	23	15	21	14	11	9.9	112	50
19	19	25	24	29	21	15	21	17	11	6.9	69	229
20	20	28	25	28	18	11	18	18	14	4.8	37	20
21	20	29	24	29	17	15	14	14	16	8.5	28	11
22	20	27	25	29	15	13	12	11	18	11	128	11
23	20	27	26	29	20	14	14	11	17	13	49	10
24	20	26	23	27	24	18	15	13	21	14	50	9.3
25	20	27	22	26	21	27	17	17	15	9.0	40	6.9
26	20	26	25	27	18	24	17	18	14	12	44	5.7
27	15	27	30	26	23	23	16	17	22	8.5	47	5.1
28	18	18	33	27	22	15	13	14	19	16	146	4.6
29	19	17	32	25	-----	18	10	14	19	33	111	3.8
30	17	19	32	25	-----	14	12	18	16	233	41	174
31	18	-----	30	22	-----	15	-----	15	-----	78	308	-----
TOTAL	915.9	696	667	797	559	599	452	467	371.1	744.3	2,626	1,885.8
MEAN	29.5	23.2	21.5	25.7	20.0	19.3	15.1	15.1	12.4	24.0	84.7	62.9
MAX	265	29	33	33	24	27	21	23	22	233	308	336
MIN	9.9	15	14	16	15	11	10	11	6.6	4.8	19	2.8
AC-FT	1,820	1,380	1,320	1,580	1,110	1,190	897	926	736	1,480	5,210	3,740

CAL YR 1970 TOTAL 11,368.0 MEAN 31.1 MAX 265 MIN 5.7 AC-FT 22,550
WTR YR 1971 TOTAL 10,780.1 MEAN 29.5 MAX 336 MIN 2.8 AC-FT 21,380

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-30	1945	6.50	2,450	8-18	2015	4.11	840
8-3	1800	4.12	875	8-28	1430	5.23	1,540
8-6	2215	5.02	1,450	8-31	1830	4.87	1,280
8-9	2345	4.13	865	9-9	0230	4.12	815
8-13	0230	4.34	978	9-19	0700	4.48	990

09444000 San Francisco River near Glenwood, N. Mex.

LOCATION.--Lat 33°14'48", long 108°52'47", in NE¼ sec. 23, T.12 S., R.20 W., Catron County, on left bank 0.2 mile upstream from hot springs, 5 miles south of Glenwood, 6 miles downstream from Whitewater Creek, and at mile 64.6.

DRAINAGE AREA.--1,653 sq mi.

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 above mean sea level; prior to Feb. 15, 1934, at site 4.5 miles upstream at datum 98.82 ft higher.

AVERAGE DISCHARGE.--44 calendar years, 66.1 cfs (47,890 acre-ft per year); 20 calendar years (1952-71), 66.9 cfs (48,470 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,100 cfs Oct. 25 (gage height, 9.78 ft); minimum, 2.7 cfs Sept. 16.

Period of record: Maximum discharge, 8,200 cfs Dec. 30, 1965 (gage height, 11.00 ft), from rating curve extended above 2,800 cfs on basis of slope-area measurement at gage height 10.74 ft; minimum, 1.5 cfs Aug. 6, 1961.

Major floods probably occurred Jan. 19 and Oct. 14, 1916 when discharges of 90,000 cfs (or greater) were computed for station at Clifton, Ariz. On Nov. 26, 1905, a peak of 25,000 cfs was measured (by float-area method) at station at Alma (about 12 miles upstream, drainage area, 1,560 sq mi); a similar measurement of 21,000 cfs was made at the Alma station for peak of Dec. 3, 1906.

REMARKS.--Records good. Diversions for irrigation of about 2,000 acres above station. Water quality records for the current year are published in Part 2 of this report.

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, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	30	21	21	16	14	11	17	21	336	1,170	74	35
2	32	20	20	16	13	13	33	23	222	173	52	52
3	33	16	22	17	12	10	57	72	146	44	31	46
4	26	15	22	14	17	8.6	20	135	57	25	21	44
5	22	16	20	17	23	7.5	12	64	37	15	11	44
6	16	18	23	17	19	6.6	9.9	97	26	11	9.6	40
7	16	20	24	17	16	8.2	8.8	117	17	8.7	9.7	38
8	16	21	22	16	17	8.1	6.0	19	16	42	11	42
9	17	21	13	18	14	9.5	13	32	203	34	11	42
10	19	21	24	16	15	11	13	253	33	15	11	39
11	21	22	23	11	14	12	11	146	15	9.7		36
12	23	22	25	15	14	8.6	15	53	6.6	7.8	16	30
13	27	23	24	11	16	8.4	21	274	5.4	7.2	15	32
14	31	22	24	11	14	9.0	17	41	4.6	7.2	16	36
15	30	22	20	13	12	6.9	13	21	4.0	9.8	21	33
16	30	19	18	10	12	9.7	10	21	2.8	15	30	27
17	29	18	17	17	14	10	10	27	214	279	40	22
18	30	23	15	21	14	11	9.9	112	50	356	38	22
19	29	21	15	21	17	11	6.9	69	229	209	38	22
20	28	18	11	18	18	14	4.8	37	20	127	36	29
21	29	17	15	14	14	16	8.5	28	11	93	33	30
22	29	15	13	12	11	18	11	128	11	71	33	24
23	29	20	14	14	11	17	13	49	10	54	30	30
24	27	24	18	15	13	21	14	50	9.3	109	30	40
25	26	21	27	17	17	15	9.0	40	6.9	4,800	31	150
26	27	18	24	17	18	14	12	44	5.7	3,500	30	500
27	26	23	23	16	17	22	8.5	47	5.1	1,100	30	1,700
28	27	22	15	13	14	19	16	146	4.6	516	30	950
29	25	-----	18	10	14	19	33	111	3.8	293	32	531
30	25	-----	14	12	18	16	233	41	174	172	33	378
31	22	-----	15	-----	15	-----	78	308	-----	111	-----	316
TOTAL	797	559	599	452	467	371.1	744.3	2,626	1,885.8	13,384.4	815.3	5,360
MEAN	25.7	20.0	19.3	15.1	15.1	12.4	24.0	84.7	62.9	432	27.2	173
MAX	33	24	27	21	23	22	233	308	336	4,800	74	1,700
MIN	16	15	11	10	11	6.6	4.8	19	2.8	7.2	9.6	22
AC-FT	1,580	1,110	1,190	897	926	736	1,480	5,210	3,740	26,550	1,620	10,630

CAL YR 1971 TOTAL 28,060.9 MEAN 76.9 MAX 4,800 MIN 2.8 AC-FT 55,660

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-30	1945	6.50	2,450	8-31	1830	4.87	1,280
8-3	1800	4.12	875	9-9	0230	4.12	815
8-6	2215	5.02	1,450	9-19	0700	4.48	990
8-9	2345	4.13	865	10-1	0745	7.11	3,040
8-13	0230	4.34	978	10-25	1615	9.78	6,100
8-18	2015	4.11	840	12-27	Unknown	Unknown	About 3,000
8-28	1430	5.23	1,540				

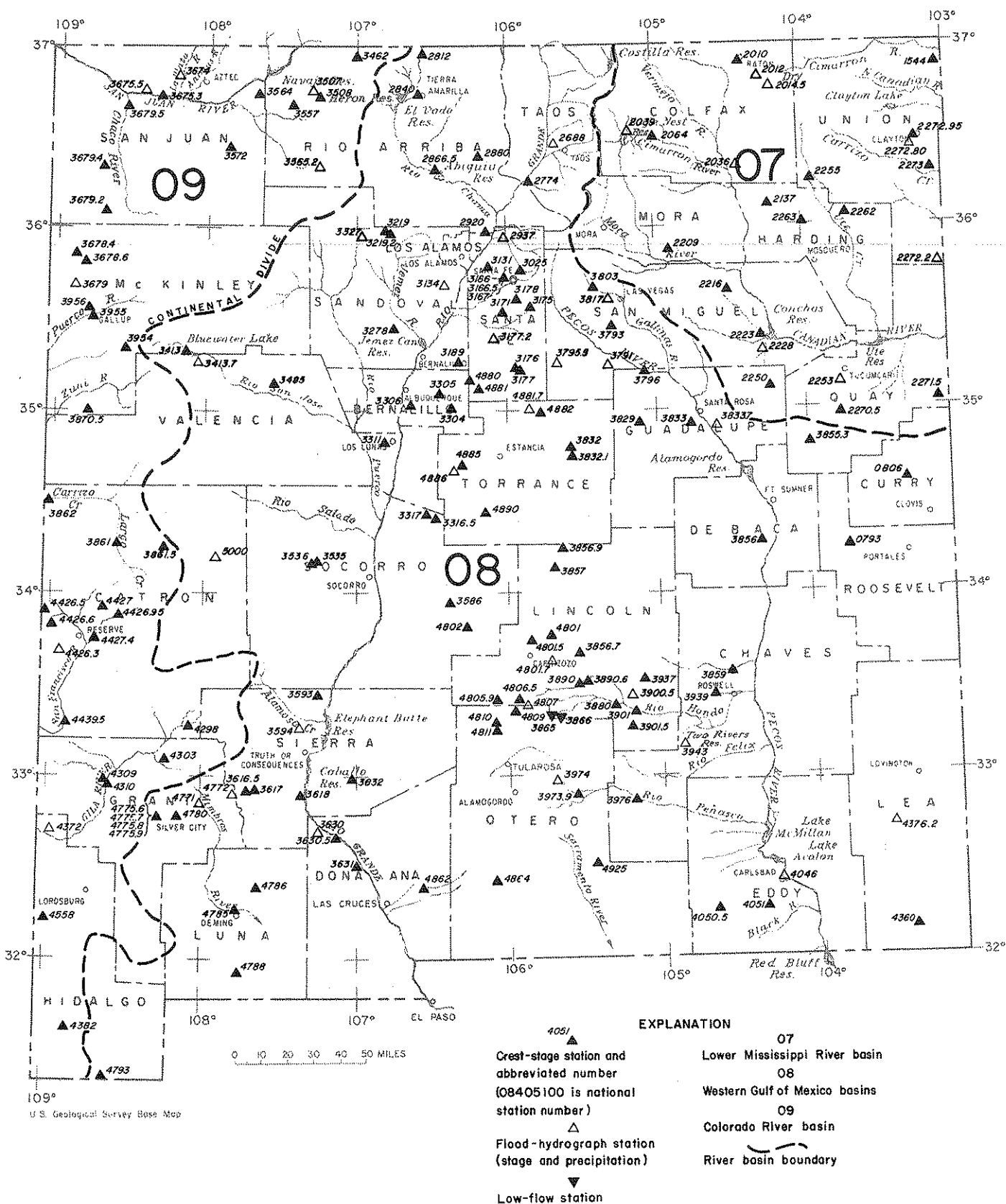


Figure 2—Map of New Mexico showing location of partial-record stations.

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.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during period,
Oct. 1, 1970 - Dec. 31, 1971

Oct. 1, 1970 - Dec. 31, 1971

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Rio Grande basin						
08386500	Rio Ruidoso near Ruidoso, N. Mex.	Lat 33°20'11", long 105°43'31", in NW¼SW¼SW¼ sec.19, T.11 S., R.13 E., Lincoln County at Mescalero Apache Indian Reservation boundary, 3.0 miles west of Ruidoso.	17.2	1953-71	12- 8-70	0.94
					3-24-71	1.6
					6-29-71	.32
					9-13-71	3.5
					12- 8-71	6.7
08386600	Carrizo Creek at Ruidoso, N. Mex.	Lat 33°19'27", long 105°39'13", in SE¼NW¼SW¼ sec.26, T.11 S., R.13 E., Lincoln County, at mouth, at Ruidoso.	24.2	1953-71	12- 8-70	2.2
					3-24-71	2.3
					6-29-71	1.9
					9-13-71	2.3
					12- 7-71	4.3

Crest-stage partial-record stations

The following table contains maximum discharge for the period October 1970 to December 1971, for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. An S under the station number indicates that a complete hydrograph of flow events and precipitation data are recorded. 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 year is given. Information on some lower floods may have been obtained, and discharge measurements made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record column represent water years through October 1970 and calendar years thereafter. For some stations, publication of discharge is delayed pending definition of stage-discharge relationship.

Annual maximum discharge at crest-stage partial-record stations

Annual maximum discharge at crest stage partial record stations							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Arkansas River basin							
07154400	Carrizozo Creek near Kenton, Okla.	NE $\frac{1}{4}$ sec.31, T.31 N., R.37 E., Union County, under bridge on New Mexico State Highway 18, 4 miles southwest of Kenton.	111	1953-71	8- -71	(a)	<100
07201000	Raton Creek at Raton, N. Mex.	Lat 36°54', long 104°26', Colfax County, 60 ft above bridge on State Highway 72 at Raton.	14.4	1953-71	5-29-71	.55	38
07201200 S	Chicorica Creek tributary near Raton, N. Mex.	Lat 36°54'40", long 104°19'56", Colfax County, upstream from culvert on U. S. Highway 64-87, 7.7 miles southeast of Raton.	4.82	1971	6- 8-71	5.56	115
07201450 S	Una del Gato Creek tributary near Raton, N. Mex.	Lat 36°47'00", long 104°15'42", Colfax County, about 1,500 feet upstream from bridge on U. S. Highway 64-87, 12.8 miles southeast of Raton.	b18	1971	7-19-71	3.51	(+)
07203600 S	Rio del Plano tributary near Taylor Springs, N. Mex.	Lat 36°26'59", long 104°22'34", Colfax County, 1.7 miles south of Sauble Ranch, 11.0 miles northeast of Taylor Springs.	6.71	1971	5-29-71	9.08	392
07203900 S	Graney Creek near Eagle Nest, N. Mex.	Lat 36°34'37", long 105°18'38", Colfax County, 3.0 miles northwest of Eagle Nest.	1.83	1971	1971	(a)	(+)
07206400	Clear Creek near Ute Park, N. Mex.	Lat 36°31'35", long 105°10'30", Colfax County, Maxwell Grant, 0.25 mile upstream from mouth, and 4 miles southwest of Ute Park.	7.44	1962-67+ 1968-71	6- -71	.98	4
07213700	Canadian River tributary near Mills, N. Mex.	NE $\frac{1}{4}$ sec.3, T.22 N., R.25 E., Harding County, on downstream end of left bridge abutment on State Highway 39, 6 miles north of Mills.	b4.2	1954-71	10-26-71	1.05	< 5
07220900	Dog Creek near Shoemaker, N. Mex.	Lat 35°49'32", long 104°53'28", Mora County, 0.5 mile above Valmora-Shoemaker road, and 1.8 miles northwest of Shoemaker.	18.4	1954-71	8- 7-71	7.07	d310
07221600	Lagartija Creek tributary near Sanchez, N.	SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.5, T.16 N., R.24 E., San Miguel County, at bridge on State Highway 65, 0.9 mile northeast of Sanchez.	b1	1961-71	7- 1-71	2.04	(+)
07222300	Trementina Creek at Trementina, N. Mex.	NW $\frac{1}{4}$ sec.8, T.14 N., R.24 E., San Miguel County, at bridge on State Highway 65, at Trementina.	b65	1959-71	7- 1-71	7.97	4,100
07222800 S	Garita Creek tributary near Variadero, N. Mex.	Lat 35°20'10", long 104°21'50", San Miguel County, 1.2 miles upstream from mouth, 6.3 miles southeast of Variadero.	b11.5	1971	7-27-71	10.49	1,510
07225000	Pajarito Creek at Newkirk, N. Mex.	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.24, T.10 N., R.25 E., Guadalupe County, downstream side of bridge on U. S. Highway 66, 1 mile east of Newkirk.	55.0	1954-71	7- 1-71	4.05	940

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Arkansas River basin--Continued							
07225300 S	Bluewater Creek near Tucumcari, N. Mex.	Lat 35°08'31", long 103°47'32", Quay County, in Tucumcari Metropolitan Park, 1,600 feet north of the park's southern boundary, and 4.8 miles southwest of Tucumcari.	15.2	1971	8- 8-71	c12.50	2,280
07225500	Ute Creek near Gladstone, N. Mex.	On line of secs. 14 and 23, T.24 N., R.28 E., Union County, on bridge on State Highway 58, 3 miles east of Gladstone.	256	1953-71	8- 8-71	6.33	9,800
07226200	Bueyeros Creek at Bueyeros, N. Mex.	Lat 35°58'10", long 103°41'05", in E½ sec.7, T.20 N., R.31 E., Harding County, on right upstream wingwall of culvert on State Road 102 at Bueyeros.	b34	1957-71	1971	(a)	(+)
07226300	Carrizo Creek near Roy, N. Mex.	NW¼SE¼ sec.16, T.21 N., R.28 E., Harding County, 800 ft below State Highway 120, and 15 miles northeast of Roy	b68	1954-71	7-23-71	3.69	330
07227050	Plaza Larga Creek tributary near Ragland, N. Mex.	NE¼ sec.15, T.7 N., R.30 E., Quay County, at culvert on State Highway 18, 1.2 miles northwest of Ragland.	b.5	1952-71	6-21-71	6.69	182
07227150	Arroyo del Puerto near Endee, N. Mex.	SW¼SW¼ sec.26, T.10 N., R.36 E., Quay County, at bridge on State Highway 93, 5.4 miles south of Endee.	b25	1961-71	11-16-71	5.39	(+)
07227200 S	Cramer Creek near Nara Visa, N. Mex.	Lat 35°45'50", long 103°07'30", Union County, upstream from culvert on State Highway 18, 11.3 miles north of Nara Visa.	b14.4	1971	5-29-71	6.65	(+)
07227280 S	Sand Draw tributary near Clayton, N. Mex.	SW¼SW¼ sec.23, T.25 N., R.33 E., Union County, 0.85 mile north of U. S. Highway 56 and 11.5 miles southwest of Clayton.	1.81	1968-71	5-29-71	10.36	(+)
07227295	Sandy Arroyo tributary near Clayton, N. Mex.	NW¼ sec.21, T.25 N., R.34 E., Union County, above culvert on State Highway 58, 8 miles southwest of Clayton.	1.25	1952-71	7-19-71	.10	8
07227300	Sandy Arroyo near Clayton, N. Mex.	At center of boundary of secs. 2 and 3, T.24 N., R.35 E., Union County, on downstream side of bridge on State Highway 18, 7.5 miles south of Clayton.	b42	1953-71	7-19-71	2.09	(+)
Brazos River basin							
08079300	Blackwater Draw tributary near Floyd, N. Mex.	NW¼SW¼ sec.13, T.1 S., R.30 E., Roosevelt County, 0.5 mile below section road and 10 miles west of Floyd.	b10	1963-71	1971	-	0
08080600	Running Water Draw near Clovis, N. Mex.	In NE¼ sec.31, T.4 N., R.36 E., Curry County, 0.25 mile upstream from Highway 18 and 8 miles north of Clovis.	109	1953-56 1957-64+ 1965-71	8- 8-71	2.43	d160

Annual maximum discharge at crest-stage partial-record stations--Continued

Annual maximum discharge at crest stage partial record stations continued							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Rio Grande basin							
08268800 S	Rio Grande tributary near Arroyo Hondo, N. Mex.	Lat 36°28'29", long 105°43'05", Taos County, upstream from culvert on State Road 111, 0.8 mile east of Rio Grande Gorge Bridge and 4.6 miles southwest of Arroyo Hondo.	1.16	1968-71	1971	-	0
08277400	Rio Grande tributary at Rinconada, N. Mex.	SW¼NW¼ sec.21, T.23 N., R.10 E., Rio Arriba County, at culvert on U. S. Highway 64, 0.6 mile west of Rinconada.	.02	1952-71	1971	(a)	< 5
08281200	Wolf Creek near Chama, N. Mex.	Lat 36°57'20", long 106°32'10", Rio Arriba County, at bridge on State Highway 17, and 4.5 miles northeast of Chama.	27.7	1959-71	9-30-71	2.78	540
08284000	Rito de Tierra Amarilla at Tierra Amarilla, N. Mex.	Lat 36°41'55", long 106°33'25", Rio Arriba County, 400 ft below culvert on U. S. Highway 84, at Tierra Amarilla.	49.7	1957-71	1971	(a)	<150
08286650	Canjilon Creek above Abiquiu Reservoir, N. Mex.	Lat 36°18'55", long 106°29'05", Rio Arriba County, in Piedra Lumbre Grant, 300 ft upstream from bridge on U. S. Highway 84, 0.2 mile northwest of entrance to Ghost Ranch and about 12 miles northwest of Abiquiu.	144	1965-71	9-30-71	5.30	720
08293700 S	Arroyo Seco tributary near Pojoaque, N. Mex.	Lat 35°56'33", long 106°01'12", Santa Fe County, upstream from culvert on U. S. Highway 64-84-285, 3.5 miles north of Pojoaque.	.72	1971	7-22-71	10.29	452
08313100	Canada Ancha tributary near Santa Fe, N. Mex.	Lat 35°44'05", long 106°07'00", Santa Fe County, in Caja del Rio Grant, 9 miles northwest of Santa Fe.	1.23	1940-48 1952-71	7-27-71	4.36	44
08313400 S	Bland Canyon near Cochiti, N. Mex.	Lat 35°42'11", long 106°24'56", Sandoval County, 200 ft south of Forest Service Road, 0.3 mile inside Santa Fe National Forest, 7.5 miles north of Cochiti.	7.57	1962-71	8-19-71	2.54	86
08317100	Arroyo Yupa tributary near Cerrillos, N. Mex.	SE¼NE¼ sec.13, T.15 N., R.7 E., Santa Fe County, 300 ft above culvert on U. S. Highway 85, 1.4 miles southwest of Turquoise Trading Post, and 6.5 miles north of Cerrillos.	.47	1957-71	1971	(a)	<15
08317500	Galisteo Creek at Canoncito, N. Mex.	NW¼NW¼ sec.7, T.15 N., R.11 E., Santa Fe County, above railroad bridge, 0.2 mile above Apache Canyon at Canoncito.	11.3	1955-56 1959-71	7-27-71	3.69	1,160
08317600	San Cristobal Arroyo near Galisteo, N. Mex.	Lat 35°22'55", long 105°51'05", Santa Fe County, at bridge on U. S. Highway 285, 5.5 miles east of Galisteo.	116	1955-71	7-27-71	10.34	5,500
08317700	Tarhole Canyon near Galisteo, N. Mex.	Lat 35°21'55", long 105°50'40", Santa Fe County, at culvert on U. S. Highway 285, 6 miles southeast of Galisteo.	2.15	1952-71	7-27-71	13.99	195
08317720 S	Canada de la Cueva near Galisteo, N. Mex.	Lat 35°26'13", long 106°00'45", Santa Fe County, 6.4 miles east of Cerrillos and 4.8 miles northwest of Galisteo.	1.79	1970-71	7-26-71	4.58	649

Annual maximum discharge at crest-stage partial-record stations--Continued

Annual maximum discharge at crest-stage partial-record stations--Continued							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Rio Grande basin--Continued							
08317800	Canada de las Minas tributary near Santa Fe, N. Mex.	Lat 35°36'27", long 105°54'42", Santa Fe County, at culvert on U. S. Highway 84, 85 and 285, 1.3 miles northeast of Seton Village, and 5.7 miles south of Santa Fe.	0.56	1952-71	7-19-71	c12.55	652
08318900	San Pedro Creek near Golden, N. Mex.	Lat 36°13'45", long 106°18'00", Sandoval County, 1 mile below bridge on State Highway 10 and 5.5 miles southwest of Golden.	45.2	1953-71	7-22-71	2.26	1,600
08321900	Rio de las Vacas near Senorita, N. Mex.	Lat 35°59'35", long 106°47'45", Sandoval County, at bridge on side road, 0.1 mile south of State Highway 126 and 6.5 miles east of Senorita.	26.8	1957-71	9-17-71	2.92	110
08327800	Arroyo Ojito at Zia Pueblo, N. Mex.	SE¼SE¼ sec.21, T.15 N., R.2 E., Sandoval County, 100 ft upstream from culvert on State Highway 44, in Zia Pueblo Grant, 0.7 mile south of Zia Pueblo.	17.7	1961-71	1971	(a)	(+)
08330400	Juan Toro Canyon near Miera, N. Mex.	NW¼SE¼ sec.7, T.9 N., R.6 E., Bernalillo County, 150 ft east of State Highway 10, 1 mile southeast of Cedro, and 4.5 miles northwest of Miera.	1.57	1959-71	7-20-71	1.33	(+)
08330500	Tijeras Arroyo at Albuquerque, N. Mex.	Lat 35°03'40", long 106°28'40", Bernalillo County, 300 ft south of U. S. Highway 66 and 0.4 mile south-east of city limits of Albuquerque.	75.3	1943-48+ 1958-71	8- 1-71	2.30	600
08331100	Belen Highline Canal tributary near Los Lunas, N. Mex.	Lat 34°49'20", long 106°49'10", Valencia County, above culvert on State Highway 6, 5.0 miles west of Los Lunas.	.16	1952-53 1955-71	1971	(a)	(+)
08331650	Canada Montoso near Scholle, N. Mex.	SW¼SW¼ sec.12, T.2 N., R.4 E., Socorro County, 130 ft upstream from dip on abandoned highway, 500 ft upstream from bridge on U. S. Highway 60, 3.6 miles southwest of Scholle.	b35	1961-71	8- 5-71	2.15	157
08331700	Abo Arroyo tributary near Scholle, N. Mex.	Lat 34°24'10", long 106°30'35", Socorro County, at culvert on U. S. Highway 60, 2.5 miles southeast of junction of U. S. Highway 60 and State Highway 6, and 5.5 miles southwest of Scholle.	b.2	1954-71	1954 8- -55 10- 3-55 1957 1958 1959 1960 9- -61 9- -62 9- 5-63 5-31-64 9-23-71	c4.92 4.28 4.22 4.39 4.83 4.11 3.52 4.11 4.18 4.30 4.10 e17.94	d145 d78 d72 d88 c135 d62 d<40 d62 d68 d80 d60 290
08332700 S	San Pablo Creek near Cuba, N. Mex.	Lat 35°56'55", long 106°56'44", Sandoval County, upstream from bridge on old section of State Highway 44 and 5.6 miles south of Cuba.	12.8	1970-71	7-20-71	9.07	2,360
08341300	Bluewater Creek above Bluewater Dam, near Bluewater, N. Mex.	NE¼ sec.20, T.12 N., R.12 W., Valencia County, 2.3 miles south of Bluewater Dam, and 8 miles west of Bluewater.	b75	1953-71	9-30-71	2.56	144

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Rio Grande basin--Continued							
08341370 S	Pine Canyon near Thoreau, N. Mex.	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.36, T.13 N., R.13 W., McKinley County, about 1 mile south-west of the north end of Bluewater Lake and about 7 miles southeast of Thoreau.	6.09	1969-71	1971	-	0
08348500	Encinal Creek near Casa Blanca, N. Mex.	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.34, T.11 N., R.6 W., Valencia County, 1.8 miles north of village of Encinal and 6.8 miles north of Casa Blanca.	6.19	1937-39+ 1959-71	8- 6-71	2.42	90
08353500	La Jencia Creek near Magdalena, N. Mex.	NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.1, T.2 S., R.4 W., Socorro County, 3.5 miles northwest of Magdalena.	195	1957-71	7-27-71	5.48	2,800
08353600	La Jencia Creek tributary near Magdalena, N. Mex.	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.13, T.2 S., R.4 W., Socorro County, at Santa Fe Railroad bridge, 2.7 miles northeast of Magdalena.	5.67	1957-71	7-27-71	.72	(+)
08358600	Chupadera Wash tributary at Bingham, N. Mex.	NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.12, T.5 S., R.5 E., Socorro County, 75 ft upstream from culvert on U. S. Highway 380, 0.1 mile west of Bingham.	1.29	1961-71	8-30-71	1.97	155
08359300	San Jose Arroyo near Monticello, N. Mex.	NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.3, T.10 S., R.4 W., Sierra County, at head of box canyon just below major tributary, 800 ft below culvert on U. S. Highway 85, 13 miles northeast of Monticello.	26.9	1959-71	1971	(a)	(+)
08359400 S	Lumber Canyon tributary near Monticello, N. Mex.	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.5, T.11 S., R.4 W., Sierra County, at culvert on U. S. Highway 85, 0.2 mile north of road to Red Rock Ranger station, and 10.5 miles east of Monticello.	.90	1952-71	8-17-71	1.55	126
08361650	Percha Creek near Kingston, N. Mex.	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.15, T.16 S., R.8 W., Sierra County, at bridge on State Highway 180, 3.3 miles east of Kingston.	21.5	1953-71	10- 4-70	5.03	810
08361700	Percha Creek near Hillsboro, N. Mex.	SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.18, T.16 S., R.7 W., Sierra County, 150 ft south of State Highway 180, and 2 miles west of Hillsboro.	35.4	1957-71	8- 9-71	4.63	1,330
08361800	Percha Creek at Caballo Dam near Arrey, N. Mex.	SW $\frac{1}{4}$ sec.24, T.16 S., R.5 W., Sierra County, at bridge on U. S. Highway 85, 0.5 mile above mouth and Caballo Reservoir, and 3.5 miles north of Arrey.	119	1953-71	8-18-71	1.96	1,020
08363000 S	Rio Grande tributary near Salem, N. Mex.	Lat 32°43'01", long 107°12'03", Dona Ana County, upstream from culvert on Interstate Highway 25, 1.0 miles northeast of Salem.	.18	1971	8-27-71	4.75	(+)
08363050	Arroyo Angostura near Rincon, N. Mex.	SE $\frac{1}{4}$ sec.13, T.19 S., R.3 W., Dona Ana County, 140 ft below dip on U. S. Highway 85, and 2.2 miles southwest of Rincon.	8.40	1959-71	10- 4-70	1.13	(+)
08363100	Rio Grande tributary near Radium Springs, N. Mex.	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.9, T.21 S., R.1 W., Dona Ana County, above culvert on U. S. Highway 85, 120 ft above mouth, and 1.4 miles west of Radium Springs.	.40	1955-71	1971	(f)	(+)

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Rio Grande basin--Continued							
08363200	Aleman Draw at Aleman, N. Mex.	SW $\frac{1}{4}$ sec.13, T.15 S., R.2 W., Sierra County, on Santa Fe Railroad bridge, 140 ft above dip on Engle-Rincon road, and 0.25 mile west of Aleman.	25.4	1959-71	9-28-71	6.34	1,560
08379100 S	Pecos River tributary near Sena, N. Mex.	Lat 35°18'37", long 105°23'37", San Miguel County, upstream from culvert on State Highway 3, 0.8 mile north of Sena.	1.24	1971	1971	(a)	(+)
08379300	Tecolote Creek at Tecolote, N. Mex.	Lat 35°27'20", long 105°16'55", San Miguel County, on bridge on U. S. Highway 85 at Tecolote.	122	1954-71	7-20-71	9.07	3,500
08379550 S	Canon Blanco near Leyba, N. Mex.	Lat 35°13'14", long 105°40'12", San Miguel County, 0.2 mile south of White Lakes-Leyba road and 5.0 miles west of Leyba.	11.2	1971	7-19-71	4.85	226
08379600	Pecos River tributary near Dilia, N. Mex.	Lat 35°12'50", long 105°04'50", Guadalupe County, above culvert on U. S. Highway 84, and 1.7 miles northwest of Dilia.	.16	1952-71	8- 7-71	4.07	114
08380300	Sandoval Canyon at Gallinas, N. Mex.	Lat 35°41'19", long 105°21'17", San Miguel County, about 500 ft upstream from culvert on State Highway 65, at north edge of Gallinas.	7.6	1957 1961-71	8-19-71	1.83	142
08381700 S	Canon Piedra Lumbre near Las Vegas, N. Mex.	Lat 35°34'14", long 105°17'50", San Miguel County, upstream from bridge on State Road 283, 4.3 miles west-southwest of Las Vegas.	8.06	1971	7-29-71	3.60	138
08382900	Pecos River tributary near Pintada, N. Mex.	Lat 34°58'06", long 105°05'38", Guadalupe County, in Anton Chico Grant, 1,500 ft south of U. S. Highway 66, 6.8 miles north of Pintada.	b.16	1961-71	7-19-71	c4.80	6,600
08383200	Pintada Arroyo tributary near Clines Corners, N. Mex.	Lat 34°50'40", long 105°35'05", Torrance County, above culvert on U. S. Highway 285, 12.2 miles south of Clines Corners.	29.2	1952-71	7-19-71	1.61	52
08383210	Pintada Arroyo tributary near Encino, N. Mex.	Lat 34°48'40", long 105°34'00", Torrance County, above culvert on U. S. Highway 285, 0.1 mile south of ranch road, and 12.5 miles northwest of Encino.	b1	1959-71	1971	-	0
08383300	Pintada Arroyo near Santa Rosa, N. Mex.	NE $\frac{1}{4}$ sec.29, T.8 N., R.21 E., Guadalupe County, 300 ft above bridge on U. S. Highway 54, and 4.5 miles southwest of Santa Rosa.	896	1959-71	8-23-71	2.27	(+)
08383370 S	Pecos River tributary near Puerto de Luna, N. Mex.	SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.32, T.8 N., R.22 E., Guadalupe County, 25 ft upstream from culvert on State Highway 91, 3.1 miles north of Puerto de Luna.	.37	1961-71	8-24-71	b.94	91
08385530	Alamosa Creek tributary near Jordan, N. Mex.	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.7 N., R.28 E., Quay County, 500 ft upstream from dip on State Highway 156, 6.9 miles west of Jordan.	b10	1962-71	6-21-71	1.69	10

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Rio Grande basin--Continued							
08385600	Yeso Creek near Fort Sumner, N. Mex.	SE $\frac{1}{4}$ sec.35, T.1 N., R.25 E., De Baca County, at abandoned bridge 1 mile below State Highway 20, and 14.5 miles south of Fort Sumner.	242	1937 1952-71	6- 3-37 7-15-52 7- -53 1954 10- 7-54 1956 8-16-57 7-16-58 1959 7- 7-60 1961 7- -62 1963 9-20-64 5-13-65 8-22-66 6- 3-67 8-10-68 9- 8-69 9-15-70 9-24-71	c8.5 4.56 1.21 c11.6 (a) 7.54 3.54 2.16 6.50 1.62 2.20 2.04 1.95 3.70 3.89 4.22 1.86 6.18 2.11 1.24	8,720 8,100 3,300 680 14,800 d25 7,310 2,150 1,110 g5,200 g820 1,150 1,050 880 2,100 2,280 2,620 830 4,900 970 560
08385670	Aragon Creek tributary near Encinoso, N. Mex.	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.22, T.7 S., R.14 E., Lincoln County, 0.3 mile upstream from wooden bridge on dirt road, 1.2 miles north of State Highway 48, 4.3 miles west of Encinoso.	6.07	1961-71	1971	3.93	540
08385690	Bonita Canyon tributary near Corona, N. Mex.	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.7, T.1 S., R.13 E., Lincoln County, above culvert on U. S. Highway 54, and 1.8 miles southwest of Corona.	b.6	1959-71	1971	-	0
08385700	Cloud Canyon near Gallinas, N. Mex.	SW $\frac{1}{4}$ sec.15, T.2 S., R.12 E., Lincoln County, above culvert on U. S. Highway 54, and 2.0 miles southwest of Gallinas.	b10	1957-71	8-25-71	3.63	93
08385900	Salt Creek tributary near Roswell, N. Mex.	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.17, T.9 S., R.24 E., Chavez County, at culvert on U. S. Highway 285, 4.7 miles north of junction of U. S. Highway 70 and 285, and 10 miles north of Roswell.	.04	1952-71	9-23-71	1.39	(+)
08389000	Rio Bonito near Fort Stanton, N. Mex.	SW $\frac{1}{4}$ sec.16, T.9 S., R.15 E., Lincoln County, at bridge on U. S. Highway 380, 2.5 miles northeast of Fort Stanton.	b85	1955-71	8- 8-71	4.75	760
08389060	Rio Bonito tributary near Fort Stanton, N. Mex.	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.15, T.9 S., R.15 E., Lincoln County, at culvert on U. S. Highway 380, 150 ft above mouth, and 3.5 miles northeast of Fort Stanton.	.72	1955-71	1971	(a)	d <10
08390050 S	Rio Hondo tributary at Tinnie, N. Mex.	Lat 33°22'15", long 105°13'01", Lincoln County, upstream from culvert on U. S. Highway 70-380, 0.5 mile east of junction of U. S. Highways 70-380 and State Highway 368, and at Tinnie.	.23	1971	9- 2-71	7.43	(+)
08390100	Rio Hondo at Picacho, N. Mex.	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.15, T.11 S., R.18 E., Lincoln County, at bridge just off U. S. Highway 70, 1.3 miles northwest of Picacho.	715	1956-62# 1963-71	1971	(f)	-

Annual maximum discharge at crest-stage partial-record stations--Continued

Annual maximum discharge at crest-stage partial-record stations--Continued							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Rio Grande basin--Continued							
08390150	Gallo Canyon near Picacho, N. Mex.	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.8, T.12 S., R.18 E., Lincoln County, 500 ft east of road, 5 miles south of Picacho.	1.32	1962-71	7-31-71	4.94	218
08393700	Pancho Canyon near Arabela, N. Mex.	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.19, T.9 S., R.18 E., Lincoln County, 200 ft downstream from dip on State Highway 368, 5.6 miles south of Arabela.	16.7	1962-71	7-31-71	10.17	(+)
08393900	Eight Mile Draw near Roswell, N. Mex.	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.32, T.10 S., R.23 E., Chavez County, 6.5 miles west of Roswell.	397	1941 1952-71	9-2-71	14.32	530
08394300 S	Twin Butte Canyon tributary near Roswell, N. Mex.	Lat 33°10'34", long 104°51'30", Chavez County, about 0.1 mile upstream from mouth and about 22 miles southwest of Roswell.	5.01	1968-71	7-31-71	7.63	(+)
08397390	Curtis Canyon near Mayhill, N. Mex.	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.4, T.17 S., R.14 E., Otero County, 0.25 mile above SCS dam, 0.4 mile west of State Highway 130, and 2.5 miles southwest of Mayhill.	10.3	1959-71	1971	(a)	(+)
08397400 S	Hyatt Canyon near Cloudcroft, N. Mex.	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.9, T.16 S., R.13 E., Otero County, 0.5 mile south of State Highway 83, and 7 miles east of Cloudcroft	3.08	1953-71	9- 9-71	1.31	(+)
08397600	Rio Penasco near Dunken, N. Mex.	NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.35, T.16 S., R.17 E., Chavez County, on bridge on State Highway 24, 5 miles north of Dunken.	583	1952-56 1956-62+ 1963-71	1971	(a)	(+)
08404600 S	Pecos River tributary at Carlsbad, N. Mex.	Lat 32°26'50", long 104°15'48", Eddy County, upstream from culvert on U. S. Highway 285, at entrance to Botanical-Zoological Gardens, 2.9 miles northwest of county court house in Carlsbad.	.47	1971	8-23-71	3.74	(+)
08405050	Last Chance Canyon tributary near Carlsbad Caverns, N. Mex.	SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.21, T.23 S., R.23 E., Eddy County, above culvert on State Highway 137, 0.1 mile north of road to Sitting Bull Falls, and 12.5 miles northwest of Carlsbad Caverns.	.2	1959-71	8-16-71	3.22	155
08405100	Mosley Canyon near White City, N. Mex.	SE $\frac{1}{4}$ sec.34, T.23 S., R. 25 E., Eddy County, 600 ft below dip on Dark Canyon road, and 5.5 miles north of White City.	14.6	1959-71	7-31-71	2.87	(+)
08436000	San Simon Swale tributary near Jal, N. Mex.	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.4, T.25 S., R.35 E., Lea County, 0.4 mile south of State Highway 128, and 10.7 miles west of Jal.	b20	1963-71	1971	(a)	(+)
08437620 S	Monument Draw tributary near Monument, N. Mex.	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.16, T.19 S., R.35 E., Lea County, upstream from culvert on U. S. Highway 62-180, about 12 miles northwest of Monument and 19.5 miles west of Hobbs.	6.23	1968-71	8-16-71	5.24	(+)

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Mimbres River basin							
08477100 S	Willow Springs Canyon at Mimbres, N. Mex.	Lat 32°51'20", long 107°58'35", Grant County, about 600 ft downstream from State Road 61, 0.2 mile north of post office in Mimbres.	3.84	1970-71	10-26-71	1.57	(+)
08477200 S	Iron Creek near Kingston, N. Mex.	Lat 32°54'50", long 107°46'35", Grant County, 50 ft east of State Highway 180, 1.6 road miles west of Emory Pass, and 4.5 miles west of Kingston.	.74	1955-71	8-29-71	3.64	d5
08477560	Little Walnut Creek near Silver City, N. Mex.	NW¼NE¼ sec.28, T.17 S., R.14 W., Grant County, 85 ft above dip on Bear Mountain Road, and 2 miles north of Silver City.	5.10	1959-71	7-27-71	1.97	440
08477570	Silva Creek tributary at Silver City, N. Mex.	SE¼SW¼ sec.27, T.17 S., R.14 W., Grant County, 350 ft above dip on Little Walnut Road, and 0.7 mile north of boundary of Silver City.	2.12	1958-71	7-27-71	4.55	1,000
08477580	Silva Creek at Silver City, N. Mex.	Lat 32°46'41", long 108°16'41", Grant County, 190 ft above Twelfth Street bridge at Silver City.	10.0	1958-71	7-27-71	2.97	660
08477590	Pinos Altos Creek at Silver City, N. Mex.	Lat 32°46'52", long 108°16'04", Grant County, 2 blocks below U. S. Highway 260 at Silver City.	4.63	1958-71	7-27-71	3.79	2,980
08478000	Cameron Creek at Central, N. Mex.	SW¼NE¼ sec.36, T.17 S., R.13 W., Grant County, 0.5 mile above culvert on U. S. Highway 260, at north edge of Central.	18.8	1954-71	1961 7- -62 7- -63 7-15-64 7-17-65 9-15-66 8- 4-67 8-26-68 8-31-69 7-27-70 9- 9-71	e1.49 1.46 1.76 3.51 3.78 1.70 4.24 3.54 c5.37 2.47 5.01	155 150 210 702 730 195 990 715 1,520 380 1,350
08478500	Mimbres River at Deming, N. Mex.	On section line 22 and 27, T.23 S., R.9 W., Luna County, at bridge on U. S. Highway 260, at north end of Deming.	1,370	1954-71	7-28-71	2.33	750
08478600	Mimbres basin tributary near Florida, N. Mex.	Near boundary of sec.25 and 36, T.22 S., R.8 W., Luna County, above culvert on State Highway 26, and 5 miles south-west of Florida.	.55	1959-71	10- 2-70	2.56	180
08478800	Seventysix Draw tributary near Waterloo, N. Mex.	Lat 31°56'34", long 107°44'38", Luna County, upstream from culvert on State Road 11, 3.9 miles southeast of Waterloo, and 7.9 miles north of Columbus.	.2	1967-71	7-31-71	5.41	136
Playas Valley							
08479300	Deer Creek tributary near Antelope Wells, N. Mex.	Sec.6, T.34 S., R.18 W., Hidalgo County, 0.1 mile below dip on State Highway 79, 2.5 miles east of San Luis Pass, and 12 miles west of Antelope Wells.	4.3	1959-71	7-22-71	2.29	380

Annual maximum discharge at crest-stage partial-record stations--Continued

Annual maximum discharge at crest stage partial record stations continued							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Tularosa Valley							
08480100	White Oaks Canyon at White Oaks, N. Mex.	NW¼SW¼ sec.20, T.6 S., R.13 E., Lincoln County, 40 ft upstream from culvert on State Highway 349, 1 mile northeast of White Oaks.	1.14	1961-71	8- 1-71	2.90	(+)
08480150	White Oaks Canyon near Carrizozo, N. Mex.	NW¼SE¼ sec.6, T.7 S., R.11 E., Lincoln County, 100 ft upstream from culvert on U. S. Highway 54, 6 miles north of Carrizozo.	31	1959 1961-71	8- 1-71	3.31	1,250
08480170 S	Nogal Creek tributary near Nogal, N. Mex.	NE¼SW¼ sec.28, T.8 S., R.13 E., Lincoln County, upstream from culvert on U. S. Highway 380, about 2.0 road miles west of Indian Divide, 7 miles northwest of Capitan and 2 miles north of Nogal.	1.94	1968-71	8- -71	1.55	(+)
08480200	Taylor Canyon tributary near Bingham, N. Mex.	SE¼NE¼ sec.15, T.6 S., R.7 E., Socorro County, 200 ft north of U. S. Highway 380, 12 miles southeast of Bingham.	2.66	1961-71	1971	-	0
08480590	Tularosa Valley tributary near Oscura, N. Mex.	SW¼NW¼ sec.25, T.10 S., R.8 E., Lincoln County, 50 ft below culvert on U. S. Highway 54, and 5.2 miles south of Oscura.	3.22	1958-71	1971	(a)	(+)
08480650	Minnie Hall Draw near Three Rivers, N. Mex.	NE¼SE¼ sec.35, T.10 S., R.9 E., Lincoln County, 8 miles northeast of Three Rivers.	9.70	1956-71	7-24-71	12.07	1,370
08480700 S	Indian Creek near Three Rivers, N. Mex.	SW¼NE¼ sec.10, T.11 S., R.10 E., Otero County, 150 ft above diversion dam, and 12 miles east of Three Rivers.	6.8	1956-58+ 1959-71	7-26-71	4.00	211
08480900	Indian Creek at mouth near Three Rivers, N. Mex.	Lat 33°22'45", long 105°57'25", Otero County, 75 ft above diversion dam, 0.35 mile above mouth, and 5.5 miles east of Three Rivers.	10.9	1956-58+ 1959-71	7-26-71	4.39	400
08481000	Three Rivers at Three Rivers, N. Mex.	NE¼SW¼ sec.3, T.12 S., R.9 E., Otero County, 150 ft below Southern Pacific Railroad bridge, 400 ft above bridge on U. S. Highway 54, and 1.3 miles south of Three Rivers.	96.0	1956-71	7-24-71	4.41	3,800
08481100	Tularosa Valley tributary near Three Rivers, N. Mex.	SW¼SE¼ sec.3, T.12 S., R.9 E., Otero County, at culvert on U. S. Highway 54, 1.6 miles south of Three Rivers.	13.8	1952-71	1971	(a)	< 60
08486200	Black Prince Canyon tributary near Organ, N. Mex.	NE¼SE¼ sec.33, T.21 S., R.4 E., Dona Ana County, above culvert on U. S. Highway 70, 2.3 miles east of San Augustin Pass, and 4.0 miles east of Organ.	.73	1959-71	1971	-	0
08486400	Tularosa Valley tributary near Orogrande, N. Mex.	SE¼SE¼ sec.1, T.22 S., R.8 E., Otero County, at bridge on U. S. Highway 54, and 2.7 miles northeast of Orogrande.	2.53	1959-71	7- 3-71	1.47	(+)

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Estancia Valley							
08488000	Estancia Valley tributary at Cedar Grove, N. Mex.	NE¼NE¼ sec.21, T.11 N., R.7 E., Santa Fe County, 50 ft upstream from culvert on State Highway 344, 0.1 mile south of Cedar Grove.	1.21	1955 1961-71	1971	7.09	(+)
08488100	Juan Tomas Canyon near Edgewood, N. Mex.	SE¼NE¼ sec.19, T.10 N., R.7 E., Santa Fe County, 140 ft upstream from culvert on U. S. Highway 66, 2.5 miles northwest of Edgewood.	b20	1962-71	1971	(a)	d10
08488170 S	Chavez Draw tributary near Clines Corners, N. Mex.	NW¼SW¼ sec.7, T.9 N., R.11 E., Torrance County, one mile north of Interstate 40, 13 miles east of Moriarty and 9 miles west of Clines Corners.	2.73	1968-71	10-25-71	6.19	36
08488200	Osita Draw near Clines Corners, N. Mex.	SW¼NW¼ sec.17, T.9 N., R.11 E., Torrance County, 100 ft upstream from culvert on U. S. Highway 66, 7.5 miles west of Clines Corners.	b10	1961-71	9-23-71	4.61	980
08488500	Canon de Torreon at Torreon, N. Mex.	Lat 34°43'20", long 106°17'50", Torrance County, at culvert on State Highway 10, in Torreon.	18.2	1954-71	1971	(a)	<25
08488600 S	Arroyo del Cuervo near Torreon, N. Mex.	Lat 34°41'35", long 106°18'27", Torrance County, in Town of Torreon Grant, about 0.3 mile above culvert on State Road 10 and 2 miles south of Torreon.	11.8	1969-71	7- 1-71	4.40	1,080
08489000	Canada del Leon near Mountainair, N. Mex.	SE¼ sec.10, T.2 N., R.7 E., 0.25 mile above culvert on State Highway 10, and 8.4 miles southeast of Mountainair.	3.9	1953-71	1971	-	0
Salt basin							
08492500	Fleming Draw near Pinon, N. Mex.	NE¼ sec.6, T.21 S., R.16 E., Otero County, 0.2 mile above dip in ranch road, and 7.5 miles south of Pinon.	16.6	1959-71	1971	(a)	<200
San Augustin Plains Basin							
08500000 S	Swingle Canyon near Datil, N. Mex.	Lat 34°11'17", long 107°53'55", Catron County, about 0.3 mile upstream from U. S. Highway 60, and 4.3 miles northwest of Datil.	6.35	1970-71	8-31-71	2.92	70
San Juan River basin							
09346200	Rio Amargo at Dulce, N. Mex.	NW¼ sec.1, T.31 N., R.2 W., Rio Arriba County, under bridge on State Highway 17, at Dulce.	168	1956-71	9-30-71	4.78	650
09350700 S	Ruben Canyon near Gobernador, N. Mex.	Lat 36°44'26", long 107°14'33", Rio Arriba County, in Carson National Forest, upstream from culvert on State Highway 17, and 6.5 miles east of Gobernador.	5.06	1970-71	9-29-71	3.23	(+)
09350800	Vaqueros Canyon near Gobernador, N. Mex.	SW¼ sec.17, T.29 N., R.4 W., Rio Arriba County, 100 ft east of State Highway 17 and 4.2 miles east of Gobernador.	60.5	1956-71	9-30-71	3.10	155

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
San Juan River basin--Continued							
09355700	Gobernador Canyon near Gobernador, N. Mex.	NE $\frac{1}{4}$ sec.36, T.29 N., R.6 W., San Juan County, 0.2 mile south of State Highway 17, and 4 miles southwest of Gobernador.	19.8	1956-71	9-30-71	7.40	1,100
09356400	Manzanares Canyon near Turley, N. Mex.	NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.8, T.29 N., R.8 W., San Juan County, 600 ft above culvert on State Highway 17, and 4.2 miles east of Turley.	b3.1	1956-71	8- -56 7-26-57 1958 8-24-59 1960 9-18-61 1962 9- -63 7-30-64 8-17-65 6-29-66 8- 7-67 8- 2-68 8- 3-69 9-12-70 8-21-71	2.67 5.29 1.11 1.79 2.25 1.44 (a) 1.38 4.19 2.19 1.97 1.36 c2.6 6.19 c1.69 1.91	525 1,560 130 275 400 195 < 125 185 1,060 385 322 180 500 2,210 253 310
09356520 S	Burro Canyon near Lindrith, N. Mex.	Lat 36°16'21", long 107°14'46", Rio Arriba County, upstream from culvert on State Highway 537, 11.5 miles west of Lindrith.	9.11	1970-71	8-20-71	8.08	382
09357200	Gallegos Canyon tributary near Nageezi, N. Mex.	SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.11, T.25 N., R.10 W., San Juan County, at culvert on State Highway 44, 1.1 miles northwest of Huerfano Trading Post, and 12.5 miles northwest of Nageezi.	.20	1952-71	9-30-71	1.42	68
09367400 S	La Plata River tributary near Farmington, N. Mex.	Lat 36°47'10", long 108°13'31", San Juan County, about 700 ft upstream from culvert on State Highway 17 and 4.1 miles northwest of Farmington.	1.03	1970-71	8-21-71	c3.24	196
09367530	Locke Arroyo near Kirtland, N. Mex.	NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.15, T.29 N., R.14 W., San Juan County, on upstream side of abandoned culvert, 200 ft above U. S. Highway 550, 0.4 mile above mouth, and 3.3 miles east of Kirtland.	2.96	1951-71	12-26-71	2.30	138
09367550 S	Stevens Arroyo near Kirtland, N. Mex.	Lat 36°46'00", long 108°22'10", San Juan County, upstream from gravel road to Young's Lake, 0.6 mile north of El Paso Natural Gas, San Juan Plant and 2.3 miles north of Kirtland.	4.59	1970-71	8-21-71	3.77	680
09367840	Yazzie Wash near Mexican Springs, N. Mex.	Lat 35°50'40", long 108°53'00" McKinley County, 5.0 miles northwest of Mexican Springs, and 23 miles north of Gallup.	b2.1	1953-54 1956-71	8- 7-71	5.04	630
09367860	Chusca Wash near Mexican Springs, N. Mex.	Lat 35°48'40", long 108°50'50", McKinley County, 1.8 miles northwest of Mexican Springs, and 20 miles north of Gallup.	b8.7	1953-71	8- 7-71	4.63	2,600
09367900 S	Black Springs Wash near Mexican Springs, N. Mex.	Lat 35°45'40", long 108°49'00", McKinley County, 2.5 miles south of Mexican Springs and 17 miles north of Gallup.	7.05	1954-71	8- 7-71	1.68	1,080
09367920	Coyote Wash tributary near Naschitti, N. Mex.	Lat 36°05'55", long 108°41'48", San Juan County, on bridge on U. S. Highway 666, 2.4 miles north of Naschitti, and 39 miles north of Gallup.	12.0	1967-71	9-30-71	5.69	(+)

Annual maximum discharge at crest-stage partial-record stations--Continued

Annual maximum discharge at crest stage partial record stations--continued							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
San Juan River basin--Continued							
09367940	Theodore Wash near Newcomb, N. Mex.	Lat 36°21'39", long 108°43'09", San Juan County, on bridge on U. S. Highway 666, 5.2 miles north of Newcomb.	37.4	1967-71	9-30-71	4.47	(+)
09367950	Chaco River near Waterflow, N. Mex.	NE¼ sec.19, T.29 N., R.16 W., San Juan County, 7 miles southwest of Waterflow, and 8 miles southeast of Shiprock.	4,350	1959-70h	--	--	--
Little Colorado River basin							
09386100	Largo Creek near Quemado, N. Mex.	NE¼SE¼ sec.8, T.1 N., R.16 W., Catron County, on downstream side of bridge on ranch road 2.5 miles southwest of Quemado.	151	1954-71	8- 6-71	2.41	385
09386150	Mangas Creek tributary near Pietown, N. Mex.	About at corner common secs. 13, 14, 23 and 24, T.1 N., R.13 W., Catron County, above culvert on U. S. Highway 60, 1.3 miles west of Pietown Post Office.	b.08	1952-71	8- 6-71	1.49	(+)
09386200	Carrizo Creek near Salt Lake, N. Mex.	SE¼ sec.3, T.3 N., R.21 W., Catron County, on left downstream wingwall of bridge, 1.3 miles east of New Mexico-Arizona State line and 15 miles west of Salt Lake.	1560	1957-71	9-29-71	.58	(+)
09387050	Galestena Canyon tributary near Black Rock, N. Mex.	SE¼ sec.30, T.9 N., R.17 W., McKinley County, 100 ft below bridge on State Highway 32 and 10.5 miles southeast of Black Rock.	b19	1957-71	9-29-71	3.04	161
09395400	Milk Ranch Canyon near Fort Wingate, N. Mex.	Lat 35°25'55", long 108°33'30", McKinley County, 0.5 mile below culvert on secondary road between Fort Wingate and McGaffey and 3 miles south of Fort Wingate.	14.0	1949 1953-71	9-29-71	.64	(+)
09395500	Puerco River at Gallup, N. Mex.	SW¼NW¼ sec.15, T.15 N., R.18 W., McKinley County, on right bank north of the Santa Fe RR freight depot, 1,500 ft above Second Street Bridge at Gallup.	558	1940-46+ 1956-71	9-30-71	3.82	980
09395600	Wagon Trail Wash near Gamerco, N. Mex.	SE¼NE¼ sec.7, T.16 N., R.18 W., McKinley County, above abandoned culvert on former U. S. Highway 666, 0.5 mile north of junction of U. S. Highway 666 and State Highway 68, 4.5 miles north of Gamerco.	.38	1951-71	9-29-71	cl.2	79
Gila River basin							
09429800	Diamond Creek near Beaverhead, N. Mex.	NE¼NW¼ sec.7, T.12 S., R.12 W., Catron County, 3.5 miles west of State Highway 61, 4 miles above Gila River and 13 miles south of Beaverhead.	106	1957-71	1971	3.44	(+)
09430300	Copperas Canyon near Pinos Altos, N. Mex.	NE¼SW¼ sec.17, T.14 S., R.13 W., Grant County, on east side of Copperas Canyon road and 15 miles north of Pinos Altos.	3.95	1963-71	7- 3-71	2.49	(+)
09430900	Duck Creek at Cliff, N. Mex.	SW¼SW¼ sec.28, T.15 S., R.17 W., Grant County, at Cliff below bridge on State Highway 211, and 0.6 mile above mouth.	228	1957-71	7-30-71	11.03	6,900
09437200 S	Mexican Canyon at Virden, N. Mex.	SE¼NW¼ sec.2, T.19 S., R.21 W., Hidalgo County, upstream from dip in State Road 82, and about 0.8 mile east of Virden.	3.40	1968-71	9-28-71	10.91	(+)

Annual maximum discharge at crest-stage partial-record stations--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							
09438200	Animas Creek near Cloverdale, N. Mex.	NE $\frac{1}{4}$ sec.33, T.31 S., R.20 W., Hidalgo County, near head of small box canyon, 0.1 mile west of State Highway 338, and 11 miles north of Cloverdale.	157	1959-71	7-24-71	6.11	1,600
09442630 S	Mail Hollow near Luna, N. Mex.	Lat 33°47'38", long 108°56'59", Catron County, upstream from culvert on U. S. Highway 180, 2.3 miles south of Luna.	4.20	1970-71	10-24-71	3.21	(+)
09442650	Romero Creek near New Mexico-Arizona State line near Luna, N. Mex.	NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.34, T.4 S., R.21 W., Catron County, at culvert on Luna-Underwood Lake road, about 1 mile east of New Mexico-Arizona State line, and 8 miles northwest of Luna.	10.8	1958-71	8-22-71	8.44	43
09442660	Trout Creek at Luna, N. Mex.	NW $\frac{1}{4}$ sec.29, T.5 S., R.20 W., Catron County, 500 ft downstream from bridge on Luna-Red Hill road and 2.6 miles north of Luna.	31.9	1954-71	8-22-71	1.88	155
09442695 S	Negro Canyon at Aragon, N. Mex.	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.18, T.5 S., R.16 W., Catron County, above culvert on State Highway 12, at west edge of Aragon.	9.62	1958-71	9-27-58 7-28-59 8-10-60 9-10-61 1962 1963 9-10-64 8-13-65 1966 1968 1969 8-8-70 7-30-71	c3.85 c11.6 1.86 c6.0 (a) (f) 3.68 1.51 3.36 (f) (a) - 1.27 (a) - .78 1.22	457 d5,200 35 1,050 d5 610 230 550 - 190 <10 0 80 184
09442700	Apache Creek near Apache Creek, N. Mex.	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.25, T.4 S., R.18 W., Catron County, 7 miles north of Apache Creek.	94.6	1957-71	9- 1-71	2.98	540
09442740	Tularosa River near Reserve, N. Mex.	SE $\frac{1}{4}$ sec.33, T.6 S., R.18 W., Catron County, 150 ft west of Eagle Peak Lookout road and 3.3 miles northeast of Reserve.	426	1956-71	8- 6-71	c4.55	500
09443950	Red Colt Canyon at Pleasanton, N. Mex.	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.14, T.12 S., R.20 W., Catron County, above culvert on U. S. Highway 260, and 1 mile south of Pleasanton.	3.00	1959-71	8-13-71	8.44	(+)
09455800	Steins Creek at Steins, N. Mex.	SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.9, T.24 S., R.21 W., Hidalgo County, at culvert on State Highway 14, 0.9 mile west of Steins.	1.26	1959-71	7- 2-71	2.27	(+)

< Less than.

S Flood-hydrograph site.

+ Discharge not yet determined.

+ Operated as continuous-record gaging station.

a Peak did not reach bottom of gage.

b Approximately.

c From floodmark.

d Estimated.

e New site and datum.

f Gage height not determined.

g Revised.

h Discontinued at end of water year.

i Contributing area.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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 period Oct. 1, 1970 to Dec. 31, 1971

Discharge measurements made at miscellaneous sites during period Oct. 1, 1970 to Dec. 31, 1971

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Arkansas River basin						
Chicorica Creek	Canadian River	Lat 36°46'13", long 104°23'45", in S½ sec.4, T.29 N., R.24 E., Colfax County, at highway bridge near east boundary of Maxwell Grant, 300 ft downstream from Una de Gato Creek, 4.4 miles northeast of Hebron, and 9 miles south of Raton, N. Mex.	381	1945-52† 1966-70	10-13-70 11-10-70 12- 9-70 1-13-71 2- 3-71 3- 9-71 4- 2-71 4-29-71 6- 7-71 7-13-71 9- 9-71 10-19-71 12- 7-71 12-22-71	2.7 a3.0 a2.8 a2.5 4.3 a1.8 a1.2 .67 1.8 a.40 a2.0 a3.0 a2.0 a1.3
Canadian River	Arkansas River	Lat 35°23'35", long 103°02'30", in SW¼ sec.32, T.14 N., R.37 E., Quay County, at N.Mex.-Texas state line 14.7 miles north of Glenrio, N. Mex.	-	1969-70	10- 7-70 11- 5-70 12- 7-70 1-11-71 2- 1-71 3- 1-71 4-13-71 5-10-71 6-24-71 7-15-71 8- 9-71 8-24-71 8-31-71 9-13-71 10-12-71 11- 8-71 12-13-71	21 16 10 25 11 20 16 27 131 13 678 316 236 18 18 14 20
Rio Grande basin						
Red River	Rio Grande	Lat 36°40'53", long 105°39'24", in NW¼NW¼ sec.10, T.28 N., R.12 E., Taos County, 0.3 mile downstream from State Fish Hatchery, near Questa, N. Mex.	-	1963 1965-66 1969-70	10- 8-70 10-26-70 11-17-70 12-30-70 1-29-71 3-15-71 4- 6-71 4-28-71 5-17-71 6- 9-71 6-30-71 7-20-71 8-11-71 9- 1-71 9-22-71 10-12-71 10-20-71 11- 1-71 11-23-71 12-15-71	50 49 38 35 35 39 37 40 40 60 51 40 43 48 40 45 42 43 33 28
Rio Chama	Rio Grande	Lat 36°39'44", long 106°41'58", Rio Arriba County, at river mile 86.1, 0.3 miles above Willow Creek, and 8.5 miles southwest of Tierra Amarilla, N. Mex.	-	1965-70	10- 1-70 10- 7-70	93 82
Rio Chama	Rio Grande	Lat 36°39'40", long 106°43'08", Rio Arriba County, at river mile 84.8, 1.0 mile downstream from Willow Creek, and 9.6 miles southwest of Tierra Amarilla, N. Mex.	-	1965-70	10- 1-70 10- 7-70	99 94

† Operated as a continuous record gaging station.

a Estimated.

Measurements at miscellaneous sites

Discharge measurements made at miscellaneous sites during period Oct. 1, 1970 to Dec. 31, 1971

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Rio Grande basin--Continued						
Tributary	Arroyo de los Chamisos	Lat 35°38'20", long 105°55'40", in Santa Fe County, at culvert on U. S. Highway 84-85-285, 0.4 mile southeast of Santa Fe city limits.	0.75	-	7-26-71	†695
Arroyo Hondo	Cienega Creek	Lat 35°57'20", long 105°55'05", in Santa Fe County, at culvert on U. S. Highway 84-85-285, 1.5 miles southeast of Santa Fe city limits	9.8	-	7-26-71	†4,050
Tributary No. 2	Pecos River	Lat 34°59'00", long 105°05'35", in Anton Chico Grant, at rest area on Interstate Highway 40, 6.8 miles north of Pintada, Guadalupe County, New Mexico.	2.17	-	7-19-71	†3,190
Pecos River	Rio Grande	Lat 32°31'33", long 104°18'11, NW¼SW¼SE¼, sec.32, T.20 S., R.27 E., above mouth of Dagger Draw at head of Lake Avalon.	-	1954, 1956-57 1959-60	11-12-71 12- 1-71 12-16-71	23 21 24
Pecos River	Rio Grande	Lat 32°13'05", long 104°00'08", SE¼SW¼NE¼, sec.17, T.24 S., R.29 E., Eddy County, at Fishing Rock Crossing, 4.1 miles southeast of Malaga.	-	1953-54, 1962-70	10- 5-70 11-03-70 12-01-70 12-30-70 2- 4-71 3- 8-71 3-29-71 4-30-71 5-28-71 6-25-71 7-30-71 8-27-71 9-28-71 10-29-71 11-16-71 12-27-71	37 37 50 48 27 43 *18 *17 *13 *14 42 39 19 *16 *17 40
Pecos River	Rio Grande	Lat 32°10'42", long 103°59'50", NW¼NW¼, sec.33, T.24 S., R.29 E., in Eddy County, at First Ford 2.6 miles below Pierce Canyon Crossing and 5.6 miles southeast of Malaga, N. Mex.	-	1959, 1961-64 1966-70	10-05-70 11- 3-70 12- 1-70 12-30-70 2- 4-71 3- 8-71 3-29-71 4-30-71 5-28-71 6-25-71 8-27-71 9-28-71 10-29-71 11-16-71 12-17-71	25 37 50 52 28 40 20 11 10 6.5 61 21 *19 20 40

† Peak flow.

* Base flow.

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